MP POWER TRANSMISSION COMPANY LIMITED

STATE LOAD DESPATCH CENTRE, NAYAGAON, JABALPUR 482 008

Phone 0761-2702748 website: www.sldcmpindia.com Fax 0761-2664343

No.07-05/SG-9B-II/1618 Jabalpur, dated 28-08-2010

To

As per distribution list

Sub: Minutes of 20th meeting of Operation and Coordination Committee of MP and intimation for 21st OCC meeting.

Dear Sir,

Please find enclosed herewith the minutes of 20th meeting of the Operation and Coordination Committee of MP held on 26th July 2010 at SLDC, Jabalpur. The minutes are also available on the website of SLDC.

The 21st OCC meeting shall be held on 15th September 2010 at Omkareshwar Hydel Power Station Sidhwarkut, Distt: Khandwa. The contact details of the coordinators are given hereunder.

SN	Name of coordinator	Designation	Contact number	Email id
01	Shri Vanasnt Hurmade	Manager (O&M)	Mob : 9407403729 Tel/Fax 07280-271727	Vasant_nhpc@yahoo.com
02	Shri Harish Sharma	Dy. Manager (E)	Mob : 9425735739	Nhpc_hksharma@yahoo.co.in

The OCC members are requested to intimate the names of the participants alongwith travel plan to coordinators directly under intimation to this office latest by 04th September 2010, so that the arrangement could be made by NHPC.

It is requested to please forward the information required for the meeting and the additional agenda points for inclusion, if any, to SLDC Jabalpur before 4th September 2010, so that the same could be included in the agenda for discussion in the meeting.

Thanking you.

Yours faithfully,

Encl : As above.

(P.A.R. Bende)
Member Secretary, OCC
S.E.(LD-OPN), SLDC
MPPTCL, Jabalpur

Distribution List

The Officer on Special Duty (T&C), MP Power Transmission Co. Limited, Jabalpur.	The Superintending Engineer (DCC-WZ), DISCOM Control Centre, MP Paschim Kshetra Vidyut Vitaran Co. Limited, Near Polo Ground, Jail Road, Indore.
The Chief Engineer (S/S), MP Power Transmission Co. Limited, Jabalpur.	The Executive Engineer (DCC-EZ), DISCOM Control Centre, MP Poorva Kshetra Vidyut Vitaran Co. Limited, Jabalpur.
The Chief Engineer (Power System), MP Power Transmission Co. Limited, Jabalpur	The Additional General Manger (LM), DISCOM Control Centre, MP Madhya Kshetra Vidyut Vitaran Co. Limited, Bhopal.
The Executive Director (O&M:Gen.), MP Power Generating Co. Limited, Jabalpur.	The Chief Engineer (PM&C), Narmada Hydroelectric Development Corpn. Ltd, NHDC Parisar, Shamla Hills, Bhopal – 462013.
The Chief Engineer (O&M:Hydel), MP Power Generating Co. Limited, Jabalpur.	The General Manager, Indira Sagar Power Station, NHDC Office complex, PO : Narmada Nagar, Distt : Khandwa (MP) – 450 119.
The Chief General Manager (Comml.), MP Power Trading Company, Jabalpur.	The General Manager, Omkareshwar Power Station, Prashsnik Bhawan, Urja Vihar, Sidhwarkut, Distt : Khandwa (MP) – 450 554.
The Addl Superintending Engineer, Sub Load Despatch Centre, MPPTCL, Indore	The Executive Engineer, Sub Load Despatch Centre, MPPTCL, Bhopal .

MINUTES OF 20TH MEETING OF OPERATION & COORDINATION COMMITTEE OF MP HELD ON 26th JULY 2010 AT SLDC, JABALPUR.

The 20th meeting of Operation & Co-ordination Committee of MP was held on 26th July 2010 at State Load Despatch Centre, Jabalpur. The list of participants is enclosed at Annexure-1.0.

Shri R.P. Sharma, OSD (SLDC) and Chairman OCC welcomed Members and participants in the 20th OCCM of MP. While highlighting the power situation in the MP, he informed that during April 2010, the system frequency of the combined grid was within the permissible range of 49.2 to 50.3 Hz for 60.24% of time with frequency dip below 48.8 Hz for 438 times. However, the frequency was within the permissible range of 49.5 to 50.2 Hz for 79.17% and 89.77 % of the time during May and June 2010 and the instances of frequency dip below 48.8 Hz were also minimized to great extent. He also informed that the net unscheduled interchange by MP during the months April, May and June 2010 are -50.64 MU, 44.25MU and 38.58 MU respectively. The OSD(SLDC) requested the DISCOMs to manage the load regulation in their respective DISCOMs in such a way so as to avoid violation of GRID Code.

Thereafter, OSD (SLDC) requested Shri P.A.R. Bende, Member Secretary (OCC) to take up the agenda items for discussion.

ITEM NO. 1 : CONFIRMATION OF MINUTES

Member Secretary, OCC stated that the Minutes of 20th meeting of Operation & coordination committee of MP held on 4th May 2010 at SGTPS, Birsinghpur were posted on the SLDC website and informed to the committee members vide letter no. 07-05/SG-9B-II/1269 dated 02.07.2010. No comments have been received. The minutes of the 20th meeting of Operation & coordination committee of MP have been confirmed by the Committee.

ITEM NO. 2 : REVIEW OF SYSTEM OPERATION DURING THE MONTH OF APRIL TO JUNE 2010.

