**AGENDA FOR 16TH MEETING OF OPERATION & COORDINATION COMMITTEE OF MP TO BE HELD ON 16TH SEPTEMBER 2009 AT CORPORATE OFFICE, MPMKVVCL, BHOPAL**

## ITEM NO. 1 : CONFIRMATION OF MINUTES

Minutes of 15th meeting of Operation & coordination committee of MP held on 15.07.2009 at SLDC, Jabalpur were forwarded to the committee members vide letter no. 07-05/SG-9B-II/1260 dated 04.08.2009 & also posted on the website. No comments have been received so far.

**The committee may confirm the minutes.**

## ITEM NO. 2 : REVIEW OF SYSTEM OPERATION DURING THE MONTH OF JULY 2009 AND AUGUST 2009

### 2.1 Frequency Particulars

The detailed frequency particulars for the month of July-2009 & August-2009 are enclosed at Annexure-2.1. The One hour integrated average frequency during July and August 2009 was recorded at 49.07 Hz and 49.41 Hz respectively. The minimum integrated average frequency was 48.98 Hz and 48.89 Hz for the respective months with the maximum frequency at 50.40 Hz and 50.14 Hz. The instantaneous maximum and minimum frequency recorded for July and August 2009 was 50.56, 48.74 Hz and 50.46 Hz, 48.62 Hz respectively.

**The Committee may like to note.**

### 2.2 Operational Matters

### 2.2.1 Operational Discipline

There was no instances of significant violation of IEGC by MP during the month of July-09 and August-09 as reported by WRLDC.

**Committee may like to discuss for proper load shedding management by each Discoms to avoid Instances of significant violation of IEGC**

During July-2009 & August 2009, the system frequency of the combined grid was within the permissible range of 49.2-50.3 Hz for 94.74 % & 73.98% of the time respectively. The net unscheduled interchange by MP during the months July and August 2009 was -41.69 MU. And 13.47 MU respectively.

**The Committee may like to note.**

### 2.3.1 Voltage Profile

Voltage profile at some of the important 400 KV and 220 KV substations of MP during the month of July-2009 & August-2009 is enclosed at Annexure -2.3.

During the month of July-2009 & August-2009, the deviation of voltage from the accepted limit on either side was recorded at following location in MP Grid.

| Sr.No. | Name of Substation | JULY 2009 | | | | AUGUST 2009 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Max. Voltage observed | | Min. Voltage observed | | Max. Voltage observed | | Min. Voltage observed | |
| | | Voltage | Date | Voltage | Date | Voltage | Date | Voltage | Date |
| 1 | Indore | 423 | 24, 28.07.09 | No Deviation Observed | | | | No Deviation Observed | |
| 2 | Itarsi | 429 | 01.07.09 | | | 429 | 16.08.09 | | |
| 3 | Bina | 427 | 28.07.09 | | | 429 | 16.08.09 | 379 | 23, 24.08.09 |
| 4 | Gwalior | 429 | 29.07.09 | 365 | 20.07.09 | 436 | 16.08.09 | 372 | 13.08.09 |
| 5 | Nagda | 430 | 24.07.09 | No Deviation Observed | | 428 | 16, 30.08.09 | No Deviation Observed | |

**The Committee may discuss.**

### 2.3.2 Status of CAPCITOR Banks in sub-transmission system

Only central discom has furnished the information of position of Capacitor Banks as on 31.08.09, out of 588 capcitor of 1200 KVAR capacity, 376 nos. installed in central zone as on 31.08.09 and balance 212 nos. are expected to be installed by Dec 09.

The progress of installation of capacitor bank in other DISCOMs is yet to be intimated by the East and West Discom.

(**Action Discoms**)

### 2.4.1 Status of completion of on going Transmission Schemes being executed by MPPTCL

The updated status on various ongoing Transmission Schemes for the current year is yet to be received.

**The Committee may like to note/discuss.**

### 2.4.2 U/F Relay Operation

(i) During July and August 2009 the system frequency remained below 49.2 Hz for 4.70 % and 25.88 % of the time respectively. The frequency touched, 48.80 Hz for 82 and 855 times during July & August 2009 respectively.

The consolidated information about UFLS operation for July 2009 & August 2009 are enclosed at Annexure-2.4.2

**The Committee may discuss.**

(ii) Status of replacement of defective under frequency & df/dt relays and installation of under frequency & df/dt relays at 33 KV feeder at newly constructed EHV S/s, needs to be furnished by T&C / PS.

(iii) As per details furnished by ED (T&C) in the 15th OCCM some of U/F relays have been shown as "NOT IN PLAN"and at Ratlam sub station some of the relays are indicated as "BLOCKED". The SE o/o ED (T&C) informed that the relay are not actually blocked and the same has been appeared in the report having not updated. The SE o.o ED (T&C) may furnish the updated df/dt and U/F relay report as agreed by them in the 15th OCCM.

[**Action ED (T&C)**]

### 2.4.3 Confirmation of Healthiness status of SERs/DRs equipment in the system

The information only from Amarkantak TPS of MPPGCL is being received regularly which states that DRs & SERs and the GPS time stamping is not available. Satpura Thermal Power Station has also furnish the monthly states of healthiness of DRS in Sequence Event Logger for the month of July-2009. The information from SE(O&M) MPPGCL, Silpara received which state that disturbance recorder and Sequential Event Logger(SEL) are not available at 2x15 MW BHPS-II Silpara & 2x10 MW BHPS-IV Jinna.

The Additional Chief Engineer(T&C) Bhopal has also furnished the monthly states of disturbance recorder/ Event Sequence recorder/ Fault recorder in service for the month of June-2009 to July-2009.

The Chief Engineer (O&M), Indira Sagar Hydel Power Station has also furnish the details of the DRs/SERs equipments installed at Indira Sagar Hydel Power Station

The complied information is also required for the OCCM of WRPC on monthly basis. The Transmission and Generating Companies should furnish the status regularly by 5th of every month..

[**Action MPPGCL / MPPTCL**].

### 2.5 Power Cuts / Load restrictions/Differential Load Shedding by DISCOMS

(i) Details of Discom wise Power cuts and Regulatory measures during July & August 2009 are enclosed at Annexure 2.5.

(ii) The DCCs have been requested vide letter No. 07-05/PM-57/1010 dated 30.06.2009 to furnish to SLDC the hourly differential load shedding data in MW on daily basis to work out the unrestricted demand. The Discoms have not started furnishing the information to SLDC. The DCCs may start furnishing the data at the end of each shift to SLDC. The discoms may plan the differential load shading in such a manner so that frequency profile is maintained ithin safe limits and proper load generation balanced is achieved.

(iii) **Unwanted Load Shedding by East Discom DCC** : Instances of exercising load shedding by East DCC at high frequency (freq above 50.1 HZ) have been noticed. The East DCC quite often do not listen to the advices for normalization of load shedding during high frequency duration. The East DCC also do not have control over differential load shedding in East DISCOM and the same is being carried out by field divisions irrespective of system frequency. Such type of operations are dangerous from the point of system security and should be avoided. The EAST DCC may start controlling the differential load shedding and also controlling the load shedding in such that they do not overdraw from the grids at low frequency and do not under draw at high frequency.

**(Action DISCOMS)**

**2.6 DISTRICTWISE / GROUPWISE LOADING OF FEEDERS**

1. The districtwise / groupwise loads shall be computed by the respective Discoms and same may be furnished to SLDC as agreed in the 15th OCCM.

2. The CE (PS), MPPTCL has proposed that the details of of mixed load feeders (Discoms wise) feeding to Tahsil (urban) plus Rural areas shall be furnished by all discoms . The proforma as proposed by the CE (PS) was sent to the DISCOMs vide letter No.07-05/ SG-9B1/ 1419 Jabalpur dt. 03.09.2009. The proposal of CE (PS) may be discussed by the committee.

**(Action DISCOMS)**

**ITEM NO. 3 : OPERATIONAL PLANNNING**

**3.1 Anticipated Power Supply Position for the Month of September-2009 to March 2009**

Details of Anticipated Demand and Source wise Availability for the period September-2009 to March-2010 as on 5th September 2009 are enclosed in Annexure-3.1.

It was explained by the Member Secretary, OCC in the 15th OCCM that as per MPEGC, the SLDC is responsible to do the demand estimation for period upto one year ahead for which the DISCOMs have to provide to SLDC their estimates of demand for the year ahead on month basis for the next financial year by 15th November each year. The DISCOMs have also to provide daily demand on month ahead by 25th for the next month. It was pointed out that the data on daily demand on month ahead for the next month is not being received from any of the DISCOMs.

The information on month ahead basis has not been submitted by the DISCOMs. The DISCOMs have to observe compliance to the Grid code and start providing the required data regularly.

(**Action DISCOMs).**

**3.2 Generating Units under planned outage and proposed maintenance programme-**

The details of outage of generating units under planned outage proposed maintenance programme for September 2009 to March 2010 (R-5) is given in Annexure 3.2.

**(**Action MPPGCL).

**3.3 Proposed shutdown programme of Transmission lines / Transformers -**

The proposed maintenance programme for the period September-2009 to November-2009 is annexed at Annexure-3.3.

**3.4 Long Outages of transmission elements :**

The transmission elements as detailed below are under long outages. The T&C, MPPTCL and O&M:Gen MPPGCL sections may give the schedule and work progress of bringing back these elements into service. The reasons for not adhering, to the schedule data as given in 15th OCC Meeting may also be furnished:

| SN | Line/Transformer/Breaker/ Reactor etc under long outage | Outage date | Reason | Expected date of restoration as intimated in the 15th OCCM |
|---|---|---|---|---|
| 1 | 63 MVAR Reactor at Satpura TPS | 24.05.2005 | Damage of all three limbs along with reactor tank | Procurement for new reactor proposed. |
| 2 | 400 KV Bkr of Nagda-Rajgarh – II at 400 KV S/S Nagda | 23.10.2008 | Breaker faulty need repair | By 15th August 2009 |
| 3 | 160 MVA X'mer at 220 KV S/S Julwania | 12.02.2009 | High tan $\delta$ value of the transformer bushing and winding. | 25.07.09 (Commissioning of New X'mer) |
| 4 | Tie Breaker of 315 MVA, 400/220 KV X'mer –II at 400 KV Bina S/S | 23.10.2008 | Gas Leakage from PIR | End of Aug 2009 |

The MPPGCL may intimate the exact status and time schedule for restoration of the 63 MVAR Bus reactor at Satpura Thermal Power Station.

**ITEM NO. 4 : OPERATIONAL STATISTICS FOR THE MONTH OF July & Aug 2009.**

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

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.
Annex. 4.3 Hourly Average of Availability and Demand.
Annex. 4.4 Details of reservoir level.
Annex. 4.5 Monthwise target of Thermal Generation of MPPGCL

**The Committee may like to note.**

**ITEM NO. 5 : SYSTEM DISTURBANCE IN MP FOR THE MONTH OF JULY & AUG 2009**

There was no significant system disturbance reported during the period July & Aug 2009.

**ITEM NO. 6 : REVIEW OF SYSTEM OPERATION & MANAGEMENT**

**6.1 Progress of functioning of Discom Control Centre (DCC)**

The Discoms have been informed in 15th OCCM that Balancing & Settlement code shall come into force very shortly and hence Preparedness of the Discoms in respect of adequate man power for round the clock shift duty and readiness of necessary infrastructure for monitoring the drawal of the Discoms is to be ensured by the Discoms.

The DCC, Central Discom is performing the load management in all three shifts. The DCC, East Discom is managing he load management in 'B' and 'C' shifts only., whereas West Discom has not started the shift duties and load management function despite of DO letter from CMD, MPPTCL.

The East Discom and West Discom are advised to start performing the load management function in all three shifts with immediate effect.

**Action in this regard is required to be taken by East & West Discoms.**

**6.2 Preparedness of MPPGCL for implementation of Balancing & Settlement Code -**

The matter of establishing full fledged ABT monitoring cells at thermal power stations and providing adequate communication facility at thermal and hydel power stations has been discussed in the 15th OCC Meeting. The problem of communication facility at Hydel Power Stations was explained by the MPPGCL in the 15th OCC meeting. The SLDC has suggested to explore the possibility of installing satellite phone at such places where basic communication facility is not adequate. The MPPGCL may give the details of their Preparedness of establishing ABT monitoring cells at their power stations.

**ITEM NO 7 : <u>ABT METER READING :</u>**

The ABT meter readings of interface points as required for the period 1st to 15th and 16th to end of the month is not being received from most of the testing divisions and power stations in time and quite

often the readings are received for the complete month. This is causing missing of ABT meter reading for some of the time blocks/days in the MRD/RM3 files emailed to SLDC. The testing divisions and power stations should ensure the completeness and correctness of data in every respect before emailing to SLDC and should also ensure emailing of data for each fortnightly period in time.

**ITEM NO 8 : SCADA/EMS RELATED ISSUES :**

**8.1 Progress of Installation of new RTUs along with PLCC data links at EHV S/s :**

The MPPTCL has started the procurement process for RTU's. The progress of the same may be submitted by the planning cell in the OCCM with time schedule of implementation..

**(Action Planning, MPPTCL)**

**8.2 Maintenance of Telemetering equipments at EHV stations and Power Stations :**

The maintenance of Remote Terminal Units installed in MPPTCL and MPPGCL power stations have to be finalized by the respective companies. In the 15th OCC meetin, it was decided that the AMC of the RTUs shall be done centrally by MMPTCL and MPPGCL. The progress inthis regard may be submitted in the OCC meeting. The maintenance strategy of the RTUs as may be prepared by the respective section of MPPTCL and MPPGCL may be submitted to the committee so that the same may be discussed in meeting.

**(ACTION : T&C, MPPTCL & O&M :GEN,MPPGCL)**

**8.3 Discrepancy in telemetrered values received from different EHV S/s & Power stations :-**

The discrepancy in telemetred values from Power Stations & S/s was brought to the notice of the concerned officials from time to time. Though the action is taken for restoration of some of the parameters, many telemetred values are still not received correctly in SCADA system or are not extended / configured in the telemetry equipments in the field. The list of faulty telemetred values/process connections is detailed in annexure-8.3(i) & 8.3(ii).

**(ACTION : T&C, MPPTCL & O&M :GEN,MPPGCL)**

**8.4 Upgradation of existing RTUs :-**

After installation of existing RTUs in 2002, several new feeders, transformers etc have been commissioned in these S/s. Accordingly, the telemetry facilities of these S/s needs to be upgraded by finalizing the requirement of transducers, relays & input modules etc. The planning section in 2008 had initiated the action to acquire the details regarding existing & proposed transmission lines etc. The SE O/o of ED (T&C), MPPTCL had assured in the 15th OCC that the information from all testing circles shall be compiled. The MPPTCL may give the progress in this matter in the meeting.

