Notified on 25.09.2015

Bhopal, dated 18.09.2015

No. 1709/MPERC/2015. In exercise of the powers conferred by Section 181 read with sub- clause (i) of clause (d) of sub-section (2) of section 39, sub-clause (i) of clause (c) of section 40, section 66, and clause (i) of sub-section (2) and clause (c) of sub-section (1) of section 86 of the Electricity Act 2003 (No. 36 of 2003), the Madhya Pradesh Electricity Regulatory Commission, hereby, makes the following Code, namely:-

MADHYA PRADESH ELECTRICITY BALANCING AND SETTLEMENT CODE, 2015

1. Preamble :- The National Electricity Policy (NEP) envisages implementation of the Availability Based Tariff (ABT) at State level to establish a credible settlement mechanism for Intra-day power transfers among Intra-State Entities. As per the Tariff Policy, this framework should be extended to Generating Stations (including Grid connected Captive Plants of capacities as determined by the State Electricity Regulatory Commission). This Code has been specified to give effect to the intentions of Section 5.7.1(b) and (d) of the National Electricity Policy as well as section 6.2(1) and 6.3 of the Tariff Policy. Central Electricity Regulatory Commission has notified Deviation Settlement Mechanism and Related Matters Regulations, 2014 and Central Electricity Regulatory Commission (UL charges and related matters), Regulations, 2009 have been repealed. In view of the aforesaid, the Madhya Pradesh Electricity Balancing and Settlement Code, 2015 are notified.

2. Short title, extent of application and commencement

- (1) These Codes may be called the "Madhya Pradesh Electricity Balancing and Settlement Code, 2015." [RG-34(I) of 2015]
- (2) This Code shall apply within the geographical area of the State of Madhya Pradesh and shall apply to all Inter / Intra-State Entities in Madhya Pradesh in a manner as specified in this Code.
- (3) This Code shall come into force from the first day of the month proceeding the month of publication in the Official Gazette of Madhya Pradesh.
- **3. Definitions :-** In this Code, unless the context otherwise requires:
- (a) "Act" means the Electricity Act, 2003 (36 of 2003);
- (b) "Buyer" means a person, including beneficiary, purchasing electricity through a

transaction scheduled in accordance with the regulations applicable for short-term open access, medium-term open access and long-term open access;

- (c) "CERC" means the Central Electricity Regulatory Commission referred to in section 76 of the Act;
- (d) "CMRI" means Common Meter Reading Instrument used for downloading and storage of data from electronic energy meters of multiple make;
- (e) "Commission" means the Madhya Pradesh Electricity Regulatory Commission (MPERC) constituted under Section 82 of the Act;
- (f) "Day" means a continuous period starting at 00.00 hours and ending at 24.00 hours;
- (g) "Despatch Schedule" means the ex-Power Plant net Mega Watt and Mega Watt Hour output of a Generating Station, Scheduled to be exported to the Grid from time to time;
- (h) "Detailed Procedure" means the detailed operating procedure issued by the State Load Desptach Centre under this code;
- (i). "Deviation" in a time-block for a seller means its total actual injection minus its total scheduled generation and for a buyer means its total actual drawal minus its total scheduled drawal;
- (j) "Deviation Charges" means the charges computed as per the rates corresponding to average Frequency of the grid in a 15-minute time block as specified by the Central Electricity Regulatory Commission from time to time;
- (k) "Deviation Settlement Mechanism Regulations" means Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 including any subsequent amendments thereof;
- (I) "Discom Control Centre (DCC)" means the Control Room established at each Discom Headquarters with necessary Infrastructure and Human Resources for implementation of this Code (DCC shall be built, owned, operated and maintained by respective Discom);
- (m) "Discom Energy Accounting Group (DEAG)" means the group to be formed by each Discom (at DCC) which would be responsible for implementation of this Code in coordination with State Load Despatch Centre (wherever required);