2.1 Frequency Particulars

Member Secretary, OCC informed the committee that the frequency profile during April 2010 was poor as compared to its preceding month. The average frequency during the month was recorded as 49.27 Hz and system frequency below 49.2 Hz was for 39.63 % of time as compared to 5.99% time during March 2010. The frequency also dipped below 48.8 Hz on 438 occasions.

It was also informed that as per revised IEGC notified on 28-04-2010 which came into force from 03-05-2010, the operational frequency band has been narrowed down from 49.2-50.3 Hz to 49.5-50.2 Hz.

Chairman, OCC advised the DCC incharge to install a frequency meter at their residence, so as to monitor the system frequency constantly to avoid underdrawal at high frequency and over drawl at low frequency. He also advised the DISCOMs to identify the 33 KV feeders so that at the time of critical over drawl conditions the load could be curtailed immediately as a contingency measure.

The frequency profile as given in Annexure 2.1 of the agenda was discussed by the committee. The same is reproduced hereunder :

Month	Average frequency	minimum integrated frequency over an hour	maximum integrated frequency over an hour	instantaneous minimum frequency	Instantaneous maximum frequency
APR 10	49.27 Hz	48.74 Hz	49.96 Hz	48.56 Hz	50.51 Hz
MAY 10	49.73 Hz	49.02 Hz	50.57 Hz	48.76 Hz	50.80 Hz
JUN 10	49.83 Hz	49.36 Hz	50.42 Hz	48.77 Hz	50.72 Hz

2.2 Operational Matters

2.2.1 Operational Discipline

Member Secretary, OCC stated that the frequency profile during April 2010 was not satisfactory as compared to the preceding month. However, the frequency profile improved during May and June 2010. The frequency profile for the period April 2010 to June 2010 is as given below :

Month	% of time Frequency Below 49.2 Hz (APR) and below 49.5 Hz (MAY & JUNE)	% of time Frequency above 50.30 Hz(APR) and above 50.2 Hz (MAY & JUNE)	% of time frequency within the permissible range of 49.2-50.3 Hz(APR) and of 49.5-50.2 Hz (MAY & JUNE)	The average monthly frequency	No. of times frequency dipped below 48.8 Hz
APR-10	39.63	0.13	60.24	49.27	438
MAY-10	18.10	2.73	79.17	49.73	16
JUN -10	5.84	4.39	89.77	49.61	02

The total number of instances of significant violation of IEGC by the DISCOMs by overdrawing at frequency below 49.2 Hz during the month of April 2010 and below 49.5 Hz for MAY & June 2010 is as given hereunder:

MONTH	East Discom	Central Discom	West Discom	Total
APR-10	518	217	544	1279
MAY-10	234	225	357	816
JUN-10	109	121	86	316

Member Secretary, OCC requested all DISCOMs to maintain their drawl within the schedule to avoid any violation of grid discipline as there is heavy penalty for overdrawing at low frequency and the congestion charge may also be levied on the under drawing DISCOM as per the CERC Regulation. He expressed his concerns The DISCOMs have agreed to follow grid discipline.

Member Secretary has advised the EAST DISCOM to avoid under drawl during morning hours when the system frequency is high and restrict the over drawal at low frequency during afternoon and evening hours. It was also advised to the DISCOMs to bring the differential load shedding under the control of DCCs.

2.3.1 Voltage Profile

Committee noted the voltage profile at some of the important 400 KV and 220 KV substations during the month of April to June 2010 as enclosed at Annexure -2.3 of agenda notes.

During the month of April to June 2010, the deviation of voltage from the accepted limit on either side was recorded at following location in MP Grid.

MAXIMUM VOLTAGE

Sr. No.	Name of Substation	APR-10		MAY-10		JUN-10	
		Max. Voltage		Max. Voltage		Max. Voltage	
		Voltage	Date	Voltage	Date	Voltage	Date
1	Indore	426	18	423	25,26	424	28
2	Itarsi	430	01	430	26,31	431	03
3	Bina	430	14	431	31	431	05
4	Gwalior	429	30	434	11	431	27
5	Nagda	430	01	434	04	432	17

MINIMUM VOLTAGE

Sr. No.	Name of Substation	APR-10		MAY-10		JUN-10	
		Min. Voltage		Min. Voltage		Min. Voltage	
		Voltage	Date	Voltage	Date	Voltage	Date
1	Indore	--	--	--	--	--	--
2	Itarsi	--	--	--	--	--	--
3	Bina	--	--	--	--	--	--
4	Gwalior	--	--	374	15	359	24
5	Nagda	--	--	--	--	--	--

Member Secretary, OCC explained that the problem of overvoltage conditions at Indore 400 KV s/s and Nagda 400 KV s/s is primarily due to low demand period/load shedding. The representative from OSD(T&C), MPPTCL informed that action has been initiated for converting one of the line reactor of 400 KV Nagda–Rajgarh line into Bus reactors to utilize the same for voltage control at Nagda 400 KV s/s.

2.3.2 Status of Capacitor Banks in sub-transmission system

Member Secretary, OCC confirmed that DISCOMs were requested vide letter No. 07-05/RPC-27/1284 dated 07-07-2010 to submit the details of total capacitor banks of different capacities installed till 31st March 2010 and the details of capacitor banks in working conditions and the action plan to rectify the faulty capacitor banks. It was also requested to furnish the details of capacitor banks proposed for installation during 2010-11 latest by 15-07-2010. However, only West DISCOM has furnished the information. As per the inputs given by the DISCOMs, the status is as indicated below.