**Action:- T&C & Planning**

**8.5 Shifting of OPGW in proposed diverted route from 220 KV Jabalpur to 400 KV Sukha S/s**

The diversion of 220KV Jabalpur-Sukha line due to railway gauge conversion is planned in near future. It is necessary to provide the OPGW cable on the diverted route alongwith required accessories to avoid interruption to SCADA data and speech communication between SLDC & Sub-LDC and SLDC-WRLDC. In the 15th OCC meeting it was informed that the shutdown on 220 KV Jabalpur-Sukha line shall not be allowed for diversion unless OPGW is installed on the new diverted routes, which is essential to avoid any interruption of SCADA data to SLDC and RLDC. The planning section of MPPTCL may submit the progress in the matter with time schedule for shifting of OPGW cable in the diverted route.

**ACTION-PLANNING MPPTCL.**

**ITEM NO. 9 : NHDC Related issue:**

(i) In the last OCC, it was informed by NHDC that dead synchronization features is not available in Control Scheme of Breakers at Omkareshwar hydel power station and hence at the time of tripping any feeder depend solely on charging from remote end. The matter was discussed at length and the committee advised the OSP to explore the possibility to modifying thr\e control scheme of breaker to charge line from their end. The Progress for the same shall be furnished by OSP in the meeting.

(ii) The issue of non-commissioning of auto Reclosure Scheme at Hydel Power Station of NHDC has been discussed. It has been decided that the T&C section shall take up the matter in the next Protection Committee Meeting at WRPC, Mumbai. The progress may be intimated by T&C section of MPPTCL.

**Committee may discuss**

(iii) At Omkareshwar Hydel Power Station, LBB (Local Breaker Backup) Protection operates sometime due to stucking of poles of generator circuit breaker which causes tripping of lines and generators. The OSP also informed that the route cause for frequent stuking of poles of generator circuit breaker is under scrutiny by the design expert of ABB ltd. OSP may give the progress in the matter.

**ITEM NO. 10 :**

**Any other issue with the permission of the chair:**

**ITEM No.11 : DATE AND VENUE OF NEXT OCC MEETING ::**

It is proposed to hold 17th meeting of Operation and Coordination Committee of MP on 16th November-2009 at SLDC, MPPTCL, Jabalpur. However, if any constituent of the OCC is willing to host the meeting the same shall be welcomed.

**FREQUENCY PARTICULARS**

| S. No. | Particulars | Jul-09 | | Aug-09 | |
|---|---|---|---|---|---|
| **1** | **INTEGRATED OVER AN-HOUR** | | | | |
| 1.1 | Maximum Frequency | 50.4 Hz | Between 12.00 hrs & 13.00 Hrs on 11.07.09 | 50.14 Hz | Between 13.00 hrs & 14.00 Hrs on 15.08.09 |
| 1.2 | Minimum Frequency | 48.98 Hz | Between 20.00 hrs & 21.00 Hrs on 07.07.09 | 48.89 Hz | Between 00.00 hrs & 01.00 Hrs on 11.08.09 |
| 1.3 | Average Frequency | 49.67 Hz | | 49.41 Hz | |
| **2** | **INSTANTANEOUS FREQUENCY** | | | | |
| 2.1 | Maximum Frequency | 50.56 Hz | AT 06.04 HRS ON 09.07.09 | 50.46 Hz | AT 13.03 HRS ON 30.08.09 |
| 2.2 | Minimum Frequency | 48.74 Hz | AT 23.07 HRS ON 23.07.09 | 48.62 Hz | AT 07.04 HRS ON 12.08.09 |

**3 Percentage of time when frequency was :-**

| | | Jul-09 | Aug-09 |
|---|---|---|---|
| 3.1 | Below 48.5 Hz | 0.00 | 0 |
| 3.2 | Between 48.50 Hz and 48.8 Hz | 0.03 | 0.48 |
| 3.3 | Between 48.80 Hz and 49.2 Hz | 4.67 | 25.4 |
| 3.4 | Between 49.20 Hz and 49.5 Hz | 22.14 | 35.9 |
| 3.5 | Between 49.50 Hz and 49.8 Hz | 39.46 | 25.29 |
| 3.6 | Between 49.80 Hz and 50.2 Hz | 31.73 | 12.28 |
| 3.7 | Between 50.20 Hz and 50.3 Hz | 1.41 | 0.51 |
| 3.8 | Between 50.30 Hz and 51.0 Hz | 0.56 | 0.14 |
| 3.9 | Above 51.0 Hz | 0.00 | 0 |
| 4.1 | No. of times frquency touched 48.80 Hz | 82 | 855 |
| 4.2 | No. of times frquency touched 48.60 Hz | 0 | 0 |
| 4.3 | No. of times frquency touched 51.0 Hz | 0 | 0 |

## Voltage Profile During the Month of July 2009

| Date | Indore | | Itarsi | | Bina | | Gwalior | | Nagda | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min |
| 1 | 411 | 387 | 417 | 396 | 418 | 397 | 425 | 393 | 423 | 397 |
| 2 | 410 | 388 | 416 | 393 | 411 | 397 | 418 | 389 | 422 | 398 |
| 3 | 414 | 392 | 420 | 402 | 417 | 406 | 418 | 393 | 426 | 403 |
| 4 | 416 | 396 | 420 | 404 | 414 | 404 | 411 | 382 | 427 | 405 |
| 5 | 416 | 397 | 420 | 404 | 416 | 402 | 417 | 384 | 426 | 405 |
| 6 | 418 | 387 | 421 | 394 | 413 | 395 | 412 | 378 | 424 | 394 |
| 7 | 418 | 394 | 421 | 402 | 412 | 400 | 417 | 384 | 427 | 401 |
| 8 | 416 | 401 | 420 | 405 | 412 | 395 | 412 | 371 | 424 | 409 |
| 9 | 420 | 400 | 423 | 405 | 415 | 398 | 415 | 384 | 427 | 407 |
| 10 | 417 | 402 | 421 | 409 | 414 | 400 | 416 | 382 | 425 | 410 |
| 11 | 417 | 399 | 421 | 405 | 414 | 402 | 420 | 391 | 426 | 407 |
| 12 | 416 | 401 | 420 | 405 | 419 | 397 | 420 | 383 | 424 | 409 |
| 13 | 417 | 396 | 423 | 404 | 421 | 395 | 427 | 386 | 425 | 403 |
| 14 | 416 | 399 | 421 | 404 | 418 | 402 | 420 | 394 | 424 | 407 |
| 15 | 417 | 400 | 422 | 407 | 417 | 403 | 421 | 389 | 425 | 409 |
| 16 | 416 | 399 | 421 | 407 | 416 | 395 | 417 | 384 | 424 | 406 |
| 17 | 418 | 404 | 424 | 409 | 416 | 399 | 414 | 382 | 427 | 411 |
| 18 | 420 | 401 | 424 | 408 | 414 | 401 | 416 | 384 | 427 | 406 |
| 19 | 420 | 404 | 424 | 406 | 417 | 401 | 427 | 379 | 428 | 410 |
| 20 | 416 | 399 | 421 | 410 | 411 | 397 | 412 | 365 | 423 | 406 |
| 21 | 417 | 400 | 422 | 414 | 419 | 400 | 421 | 384 | 424 | 407 |
| 22 | 418 | 401 | 421 | 414 | 423 | 398 | 425 | 377 | 424 | 406 |
| 23 | 417 | 407 | 423 | 414 | 413 | 399 | 417 | 379 | 422 | 410 |
| 24 | 423 | 400 | 429 | 401 | 423 | 392 | 424 | 381 | 430 | 406 |
| 25 | 422 | 399 | 426 | 406 | 424 | 396 | 422 | 382 | 428 | 404 |
| 26 | 419 | 403 | 421 | 409 | 415 | 398 | 418 | 386 | 424 | 405 |
| 27 | 418 | 402 | 421 | 409 | 419 | 401 | 421 | 386 | 423 | 408 |
| 28 | 423 | 404 | 428 | 413 | 427 | 403 | 428 | 390 | 429 | 407 |
| 29 | 421 | 403 | 428 | 411 | 422 | 408 | 429 | 398 | 428 | 409 |
| 30 | 416 | 400 | 428 | 407 | 420 | 399 | 423 | 384 | 424 | 409 |
| 31 | 417 | 401 | 423 | 409 | 418 | 392 | 424 | 375 | 424 | 407 |
| **Max** | **423** | **387** | **429** | **393** | **427** | **392** | **429** | **365** | **430** | **394** |

## Voltage Profile During the Month of August 2009

| Date | Indore | | Itarsi | | Bina | | Gwalior | | Nagda | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min |
| 1 | 417 | 400 | 422 | 409 | 416 | 396 | 414 | 382 | 424 | 406 |
| 2 | 419 | 401 | 423 | 409 | 412 | 397 | 416 | 380 | 425 | 406 |
| 3 | 417 | 400 | 421 | 409 | 411 | 400 | 407 | 379 | 426 | 407 |
| 4 | 416 | 400 | 422 | 407 | 417 | 394 | 413 | 378 | 426 | 408 |
| 5 | 417 | 403 | 422 | 410 | 415 | 395 | 414 | 381 | 424 | 407 |
| 6 | 417 | 399 | 421 | 406 | 415 | 392 | 414 | 3814 | 424 | 402 |
| 7 | 412 | 392 | 419 | 400 | 409 | 396 | 411 | 378 | 422 | 401 |
| 8 | 415 | 393 | 420 | 402 | 412 | 391 | 410 | 381 | 426 | 403 |
| 9 | 413 | 393 | 419 | 400 | 410 | 389 | 410 | 384 | 424 | 400 |
| 10 | 411 | 382 | 419 | 393 | 415 | 386 | 412 | 375 | 424 | 394 |
| 11 | 411 | 382 | 419 | 393 | 415 | 401 | 401 | 384 | 424 | 394 |
| 12 | 414 | 397 | 421 | 407 | 416 | 404 | 411 | 383 | 424 | 407 |
| 13 | 410 | 397 | 419 | 404 | 414 | 400 | 409 | 372 | 420 | 406 |
| 14 | 416 | 402 | 426 | 411 | 421 | 405 | 420 | 391 | 426 | 404 |
| 15 | 416 | 399 | 426 | 410 | 426 | 399 | 426 | 392 | 427 | 406 |
| 16 | 417 | 413 | 429 | 410 | 429 | 408 | 436 | 400 | 428 | 423 |
| 17 | 414 | 399 | 424 | 408 | 423 | 400 | 425 | 398 | 424 | 405 |
| 18 | 418 | 401 | 426 | 406 | 424 | 406 | 425 | 388 | 423 | 402 |
| 19 | 414 | 397 | 424 | 409 | 424 | 394 | 428 | 397 | 424 | 406 |
| 20 | 413 | 391 | 426 | 404 | 415 | 399 | 415 | 391 | 423 | 399 |
| 21 | 413 | 391 | 426 | 404 | 415 | 401 | 419 | 387 | 423 | 399 |
| 22 | 414 | 394 | 426 | 406 | 417 | 396 | 418 | 384 | 422 | 404 |
| 23 | 410 | 392 | 419 | 404 | 413 | 379 | 415 | 376 | 419 | 399 |
| 24 | 414 | 392 | 423 | 404 | 413 | 379 | 418 | 376 | 419 | 399 |
| 25 | 416 | 397 | 421 | 404 | 412 | 395 | 416 | 383 | 427 | 404 |
| 26 | 415 | 400 | 420 | 406 | 415 | 398 | 415 | 384 | 424 | 410 |
| 27 | 416 | 394 | 423 | 404 | 421 | 396 | 419 | 387 | 424 | 406 |
| 28 | 417 | 404 | 425 | 411 | 418 | 404 | 416 | 392 | 427 | 413 |
| 29 | 418 | 404 | 423 | 413 | 415 | 401 | 418 | 385 | 427 | 414 |
| 30 | 419 | 402 | 422 | 408 | 418 | 400 | 413 | 394 | 428 | 412 |
| 31 | 417 | 400 | 423 | 406 | 3413 | 396 | 421 | 387 | 425 | 407 |

## Datewise Under Frequnecy (48.8 Hz & 48.6 Hz) & Df / Dt Operation in Madhya Pradesh

| Month : July-2009 | | | | | Month : August 2009 | | | |
|---|---|---|---|---|---|---|---|---|
| Date | U/F 48.8 Hz | | Df/Dt | | U/F 48.8 Hz | | Df/Dt | |
| | No.of Occasion | MAX LOAD RELIEF IN MW | No.of Occasion | MAX LOAD RELIEF IN MW | No.of Occasion | MAX LOAD RELIEF IN MW | No.of Occasion | MAX LOAD RELIEF IN MW |
| 1 | 0 | 0.0 | 0 | 0.0 | 2 | **110.0** | 0 | 0.0 |
| 2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 3 | 0 | 0.0 | 0 | 0.0 | 8 | **140.5** | 0 | 0.0 |
| 4 | 0 | 0.0 | 0 | 0.0 | 5 | **49.7** | 0 | 0.0 |
| 5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 6 | **1** | **13.0** | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 7 | 0 | 0.0 | 0 | 0.0 | 1 | **60.6** | 0 | 0.0 |
| 8 | 0 | 0.0 | 0 | 0.0 | 25 | **175.1** | 0 | 0.0 |
| 9 | 0 | 0.0 | 0 | 0.0 | 5 | **46.1** | 0 | 0.0 |
| 10 | 0 | 0.0 | 0 | 0.0 | 13 | **163.8** | 0 | 0.0 |
| 11 | 0 | 0.0 | 0 | 0.0 | 16 | **54.6** | 0 | 0.0 |
| 12 | 0 | 0.0 | 0 | 0.0 | 21 | **119.3** | 0 | 0.0 |
| 13 | 0 | 0.0 | 0 | 0.0 | 2 | **118.3** | 0 | 0.0 |
| 14 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 15 | 0 | 0.0 | 0 | 0.0 | 2 | **73.0** | 0 | 0.0 |
| 16 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 17 | 0 | 0.0 | 0 | 0.0 | 1 | **45.5** | 0 | 0.0 |
| 18 | **2** | **107.6** | 0 | 0.0 | 4 | **55.4** | 0 | 0.0 |
| 19 | 0 | 0.0 | 0 | 0.0 | 4 | **82.8** | 0 | 0.0 |
| 20 | **5** | **76.2** | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 21 | 0 | 0.0 | 0 | 0.0 | 1 | **114.2** | 0 | 0.0 |
| 22 | 0 | 0.0 | 0 | 0.0 | 9 | **180.9** | 0 | 0.0 |
| 23 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 24 | 0 | 0.0 | 0 | 0.0 | 11 | **109.6** | 0 | 0.0 |
| 25 | **3** | **89.5** | 0 | 0.0 | 1 | **21.1** | 0 | 0.0 |
| 26 | 0 | 0.0 | 0 | 0.0 | 2 | **124.2** | 0 | 0.0 |
| 27 | 0 | 0.0 | 0 | 0.0 | 1 | **4.6** | 0 | 0.0 |
| 28 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 29 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 30 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 31 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 |
| **TOTAL** | **11** | **107.60** | **0** | **0.00** | **134** | **180.90** | 0 | **0.00** |