- (n) "Distribution Licensee or Discom" means a Licensee authorized to operate and maintain a Distribution System for supplying electricity to the consumers in his area of supply;
- (o) "Drawal Schedule" means the ex-Power Plant, Mega Watt that a Discom or an Open Access Customer is Scheduled to receive from an Electricity Generating Station, including Bilateral and Collective transactions from time to time;
- (p). "Energy Accounting Group (EAG)" means the group to be formed at the State Load Despatch Centre which would be responsible for implementation of this Code;
- (q). "Entitlement" means share of a Discom or an Open Access Customer (in Mega Watt and Mega Watt Hour) in the installed Capacity/output Capability of an Electricity Generating Station;
- (r) "Ex-Power Plant" means net Mega Watt / Mega Watt hour output of an Electricity Generating Station, after deducting Auxiliary consumption and Transformation losses;
- (s) "Generator Control Centre (GCC)" means the control room established at Headquarters of the generating company with necessary Infrastructure and Human Resources for implementation of this Code (GCC shall be built, owned, operated and maintained by Madhya Pradesh Power Generating Company Limited);
- (t) "Grid" means the high Voltage backbone system of inter-connected Transmission lines,Sub-Stations and Generating plants;
- (u) "Independent Power Producer (IPP)" means an Electricity generating company not owned or controlled by the Central / State Government;
- (v). "Indian Electricity Grid Code (IEGC)" means the Grid Code specified by the Central Electricity Regulatory Commission under Clause (h) of Sub-section(1) of Section 79 of the Act;
- (w) "Inter-State Generating Station (ISGS)" means a Central/other Electricity Generating Station in which two or more States have shares and whose Scheduling is to be coordinated by the Regional Load Despatch Centre (RLDC);
- (x) "Intra-State Entity" means a person whose metering is done by the State Transmission Utility or the Distribution Licensee, as the case may be and the energy accounting is done by the State Load Despatch Centre or by any other authorized State Agency.

- (y) "Madhya Pradesh Electricity Grid Code (MPEGC)" means the Grid Code specified by the MPERC under Clause (h) of sub-section(1) of Section 86 of the Act;
- (z). "Month" means a Calendar month as per the British Calendar;
- (z-a) "MPPMCL" means Madhya Pradesh Power Management Company Ltd. notified by the Government of Madhya Pradesh on 29th June' 2012;
- (z-b) "Net Drawal Schedule" means the Drawal Schedule of a Discom or an Open Access Customer after deducting the apportioned Transmission Losses (estimated);
- (z-c) "Open Access Customer" means a person who has availed or intends to avail of Open Access under Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations 2008 as amended and Madhya Pradesh Electricity Regulatory Commission (Terms and conditions for intra state open access in Madhya Pradesh) Regulations, 2005 and amendments thereof or a Generating Company (including Captive Generating Plant) or a licensee or a Consumer permitted by the Madhya Pradesh Electricity Regulatory Commission to receive supply of electricity from a person other than Distribution Licensee of his area of supply, or a State Government Entity authorized to sell or purchase electricity;
- (z-d) "Seller" means a person, including an Electricity generating station, supplying electricity through a transaction schedule in accordance with the regulations applicable for short-term open access, medium-term open access and long-term open access;
- (z-e) "State Load Despatch Centre (SLDC)" means the Centre established under Subsection(1) of Section 31 of the Act;
- (z-f) "State" means the State of Madhya Pradesh;
- (z-g) "State Energy Account (SEA)" means monthly State Energy Account prepared by State Load Despatch Centre for the billing and settlement of Capacity charges, Energy charges and incentives, if any, applicable;
- (z-h) "State Reactive Account (SRA)" means weekly State Reactive Energy Account prepared by State Load Despatch Centre for the billing and settlement of Reactive Energy Charges;
- (z-i). "State Deviation Settlement Mechanism Account (SDSMA)" means weekly State Deviation Settlement Mechanism Account prepared by State Load Despatch Centre for the billing and settlement of Deviation charges;

- (z-j) "State Sector Generating Station (SSGS)" means any Electricity Generating Station within the State including pench hydro power station (operated by Madhya Pradesh Power Generating Company Limited), except Inter-State Generating Stations (ISGS) and Independent Power producer generating stations (IPPs) / Captive Power Producer (CPP) located within the State of MP in which state has its share;
- (z-k) "State Transmission Utility (STU)" means the Board or the Government Company specified as such by the State Government under Sub-section(1) of Section 39 of the Act;
- (z-l) "Time Block" means Block of 15-minute each for which special energy meters record specified electrical parameters and quantities with first Time Block starting and 00.00 hours;
- (z-m) "Week" means a period of consecutive seven days commencing from 00.00 hours on the Monday and ending at 24.00 hours on following Sunday as per the British Calendar;
- (2) Words and expressions used in this Code and not defined herein but defined in the Act or Indian Electricity Grid Code or Madhya Pradesh Electricity Grid Code shall have the meaning assigned to them under the Act or Indian Electricity Grid Code or Madhya Pradesh Electricity Grid Code, as the case may be.