DISCOM	Capacitor bank installed in good condition (No)		Capacitor bank installed but defective and 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	600 KVAR	1200 KVAR	No of 100 KVAR Units required	600 KVAR	1200 KVAR	600 KVAR	1200 KVAR	600 KVAR	1200 KVAR
WZ	484	337	10	100	286	38	40	150	136	44	37
CZ	Information not furnished										
EZ	Information not furnished										

West DISCOM also furnished the following information :

(i) MVAR capacity of connected capacitors in good condition 694.80 MVAR
(ii) MVAR capacity of connected capacitors in partially good condition 97.40 MVAR
(iii) MVAR capacity of connected capacitors in good condition including partially good condition. 792.20 MVAR
(iv) MVAR capacity of connected capacitors covered under ABT T-V Scheme. 253.20 MVAR
(v) G. total MVAR of capacitors including that are proposed in ADB T-V scheme 1045.40 MVAR

The East and Central DISCOMs have been requested to furnish the updated details in the above format by 31st August 2010.

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 financial year i.e. Year - 2010-2011 as submitted by MPPTCL in the meeting is enclosed as annexure 2.4.1. Member Secretary, OCC requested that alongwith the year, the month of completion may also be indicated in the status report.

2.4.2 U/F and df/dt Relay Operation :

(i) **U/F and df/dt Relay Operation:** The Committee noted that during April to July 2010, the system frequency touched 48.8 Hz for 5, 12 and 1 occasions respectively. The details of under frequency and DF/DT operation are already given in annexure 2.4.2 of agenda.

(ii) **Defective u/f, df/dt relays :** The representative from OSD(T&C), MPPTCL has informed that there are no defective u/f or df/dt relays in the system and the df/dt relays at 14 Nos. locations have been installed as per revised df/dt relay plan.

The CE(PS) has submitted the list of following EHV substations where u/f relays are to be installed.

SN	Name of EHV Substation	Name of T&C circle
01	220 KV s/s Rajgarh (Biora)	Bhopal
02	220 KV s/s Hoshangabad	Bhopal
03	220 KV s/s Pipariya	Bhopal
04	220 KV s/s Ashta	Bhopal
05	132 KV s/s Shyampur	Bhopal
06	132 KV s/s Chanderi	Gwalior
07	132 KV s/s Betma	Indore
08	132 KV s/s Badgaon	Indore
09	132 KV s/s Bagdi	Indore
10	132 KV s/s Kasrawad	Indore
11	132 KV s/s Petlawad	Indore
12	220 KV s/s Badod	Ujjain
13	132 KV s/s Zarda	Ujjain
14	132 KV s/s Mazgawan	Satna

Representative from T&C, MPPTCL has informed that if the relays are not available in the substation control panel, the same shall be procured and installed.

The CE(PS), MPPTCL submitted the revised Automatic Under Frequency Plan circulated vide No. 04-02/PS/LM/292 dated 22-04-2010 and revised df/dt plan circulated by OSD(T&C) vide No. 04-04/K-UFR/1121 dated 13-04-2010. The same is detailed in Annexure 2.4.2(i) and (ii).

Chief Engineer (PS) explained the problems being faced in allocation of groups to newly constructed feeders due to delay in receipt of required information from East and West DISCOM. Chairman OCC requested West and Central DISCOM to take up the Group allocation to new 33 KV feeders as being done by Central DISCOM, by obtaining suitable approval from the competent authority. East and Central DISCOM representatives agreed to take up the matter with concerned authorities.

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

The representative of MPPTCL submitted the consolidated information of Healthiness status of SERs/DRs equipment in MPPTCL. MPPGCL representative assured to furnish the information by 5th August 2010. ***(However, SLDC has not received the information so far. MPPGCL may furnish the same positively by 5th September 2010).***

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

(i) Details of Discom wise Power cuts and Regulatory measures during Apr 2010 to Jun 2010 are enclosed at Annexure 2.5 of agenda have been noted by the committee.

(ii) **Schedule & Unschedule Load Shedding data** : It has been informed that the hourly Schedule & Unschedule load shedding data including load relief from differential LS and weekly off in MW on daily basis to work out the unrestricted demand in realistic manner is not being received from West DISCOM. The SE, DCC, West DISCOM agreed to furnish the data regularly.

(iii) Chairman, OCC pointed out that during 18:00 to 21:00 hrs EAST DISCOM underdraws from the grid when there is no load shedding and overdraws during 21:00 to 24:00 hrs when there is load shedding of rural and Tahsil feeders. He requested the EAST DISCOM to give the reason for the same alongwith necessary corrective measures to be adopted. The Director (DCC), East DISCOM has informed the committee that the matter shall be discussed at higher level and the OCC would be informed accordingly.

ITEM NO. 3 : OPERATIONAL PLANNNING

3.1 Anticipated Power Supply Position for the Month of July-2010 to March 2011 and Demand estimation :

Details of Anticipated Demand and Source wise Availability for the period July 2010 to March-2011, worked out on the basis of Demand Estimation as furnished by the DISCOMs and availability as furnished by the respective authorities for 2010-11, as enclosed in Annexure-3.1 of agenda has been noted by the Committee. Chairman, OCC has requested the MPPGCL to indicate the ex-bus availability while issuing the Maintenance plan of thermal units.

3.2 Month Ahead Demand Estimation :

Member Secretary, OCC informed the committee that as per MPERC regulation (MPEGC), the DISCOMs have to provide daily demand on month ahead by 25th for the next month. However, despite giving assurance in the past OCC meetings, daily demand estimation on month ahead is not being furnished by the DISCOMs. The relevant MPEGC clauses (7.3.1, 7.3.2) were explained to the committee members. The MP Tradeco pointed out that as per Energy Department, GoMP, the month ahead availability, demand and shortage should be furnished by 15th of the preceding month and hence the DISCOMs and GENCO should furnish the data in time.