**Note :- U/F 48.2 Hz & 48.6 Hz Operation - NIL**

**Annexure-2.5**

# Discoms wise Average Supply Hours

| PARTICULARS | East Zone | | Central Zone | | West Zone | | MP | |
|---|---|---|---|---|---|---|---|---|
| | Jul-09 | Aug-09 | Jul-09 | Aug-09 | Jul-09 | Aug-09 | Jul-09 | Aug-09 |
| Commissinary HQ | 22:24:00 | 22:29 | 22:38:00 | 22:19 | 22:42 | 22:59 | 22:34 | 22:28 |
| District HQ | 21:29 | 19:26 | 20:15 | 19:25 | 21:32 | 19:41 | 21:03 | 19:24 |
| Tehsil HQ | 15:17 | 11:41 | 15:26 | 13:14 | 16:08 | 12:36 | 15:35 | 12:27 |
| Rural -3Phase | 6:29 | 4:31 | 6:48 | 5:39 | 6:47 | 4:58 | 6:41 | 5:00 |
| Rural -1Phase | 6:12 | 4:39 | 5:12 | 4:02 | 6:42 | 5:28 | 6:01 | 4:42 |
| Total Rural | 12:41 | 9:10 | 12:00 | 9:41 | 13:29 | 10:26 | 12:42 | 9:42 |

# Anticipated Average Availability at MP Periphery: 2009-10

**Figures in MW**

| Particulars | | | | | | | | | | | Sep-09 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU |
| Thermal (R-5) | | | | | | | | | | | 1502 | 1502 | 1502 | 1502 | 1081 |
| Hydel | | | | | | | | | | | 70 | 0 | 0 | 240 | 56 |
| CSS | | | | | | | | | | | 1559 | 1559 | 1559 | 1559 | 1122 |
| ISP | | | | | | | | | | | 160 | 0 | 0 | 320 | 86 |
| SSP | | | | | | | | | | | 30 | 30 | 30 | 240 | 59 |
| Omkareshwar | | | | | | | | | | | 50 | 50 | 50 | 50 | 36 |
| DVC | | | | | | | | | | | 100 | 100 | 100 | 100 | 72 |
| **Total** | | | | | | | | | | | **3470** | **3240** | **3240** | **4010** | **2513** |
| **Avg Unres. Demand** | | | | | | | | | | | **4100** | **3900** | **3700** | **4800** | |

| Particulars | Oct-09 | | | | | Nov-09 | | | | | Dec-09 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU |
| Thermal (R-5) | 1729 | 1729 | 1729 | 1729 | 1286 | 1911 | 1911 | 1911 | 1911 | 1376 | 1911 | 1911 | 1911 | 1911 | 1422 |
| Hydel | 90 | 0 | 10 | 290 | 73 | 100 | 50 | 10 | 360 | 94 | 100 | 50 | 10 | 390 | 102 |
| CSS | 1606 | 1606 | 1606 | 1606 | 1195 | 1581 | 1581 | 1581 | 1581 | 1139 | 1530 | 1530 | 1530 | 1530 | 1138 |
| ISP | 240 | 0 | 0 | 380 | 115 | 260 | 0 | 0 | 500 | 137 | 230 | 0 | 0 | 498 | 135 |
| SSP | 30 | 30 | 30 | 240 | 61 | 120 | 30 | 30 | 310 | 88 | 120 | 30 | 30 | 310 | 91 |
| Omkareshwar | 50 | 50 | 50 | 50 | 37 | 50 | 50 | 50 | 160 | 56 | 50 | 50 | 50 | 160 | 58 |
| DVC | 100 | 100 | 100 | 100 | 74 | 100 | 100 | 100 | 100 | 72 | 100 | 100 | 100 | 100 | 74 |
| **Total** | **3845** | **3515** | **3525** | **4395** | **2842** | **4122** | **3722** | **3682** | **4922** | **2961** | **4041** | **3671** | **3631** | **4899** | **3021** |
| **Avg Unres. Demand** | **5200** | **5000** | **5000** | **5800** | | **6500** | **6300** | **6000** | **7000** | | **6600** | **6500** | **6200** | **7100** | |

| Particulars | Jan-10 | | | | | Feb-10 | | | | | Mar-10 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU | 0 to 06 | 06 to 12 | 12 to 18 | 18 to 24 | Energy in MU |
| Thermal (R-5) | 1911 | 1911 | 1911 | 1911 | 1422 | 1911 | 1911 | 1911 | 1911 | 1284 | 1911 | 1911 | 1911 | 1911 | 1422 |
| Hydel | 100 | 0 | 10 | 300 | 76 | 60 | 0 | 0 | 220 | 47 | 10 | 0 | 0 | 180 | 35 |
| CSS | 1651 | 1651 | 1651 | 1651 | 1228 | 1567 | 1567 | 1567 | 1567 | 1053 | 1646 | 1646 | 1646 | 1646 | 1225 |
| ISP | 220 | 0 | 0 | 440 | 123 | 170 | 0 | 0 | 390 | 94 | 160 | 0 | 0 | 370 | 99 |
| SSP | 120 | 30 | 30 | 270 | 84 | 100 | 30 | 30 | 200 | 60 | 100 | 30 | 30 | 200 | 67 |
| Omkareshwar | 50 | 50 | 50 | 160 | 58 | 50 | 50 | 50 | 110 | 44 | 50 | 50 | 50 | 110 | 48 |
| DVC | 100 | 100 | 100 | 100 | 74 | 100 | 100 | 100 | 100 | 67 | 100 | 100 | 100 | 100 | 74 |
| **Total** | **4152** | **3742** | **3752** | **4832** | **3065** | **3958** | **3658** | **3658** | **4498** | **2650** | **3977** | **3737** | **3737** | **4517** | **2970** |
| **Avg Unres. Demand** | **6400** | **6300** | **5900** | **6900** | | **5800** | **5700** | **5400** | **6400** | | **5200** | **5000** | **4800** | **5800** | |

# TENTATIVE MAINTENANCE PROGRAMME OF MPPGCL THERMAL UNITS FOR THE YEAR 2009-2010 R-05

| STATION | UNIT No. | AOH START | AOH COMP | No of Days | REMARKS | |
|---|---|---|---|---|---|---|
| AM -II | 3 | 15/Dec/09 | 2-May | 138 | C.O.H. | R&M |
| AM -II | 4 | 26/Jul/09 | 13-Dec | 140 | C.O.H. | R&M |
| AMK EXT | 5 | | | | | |
| STP-I | 1 | 3/Jun/09 | 5-Jul | 32 | A.O.H. | |
| STP-I | 2 | 15/Sep/09 | 30-Sep | 15 | A.O.H. | |
| STP-I | 3 | 15/Jul/09 | 8-Aug | 25 | A.O.H. | |
| STP-I | 4 | 15/Oct/09 | 30-Oct | 16 | A.O.H. | |
| STP-I | 5 | 5/Nov/09 | 20-Nov | 16 | A.O.H. | |
| STP-II | 6 | 1/May/09 | 11-Jun | 41 | C.O.H. | Gen.X"mer & TG Works |
| STP-II | 7 | 10/Sep/09 | 30-Sep | 20 | A.O.H. | |
| STP-III | 8 | 15/Jun/09 | 11-Jul | 27 | A.O.H. | |
| STP-III | 9 | 25/Jun/09 | 27-Jul | 32 | A.O.H. | |
| SGTPS - I | 1 | 10/Sep/09 | 20-Oct | 40 | C.O.H. | HP ROTOR & HPH REPLACE |
| SGTPS - I | 2 | 25/Sep/09 | 4-Nov | 40 | A.O.H. | HPH REPLACE |
| SGTPS - II | 3 | 27/Jun/09 | 30-Jul | 34 | A.O.H. | |
| SGTPS - II | 4 | 4/Sep/09 | 25-Sep | 21 | A.O.H. | |
| SGTPS EXT | 5 | 2/Aug/09 | 1-Sep | 31 | A.O.H. | |

| | APR | | MAY | | JUN | | JUL | | AUG | | SEP | | OCT | | NOV | | DEC | | JAN | | FEB | | MAR | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity under Planned Maintenance | 0 | 0 | 200 | 200 | 242 | 413 | 651 | 523 | 495 | 620 | 567 | 813 | 622 | 463 | 232 | 141 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| PLANNED MAINTENANCE % | 0 | 0 | 9 | 9 | 11 | 18 | 29 | 23 | 22 | 27 | 25 | 36 | 27 | 20 | 10 | 6 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 4 |
| AVAILABLE CAPACITY ON BARS AFTER PLANNED MAINTENANCE | 2933 | 2933 | 2733 | 2733 | 2691 | 2520 | 2282 | 2410 | 2438 | 2313 | 2366 | 2120 | 2311 | 2470 | 2701 | 2792 | 2813 | 2813 | 2813 | 2813 | 2813 | 2813 | 2813 | 2813 |
| THERMAL AVAILABLITYAFTER CONSIDERING FORCED & PARTIAL OUTAGES IN MW INCLUDING AUX. CONSUMPTION | 2079 | | 1737 | | 1461 | | 1405 | | 1528 | | 1650 | | 1900 | | 2100 | | 2100 | | 2100 | | 2100 | | 2100 | |

A.O.H C.O.H *Completed*

**MADHYA PRADESH POWER TRANSMISSION COMPANY LIMITED**
**STATE LOAD DESPATCH CENTER, NAYAGAON, RAMPUR, JABALPUR**
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**E-mail sldcmpseb@yahoo.com**

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THE DETAILS OF SHUT DOWN PROGRAMME FOR THE POST MANSOON MAINTENANCE OF 400KV/220KV LINES / TRASFORMER HAS BEEN REVISED & APPROVED BY SLDC , HOWEVER THE SHUT DOWN SHALL BE AVAILED ON CONFIRMATION BY SLDC CONTROL ROOM IN REAL TIME.

| Sr. No | NAME OF LINES / ICT's | CKT / ICT NO. | S / D REQUISITION BY | PROPOSED S/D DATE | APPROVAL DATE | REMARK |
|---|---|---|---|---|---|---|
| 1 | 400 KV BINA - BHOPAL | I | EHT | | 29.09.09 | |
| 2 | 400 KV INDORE - NAGDA | | EHT | | 05.10.09 & 06.10.09 | THE EHT HAS PROPOSED S/D ON THE APPROVAL DATE |
| 3 | 400 KV NAGDA-ISP | | EHT | | 07.10.09 & 08.10.09 | |
| 4 | 400 KV BHOPAL- BINA LINE & BAY | II | EHT | | 08.10.09 | |
| 5 | 400 KV BHOPAL- ITARSI LINE & BAY | I | (T&C) BHOPAL | 09.10.09 | 09.10.09 | |
| 6 | 400 KV BHOPAL- ITARSI LINE & BAY | II | EHT/(T&C) BHOPAL | 12.10.09 | 12.10.09 | |
| 7 | 400KV ISP-INDORE | II | EHT | | 10.10.09 & 11.10.09 | |
| 8 | 400KV ISP-INDORE | I | EHT | | 12.10.09 & 13.10.09 | THE EHT HAS PROPOSED S/D ON THE APPROVAL DATE |
| 9 | 400 KV MAIN BUS AT 400 KV S/S BINA | I | T&C BINA | | 15.10.09 | |
| 10 | 400 KV MAIN BUS AT 400 KV S/S BINA | II | T&C BINA | | 16.10.09 | |
| 11 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S INDORE | I | T & C INDORE | 16.09.09 , 17.09.09 & 18.09.09 | 16.09.09 , 17.09.09 & 18.09.09 | |
| 12 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S INDORE | II | T & C INDORE | 22.09.09 ,23.09.09 & 24.09.09 | 22.09.09 ,23.09.09 & 24.09.09 | |
| 13 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S INDORE | III | T & C INDORE | 25.09.09 & 26.09.09 | 25.09.09 & 26.09.09 | |
| 14 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S NAGDA | I | T & C NAGDA | 16.09.09 , 17.09.09 & 18.09.09 | NOT APPROVED | DATE MAY BE REVISED BY TESTING DN. NAGDA |
| 15 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S NAGDA | II | T & C NAGDA | 22.09.09 ,23.09.09 & 24.09.09 | NOT APPROVED | DATE MAY BE REVISED BY TESTING DN. NAGDA |
| 16 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S NAGDA | III | T & C NAGDA | 05.10.09 ,06.10.09 & 07.10.09 | 05.10.09 ,06.10.09 & 07.10.09 | |
| 17 | 400KV NAGDA-RAJGARH | I | T & C NAGDA | 21.10.09 & 22.10.09 | 21.10.09 & 22.10.09 | |
| 18 | 400KV NAGDA-RAJGARH | II | T & C NAGDA | 26.10.09 & 27.10.09 | 26.10.09 & 27.10.09 | |
| 19 | 400KV NAGDA-ISP | | T & C NAGDA | 29.10.09 & 30.10.09 | 29.10.09 & 30.10.09 | |
| 20 | 400KV MAIN BUS | I | T & C NAGDA | 4.11.09 & 05.11.09 | 4.11.09 & 05.11.09 | |
| 21 | 400KV MAIN BUS | II | T & C NAGDA | 10.11.09 & 11.11.09 | 10.11.09 & 11.11.09 | |
| 22 | 220KV ICT AT 400KV S/S BHOPAL | II | T & C BHOPAL | 16.09.09 | 16.09.09 | |
| 23 | 220KV BINA-BHOPAL LINE & BAY AT 400KV S/S BHOPAL | I | T & C BHOPAL | 18.09.09 | 18.09.09 | |
| 24 | 220KV BINA-BHOPAL LINE & BAY AT 400KV S/S BHOPAL | II | T & C BHOPAL | 19.09.09 | 19.09.09 | |
| 25 | 220KV BAIRAGARH-BHOPAL LINE & BAY AT 400KV S/S BHOPAL | II | T & C BHOPAL | 22.09.09 | 22.09.09 | |
| 26 | 220KV SHUJALPUR -BHOPAL LINE & BAY AT 400KV S/S BHOPAL | I | T & C BHOPAL | 23.09.09 | 23.09.09 | |
| 27 | 220KV SHUJALPUR -BHOPAL LINE & BAY AT 400KV S/S BHOPAL | II | T & C BHOPAL | 30.09.09 | 30.09.09 | |
| 28 | 220KV BUS TIE BAY AT 400KV S/S BHOPAL | | T & C BHOPAL | 3.10.09 | 3.10.09 | |
| 29 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S BHOPAL | III | T & C BHOPAL | 05.10.09 | 05.10.09 | |
| 30 | 400KV MAIN AND TIE CB OF 315 MVA Xmer AT 400 KV S/S BHOPAL | III | T & C BHOPAL | 06.10.09 | 06.10.09 | |
| 31 | 400KV MAIN AND TIE CB OF ITARSI AT 400KV S/S BHOPAL | I | T & C BHOPAL | 06.10.09 | 06.10.09 | |
| 32 | 220KV ICT AT 400KV S/S BHOPAL | III | T & C BHOPAL | 07.10.09 | 07.10.09 | |
| 33 | 220 KV BUS AT 400KV S/S BHOPAL | II | T & C BHOPAL | 13.10.09 | 13.10.09 | |
| 34 | 220 KV BUS AT 400KV S/S BHOPAL | I | T & C BHOPAL | 14.10.09 | 14.10.09 | |
| 35 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S BINA | II | T & C BINA | 22.09.09,23.09.09 & 24.09.09 | 22.09.09,23.09.09 & 24.09.09 | |
| 36 | 400/220 KV 3*105 MVA ICT AT 400 KV S/S BINA | III | T & C BINA | 25.09.09 & 26.09.09 | 25.09.09 & 26.09.09 | |
| 37 | 50MVA REACTOR 400KV BHOPAL AT 400 KV S/S BINA | I | T & C BINA | 01.10.09 | 01.10.09 | |