4. Infrastructure and Capability Requirements

- (1) Respective Entity shall ensure adequate Infrastructure and Capability Development to fully implement this Code.
- (2) Subject to provisions of this Code, the State Load Despatch Centre, with prior approval of the Commission shall issue a detailed procedure covering relevant and residual matters not detailed in this Code such as:-
 - (a) Detailed procedure for Scheduling and Despatch;
 - (b) Detailed procedure for Energy Metering (including data collection, data processing, data transfer, data archiving, etc.);
 - (c) Detailed procedure for Energy Accounting, Demand Side Management Accounting, Reactive Accounting and Settlement (including management of dedicated Bank Account, management of Letters of Credit, payments/receipts, etc.)

- (d) Any other procedure which State Load Despatch Centre feels necessary for the successful implementation of this Code.
- (3) Each Discom shall fully develop and equip Discom Energy Accounting Group (DEAG) at respective Discom Control Centre (DCC) for undertaking various activities such as deviation settlement, energy settlement of Discoms embedded customer drawing power under short term open access and other activities required for implementation of this Code.

5. Scheduling and Despatch

(1) This section describes general Principles of Scheduling and Despatch. The basic idea behind Scheduling is to match the Supply and Demand on a day- ahead basis. This section shall be read in conjunction with the Indian Electricity Grid Code, Madhya Pradesh Electricity Grid Code and Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012 as amended from time to time.

General Principles: Scheduling

- (2) All the scheduling shall be done on 15-minutes time block. For this purpose of scheduling each day starting from 00.00 hrs to 24.00 hrs shall be divided into 96 equal time blocks each of 15-minutes duration. State Load Despatch Centre shall compile and intimate the Drawal Schedule to each Buyer and the Generation Schedule to each Seller in advance.
- (3) Merit Order Operation: Discoms or Madhya Pradesh Power Management Company Limited on behalf of Discoms (on receipt of requisition from Discoms) will give their requisitions on day ahead and real time basis as per individual Merit Order i.e. in ascending order of the cost of energy (i.e. variable cost) of Inter State Generating Station, State Area Generating Station excluding Hydro Power Stations, Independent Power Pruducer and other Long Term, Medium Term Open Access and intra state short term Open Access allocated to individual Discom /Madhya Pradesh Power Management Company Limited.
- (4) The Net Drawal Schedule of any Discom issued by State Load Despatch Centre would be sum of ex-Power Plant Schedules from different State Sector Generating Station, share from Inter State Generating Station, Independent Power Producers, Other Long Term and Medium Term Open Access, any Bilateral transactions and Collective transactions agreed by Madhya Pradesh Power Management Company

Limited on behalf of Discoms.

- (5) The Generation Schedule of each State Area Generating Station shall be sum of the requisitions made by each Discom, restricted to their Entitlement and subjected to maximum and minimum Value criteria or any other technical constraints indicated by State Load Despatch Centre.
- (6) All the Intra State entities shall endeavour to maintain their Drawals/injections in such a manner that they do not violate the limits on deviation volume as specified in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 and subsequent amendments thereof.
- (7) Generation Schedules and Drawal Schedules issued / revised by State Load Despatch Centre shall become effective from designated time block irrespective of communication success.
- (8) For any revision of scheduled Generation of any Generator (including post facto deemed revision), there shall be a corresponding revision of scheduled Drawals of the Discoms.
- (9) A procedure for recording the communication regarding changes to Schedules duly taking into account the time factor shall be evolved by State Load Despatch Centre (Voice recorder with time stamping).
- (10) Generator shall ensure that Declared Capacity (DC) during Peak shall not be less than that of during Off-Peak period of the day.
 [Exception: Tripping/Re- synchronisation of units due to Forced Outage]
- (11) The following specific points would be taken into consideration while preparing the Schedules:
 - (a) State Load Despatch Centre shall check that the resulting power flows do not give rise to any Transmission constraint. In case of any constraints, State Load Despatch Centre shall moderate the Schedule to the required extent by intimation to concerned Discoms; and
 - (b) State Load Despatch Centre shall check that Schedules are operationally reasonable particularly in terms of ramping-up/ ramping-down rates and ratio between minimum and maximum generation levels. State Load Despatch Centre shall moderate the Schedule to the required extent by intimation to concerned Discoms. The ramping up/ ramping down rates in respect of

different categories of Stations would be based on the technical data as substantiated by Electricity Generating Stations and as mutually agreed by Discoms or Madhya Pradesh Power Management Company Limited on behalf of Discoms with due consent of State Load Despatch Centre.