The representatives of DISCOM, MPPGCL and TRADECO have agreed to furnish the data on regular basis. The data for September 2010 shall be furnished by end of August 2010 and by 13th of preceding month thereafter.

3.3 Generating Units under planned outage and proposed maintenance programme-

The details of proposed maintenance programme for April 2010 to March 2011 as given in Annexure-3.2 of the agenda has been noted by the committee.

3.4 Proposed shutdown programme of Transmission lines / Transformers -

The proposed maintenance programme for the period 16th Jul to 15th Aug-2010 as annexed at Annexure-3.3 of agenda has been discussed in the meeting and found in order.

3.5 Long Outages of transmission elements :

The transmission elements as detailed below are under long outages :-

SN	Line/Transformer/Breaker/ Reactor etc under long outage	Outage date	Reason	Expected date of restoration.
1	63 MVAR Bus-I Reactor at Satpura TPS.	24.05.2005	Damage of all three limbs along with reactor tank.	Order has been placed to BHEL. The delivery schedule is 15 months i.e. July 2011.
2	40 MVA 132/33 KV transformer at Amarkantak TPS.	19.04.2010	Damage due to fire.	It has been informed by MPPGCL that the process for procurement of new transformer has been initiated.

The committee requested MPPGCL to inform the probable date of commissioning of new transformer at Amarkantak TPS in the next OCC meeting.

ITEM NO. 4 : OPERATIONAL STATISTICS FOR THE MONTH OF APRIL TO JUNE 2010.

The details of actual generation, schedule from Central Sector, demand etc. as given in Annexure 4.1 to 4.5 of the agenda of 20th OCC meeting have been noted by the Committee.

ITEM NO. 5 : SYSTEM DISTURBANCE IN MP FOR THE MONTH OF APRIL TO JUNE 2010.

The committee has been informed that there was no significant system disturbance reported during the period April to June 2010.

ITEM NO. 6 : REVIEW OF SYSTEM OPERATION & MANAGEMENT

6.1 PREPAREDNESS OF MPPGCL FOR IMPLEMENTATION OF BALANCING & SETTLEMENT CODE -

Member Secretary, OCC pointed out that despite assurance given in past OCC meetings the MPPGCL has not submitted the compliance report to SLDC. MPPGCL representative agreed to submit the report within a week's time.

6.2 UI and Reactive Energy Bills of DISCOM embedded STOA customers :-

Additional Chief Engineer (SLDC) has pointed out that issue of the UI and reactive energy bills of DISCOM embedded Open Access customers is the responsibility of respective DISCOM though Central and West DISCOMs are performing this task, East DISCOM is not issuing the bills to the embedded STOA Customers. He further mentioned that September 2010 onwards the DISCOMs have to carry out the energy accounting of DISCOM embedded Open Access Customers.

ITEM NO. 7.0 : ADDITIONAL OPERATIONAL ISSUES :

7.1 REPORTING OF TRIPPING DETAILS:

It has been apprised to the Committee that as discussed in the OCC of WRPC, as per clause 5.9.6(c) of the new IEGC, a written report shall be sent to NLDC, RLDC, a User, STU, CTU, SLDC as the case may be, in the reporting formats as devised by the appropriate Load Despatch Centre and will confirm the oral notification together with the following details of the events:

I. Time & date of event
II. Location:
III. Plant and/or equipment directly involved:
IV. Description and cause of event:
IV. Antecedent conditions of load and generation, including frequency, voltage and flow in the affected area at the time of tripping including Weather Condition prior to the event
VI. Duration of interruption and demand and /or generation(in mw and mwh) interrupted:
VII. All relevant system data including copies of record of all recording instruments including DR, ER, DAS etc:
VIII. Sequence of trippings with time:
IX. Details of relay flags:
X. Remedial measure:

The representatives of MPPGCL, MPPTCL and NHDC agreed to send the tripping report to SLDC, Jabalpur, which will include the details as described above.

NHDC raised the issue of syncronisation of 220 KV Khandwa-OSP lines at Omkareshwar end. Chairman, OCC pointed out that the non availability of dead synchronization features in Control Scheme of Breakers at Omkareshwar hydel power station thereby at the time of tripping any feeder depend solely on charging from remote end was discussed in the 16th OCC meeting held on 16th September 2009, and NHDC had informed that dead synchronization facility is available locally and that remote synchronization facility is not available. NHDC has also assured to modify the control scheme. Chairman, OCC requested the NHDC to immediately start action for modification required at OSP to overcome the problem and that if the same is not done, the SLDC would inform MPERC.

7.2 Implementation of restricted governor mode of operation on all generating units installed :

Member Secretary, OCC informed the committee that the schedule for operation of restricted governor mode of operation was intimated in the 411th OCC meeting of WRPC and all concern utilities were requested to ensure implementation of the provision under IEGC clause 5.2(f) under system security aspect as per stipulated schedule. Accordingly all the thermal units of 200 MW & above and all hydro units of 10 MW & above shall be operated with their restricted governor mode of operation wef 01-08-2010. The MPPGCL and NHDC were requested to intensify their efforts to implement RGMO by the target date i.e. 01.08.2010 and furnish necessary details concerning RGMO as requested by WRLDC as it they have to monitor the performance of the units and inform the Honorable Commission if violation of IEGC is noticed.