| THE DETAILS OF SHUT DOWN PROGRAMME FOR THE POST MANSOON MAINTENANCE OF 400KV/220KV LINES / TRASFORMER HAS BEEN REVISED & APPROVED BY SLDC , HOWEVER THE SHUT DOWN SHALL BE AVAILED ON CONFIRMATION BY SLDC CONTROL ROOM IN REAL TIME. | | | | | | |
|---|---|---|---|---|---|---|
| **Sr. No** | **NAME OF LINES / ICT's** | **CKT / ICT NO.** | **S / D REQUISITION BY** | **PROPOSED S/D DATE** | **APPROVAL DATE** | **REMARK** |
| **38** | 50MVA REACTOR 400KV BHOPAL AT 400 KV S/S BINA | **II** | **T & C BINA** | **3.10.09** | **3.10.09** | |
| **39** | 50MVA 400KV BUS REACTOR AT 400 KV S/S BINA | | **T & C BINA** | **13.10.09** | **13.10.09** | |
| **40** | 25MVA REACTOR AT 400 KV S/S BINA | **I** | **T & C BINA** | **18.09.09** | **18.09.09** | |
| **41** | 25MVA REACTOR AT 400 KV S/S BINA | **II** | **T & C BINA** | **19.09.09** | **19.09.09** | |
| **42** | 220KV BINA- GWALIOR | **II** | **T & C BINA** | **16.09.09** | **16.09.09** | |
| **43** | 220KV BINA- SAGAR | **I** | **T & C BINA** | **9.10.09** | **9.10.09** | |
| **44** | 220KV BINA- SAGAR | **II** | **T & C BINA** | **12.10.09** | **12.10.09** | |
| **45** | 220KV BINA I/C | **I** | **T & C BINA** | **17.09.09** | **17.09.09** | |
| **46** | 220KV BINA I/C | **II** | **T & C BINA** | **30.09.09** | **30.09.09** | |
| **47** | 220KV BINA- BHOPAL | **I** | **T & C BINA** | **18.09.09** | **18.09.09** | |
| **48** | 220KV BINA- BHOPAL | **II** | **T & C BINA** | **19.09.09** | **19.09.09** | |
| **49** | 220KV BINA IC | **I** | **T & C BINA** | **17.09.09** | **17.09.09** | |
| **50** | 220KV BINA IC | **II** | **T & C BINA** | **30.09.09** | **30.09.09** | |
| **51** | 160MVA AT 220 KV S/S BINA | | **T & C BINA** | **05.10.09 & 06.10.09** | **05.10.09 & 06.10.09** | |
| **52** | 3*40MVA AT 220 KV S/S BINA | | **T & C BINA** | **07.10.09 & 08.10.09** | **07.10.09 & 08.10.09** | |
| **53** | 220KV MAIN BUS TOWARDS 160MVA Xmer AT 220 KV S/S BINA | | **T & C BINA** | **01.10.09** | **01.10.09** | |
| **54** | 220KV MAIN BUS TOWARDS 3 * 40MVA Xmer AT 220 KV S/S BINA | | **T & C BINA** | **3.10.09** | **3.10.09** | |
| **55** | 220KV AUXILLARY BUS AT 220 KV S/S BINA | | **T & C BINA** | **10.10.09** | **10.10.09** | |

# Unitwise / Stationwise Genration in MU

## A. Thermal

| Stn. Name | UNIT No. | Capacity MW | July '09 | August '09 |
|---|---|---|---|---|
| AMARKANTAK | 3 | 120 | 23.419 | 28.11 |
| | 4 | 120 | 9.23 | 0.00 |
| | **PH II** | **240** | **32.649** | **28.11** |
| | **PH III** | **210** | **83.184** | **68.82** |
| | **TOT** | **450** | **115.833** | **96.94** |
| SATPURA | 1 | 62.5 | 21.847 | 32.79 |
| | 2 | 62.5 | 28.021 | 30.48 |
| | 3 | 62.5 | 13.697 | 20.66 |
| | 4 | 62.5 | 28.057 | 28.71 |
| | 5 | 62.5 | 29.384 | 28.56 |
| | **PH I** | **312.5** | **121.006** | **141.19** |
| | 6 | 200 | 80.845 | 124.72 |
| | 7 | 210 | 91.715 | 94.35 |
| | **PH II** | **410** | **172.56** | **219.06** |
| | 8 | 210 | 63.795 | 120.01 |
| | 9 | 210 | 14.72 | 131.83 |
| | **PH III** | **420** | **78.515** | **251.84** |
| | **TOT** | **1142.5** | **372.081** | **612.09** |
| SANJAY GANDHI | 1 | 210 | 79.037 | 87.87 |
| | 2 | 210 | 80.518 | 63.75 |
| | **PH I** | **420** | **159.555** | **151.63** |
| | 3 | 210 | 5.163 | 142.42 |
| | 4 | 210 | 111.587 | 115.76 |
| | **PH II** | **420** | **116.75** | **258.18** |
| | **PH III** | **500** | **281.296** | **17.96** |
| | **TOT** | **1340** | **557.60** | **427.77** |
| **MPPGCL THERMAL** | | **2932.5** | **1045.52** | **1136.79** |

AMARKANTAK POWER HOUSE-I RETIRED FROM SERVICE WEF 01.04.2009

## B. Hydel

| Station Name | Capacity MW | July '09 | Aug'09 |
|---|---|---|---|
| GANDHISAGAR | **115.0** | 1.45 | 10.49 |
| R.P.SAGAR | **172.0** | 0.02 | 0.00 |
| J.SAGAR | **99.0** | 8.14 | 1.57 |
| CHAMBAL | **386.0** | 9.61 | 12.06 |
| M.P.CHAMBAL | **193.0** | 4.80 | 6.03 |
| PENCH | **160.0** | 33.75 | 55.20 |
| M.P.PENCH | **107.0** | 22.50 | 36.80 |
| BARGI | **90.0** | 6.88 | 8.27 |
| TONS | **315.0** | 120.55 | 67.72 |
| BIRSINGHPUR | **20.0** | 7.24 | 4.98 |
| B.SGR(DEOLONDH) | **60.0** | 0.00 | 9.41 |
| B.SGR(SILPARA) | **30.0** | 9.47 | 3.46 |
| RAJGHAT | **45.0** | 0.00 | 0.00 |
| M.P.RAJGHAT | **22.5** | 0.00 | 0.00 |
| B.SGR(JINHA) | **20.0** | 0.00 | 0.00 |
| MADIKHEDA | **60.0** | 0.00 | 2.40 |
| TOTAL HYDEL | **1186.0** | 187.49 | 161.11 |
| M.P.P.GCL Hydel | **915.0** | 179.33 | 159.54 |
| MPSEB HYDEL | **917.5** | 171.43 | 136.68 |
| MPSEB TOTAL | **917.5** | 1168.55 | 1216.99 |

## B. NHDC

| | | | |
|---|---|---|---|
| Indira Sagar Hydel Project | 1000 | 69.37 | 170.13 |
| Omkareshwar Hydel Project | 520 | 50.52 | 81.44 |

# MP SUPPLY EXCLUDING AUXILIARY CONS.
## in Million Units

| S.No. | Particulars | Jul-09 | Aug-09 |
|---|---|---|---|
| 1 | MPSEB Thermal Availability | 893.61 | 952.35 |
| 2 | MPSEB Hydel Availability | 168.50 | 137.24 |
| 3 | Indira Sagar | 69.33 | 170.08 |
| 4 | Omkareshwar | 50.52 | 81.44 |
| 5 | Schedule / Drawal From Central Sector | 1309.10 | 1226.46 |
| 6 | Schedule of DVC | 33.96 | 28.11 |
| 7 | Schedule og Rhand+Matatila | 2.64 | 5.60 |
| 8 | Sardar Sarovar | 76.37 | 91.72 |
| 9 | Additional Power Purchase | 0.00 | 0.00 |
| 10 | Sale of Power | -9.95 | 0.00 |
| 11 | Banking of Power | -201.94 | -244.91 |
| 12 | Energy Exchange | 0.00 | 0.00 |
| 13 | Unschedule Interchange | -41.69 | 13.47 |
| 14 | Excess Drawal From Chambal-Satpura | 36.06 | 50.81 |
| 15 | Excess Drawal From Rajghat | -0.01 | -0.02 |
| 16 | Other Imp / Exp | 42.45 | 42.61 |
| ***17*** | ***Total MPSEB Supply excl. Aux. Cons.*** | ***2423.21*** | ***2554.96*** |
| 18 | Average Supply per Day | 78.17 | 82.42 |
| 19 | Maximum Daily M.P. Supply | 82.02 | 83.31 |
| 20 | Minimum Daily M.P. Supply | 69.18 | 75.22422 |
| 21 | Registered Demand : MW | 4216 | 4590 |
| 22 | Morning Peak : MW | 3565 | 4590 |
| 23 | Eveninig Peak : MW | 4129 | 4373 |
| 24 | Unrestricted Demand : MW | 5251 | 5374 |