- (12) While preparing Generation Schedules, State Load Despatch Centre shall keep in view the Transmission system constraints and provision of operating margins (reserves) and limitations on generation as provided in the Indian Electricity Grid Code and Madhya Pradesh Electricity Grid Code.
- (13) For calculating the Net Drawal Schedules of Buyers at their periphery, the weekly Point of Connection losses as computed by National Load Despatch Centre in accordance with Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended and Weekly Estimated Transmission Losses of Madhya Pradesh Distribution / Other losses, if applicable, shall be apportioned in proportion to their Drawal Schedules. Following process shall be adopted to compute weekly losses:-
 - (a) State Transmission loss for a given Week = (Total net injection into the State Grid in a week) (Total net Drawal from the State Grid in a Week);
 - (b) Loss of n^{th} Week shall be computed by the 5th day of the $(n+1)^{th}$ Week;
 - (c) This loss figure shall then be used in the Scheduling process from the beginning of the $(n+2)^{th}$ Week;
 - (d) State Load Despatch Centre shall round-off actual loss of nth Week to nearest 0.01% for the purpose of Scheduling for the (n+2)th Week (e.g. 4.705% is rounded-off to 4.71%, 3.442% is rounded off to 3.44% and so on);
 - (e) Events in the Grid of an exceptional nature could result in abnormally high or low losses in any Week. This could be either a Load crash in the State due to a Weather disturbance or closure of any Major Hydro Power Station during the monsoon for flushing of silt/debris from the Reservoir or Outage of any major Transmission Lines etc. The losses for these abnormal weeks shall generally be ignored as far as the Scheduling process is concerned. State Load Despatch Centre decision in this regard will be final.
- (14) While availability declaration by State Area Generating Station, Independent Power Producers and Renewable Energy Generators may have a Resolution of 0.1 MegaWatt

and 0.1 MegaWatt hours, all Entitlements, Requisitions and Schedules shall be roundedoff to the nearest two decimal, to have a Resolution of 0.01 MegaWatt.

(15) State Load Despatch Centre shall properly document all the information mentioned under Clauses 5(2) to 5(14) on its Website including Station-wise foreseen ex-Power Plant capabilities advised by the Generating Stations, Entitlements in Inter State Generating Station, Drawal Schedules advised by Discoms, all Schedules issued by the State Load Despatch Centre and all revisions/updating of such information be hosted on Website.

General Principles: Revision of Schedules

- (16) Revision of declared capability by the State Area Generating Station, Independent Power Producer having two part tariff with capacity charge and energy charge (except hydro station of Madhya Pradesh Power Generating Company Limited) and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Revised schedules / declared capability in such cases shall become effective from 4th time block, counting the time block in which the request for revision has been received in the State Load Despatch Centre to be the first one.
- (17) In the event of bottleneck in evacuation of power due to any constraint, outage, failure or limitation in the Transmission system, associated Switchyard and Sub- stations owned by the State Transmission Unit or any other Transmission Licensee involved in Intra-State Transmission (as certified by the State Load Despatch Centre) necessitating reduction in generation, the State Load Despatch Centre shall revise the Schedules which shall become effective from the 4th Time Block, counting the Time Block in which the bottleneck in evacuation of power has taken place to be the First one. Also, during the first, second and third Time blocks of such an event, the Scheduled generation of the State Area Generating Station / Independent Power Producers shall be deemed to have been revised to be equal to have been revised to be equal to their Actual Drawals.
- (18) In case of any Grid disturbance, Scheduled Generation of all the State Area Generating Station / Independent Power Producers and Scheduled Drawal of all the Discoms shall be deemed to have been revised to be equal to their actual generation/Drawal for all the Time Blocks affected by the Grid disturbance. The Certification of grid disturbance and its duration shall be done by the Regional Load Despatch Centre / State Load Despatch Centre.
- (19) If, at any point of time, the State Load Despatch Centre observes that there is

need for revision of the Schedules in the interest of better system operation, it may do so on its own, and in such cases, the revised Schedules shall become effective from the 4th Time block, counting the time block in which the revised Schedule is issued by the State Load Despatch Centre to be the first one.