NHDC stated that Hydel units at Omkareshwar will not participate in RGMO as the reservoir level to be maintained as per court order is below MDDL. NHDC has been asked to inform the same to WRLDC.

7.3 Submission of Information by SLDC to WRLDC as per Revised Grid Code :

Member Secretary, OCC informed the committee that as per clause 5.5.1(h) of IEGC “Non-compliance of instructions of SLDC by SEB/Distribution Licenses/Bulk Consumers to curtail drawal resulting in non-compliance if IEGC” is to be uploaded bon WRLDC website on weekly basis and also to be forwarded to CERC by WRLDC. A NIL report is also to be furnished in case of no Non-compliance of instructions of SLDC by SEB/Distribution Licenses/Bulk Consumers. The SLDC shall send the weekly report to WRLDC as decided in the 412th OCC meeting of WRPC, in the format enclosed at annex- 7.3 of agenda.

Chairman, OCC requested the DISCOMs to ensure that load shedding should be avoided when system frequency is on higher side and the same should be regulated by the DCCs.

7.4 Black-Start facilities and Schedule for Mock Exercise:

The committee has been briefed that as per IEGC clause 5.8(b), mock trial runs of the recovery procedures for different subsystem would have to be carried out at least once every six months under intimation to RLDC. Diesel Generator sets for black start should be tested on weekly basis and test report is to be sent to WRLDC on quarterly basis.

It has been decided in the 411th OCC meeting of WRPC that to facilitate black start, the information regarding DG sets available in various constituents needs to be updated and forwarded to WRLDC. It was also agreed that the constituents shall indicate the schedule of mock trial run of their subsystems for next one year as per the proforma enclosed at Annexure-7.4 of agenda.

Member Secretary, OCC stated that the information of Black start trial is being received from Pench Hydel Power Station every month and Bargi HPS has stopped sending the trial run report to SLDC. The report is not being received from all other Hydel stations.

SLDC requested MPPGCL and NHDC to furnish the information regularly on monthly basis so that the same could be updated regularly at SLDC and WRLDC. The information of DG sets and black start trial runs is also required for finalising the schedule of mock trial run. MPPGCL and NHDC representatives agreed to furnish the information shortly ***(The information is not received so far)***.

7.5 Preparation of contingency scheme by distribution companies:

Member Secretary, OCC apprised to the committee that CERC vide order dated 28.04.2010 in the Suo-motu petition no.246/2009, has directed, SLDC and Distribution Companies in the State to be prepared with contingency scheme to handle the unprecedented situations endangering the safety and security of the grid. The SLDC was further directed to ensure that such contingency schemes were placed in the control centers of all the Distribution Companies for their awareness and necessary action.

Accordingly the DISCOMs have to get prepared with contingency scheme in their respective control areas and to ensure that such contingency schemes were placed in the Control Centers of all the Distribution Companies for their awareness and necessary action. The DISCOMs may prepare the contingency plan and ensure the compliance of CERC's directives.

ITEM NO 8 : <u>SCADA/EMS RELATED ISSUES :</u>

8.1 PROGRESS OF INSTALLATION OF NEW RTUS ALONG WITH PLCC DATA LINKS AT EHV S/S :

S.E. o/o CE(S/S) has informed that the retendering process has been initiated for procurement of RTUs.

8.2 MAINTENANCE OF TELEMETERING EQUIPMENTS AT EHV STATIONS AND POWER STATIONS :

Member Secretary, OCC informed that on the request, SLDC has started action on behalf of MPPTCL for procurement of spares required for maintenance of RTUs by MPPTCL. The MPPGCL

representatives expressed their view that SLDC may procure the spares on behalf of MPPGCL also for which the requirement shall be finalised by them. SLDC agreed to extend assistance similar to MPPTCL.

8.3 DISCREPANCY IN TELEMETRERED VALUES RECEIVED FROM DIFFERENT EHV S/S & POWER STATIONS :-

It has been informed to the committee that the discrepancy in telemetered values from Power Stations & EHV Substations is being brought to the notice of the concerned officials from time to time. Though the action is being taken for restoration of some of the parameters, many telemetered values are still not received correctly in SCADA system or not extended / configured in the telemetry equipments in the field. The committee noted the list of faulty telemetered values/process connections as detailed in annexure-7.3(i) & 7.3(ii) of agenda. MS, OCC requested MPPTCL and MPPGCL to take up the matter with field units to restore the telemetry data for which they agreed.

8.4 UPGRADATION OF EXISTING RTUS :-

Member Secretary, OCC informed that the details of upgradation of the existing RTUs has already been forwarded to OSD(T&C), MPPTCL on 30th April 2010. It is confirmed by the representative from T&C that the matter is under process with the OEMs. Chairman, OCC requested to initiate the action so that the telemetry of new feeders/transformers is available before coming Rabi season.

8.5 SHIFTING OF OPGW IN PROPOSED DIVERTED ROUTE FROM 220 KV JABALPUR TO 400 KV SUKHA S/S

SE o/o CE(S/S), MPPTCL confirmed that the OPGW cable is received and the accessories are expected soon. The OPGW shifting shall be done at the time of route diversion.

ITEM NO. 9: Intra-State Long Term Open Access Customers :-

CE (PS), MPPTCL has requested the East and Central Discoms to furnish the detailed list of existing Intra State long term open access customers whose agreement period expired / likely to be expired and confirmed that West Discom has furnished the information. He further informed that despite assuring in the 19th OCC meeting to furnish the information by 15th May 2010, the EAST DISCOM has not provided the information.