## Hourly Average Own Generation, Schedule Drawal , Actual Drawal & Demand
## Month :- July 2009

**FIGURES IN MW**

| Hrs. | FREQ. | Own Generation | | | | | | | Schedule from | | | | | | | | | | | Tot Avl. | Act. Drl | UI | Other Imp/ Exp | DEMAND MET | Load Shedding | | | REST. DEMAND | UNREST. DEMAND |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | THER. Incl Aux | THER. Excl Aux | HYD. | ISP | OSP | Injection from STOA | Total | CSS | DVC ER | SSP | SEZ | Banking | Sale | Pur | Exchange | STOA | Rihand+ Mata | Total | | | | | | SCH | UNSCH | TOTAL | | |
| 1:00 | 49.72 | 1393 | 1253 | 237 | 136 | 74 | 21 | 1722 | 1645 | 44 | 96 | 8 | -187 | 0 | 0 | 0 | -21 | 3 | 1588 | 3310 | 1609 | 22 | 0 | 3331 | 0 | 619 | 619 | 3990 | 3990 |
| 2:00 | 49.85 | 1390 | 1251 | 233 | 124 | 71 | 21 | 1701 | 1645 | 44 | 86 | 8 | -187 | 0 | 0 | 0 | -21 | 3 | 1579 | 3280 | 1682 | 102 | 0 | 3382 | 0 | 523 | 523 | 3926 | 3926 |
| 3:00 | 49.92 | 1394 | 1255 | 229 | 94 | 68 | 20 | 1666 | 1644 | 44 | 83 | 8 | -187 | 0 | 0 | 0 | -20 | 3 | 1575 | 3241 | 1710 | 135 | 0 | 3376 | 0 | 452 | 452 | 3839 | 3839 |
| 4:00 | 49.93 | 1386 | 1247 | 212 | 65 | 68 | 20 | 1613 | 1644 | 44 | 80 | 8 | -187 | -10 | 0 | 0 | -20 | 3 | 1563 | 3176 | 1704 | 141 | 0 | 3317 | 1 | 333 | 334 | 3660 | 3661 |
| 5:00 | 49.68 | 1390 | 1251 | 207 | 60 | 66 | 19 | 1603 | 1646 | 44 | 77 | 8 | -187 | -10 | 0 | 0 | -19 | 3 | 1562 | 3165 | 1612 | 49 | 0 | 3214 | 1 | 371 | 372 | 3630 | 3631 |
| 6:00 | 49.77 | 1410 | 1269 | 221 | 57 | 64 | 19 | 1630 | 1647 | 44 | 67 | 8 | -187 | -10 | 0 | 0 | -19 | 3 | 1553 | 3183 | 1544 | -10 | 0 | 3174 | 0 | 418 | 418 | 3625 | 3625 |
| 7:00 | 49.80 | 1418 | 1276 | 218 | 3 | 64 | 21 | 1583 | 1635 | 44 | 58 | 9 | -278 | -3 | 0 | 0 | -21 | 3 | 1447 | 3029 | 1534 | 88 | 0 | 3117 | 510 | 0 | 510 | 3146 | 3656 |
| 8:00 | 49.93 | 1408 | 1267 | 212 | 7 | 64 | 21 | 1571 | 1634 | 44 | 58 | 9 | -279 | -3 | 0 | 0 | -21 | 3 | 1444 | 3015 | 1542 | 98 | 0 | 3113 | 504 | 0 | 504 | 3123 | 3627 |
| 9:00 | 49.75 | 1388 | 1249 | 215 | 7 | 64 | 27 | 1563 | 1633 | 44 | 58 | 9 | -279 | -5 | 0 | 0 | -27 | 3 | 1435 | 2998 | 1449 | 15 | 0 | 3012 | 552 | 0 | 552 | 3048 | 3600 |
| 10:00 | 49.74 | 1374 | 1237 | 210 | 4 | 61 | 31 | 1543 | 1624 | 44 | 60 | 8 | -391 | -16 | 0 | 0 | -31 | 3 | 1302 | 2845 | 1270 | -32 | 0 | 2813 | 684 | 0 | 684 | 2849 | 3533 |
| 11:00 | 49.68 | 1341 | 1207 | 195 | 7 | 59 | 31 | 1499 | 1622 | 43 | 63 | 8 | -391 | -23 | 0 | 0 | -31 | 3 | 1295 | 2794 | 1176 | -118 | 0 | 2676 | 825 | 0 | 825 | 2721 | 3545 |
| 12:00 | 49.74 | 1359 | 1223 | 205 | 3 | 57 | 31 | 1519 | 1616 | 43 | 63 | 8 | -391 | -30 | 0 | 0 | -31 | 3 | 1282 | 2800 | 1235 | -47 | 0 | 2754 | 859 | 0 | 859 | 2790 | 3649 |
| 13:00 | 49.92 | 1377 | 1240 | 203 | 3 | 54 | 34 | 1533 | 1622 | 43 | 69 | 8 | -391 | -30 | 0 | 0 | -34 | 3 | 1291 | 2824 | 1203 | -88 | 0 | 2736 | 791 | 0 | 791 | 2748 | 3539 |
| 14:00 | 49.68 | 1398 | 1258 | 192 | 3 | 52 | 34 | 1539 | 1623 | 43 | 69 | 8 | -391 | -25 | 0 | 0 | -34 | 3 | 1297 | 2836 | 1206 | -91 | 0 | 2745 | 665 | 0 | 665 | 2790 | 3455 |
| 15:00 | 49.69 | 1401 | 1261 | 194 | 3 | 52 | 34 | 1545 | 1621 | 43 | 69 | 8 | -391 | -27 | 0 | 0 | -34 | 3 | 1292 | 2837 | 1213 | -79 | 0 | 2758 | 646 | 0 | 646 | 2801 | 3447 |
| 16:00 | 49.76 | 1414 | 1273 | 181 | 3 | 54 | 36 | 1547 | 1611 | 43 | 67 | 8 | -391 | -27 | 0 | 0 | -36 | 3 | 1279 | 2826 | 1163 | -116 | 0 | 2710 | 717 | 0 | 717 | 2744 | 3461 |
| 17:00 | 49.80 | 1422 | 1280 | 182 | 3 | 61 | 35 | 1561 | 1618 | 43 | 67 | 8 | -386 | -25 | 0 | 0 | -35 | 3 | 1293 | 2854 | 1243 | -50 | 0 | 2803 | 501 | 0 | 501 | 2831 | 3332 |
| 18:00 | 49.93 | 1428 | 1285 | 207 | 139 | 72 | 36 | 1738 | 1619 | 42 | 67 | 8 | -313 | -7 | 0 | 0 | -36 | 3 | 1384 | 3122 | 1379 | -5 | 0 | 3117 | 386 | 0 | 386 | 3126 | 3513 |
| 19:00 | 49.76 | 1418 | 1277 | 262 | 234 | 81 | 33 | 1886 | 1621 | 42 | 167 | 8 | -192 | -13 | 0 | 0 | -33 | 3 | 1604 | 3490 | 1541 | -63 | 0 | 3427 | 875 | 0 | 875 | 3461 | 4336 |
| 20:00 | 49.54 | 1436 | 1292 | 302 | 301 | 91 | 34 | 2020 | 1616 | 42 | 176 | 8 | -192 | -13 | 0 | 0 | -34 | 3 | 1607 | 3627 | 1534 | -73 | 0 | 3554 | 1051 | 0 | 1051 | 3619 | 4671 |
| 21:00 | 49.56 | 1450 | 1305 | 303 | 313 | 96 | 33 | 2050 | 1619 | 42 | 176 | 8 | -192 | -13 | 0 | 0 | -33 | 3 | 1611 | 3661 | 1501 | -109 | 0 | 3551 | 1159 | 0 | 1159 | 3613 | 4772 |
| 22:00 | 49.64 | 1447 | 1303 | 288 | 282 | 97 | 34 | 2003 | 1622 | 42 | 176 | 8 | -192 | -15 | 0 | 0 | -34 | 3 | 1611 | 3615 | 1490 | -121 | 0 | 3493 | 1048 | 0 | 1048 | 3544 | 4592 |
| 23:00 | 49.64 | 1430 | 1287 | 258 | 278 | 96 | 35 | 1954 | 1641 | 42 | 176 | 8 | -170 | -13 | 0 | 0 | -35 | 3 | 1653 | 3608 | 1465 | -188 | 0 | 3419 | 954 | 0 | 954 | 3470 | 4423 |
| 24:00 | 49.78 | 1419 | 1277 | 243 | 238 | 95 | 28 | 1880 | 1640 | 42 | 173 | 8 | -185 | -3 | 0 | 0 | -28 | 3 | 1650 | 3530 | 1531 | -119 | 0 | 3411 | 831 | 0 | 831 | 3442 | 4273 |
| **Avg.** | **49.76** | **1404** | **1263** | **225** | **99** | **70** | **29** | **1686** | **1630** | **43** | **96** | **8** | **-271** | **-13** | **0** | **0** | **-29** | **3** | **1463** | **3153** | **1439** | **-28** | **0** | **3125** | **565** | **113** | **678** | **3272** | **3837** |
| **00 TO 06 HRS.** | 49.81 | 1394 | 1254 | 223 | 89 | 69 | 20 | 1656 | 1645 | 44 | 82 | 8 | -187 | -5 | 0 | 0 | -20 | 3 | 1570 | 3226 | 1643 | 73 | 0 | 3299 | 0 | 452 | 453 | 3778 | 3779 |
| **06 TO 12 HRS.** | 49.77 | 1381 | 1243 | 209 | 5 | 62 | 27 | 1546 | 1627 | 43 | 60 | 8 | -334 | -13 | 0 | 0 | -27 | 3 | 1367 | 2914 | 1368 | 1 | 0 | 2914 | 656 | 0 | 656 | 2946 | 3602 |
| **12 TO 18 HRS.** | 49.80 | 1407 | 1266 | 193 | 26 | 57 | 35 | 1577 | 1619 | 43 | 68 | 8 | -377 | -23 | 0 | 0 | -35 | 3 | 1306 | 2883 | 1234 | -72 | 0 | 2812 | 618 | 0 | 618 | 2840 | 3458 |
| **06TO 18 HRS.** | 49.79 | 1394 | 1255 | 201 | 15 | 60 | 31 | 1562 | 1623 | 43 | 64 | 8 | -356 | -18 | 0 | 0 | -31 | 3 | 1337 | 2898 | 1301 | -36 | 0 | 2863 | 637 | 0 | 637 | 2893 | 3530 |
| **18 TO 24 HRS.** | 49.65 | 1434 | 1290 | 276 | 274 | 93 | 33 | 1966 | 1626 | 42 | 174 | 8 | -187 | -12 | 0 | 0 | -33 | 3 | 1623 | 3588 | 1510 | -112 | 0 | 3476 | 986 | 0 | 986 | 3525 | 4511 |

## Hourly Average Own Generation, Schedule Drawal , Actual Drawal & Demand
## Month :- August 2009

**FIGURES IN MW**

| Hrs. | FREQ. | | Own Generation | | | | | | Schedule from | | | | | | | | | | | Tot Avl. | Act. Drl | UI | Other Imp/ Exp | DEMAND MET | Load Shedding | | | REST. DEMAND | UNREST. DEMAND |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | THER. Incl Aux | THER. Excl Aux | HYD. | ISP | OSP | Injection from STOA | Total | CSS | DVC ER | SSP | SEZ | Banking | Sale | Pur | Exchange | STOA | Rihand+ Mata | Total | | | | | SCH | UNSCH | TOTAL | | |
| 1:00 | 49.44 | 1513 | 1361 | 228 | 257 | 122 | 38 | 2007 | 1571 | 36 | 104 | 9 | -248 | 0 | 0 | 0 | -38 | 6 | 1439 | 3446 | 1520 | 80 | -54 | 3526 | 0 | 685 | 685 | 4291 | 4291 |
| 2:00 | 49.52 | 1519 | 1367 | 210 | 228 | 134 | 38 | 1977 | 1570 | 36 | 76 | 9 | -248 | 0 | 0 | 0 | -38 | 6 | 1411 | 3388 | 1518 | 106 | -54 | 3495 | 0 | 671 | 671 | 4233 | 4233 |
| 3:00 | 49.57 | 1520 | 1368 | 203 | 212 | 117 | 38 | 1939 | 1567 | 36 | 76 | 9 | -248 | 0 | 0 | 0 | -38 | 6 | 1409 | 3347 | 1572 | 163 | -54 | 3510 | 0 | 611 | 611 | 4182 | 4182 |
| 4:00 | 49.50 | 1517 | 1365 | 207 | 212 | 134 | 39 | 1958 | 1569 | 36 | 76 | 9 | -248 | 0 | 0 | 0 | -39 | 6 | 1409 | 3367 | 1523 | 115 | -54 | 3481 | 0 | 565 | 565 | 4117 | 4117 |
| 5:00 | 49.46 | 1507 | 1356 | 196 | 216 | 136 | 40 | 1945 | 1570 | 36 | 76 | 9 | -248 | 0 | 0 | 0 | -40 | 6 | 1410 | 3354 | 1407 | -2 | -54 | 3352 | 0 | 597 | 597 | 4025 | 4025 |
| 6:00 | 49.56 | 1517 | 1366 | 191 | 208 | 119 | 40 | 1924 | 1567 | 36 | 76 | 9 | -246 | 0 | 0 | 0 | -40 | 6 | 1408 | 3332 | 1358 | -50 | -54 | 3282 | 0 | 574 | 574 | 3918 | 3918 |
| 7:00 | 49.45 | 1525 | 1372 | 177 | 109 | 111 | 40 | 1809 | 1572 | 36 | 50 | 8 | -264 | 0 | 0 | 0 | -40 | 6 | 1368 | 3177 | 1407 | 39 | -54 | 3216 | 537 | 0 | 537 | 3293 | 3830 |
| 8:00 | 49.66 | 1533 | 1379 | 159 | 104 | 102 | 42 | 1787 | 1571 | 36 | 50 | 8 | -279 | 0 | 0 | 0 | -42 | 6 | 1351 | 3138 | 1417 | 66 | -54 | 3204 | 556 | 0 | 556 | 3252 | 3808 |
| 9:00 | 49.59 | 1534 | 1381 | 152 | 100 | 102 | 43 | 1778 | 1566 | 36 | 54 | 8 | -279 | 0 | 0 | 0 | -43 | 6 | 1349 | 3127 | 1352 | 3 | -54 | 3131 | 647 | 0 | 647 | 3189 | 3836 |
| 10:00 | 49.57 | 1520 | 1368 | 149 | 100 | 101 | 44 | 1761 | 1563 | 37 | 54 | 8 | -453 | 0 | 0 | 0 | -44 | 6 | 1171 | 2932 | 1213 | 42 | -54 | 2974 | 779 | 0 | 779 | 3035 | 3814 |
| 11:00 | 49.49 | 1523 | 1370 | 153 | 100 | 94 | 44 | 1762 | 1561 | 37 | 54 | 8 | -453 | 0 | 0 | 0 | -44 | 6 | 1170 | 2931 | 1218 | 48 | -54 | 2979 | 847 | 0 | 847 | 3050 | 3898 |
| 12:00 | 49.53 | 1526 | 1373 | 160 | 100 | 94 | 46 | 1773 | 1560 | 37 | 54 | 8 | -453 | 0 | 0 | 0 | -46 | 6 | 1166 | 2939 | 1224 | 58 | -54 | 2997 | 860 | 0 | 860 | 3064 | 3924 |
| 13:00 | 49.70 | 1524 | 1372 | 158 | 100 | 96 | 46 | 1771 | 1564 | 37 | 59 | 8 | -453 | 0 | 0 | 0 | -46 | 6 | 1174 | 2946 | 1207 | 32 | -54 | 2978 | 734 | 0 | 734 | 3021 | 3754 |
| 14:00 | 49.45 | 1522 | 1370 | 152 | 96 | 96 | 45 | 1758 | 1562 | 37 | 59 | 8 | -453 | 0 | 0 | 0 | -45 | 6 | 1174 | 2932 | 1196 | 22 | -54 | 2954 | 698 | 0 | 698 | 3031 | 3730 |
| 15:00 | 49.47 | 1529 | 1377 | 147 | 96 | 96 | 44 | 1759 | 1559 | 37 | 59 | 8 | -455 | 0 | 0 | 0 | -44 | 6 | 1171 | 2930 | 1160 | -11 | -54 | 2919 | 729 | 0 | 729 | 2995 | 3724 |
| 16:00 | 49.54 | 1525 | 1372 | 144 | 92 | 96 | 44 | 1748 | 1556 | 37 | 59 | 8 | -455 | 0 | 0 | 0 | -44 | 6 | 1167 | 2915 | 1197 | 30 | -54 | 2945 | 700 | 0 | 700 | 3010 | 3710 |
| 17:00 | 49.63 | 1517 | 1365 | 141 | 92 | 96 | 46 | 1740 | 1555 | 37 | 75 | 8 | -456 | 0 | 0 | 0 | -46 | 6 | 1179 | 2919 | 1230 | 51 | -54 | 2970 | 601 | 0 | 601 | 3022 | 3623 |
| 18:00 | 49.62 | 1531 | 1377 | 164 | 204 | 96 | 44 | 1886 | 1558 | 35 | 75 | 8 | -446 | 0 | 0 | 0 | -44 | 6 | 1192 | 3077 | 1283 | 91 | -54 | 3169 | 614 | 0 | 614 | 3223 | 3837 |
| 19:00 | 49.41 | 1528 | 1375 | 243 | 478 | 106 | 48 | 2249 | 1551 | 34 | 204 | 8 | -255 | 0 | 0 | 0 | -48 | 6 | 1500 | 3750 | 1527 | 26 | -54 | 3776 | 886 | 0 | 886 | 3859 | 4745 |
| 20:00 | 49.37 | 1528 | 1375 | 278 | 573 | 112 | 50 | 2389 | 1548 | 34 | 242 | 8 | -255 | 0 | 0 | 0 | -50 | 6 | 1533 | 3922 | 1438 | -95 | -54 | 3827 | 1022 | 0 | 1022 | 3916 | 4938 |
| 21:00 | 49.33 | 1527 | 1375 | 271 | 562 | 123 | 49 | 2380 | 1551 | 34 | 242 | 8 | -255 | 0 | 0 | 0 | -49 | 6 | 1536 | 3916 | 1510 | -26 | -54 | 3890 | 1033 | 0 | 1033 | 3985 | 5018 |
| 22:00 | 49.41 | 1535 | 1381 | 260 | 549 | 138 | 48 | 2376 | 1553 | 34 | 242 | 8 | -255 | 0 | 0 | 0 | -48 | 6 | 1540 | 3916 | 1538 | -1 | -54 | 3915 | 936 | 0 | 936 | 3998 | 4934 |
| 23:00 | 49.53 | 1522 | 1370 | 242 | 517 | 131 | 48 | 2308 | 1571 | 34 | 242 | 8 | -244 | 0 | 0 | 0 | -48 | 6 | 1570 | 3878 | 1539 | -30 | -54 | 3848 | 919 | 0 | 919 | 3914 | 4833 |
| 24:00 | 49.46 | 1504 | 1354 | 219 | 349 | 128 | 40 | 2090 | 1573 | 35 | 220 | 8 | -248 | 0 | 0 | 0 | -40 | 6 | 1555 | 3644 | 1547 | -8 | -54 | 3636 | 924 | 0 | 924 | 3712 | 4636 |
| **Avg.** | **49.51** | **1523** | **1370** | **192** | **236** | **112** | **43** | **1953** | **1563** | **36** | **107** | **8** | **-329** | **0** | **0** | **0** | **-43** | **6** | **1342** | **3301** | **1379** | **31** | **-54** | **3332** | **584** | **154** | **739** | **3556** | **4140** |
| **00 TO 06 HRS.** | 49.51 | 1515 | 1364 | 206 | 222 | 127 | 39 | 1958 | 1569 | 36 | 80 | 9 | -248 | 0 | 0 | 0 | -39 | 6 | 1414 | 3372 | 1483 | 69 | -54 | 3441 | 0 | 617 | 617 | 4128 | 4128 |
| **06 TO 12 HRS.** | 49.55 | 1527 | 1374 | 158 | 102 | 101 | 43 | 1778 | 1566 | 36 | 53 | 8 | -364 | 0 | 0 | 0 | -43 | 6 | 1262 | 3041 | 1305 | 43 | -54 | 3083 | 704 | 0 | 704 | 3147 | 3851 |
| **12 TO 18 HRS.** | 49.57 | 1525 | 1372 | 151 | 114 | 96 | 45 | 1777 | 1559 | 36 | 64 | 8 | -453 | 0 | 0 | 0 | -45 | 6 | 1176 | 2953 | 1212 | 36 | -54 | 2989 | 679 | 0 | 679 | 3050 | 3730 |
| **06TO 18 HRS.** | 49.56 | 1526 | 1373 | 155 | 108 | 98 | 44 | 1778 | 1562 | 36 | 58 | 8 | -408 | 0 | 0 | 0 | -44 | 6 | 1219 | 2997 | 1259 | 39 | -54 | 3036 | 692 | 0 | 692 | 3099 | 3791 |
| **18 TO 24 HRS.** | 49.42 | 1524 | 1372 | 252 | 505 | 123 | 47 | 2299 | 1558 | 34 | 232 | 8 | -252 | 0 | 0 | 0 | -47 | 6 | 1539 | 3838 | 1517 | -22 | -54 | 3815 | 953 | 0 | 953 | 3897 | 4850 |