Chairman, OCC requested the EAST and CENTRAL DISCOMs to furnish the desired information.

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

NHDC agreed to host the 21st meeting of Operation and Coordination Committee of MP on 15th September 2010 at Omkareshwar Hydel Power Station, Sidhwarkut, Distt: Khandwa. The meeting ended with vote of thanks by Member Secretary, OCC.

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Annexure-I

LIST OF PARTICIPANTS OF 20TH OCC MEETING OF MP HELD ON 26TH JULY

SN	NAME S/SHRI	DESIGNATION	COMPANY
01	R.P. Sharma	OSD, SLDC & Chairman OCC, Jabalpur	SLDC, MPPTCL
02	A.P. Bhairve	Addl. CE, SLDC, Jabalpur	
03	P.A.R. Bende	S.E.(LD:OPN), SLDC & MS OCC, Jabalpur	
04	K.K. Parbhakar	S.E.(LD:ABT&OA), SLDC, Jabalpur	
05	S.K. Gaikwad	S.E.(LD:E&T), SLDC, Jabalpur	
06	Sunita Mishra	E.E., SLDC, Jabalpur	
07	O.P. Jaiswal	C.E. (PS), MPPTCL, Jabalpur	POWER SYSTEM, MPPTCL
08	R.C. Chakraborty	E.E. (PS), MPPTCL, Jabalpur	
09	M.K. Raghuvanshi	Addl. E.E. (PS), MPPTCL, Jabalpur	
10	Siddharth Paney	E.E. (T&C), MPPTCL, Jabalpur	T&C, MPPTCL
11	Prabhakar Joshi	E.E. (T&C), MPPTCL, Jabalpur	
12	A.K. Das	S.E. o/o CE(S/S), MPPTCL, Jabalpur	S/S, MPPTCL
13	Subhash Deshpande	E.E. (O&M:Gen), MPPGCL, Jabalpur	O&M:GEN, MPPGCL
14	Girish Dixit	A.E. (O&M:Gen), MPPGCL, Jabalpur	
15	R.S. Sharma	E.E. (O&M:Hydel), MPPGCL, Jabalpur	O&M:HYDEL, MPPGCL
16	M.K. Jain	A.E. (O&M:Hydel), MPPGCL, Jabalpur	
17	P.K. Shrivastava	A.E.(T) (O&M:Hydel), MPPGCL, Jabalpur	
18	Suryabali	AGM, TRADECO, Jabalpur	MP TRADECO
19	O.P. GUPTA	S.E. (DCC) MPPaKVVCL, Indore	MPPaKVVCL
20	K.C. Mishra	E.E.(DCC), MPMKVVCL, Bhopal	MPMKVVCL
21	S.J. Marathe	A.E.E.(DCC), MPMKVVCL, Bhopal	
22	Shyamji Tiwari	Director (DCC), MPPuKVVCL, Jabalpur	MPPuKVVCL
23	Vinod Kumar Singh	Dy. Manager(E), NHDC, Bhopal	NHDC
24	Harish Kumar Sharma	Dy. Manager(E), OSP, Omkareshwar	
25	Dwijen Roy	Engineer(E), ISPS, Indirasagar, Khandwa	
26	M.K. Jaitwal	Addl. S.E., Sub LDC, Indore	Sub LDC, MPPTCL
27	Pradeep Sachan	E.E., Sub LDC, Bhopal	

					Annexure 2.4.1
EHV TRANSMISSION LINES UNDER PROGRESS DURING 2010-11 (AS ON 31.7.2010)					
S. No.	**NAME OF THE TRANSMISSION LINE**	**TYPE OF CIRCUITS**	**ROUTE LENGTH**	**CKT.KMS.**	**PROGRESS IN %**
A.	**400 KV TRANSMISSION LINES**	**NIL**			
B.	**220 KV TRANSMISSION LINES**				
1	Satna - Chhatarpur	DCSS	160	160	93%
2	LILO of one circuit of 220KV Amarkantak - Birsinghpur line at 400 kv S/s Sukha (PGCIL) (2x150 km). (DCDS)	DCDS	150	300	91%
3	LILO of one Ckt of 220KV Bhopal-Bina DCDS line at Vidisha along with diversion work (2x23 Km)	DCDS	23	46	38%
4	Dewas - Ashta	DCDS	73	146	63%
5	LILO of one ckt of 220kv Khandwa - Nepanagar DCDS line for 220KV S/s Chhegaon (2x17.51)	DCDS	17.51	35.02	61%
6	LILO of 220kv Satna - Bansagar Tons line for 220KV S/s Kotar (2x3.9)	DCDS	3.9	7.8	99%
7	Maheshwar - Pithampur line	DCDS	54	108	69%
8	LILO of one ckt of 220kv Bina - Shivpuri line at 765KV S/s Bina of PGCIL (2x0.83)	DCDS	0.83	1.66	1%
	Sub Total (B)		**482.24**	**804.48**	
C.	**132 KV TRANSMISSION LINES**				
1	Jatara 132 KV - Prithvipur 132 KV DCSS line	DCSS	45	45	99%
2	132KV Rajgarh (B) - Raghogarh DCSS	DCSS	72.4	72.4	60%
3	Chhegaon (220kv) - Khargone line	DCDS	72	144	91%
4	Nimrani (220 kv) - Manawar DCDS line (2x45).	DCDS	45	90	99%
5	Shivpuri (220kv) - Kolaras DCSS line	DCSS	34.47	34.47	99%
6	Sironj - Maksoodangarh DCSS line	DCSS	60	60	60%
7	Nagda - Mahidpur 2nd ckt	2nd ckt		23	91%
8	Ashta - Polaikalan DCSS line	DCSS	36	36	99%
9	Ashta - Ichhawar DCSS line	DCSS	38	38	99%
10	Shahdol - Dindori DCSS line	DCSS	65	65	54%
11	Second Circuiting of 132 KV Sabalgarh - Sheopurkalan line	2nd ckt		93.25	99%
12	Sabalgarh (220 kv) - Vijaypur DCSS line	DCSS	33	33	59%
13	LILO of both ckts of 132 kV Betul - Multai line through Betul 220 kv S/s (2x3.75 + 2x3.55)	DCDS	7.3	14.6	28%
14	Rerouting of 132 kV Betul - Gudgaon line through Betul 220 kv S/s (1x11.5)	DCSS	11.5	11.5	99%
15	Betul (220kv) - Chicholi DCSS	DCSS	26.55	26.55	52%
16	LILO of 132 KV Chhegaon - Khandwa line at 220kv Chhegaon S/s	DCDS	15.6	31.2	40%
17	Vidisha - Shamsabad DCSS line	DCSS	57.84	57.84	30%
18	132kv line for 132kv S/s at Amrawadkhurd (Bhopal)	DCSS	1.2	1.2	48%
	Sub Total (C)		**620.86**	**877.01**	
	Grand Total (A+B+C)		**1103.10**	**1681.49**	