# Reservoir Level of Hydel Power Stations

| Sr. No. | Name of Hydel Power Station | Last day of Jul'09 | Last Day of Aug'09 | MDDL |
|---|---|---|---|---|
| 1 | Gandhi Sagar | 1268.18 ft | 1268.04 ft | 1250 ft |
| 2 | Pench | 483.98 Mtr | 483.55 Mtr | 464 Mtr |
| 3 | Bargi | 410.6 Mtr | 412.55 Mtr | 403.5 Mtr |
| 4 | Birsingpur | 476.05 Mtr | 476.66 Mtr | 471 Mtr |
| 5 | Bansagar | 326.17 Mtr | 326.54 Mtr | 323 Mtr |
| 6 | Rajghat | 361.75 Mtr | 364.35 Mtr | 361.5 Mtr |
| 7 | Indira Sagar | 255.47 Mtr | 255.84 Mtr | 243.23 Mtr |
| 8 | Omrakershwar | 189.37 Mtr | 189.43 Mtr | 193.3 Mtr |
| 9 | Sardar Sarovar | 118.05 Mtr | 120.57 Mtr | 110.64 Mtr |

| TENTATIVE UNITWISE GENERATION TARGETS IN MUs YEAR 2009-10 R- 05 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **POWER STATION** | **ACTUAL** | | | | | **ANTICIPATED** | | | | | | | |
| | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | TOTAL |
| AMK #3 | 49 | 47 | 35 | 23 | 28 | 45 | 37 | 43 | 22 | 0 | 0 | 0 | 331 |
| AMK #4 | 48 | 43 | 45 | 9 | 0 | 0 | 0 | 0 | 21 | 42 | 38 | 42 | 288 |
| AMK PH II | 96 | 90 | 80 | 33 | 28 | 45 | 37 | 43 | 43 | 42 | 38 | 42 | 618 |
| AMK PH III | 62 | 74 | 61 | 83 | 69 | 110 | 114 | 110 | 114 | 114 | 103 | 114 | 1129 |
| AMK COMP. | 158 | 164 | 141 | 116 | 97 | 155 | 151 | 154 | 157 | 156 | 141 | 156 | 1747 |
| STP #1 | 28 | 28 | 2 | 22 | 33 | 30 | 31 | 30 | 31 | 31 | 28 | 31 | 327 |
| STP #2 | 34 | 32 | 25 | 28 | 30 | 15 | 31 | 30 | 31 | 31 | 28 | 31 | 348 |
| STP #3 | 33 | 33 | 26 | 14 | 21 | 30 | 31 | 30 | 31 | 31 | 28 | 31 | 341 |
| STP #4 | 34 | 31 | 22 | 28 | 29 | 30 | 10 | 30 | 31 | 31 | 28 | 31 | 338 |
| STP #5 | 33 | 32 | 18 | 29 | 29 | 30 | 26 | 15 | 31 | 31 | 28 | 31 | 335 |
| STP PH I | 161 | 156 | 93 | 121 | 141 | 137 | 131 | 137 | 157 | 157 | 142 | 157 | 1689 |
| STP #6 | 117 | 0 | 44 | 81 | 125 | 109 | 113 | 109 | 113 | 113 | 102 | 113 | 1139 |
| STP #7 | 106 | 107 | 70 | 92 | 94 | 37 | 116 | 112 | 116 | 116 | 104 | 116 | 1185 |
| STP PH II | 223 | 107 | 114 | 173 | 219 | 147 | 229 | 221 | 229 | 229 | 207 | 229 | 2325 |
| STP #8 | 101 | 109 | 40 | 64 | 120 | 119 | 123 | 119 | 123 | 123 | 111 | 123 | 1278 |
| STP #9 | 105 | 110 | 62 | 15 | 132 | 119 | 123 | 119 | 123 | 123 | 111 | 123 | 1268 |
| STP PH III | 206 | 219 | 102 | 79 | 252 | 239 | 247 | 239 | 247 | 247 | 223 | 247 | 2546 |
| STP COMP. | 590 | 482 | 309 | 372 | 612 | 522 | 606 | 597 | 633 | 633 | 571 | 633 | 6560 |
| SGTPS#1 | 102 | 89 | 79 | 79 | 88 | 38 | 39 | 113 | 117 | 117 | 106 | 117 | 1085 |
| SGTPS#2 | 93 | 90 | 65 | 81 | 64 | 95 | 0 | 95 | 117 | 117 | 106 | 117 | 1038 |
| SGTPS PH I | 194 | 179 | 144 | 160 | 152 | 132 | 39 | 208 | 234 | 234 | 212 | 234 | 2123 |
| SGTPS#3 | 122 | 101 | 81 | 5 | 142 | 122 | 126 | 122 | 126 | 126 | 114 | 126 | 1312 |
| SGTPS#4 | 120 | 108 | 100 | 112 | 116 | 41 | 126 | 122 | 126 | 126 | 114 | 126 | 1334 |
| SGTPS PH II | 242 | 209 | 181 | 117 | 258 | 162 | 252 | 243 | 252 | 252 | 227 | 252 | 2646 |
| SGTPS EXT | 313 | 258 | 277 | 281 | 18 | 306 | 316 | 306 | 316 | 316 | 286 | 316 | 3308 |
| SGTPS COMP. | 749 | 646 | 602 | 558 | 428 | 601 | 607 | 757 | 802 | 802 | 724 | 802 | 8077 |
| **TOTAL** | 1497 | 1292 | 1052 | 1046 | 1137 | 1278 | 1364 | 1508 | 1592 | 1591 | 1437 | 1591 | 16384 |
| | | | | | | | | | | | | | |

| TENTATIVE UNITWISE PUF IN % YEAR 2009-10 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **POWER STATION** | **ACTUAL** | | | | | **ANTICIPATED** | | | | | | | |
| | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | TOTAL |
| AMK #3 | 56.5 | 52.8 | 40.7 | 26.2 | 31.8 | 52.1 | 41.7 | 50.0 | 25.0 | 0.0 | 0.0 | 0.0 | 31.4 |
| AMK #4 | 55.2 | 48.5 | 51.9 | 10.3 | 0.0 | 0.0 | 0.0 | 0.0 | 23.5 | 47.0 | 47.0 | 47.0 | 27.4 |
| AMK PH II | 55.8 | 50.6 | 46.3 | 18.3 | 15.9 | 26.0 | 20.8 | 25.0 | 24.3 | 23.5 | 23.5 | 23.5 | 29.4 |
| AMK PH III | 40.7 | 47.1 | 40.3 | 53.2 | 44.0 | 73.1 | 73.1 | 73.1 | 73.1 | 73.1 | 73.1 | 73.1 | 73.7 |
| AMK COMP. | 55.8 | 50.6 | 46.3 | 18.3 | 15.9 | 48.0 | 45.2 | 47.4 | 47.0 | 46.6 | 46.6 | 46.6 | 48.7 |
| STP #1 | 61.9 | 60.9 | 4.5 | 47.0 | 70.5 | 67.4 | 67.4 | 67.4 | 67.4 | 67.4 | 67.4 | 67.4 | 59.8 |
| STP #2 | 74.7 | 68.2 | 55.3 | 60.3 | 65.5 | 33.7 | 67.5 | 67.5 | 67.5 | 67.5 | 67.5 | 67.5 | 63.6 |
| STP #3 | 72.2 | 70.9 | 57.6 | 29.5 | 44.4 | 67.6 | 67.6 | 67.6 | 67.6 | 67.6 | 67.6 | 67.6 | 62.2 |
| STP #4 | 76.3 | 66.3 | 49.2 | 60.3 | 61.7 | 67.6 | 22.5 | 67.6 | 67.6 | 67.6 | 67.6 | 67.6 | 61.8 |
| STP #5 | 72.3 | 68.8 | 40.3 | 63.2 | 61.4 | 67.5 | 56.3 | 33.8 | 67.5 | 67.5 | 67.5 | 67.5 | 61.2 |
| STP PH I | 71.5 | 67.0 | 41.4 | 52.0 | 60.7 | 60.8 | 56.2 | 60.8 | 67.5 | 67.5 | 67.5 | 67.5 | 61.7 |
| STP #6 | 80.9 | 0.0 | 30.3 | 54.3 | 83.8 | 76.0 | 76.0 | 76.0 | 76.0 | 76.0 | 76.0 | 76.0 | 65.0 |
| STP #7 | 70.3 | 68.5 | 46.3 | 58.7 | 60.4 | 24.7 | 74.0 | 74.0 | 74.0 | 74.0 | 74.0 | 74.0 | 64.4 |
| STP PH II | 75.5 | 35.1 | 38.5 | 56.6 | 71.8 | 49.7 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 64.7 |
| STP #8 | 66.9 | 69.7 | 26.6 | 40.8 | 76.8 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 69.5 |
| STP #9 | 69.6 | 70.6 | 40.7 | 9.4 | 84.4 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 68.9 |
| STP PH III | 68.2 | 70.2 | 33.7 | 25.1 | 80.6 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 79.0 | 69.2 |
| STP COMP. | 71.7 | 56.7 | 37.5 | 43.8 | 72.0 | 63.5 | 71.3 | 72.6 | 74.4 | 74.4 | 74.4 | 74.4 | 65.5 |
| SGTPS#1 | 67.1 | 57.3 | 52.4 | 50.6 | 56.2 | 25.0 | 25.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 59.0 |
| SGTPS#2 | 61.2 | 57.4 | 43.0 | 51.5 | 40.8 | 62.5 | 0.0 | 62.5 | 75.0 | 75.0 | 75.0 | 75.0 | 56.4 |
| SGTPS PH I | 64.2 | 57.3 | 47.7 | 51.1 | 48.5 | 43.8 | 12.5 | 68.8 | 75.0 | 75.0 | 75.0 | 75.0 | 57.7 |
| SGTPS#3 | 80.7 | 64.8 | 53.7 | 3.3 | 91.2 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 71.3 |
| SGTPS#4 | 79.3 | 69.1 | 66.0 | 71.4 | 74.1 | 26.8 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 72.5 |
| SGTPS PH II | 80.0 | 66.9 | 59.9 | 37.4 | 82.6 | 53.7 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 71.9 |
| SGTPS PH III | 87.0 | 69.2 | 76.9 | 75.6 | 4.8 | 85.0 | 84.9 | 85.0 | 85.0 | 85.0 | 85.0 | 85.0 | 75.5 |
| SGTPS COMP. | 77.6 | 64.8 | 62.4 | 55.9 | 42.9 | 62.3 | 60.8 | 78.5 | 80.4 | 80.4 | 80.4 | 80.4 | 68.8 |
| **TOTAL** | 73.2 | 60.2 | 50.5 | 47.5 | 52.7 | 60.5 | 62.5 | 71.4 | 73.0 | 72.9 | 72.9 | 72.9 | 64.4 |

Annexure- 8.3(i)