					Annexure 2.4.1
EHV SUB STATIONS UNDER PROGRESS DURING 2010-11 (AS ON 31.7.2010)					
S.No.	**NAME OF THE SUBSTATION**	**VOLTAGE RATIO (KV)**	**No.OF X-mer & Cap. (MVA)**	**EFFECTIVE CAPACITY MVA**	**PROGRESS IN %**
A.	**400 KV SUBSTATIONS**				
1	Indore (ADDL) (Distt. Indore)	400/220/33	1x315	315	45%
	Sub Total (A) (400 kv)			**315**	
B.	**220 KV SUBSTATIONS**				
1	Vidisha (NEW) (Distt. Vidisha)	220/132/33	1x160	160	80%
2	Betul (NEW) (Distt. Betul)	220/132/33	1x160	160	99%
3	Kotar (NEW) (Distt. Satna)	220/132/33	1x160	160	62%
4	Mehgaon (ADDL) (Distt. Bhind)	220/132/33	1x160	160	40%
	Sub Total (B) (220kv)			**640**	
C.	**132 KV SUBSTATIONS**				
(a)	**NEW SUBSTATIONS**				
1	Chicholi (Distt. Betul)	132/33	1x40	40	92%
2	Vijaypur (Distt. Sheopur)	132/33	1x40	40	38%
3	Dindori (Distt. Dindori)	132/33	1x40	40	56%
4	Kolaras (Distt. Shivpuri)	132/33	1x40	40	67%
5	Pawai (Distt. Panna)	132/33	1x40	40	99%
6	Shamsabad (Distt. Vidisha)	132/33	1x40	40	37%
7	Mohna (Distt. Shivpuri)	132/33	1x40	40	8%
8	Polaikalan (Distt. Shajapur)	132/33	1x40	40	94%
9	Ichhawar (Distt. Sehore)	132/33	1x40	40	96%
10	Amrawadkhurd (Distt. Bhopal)	132/33	1x63	63	84%
	Sub Total (a)			**423**	
C.	**132 KV SUBSTATIONS**				
(b)	**Additional/ Augmentation of Transformers**				
1	Bhonra (ADDL) (Distt. Guna)	132/33	1x20	20	50%
2	Sarni (Aug from 20 to 40 MVA) (Distt. Betul)	132/33		20	40%
3	Kurawar (Aug from 40 to 63 MVA) (Distt. Sehore)	132/33		23	30%
4	Pithampur (Aug from 40 to 63 MVA) (Distt. Dhar)	132/33		23	30%
	Sub Total (b)			**86**	
	Grand Total (a+b+c) (132 kv)			**509**	
	Grand Total (A+B+C)			**1464**	
Total Cost of EHV Lines and Substations under progress (A+B+C)					**03.08.2010**

Annexure : 2.4.2(i)

AUTOMATIC UNDER FREQUENCY LOAD SHED PLAN WEF APRIL 2010

Day	48.8 Hz Gr.No.I,II,III,IV,V,V-A,VI & VI-A of Districts.	48.6 Hz Gr. No. VII of District Groups.	48.2 Hz Gr. No. VIII of District Groups.
MONDAY	JABALPUR, DAMOH, DHAR, GUNA, ASHOKNAGAR, SHEOPUR.	**D1+D2**	**D1+D2**
TUESDAY	TIKAMGARH, REWA, INDORE, JHABUA, ALIRAJPUR, BHOPAL, HARDA, HOSHANGABAD.	**D3+D4**	**D3+D4**
WEDNESDAY	SEONI, BALAGHAT, CHHINDWARA, UJJAIN, VIDISHA, RAISEN	**D5+D6**	**D5+D6**
THURSDAY	SAGAR, SIDHI, SINGRAULI, KHARGONE, BARWANI, SHIVPURI, BETUL	**D7+D5**	**D7+D5**
FRIDAY	MANDLA, DINDORI, KATNI, CHHATARPUR, PANNA, DEWAS, NEEMUCH, RAJGARH, BHIND	**D2+D3**	**D2+D3**
SATURDAY	NARSINGPUR, RATLAM, KHANDWA, BURHANPUR, DATIA, SEHORE	**D4+D1**	**D4+D1**
SUNDAY	SATNA, SHAHDOL, UMARIYA, ANUPPUR, MANDSAUR,SHAJAPUR, GWALIOR, MORENA	**D6+D7**	**D6+D7**

THE DISTRICTS COVERED UNDER DISTRICT GROUPS SPECIFIED FOR UNDER FREQUENCY 48.6 Hz AND 48.2 Hz ARE AS UNDER :

District Group No.	Districts
D1	Indore, Morena, Balaghat, Shajapur & Chhindwara.
D2	Ujjain, Betul, Katni, Bhind, Sehore, Chhatarpur, Mandla, Dindori, Shahdol & Anuppur
D3	Bhopal, Khargone, Narsinghpur, Tikamgarh & Sheopur
D4	Sagar, Dewas, Khandwa, Burhanpur, Ratlam, Vidisha & Datia
D5	Rewa, Damoh, Rajgarh, Neemuch, Raisen, Dhar, Shivpuri & Umaria
D6	Jabalpur, Satna, Guna, Ashoknagar, Barwani, Harda & Seoni
D7	Gwalior, Panna, Sidhi, Hoshangabad, Mandsaur, Jhabua, Alirajpur & Singrauli.

ANNEXURE-2.4.2(ii)

DF/DT RELAY APPROVED PLAN

SR.NO.	NAME OF S/S	df/dt 0.4Hz/s Base freq.49.9 Hz. Lines to be tripped	Load in MW	df/dt 0.2Hz/s Base freq.49.9 Hz. Lines to be tripped	Load in MW	df/dt 0.1Hz/s Base freq.49.9 Hz. Lines to be tripped	Load in MW	TOTAL LOAD M.W.
(I)	**EASTERN MP.**							
1	220 KV S/s JABALPUR			132 KV MANERI	**15**			
	132 KV S/S SEONI			132 KV NAINPUR-MANDLA	**20**			
	220 KV S/s KATNI			132 KV SLEEMNABAD	**25**			
	220 KV S/s SAGAR			132/33 KV TRANSFORMER AT GOURJHAMER	**25**			
2	220 KV S/s NARSINGHPUR			160MVA XMER-I&II	**75**			
				(At 132KV NSP Shrinagar fdr				
				will get cut off due to overloading)				
3	220 KV S/s SATNA			132 KV PANNA	**30**			
				132 KV Majhgawan-Pawai	**20**			
4	220 KV S/s REWA	132 KV MANGAWAN-KATRA **20** 132 KV RAMPUR BAGHELAN AT X-MER **35**						
5	220KV S/s BINA					132KV SIRONJ	**15**	
						132KV GANJBASODA	**15**	
TOTAL EASTERN M.P.			**55**		**210**		**30**	**295**
(II)	**CENTRAL MP.**							
1	220 KV S/s BHOPAL					132/33 KV TR I,II,III LALGHATI	**50**	
2	220 KV S/s MEHGAON	160MVA XMER	**110**					
		132 KV MALANPUR	**-**					
3	132 KV VIDISHA	132 KV GAIRATGANJ	**20**					
		132 KV RAISEN	**15**					
4	132 KV CHHANERA					132/33 KV TRANSFORMER AT CHHANERA	**15**	
5	220 KV HANDIYA			132 KV NASRULLAGANJ	**40**			
6	132 KV BETUL					132 KV GUDGAON	**15**	
7	132 KV KHILCHIPUR			132 KV ZEERAPUR	**15**			
8	132 KV AGAR			132 KV SUSNER	**10**			
9	220KV MALANPUR	132 KV AMBAH	**30**					
10	220KV S/s GUNA			132/33 KV XMER-I,II & III	**75**	132/33 KV TRANSFORMERS AT 132 KV RAGHOGARH	**40**	
TOTAL CENTRAL MP.			**175**		**140**		**120**	**435**
(III)	**WESTERN M.P.**							
1	220 KV S/Z INDORE	132 KV DHAR (TAPPED G.BILLOD)	**40**					
2	220 KV RAJGARH	132 KV DHAR	**-**					
		132 I/C-I&II	**105**					
		132KV KUKSHI	**-**					
3	220 KV RATLAM					132KV SAILANA	**10**	
4	400 KV NAGDA					220KV NEEMUCH I&II		
	132 KV NEEMUCH					132 KV MANASA & MALHARGARH	**145**	
5	220KV SHUJALPUR					132/33 KV XMER-I & II	**25**	
6	220 KV PITHAMPUR			132 KV JAMLI	**35**			
7	220 KV DEWAS			132 KV CHAPDA	**30**			
8	220KV JULWANIA	132 KV XMER-I & II	**30**					
		132 KV SENDHWA (& PANSEMAL)	**40**					
9	220 KV UJJAIN					132 KV TARANA I & II	**15**	
10	220 KV BADNAGAR					132 KV DEPALPUR	**30**	
						132 KV GOUTAMPURA	**20**	
						132 KV KANWAN	**30**	
11	220 KV NAGDA					132 KV MAHIDPUR I&II	**15**	
						132KV A LOT	**35**	
TOTAL WESTERN MP.			**215**		**65**		**325**	**605**
TOTAL M.P.			**445**		**415**		**475**	**1335**
LOAD RELIEF DESIRED BY WRLDC w.e.f. 01.07.2008			**361**		**355**		**392**	**1108**