List OF Telemetry Discrepancy Observed at S/s's

| Sr.No | DESCRIPTION | status | telemetry value at SLDC | actual value at site |
|---|---|---|---|---|
| **RTU name -Indore 400 KV S/S (Out of 5, attended 3 points)** | | | | |
| 1 | INDORE -UJJAIN 220 KV | CB | FAULTY | CLOSE |
| 2 | INDORE -IND EAST220 KV | CB | FAULTY | CLOSE |
| **RTU Name INDORE NZ 220 KV S/S ( Out of 6,attended 2 points & 3 new points added)** | | | | |
| 1 | 220 KV BUS 2 | VOLTAGE | 0 | 227 |
| 2 | 160 MVA XMER 1 | OLTC | 6 | 8 |
| 3 | 220 KV TRB | CB | FAULTY | OPEN |
| 4 | 220 KV BUS COUPLER | CB | FAULTY | OPEN |
| 5 | INDORE NZ TO INDORE-II | CB | FAULTY | CLOSE |
| 6 | INDORE NZ TO UJJAIN-II | CB | FAULTY | CLOSE |
| 7 | INDORE TO UJJAIN -I | CB | OPEN | CLOSE |
| **RTU Name INDORE CHAMBLE132 KV S/S (No change)** | | | | |
| 1 | 63 MVA XMER | OLTC | 8 | 17 |
| 2 | 20 MVA XMER | OLTC | 8 | 17 |
| 3 | 40 MVA XMER | OLTC | 8 | 17 |
| 4 | 20 MVA XMER | CB | FAULTY | CLOSE |
| 5 | CHAMBLE132 KV-INDORE S.ZONE | CB | FAULTY | CLOSE |
| **RTU name -Indore S.ZONE 220 KV S/S (Out of 16 , points attended 7 , new added 1)** | | | | |
| 1 | 160 MVA TRANSFORMER | OLTC | 17 | 11 |
| 2 | 3X40 MVA TRANSFORMER I | OLTC | 1 | 16 |
| 3 | 3X40 MVA TRANSFORMER II | OLTC | 15 | 16 |
| 4 | 40 MVA TRANSFORMER I | OLTC | 9# | 11 |
| 5 | 40 MVA TRANSFORMER II | OLTC | 17 | 4 |
| 6 | 160 MVA TRANSFORMER | CB | OPEN | CLOSE |
| 7 | IND S/Z TO CAT -1 132 KV | CB | OPEN | CLOSE |
| 8 | IND S/Z TO CHAMBLE | CB | FAULTY | CLOSE |
| 9 | 3X40 MVA TRANSFORMER II(132KV SIDE) | CB | OPEN | CLOSE |
| 10 | IND S/Z TO PITHAMPUR II | CB | OPEN | CLOSE |
| | | | | |
| **RTU name Pitampur 220 KV S/S (Out of 10 , points attended 2 , new added 4)** | | | | |
| 1 | 220 KV TR Bus Coupler | CB | FAULTY | OPEN |
| 1 | Pithampur-Rajgar (PG)-2 220KV | MW | Not provided, need to be provided by utilising transducers of 132 KV line | |
| 2 | Pithampur-Rajgar (PG)-2 220KV | MVAR | | |
| 2 | PITAMPUR 220 KV-RATLAM | CB | FAULTY | CLOSE |
| 3 | 132/33 KV TRANSFORMER 2 | OLTC | N/C | 8 |
| 4 | 132/33 KV TRANSFORMER 3 | OLTC | N/C | 11 |
| 5 | 132 KV TRB | CB | FAULTY | OPEN |
| 6 | 132 KV BUS COUPLE | CB | FAULTY | OPEN |
| 7 | PITAMPUR 132 KV-HML | CB | FAULTY | OPEN |
| 8 | CAPACITOR BANK | CB | FAULTY | OPEN |
| 9 | 20 MVA TRANSFORMER 132/33 | MW | NC | 10 |
| 10 | 20 MVA TRANSFORMER 132/33 | MVAR | NC | 12 |
| 11 | 40 MVA TRANSFORMER 132/33 | OLTC | NC | 6 |
| 12 | 40 MVA TRANSFORMER #1 | CB | FAULTY | CLOSE |
| **RTU name -NAGDA 400 KV S/S (Out of 5 , points attended 1 , new added 13)** | | | | |
| 1 | 400/220 KV ICT II | OLTC | N/C | 7 |
| 2 | 400/220 KV ICT III | OLTC | N/C | 7 |
| 3 | NAGDA –NEEMUCH 220 KV | MW | 10 | 0 |

| | | | | |
|---|---|---|---|---|
| 4 | NAGDA –NEEMUCH 220 KV | MVAR | 3 | 0 |
| 5 | NAGDA-- ISP TIE BAY | CB | FAULTY | CLOSE |
| 6 | NAGDA-- ICT -II TIE BAY | CB | FAULTY | CLOSE |
| 7 | NAGDA-- ICT III TIE BAY | CB | FAULTY | CLOSE |
| 8 | 400 KV Nagda-Bina1 | CB | Not connected at site | |
| 9 | 400 KV Nagda-Bina 2 | CB | | |
| 10 | 400 KV Nagda-Rajgar 1 | CB | | |
| 11 | 400 KV Nagda-Rajgar 2 | CB | | |
| 12 | 400 KV Nagda-Dehgaon 1 | CB | | |
| 13 | 400 KV Nagda-Dahgaon 2 | CB | | |
| 14 | 220 KV Nagda-Ratlam 1 | MW | Transducers Not available | |
| 15 | 220 KV Nagda –Ratlam 1 | MVAR | | |
| 16 | 220 Kv Nagda-Ratlam 2 | MW | | |
| 17 | 220 KV Nagda-Ratlam 2 | MVAR | | |
| **RTU name NAGDA 220 KV S/S (Out of 13, points attended 2, new added 2)** | | | | |
| 1 | 125 MVA TRANSFORMER | OLTC | 9# | 8 |
| 2 | 160 MVA TRANSFORMER | OLTC | 17 | 12 |
| 3 | 40 MVA TRANSFORMER -II | OLTC | 17 | 5 |
| 7 | 220 KV BUS INTERCONNECTOR II | CB | FAULTY | CLOSE |
| 5 | 125 MVA TRANSFORMER | CB | OPEN | CLOSE |
| 6 | 220 KV BUS COUPLER | CB | FAULTY | OPEN |
| 7 | 220 KV BUS INTERCONNECTOR I | CB | FAULTY | CLOSE |
| 8 | 160 MVA TRANSFORMER 220kv side | CB | OPEN | CLOSE |
| 9 | NAGDA TO MAHIDPUR | CB | open | CLOSE |
| 10 | NAGDA TO A LOT | CB | FAULTY | CLOSE |
| 11 | NAGDA TO RATDIYA | CB | FAULTY | CLOSE |
| 12 | 125 MVA TRANSFORMER (132KV) #1 | CB | FAULTY | CLOSE |
| 13 | 125 MVA TRANSFORMER (132KV)#2 | CB | OPEN | CLOSE |
| **RTU name Dewas 132 KV S/S (Out of 1 ,attended 1)** | | | | |
| | | | | |
| **RTU name Dewas 220 KV S/S (Out of 11,points attended 1,new added 3)** | | | | |
| 1 | 220/132 KV TRANSFORMER | MW | 29 | 90 |
| 2 | 220/132 KV TRANSFORMER | MVAR | 6 | 10 |
| 4 | 132/33 KV TRANSFORMER 2 | OLTC | N/C | 7 |
| 5 | 220/132 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 6 | 220/132 KV TRANSFORMER 2 | OLTC | N/C | 7 |
| 7 | DEWAS 220 KV -INDORE EAST | CB | FAULTY | CLOSE |
| 8 | DEWAS 220 KV -INDORE 400KV S/S | CB | FAULTY | CLOSE |
| 9 | DEWAS 132 KV –CHAPDA | CB | FAULTY | CLOSE |
| 10 | DEWAS 132 KV –MSP | CB | FAULTY | CLOSE |
| 11 | 20 MVA TRANSFORMER I | CB | FAULTY | OPEN |
| 12 | BUS COUPLER | CB | FAULTY | OPEN |
| 13 | DEWAS TO DEWAS IC #2 | CB | FAULTY | CLOSED |
| 14 | DEWAS TO KESHRI STEEL | CB | FAULTY | OPEN |
| **RTU name Ujjain 220 KV S/S (Out of 8 ,points attended 1, new added 2)** | | | | |
| 1 | 3X40 MVA TRANSFORMER | OLTC | 5 | 11 |
| 2 | 220/132 KV TRANSFORMER 4 | OLTC | N/C | 6 |
| 3 | 160 MVA TRANSFORMER | OLTC | N/C | 9 |
| 4 | UJJAIN220 KV -JETPURA | CB | FAULTY | CLOSE |
| 5 | 3X40 MVA TRANSFORMER (132 KV SIDE) | CB | FAULTY | CLOSE |
| 6 | 63 MVA TRANSFORMER #2 | CB | FAULTY | CLOSE |
| 7 | UJJAIN 132 KV- GHOSLA | CB | FAULTY | CLOSE |
| 8 | UJJAIN 220 TO BADNAGAR | CB | FAULTY | CLOSE |
| 9 | UJJAIN 220 SYNTHETIC | CB | FAULTY | OPEN |
| | | | | |
| **RTU name Shujalpur 220 KV S/S (Attended -nil** | | | | |

| | | | | |
|---|---|---|---|---|
| 1 | 160 MVA TRANSFORMER –I | OLTC | 2 | 10 |
| 2 | 20 MVA TRANSFORMER | OLTC | 10 | 5 |
| 3 | 160 MVA TRANSFORMER II | CB | FAULTY | CLOSE |
| 4 | 160 MVA TRANSFORMER II (132 KV SIDE) | CB | FAULTY | CLOSE |
| 5 | 20 MVA TRANSFORMER | CB | OPEN | CLOSE |
| 6 | 132 KV BUS COUPLE | CB | FAULTY | OPEN |
| 7 | 2X33 MVAR CAPACITOR BANK | CB | FAULTY | CLOSE |
| 8 | SHUJALPUR 220 KV-BHOPAL 2 | CB | FAULTY | CLOSE |
| **RTU name Shajapur132 KV S/S (Out of 2, point attended 1)** | | | | |
| 1 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 9 |
| | | | | |
| **RTU name Ratlam 220 KV S/S (Out of 4, points attended 2, new added 3)** | | | | |
| | | | | |
| 1 | RATLAM 132 KV-MEGHNAGAR | MW | 26 | 36 |
| 2 | 220 KV TRB | CB | FAULTY | OPEN |
| 3 | RATLAM 132 KV-MALHARGARH | CB | FAULTY | CLOSE |
| 4 | RATLAM 132 KV-UDEPUR | CB | FAULTY | CLOSE |
| 5 | RATLAM 132 KV-RATANGARH | CB | FAULTY | CLOSE |
| **RTU name Neemuch 220 KV S/S (Out of 4 ,points attended 0 , new added 2)** | | | | |
| 1 | 220/132 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 2 | NEEMUCH TO NAGDA #2 | CB | TRANSIT | CLOSE |
| 3 | BUS FREQUENCY | | # | |
| 4 | 220/132 KV TRANSFORMER 2 | OLTC | N/C | 8 |
| 5 | NEEMUCH 132 KV INTER CONNECTOR II | CB | TRANSIT | CLOSE |
| 6 | 220 KV MAIN BUS | VOLTAGE | 33 | 230 |
| **RTU name Burwaha 220 KV S/S (Out of 10 , attended - nil )** | | | | |
| 1 | 160 MVA XMER | OLTC | 17 | 3 |
| 2 | 3X40 MVA XMER | OLTC | 17 | 3 |
| 3 | 63 MVA XMER | OLTC | 17 | 4 |
| 4 | 220 KV BUS COUPLER | CB | FAULTY | OPEN |
| 5 | BURWAHA 220KV-NIMRANI | CB | FAULTY | CLOSE |
| 6 | BURWAHA 220KV-INDORE I | CB | FAULTY | CLOSE |
| 7 | 220 /132 KV TRANSFORMER 1 | CB | FAULTY | CLOSE |
| 8 | 220 /132 KV TRANSFORMER 2 (132 KV SIDE) | CB | FAULTY | CLOSE |
| 9 | 220 /132 KV TRANSFORMER2 (132 KV SIDE) | CB | FAULTY | CLOSE |
| 10 | BURWAHA 132KV-CHEGAON | CB | FAULTY | CLOSE |
| **RTU name Nepanagar 220 KV S/S (Out of 5, points attended 2, new added 1)** | | | | |
| 1 | 3X40 MVA XMER | OLTC | 1 | 15 |
| 2 | 132/33 KV 12.5 MVA XMER | OLTC | 17 | 5 |
| 3 | 220 KV TRB | CB | FAULTY | OPEN |
| 4 | NEPANAGAR TO CHHEGAON#2 | CB | OPEN | CLOSE |
| **RTU name Bhopal 400 KV S/S** | | | | |
| | | | | |
| **RTU name Bhopal 220 KV S/S (Out of 9 attended nil)** | | | | |
| 1 | BHOPAL132 KV-BAIRAGRAH II | MW | 0 | 40 |
| 2 | BHOPAL132 KV-BAIRAGRAH II | MVAR | 0 | 15 |
| 3 | BHOPAL132 KV-CHAMBLE I | MW | TRANDUCSERS ARE TO BE PROVIDED | 15 |
| 4 | BHOPAL132 KV- CHAMBLE I | MVAR | | 5 |
| 5 | BHOPAL132 KV- CHAMBLE II | MW | | 14 |
| 6 | BHOPAL132 KV- CHAMBLE II | MVAR | | 10 |
| 7 | BHOPAL132 KV-CHAMBLE I | CB | FAULTY | CLOSE |
| 8 | BHOPAL132 KV-BAIRAGRAH II | CB | OPEN | CLOSE |
| 9 | BHOPAL132 KV- CHAMBLE II | CB | TRANDUCSERS ARE TO BE PROVIDED | CLOSE |
| **RTU name Piparia 132 KV S/S (Out of 7,points attended 2 , new added 1) (All CB are n/c)** | | | | |

| | | | | |
|---|---|---|---|---|
| 1 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 4 |
| 2 | 132/33 KV TRANSFORMER 1I | OLTC | N/C | 4 |
| 3 | PIPARIA-ITARSI 132 KV | MW | 0 | 15 |
| 4 | PIPARIA-ITARSI 132 KV | MVAR | 0 | 10 |
| 5 | PIPARIA 132 KV-BARELI | MW | 0 | 8 |
| 6 | PIPARIA 132 KV-BARELI | MVAR | 0 | 5 |
| 7 | **ALL DIGITAL INDICATIONS ARE NON CURRENT** | | | |
| **RTU name Sarni 220 KV S/S (Out of 4 , points attended nil , new added 3)** | | | | |
| 1 | SARNI-SATPURA TPS 220 KV | MW | Telemetry no provided as metering not available at site | |
| 2 | SARNI-SATPURA TPS 220 KV | MVAR | | |
| 3 | SARNI-SATPURA TPS 220 KV | CB | | |
| 4 | SARNI 220 KV TRB | CB | FAULTY | CLOSE |
| 5 | 220/132 KV TRANSFERMER I | CB | FAULTY | CLOSE |
| 6 | 20 MVA TRANSFORMER III | OLTC | 17 | 6 |
| 7 | 20 MVA TRANSFORMER IV | OLTC | 9# | 8 |
| **RTU name Bairagrah 220 KV S/S (Out of 5 , points attended 1)** | | | | |
| 1 | 220 KV BUS 1 AND FREQUENCY | VOLTAGE | 127 | 225 |
| 2 | Bairagrah 220KV-Lalghati II | CB | FAULTY | CLOSE |
| 3 | 220/132 KV TRANSFORMER 1 | CB | FAULTY | CLOSE |
| 4 | 220 KV TRB | CB | FAULTY | OPEN |
| | | | | |
| **RTU Name HANDIA 220 KV S/S (Out of 8 attended 4 , new added 4)** | | | | |
| 1 | 132/33 TRANSFORMER II | MW | Telemetry not available because of non availability of metering at site | |
| 2 | 132/33 TRANSFORMER II | MVAR | | |
| 3 | 132/33 TRANSFORMER II | OLTC | NC | |
| 4 | 132/33 TRANSFORMER II | CB | FAULTY | CLOSE |
| 5 | HANDIA –KANNOD II | CB | FAULTY | CLOSE |
| 6 | HANDIA –ITARSI 220 KV | CB | FAULTY | CLOSE |
| 7 | HANDIA –BURWAHA 220 KV | CB | FAULTY | CLOSE |
| 8 | 220 KV TRB | CB | FAULTY | CLOSE |
| **RTU Name MALANPUR 220 KV S/S (Out of 7 , points attended 4 )** | | | | |
| 1 | MALANPUR132 KV-BANMORE | CB | FAULTY | CLOSE |
| 2 | 220 KV BUS COUPLER I | CB | FAULTY | CLOSE |
| 3 | 220 KV BUS COUPLER II | CB | FAULTY | CLOSE |
| **RTU Name MEHGAON 220 KV S/S ((out of 14,Attended –6)** | | | | |
| 1 | 220 KV BUS TRANSFER | CB | FAULTY | OPEN |
| 2 | 220/132 KV TRANSFERMER | CB | FAULTY | CLOSE |
| 3 | MEHGAON 22KV- MALANPUR | CB | FAULTY | CLOSE |
| 4 | MEHGAON 22KV- AURIYA | CB | FAULTY | CLOSE |
| 5 | 220/132 KV TRANSFERMER (132 KVSIDE) | CB | FAULTY | CLOSE |
| 6 | MEHGAON 132 KV RON | CB | FAULTY | CLOSE |
| 7 | 132 KV BUS TRANSFER | CB | FAULTY | OPEN |
| 8 | 132 KV INTERCONNECTOR | CB | FAULTY | CLOSE |
| **RTU name Gwalior 220 KV S/S (Out of 7, attended 1)** | | | | |
| 1 | 132/33 KV TRANSFORMER 4 | OLTC | N/C | 6 |
| 2 | 132/33 KV TRANSFORMER 5 | OLTC | N/C | 6 |
| 3 | GWALIOR 132 KV-BANMORE | CB | FAULTY | CLOSE |
| 4 | 132 KV TRB | CB | FAULTY | OPEN |
| 5 | GWALIOR 132 KV-TRACTION II | CB | FAULTY | CLOSE |
| 6 | 220/132 XMER I(132KV SIDE) | CB | FAULTY | CLOSE |
| | | | | |
| **RTU name Guna 220 KV S/S (Out of 5, attended 1,new added 4)** | | | | |
| 1 | 220/132 KV TRANSFORMER | OLTC | N/C | 3 |
| 3 | GUNA RAGHAVGRAH | MW | 5 | 12 |
| 3 | 220/132 KV TRANSFORMER | MW | 0 | 40 |
| 4 | 220 KB AUX BUS | CB | FAULTY | OPEN |

| | | | | |
|---|---|---|---|---|
| 5 | GUNA-220 KV BINA 2 | MW | TRANSDUCERS NOT AVAILABLE | |
| 6 | GUNA-220 KV BINA 2 | MVAR | | |
| 7 | GUNA 220/132 TRF-2 | MW | | |
| 8 | GUNA 220/132 TRF-2 | MVAR | | |
| **RTU name Ashta 132 KV S/S (Out of 3, attended 1)** | | | | |
| 1 | ASHTA 132 KV-ARNIKALAN II | CB | FAULTY | CLOSE |
| 2 | ASHTA 132 KV | VOLTAGE | N/C | 130 |
| **RTU name Boregaon 132 KV S/S (Out of 3, attended 1)** | | | | |
| 1 | 132/33 KV TRANSFORMER | OLTC | N/C | 5 |
| 2 | BOREGOAN132 KV-CHINDWADA | MVAR | 136 | 10 |
| | | | | |
| | | | | |
| **RTU name Chindwada 132 KV S/S (attended nil)** | | | | |
| 1 | 132 KV TRB | CB | FAULTY | OPEN |
| 2 | 132/33 KV TRANSFORMER 2 | OLTC | 17 | 5 |
| 3 | 132/33 KV TRANSFORMER 2 | CB | FAULTY | CLOSE |
| **RTU name Pandurna 220 KV S/S (Out of 3, attended 1)** | | | | |
| 1 | 220/132 KV TRANSFORMER | OLTC | N/C | 4 |
| 2 | 132/33 KV TRANSFORMER 1 | CB | FAULTY | CLOSE |
| 3 | PANDURNA TRF BuS CB | CB | transit | CLOSE |
| **RTU name Narsingpur 220 KV S/S (Out of 21, attended 10)** | | | | |
| 1 | 220/132 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 2 | 220/132 KV TRANSFORMER 2 | OLTC | N/C | 5 |
| 3 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 6 |
| 4 | NARSINGPUR220 KV-ITARSI 1 | MW | Transducers not Available | |
| 5 | NARSINGPUR220 KV-ITARSI 1 | MVAR | | |
| 6 | NARSINGPUR220 KV-ITARSI 2 | MW | | |
| 7 | NARSINGPUR220 KV-ITARSI 2 | MVAR | | |
| 8 | 220/132 KV TRANSFORMER 2 | MW | | |
| 9 | 220/132 KV TRANSFORMER 2 | MVAR | | |
| 10 | 220/132 KV TRANSFORMER 2 | CB | OPEN | CLOSE |
| 11 | 132 KV INTERCONNECTOR 2 | MW | 74 | 10 |
| **RTU name Satna 220 KV S/S (Out of 9, attended 1)** | | | | |
| 1 | 220/132 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 2 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 3 | 132/33 KV TRANSFORMER 2 | OLTC | N/C | 7 |
| 4 | SATNA 220KV-SATNA PGCIL 2 | CB | OPEN | CLOSE |
| 5 | SATNA 132 KV-PANNA | CB | FAULTY | CLOSE |
| 6 | SATNA 132/33 KV TRf 2 | CB | FAULTY | CLOSE |
| 7 | SATNA 132 KV INTERCONNECTOR 2 | CB | FAULTY | CLOSE |
| 8 | 132 KV BUS 2 | VOLTAGE | 13 | 134 |
| **RTU name Satna 132 KV S/S (Attended – nil)** | | | | |
| 1 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 6 |
| 2 | 132 KV TRB | CB | FAULTY | OPEN |
| **RTU name Morwa 132 KV S/S (Attended – nil)** | | | | |
| 1 | MORWA 132KV-WAIDHAN | CB | FAULTY | CLOSE |
| 2 | 132/33 KV TRANSFORMER 1 | OLTC | N/C | 7 |
| 3 | 132/33 KV TRANSFORMER 2 | OLTC | N/C | 7 |
| **RTU name -Bina 400 KV S/S (Out of 6, attended 1, new added 1)** | | | | |
| 1 | BINA400 KV-BINA PGCIL1 | CB | FAULTY | CLOSE |
| 2 | BINA 220 KV-SHIVPURI 2 | CB | OPEN | CLOSE |
| 3 | BINA 400/220 TRF3 CB | CB | N/C | CLOSE |
| 4 | BINA 220 KV-GWALIOR 2 | CB | OPEN | CLOSE |
| 5 | BINA 220 KV- GUNA 1 | CB | FAULTY | CLOSE |
| 6 | BINA 220 KV-GUNA 2 | CB | OPEN | CLOSE |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **RTU name -Bina 220 KV S/S** | | | | |
| 1 | BINA 132 KV-SAGAR | CB | FAULTY | CLOSE |
| 2 | BINA 132 KV-PICHORE | CB | FAULTY | CLOSE |
| 3 | BINA 132 KV –CAPACITOR BANK | CB | FAULTY | OPEN |
| 4 | 220/132 KV TRANSFORMER 2 (132 KV SIDE) | CB | FAULTY | CLOSE |

List of Telemetry Discrepancy Observed at Power Stations **Annexure 8.3(ii)**

**RTU NAME- Amarkanatak Thermal Power Station (Out of 24,attended 2 points)**

| S.N | Description | | Telemetred value at site | Telemetred value at SLDC |
|---|---|---|---|---|
| 1 | ATPS 220 KV- Jabalpur | CB | CLOSE | OPEN |
| 2 | ATPS 220/6.6 KV Stn Xmer II | CB | CLOSE | OPEN |
| 3 | ATPS 220/132 KV Xmer 1(132kv) | CB | CLOSE | OPEN |
| 4 | ATPS 220/132 KV Xmer 4 (132kv) | CB | CLOSE | OPEN |
| 5 | ATPS220KV-Rewa | MW | 67 MW | 57 MW |
| 6 | ATPS220KV-Rewa | MVAR | 10 MVAR | 29 MVAR |
| 7 | ATPS220KV-BRS220 III | MW | 20 MW | 37 MW |
| 8 | GENERATOR 5 | CB | CLOSE | N/C |
| 9 | ATPS220KV-Rewa | CB | CLOSE | N/C |
| 10 | ATPS220KV-BRS220 III | CB | CLOSE | N/C |
| 11 | ATPS 220/6.6 KV Stn Xmer A | CB | CLOSE | N/C |
| 12 | ATPS 220/6.6 KV Stn Xmer B | CB | CLOSE | N/C |
| 13 | ATPS 220/6.6 KV Stn Xmer A | MW | 10 | 75 |
| 14 | ATPS 220/6.6 KV Stn Xmer A | MVAR | 5 | 0 |
| 15 | ATPS 220/6.6 KV Stn Xmer B | MW | 10 | 75 |
| 16 | ATPS 220/6.6 KV Stn Xmer B | MVAR | 5 | 0 |
| 17 | ATPS132/33 KV ICT 5 | CB | CLOSE | FAULTY |
| 18 | ATPS132 KV 220/132 KV ICT -I | MW | 30 MW | 22 MW |
| 19 | ATPS 132 KV Bus -1 | VOLTAGE | 134 KV | 127 KV |
| 20 | ATPS132 KV-Waidhan | CB | close | FAULTY |
| 21 | 132/33 KV TRANSFORMER 4 | OLTC | 6 | N/C |
| 22 | 132/33 KV TRANSFORMER 5 | OLTC | 6 | N/C |
| **RTU NAME- Birsingpur Thermal Power Station (Out of 6, attended 2)** | | | | |
| 1 | BRS220 KV IC 1 | MW | 117 MW | 2 MW |
| 2 | BRS220 KV IC 1 | MVAR | 10 MVAR | 0 MVAr |
| 3 | BRS 400 /220 ICT | MW | 115 | 190 |
| 4 | BRS 400KV- DAMOH PGCIL | MW | 330 | 344 |
| **RTU NAME- Satpura Thermal Power Station –I (Out of 19, attended 9)** | | | | |
| 1 | STPS PH I Stn Xmer III | CB | CLOSE | FAULTY |
| 2 | STPS PH I BUSCOUPLER I | CB | OPEN | FAULTY |
| 3 | STPS PH I BUSCOUPLER II | CB | OPEN | FAULTY |
| 3 | STPS PH I TRB I | CB | OPEN | FAULTY |
| 4 | STPS PH I TRB II | CB | OPEN | FAULTY |
| 5 | STPS PH 2 GENERATOR 6 (GT) | MVAR | 20 | N/C |
| 6 | STPS PH 2 GENERATOR 7 (GT) | MVAR | 15 | N/C |
| 7 | STPS PH 2 MAIN BUS 1 | VOLTAGE | 229 | N/C |
| 8 | STPS PH 2 MAIN BUS 1 | FREQ. | 49.46 | N/C |
| 9 | STPS PH 2 MAIN BUS 2 | VOLTAGE | 228 | N/C |
| 10 | STPS PH 2 MAIN BUS 2 | FREQ. | 49.44 | N/C |

**RTU NAME- Madhikheda hydel Power Station (Out of 9, attended nil )**

| | | | | |
|---|---|---|---|---|
| 1 | GENERATOR 1 | CB | OPEN | FAULTY |
| 2 | GENERATOR 2 | CB | OPEN | FAULTY |
| 3 | GENERATOR 3 | CB | OPEN | FAULTY |
| 4 | Madhikheda 132 Kv- Karera I | CB | OPEN | FAULTY |
| 5 | Madhikheda 132 Kv- Karera I I | CB | OPEN | N/C |
| 6 | Madhikheda 132 Kv- Karera I | MW | 10 | 0 |
| 7 | Madhikheda 132 Kv- Karera I | MVAR | 5 | 0 |
| 8 | Madhikheda 132 Kv- Karera II | MW | 10 | 0 |
| 9 | Madhikheda 132 Kv- Karera II | MVAR | 5 | 0 |
| **RTU NAME- Tons hydel Power Station (Out of 4, attended nil )** | | | | |
| 1 | STN. XMER | MW | 2 | 0 |
| 2 | STN. XMER | MVAR | 10 | 0 |
| 3 | GENERATOR 3 | CB | close | faulty |
| 4 | BUSCOUPLER | CB | OPEN | faulty |
| | | | | |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **RTU NAME- Bargi hydel Power Station (Out of 3, attended nil )** | | | | |
| 1 | BARGI 132 KV –JABALPUR 2 | CB | Close | faulty |
| 2 | GENERATOR 1 | CB | OPEN | transit |
| 3 | STN. XMER | CB. | OPEN | faulty |
| **RTU NAME- Pench hydel Power Station (Attended – nil)** | | | | |
| 1 | GENERATOR 2 | CB | open | transit |

**RTU NAME- Gandhi sagar hydel Power Station (Out of 7, attended 3)**

| | | | | |
|---|---|---|---|---|
| 1 | 132 KV BUS COUPLER | CB | OPEN | CLOSE |
| 2 | 132/33 KV Transformer | CB | faulty | CLOSE |
| 3 | GENERATOR V | CB | FAULTY | CLOSE |
| 4 | 132/33 KV XMER | OLTC | 9 | 6 |
| **RTU NAME- Rajghat hydel Power Station (Out of 7, attended nil)** | | | | |
| 1 | RAJGHAT132 KV-LALITPUR | MW | N/C | 5 |
| 2 | RAJGHAT132 KV-LALITPUR | MVAR | N/C | 5 |
| 3 | RAJGHAT132 KV-LALITPUR | CB | FAULTY | OPEN |
| 4 | GENERATOR I | CB | FAULTY | OPEN |
| 5 | GENERATOR I I | CB | FAULTY | OPEN |
| 6 | GENERATOR I I I | CB | FAULTY | OPEN |
| 7 | 132 KV BUS | VOLTAGE | N/C | 129 |