(20) If a revision is received from any Inter State Generating Station, Regional Load Despatch Centre will flash the information (as per the requirements of the Central Electricity Regulatory Commission Regulations/Orders) in real-time basis containing all the relevant information needed to the Schedule based on which State Load Despatch Centre will process the revision in parallel. The implementation time of revision will be same for Regional Load Despatch Centre and State Load Despatch Centre.

Implemented Schedules

- (21) After the operating day is over at 24.00 hours, the Schedule finally implemented during the day (taking into account all before-the-fact changes in Despatch Schedule of Electricity Generating Stations and Drawal Schedule of the other Intra-State Entities) shall be issued by State Load Despatch Centre within three days or on receipt of Western Regional Load Despatch Centre implemented schedule. Further, implemented schedule may be revised by State Load Despatch Centre if Ex-post facto revision in implemented schedule is made by Western Region Power Committee. These Schedules shall form the basis for commercial accounting. The average Exbus capability for each State Area Generating Station and Independent Power Producers shall also be worked out based on all before-the-fact advice to State Load Despatch Centre.
- (22) The procedure for Scheduling and the final implemented Schedules issued by State Load Despatch Centre, shall be open to all Intra-State Entities for any checking/verification, for a period of five (5) days. In case any mistake/omission is detected, the State Load Despatch Centre shall forthwith make a complete check and rectify the same.

Timelines and responsibility matrix (Madhya Pradesh Balancing and Settlement Code)

Time <u>(Furnish by)</u>	Primary Activity	Responsibility
10:00 hours	 (i) Western Regional Load Despatch Centre intimates MegaWatt and MegaWatt hours entitlements of Madhya Pradesh in each Inter State Generating Station to State Load Despatch Centre for the next day i.e. between 00.00 hrs to 24.00 hrs of the following day, in each 15-minute time block; (ii) Madhya Pradesh Power Generating Company Limited* shall advise State Load Despatch Centre the Station wise ex-Power Plant Mega Watt and 	Western Regional Load Despatch Centre Madhya Pradesh Power Generating
	Mega Watt hour Capabilities foreseen for the next day i.e. between 00.00 hrs to 24.00 hrs of the following day, in each 15-minute Time Block; (iii) Independent Power Producer and eligible Renewable	Company Limited/ GCC Independent
	Energy Generators shall advise State Load Despatch Centre the Station wise ex-Power Plant MegaWatt and MegaWatt hour Injections for the next day i.e. between 00.00 hours to 24.00 hours of the following day, Independent Power Producers /Renewable Energy Generators in each 15-minute Time block;	Power Producers/Rene wable Energy Generators
	(iv) Indira Sagar Project, Omkareshwar Hydro-Electric Project, Shared Stations and any other Stations not covered under above Serial. Number (i),(ii) and (iii) shall advise State Load Despatch Centre the Station wise ex-Power PlantRespective MegaWatt and MegaWatt hour Capabilities foreseen for the next day i.e. between 00.00 Station hours to 24.00 hours of the following day, in each 15-minute Time Block.	Respective Station
10.30 hours	 (i) State Load Despatch Centre shall compile total ex- Power Plant MegaWatt. and MegaWatt hour availability from all the Generating Stations; (ii) State Load Despatch Centre shall compute Station 	State Load Despatch Centre
	(ii) State Load Despatch Centre shall compute Station wise and total MegaWatt and MegaWatt hour Entitlement of each Discom for the next day in each 15-minute Time Block and shall intimate to Madhya	State Load Despatch Centre
	 Pradesh Power Management Company Limited; (iii) Each Discom shall intimate to Madhya Pradesh Power Management Company Limited its total MegaWatt demand in each 15-minute Time Block for the next day based on day-ahead demand forecasts grossed up for actual State Transmission Losses. 	Madhya Pradesh Power Management Company Limited/ Respective Discom

11.00 hours	 (i) Madhya Pradesh Power Management Company Limited shall compute the shortage and surplus of power for State as a whole in consultation with Discoms; (ii) Madhya Pradesh Power Management Company Limited shall take decisions for transaction of power through power exchanges on day ahead/term ahead basis 	Madhya Pradesh Power Management Company Limited
13.30 hours	 (i) Madhya Pradesh Power Management Company Limited on receipt of Provisional Transaction Report of power through power exchanges shall run Merit Order Dispatch for State as a whole for all power plants including power plants allocated to Madhya Pradesh Power Management Company Limited. (ii) For each Discom, Madhya Pradesh Power Management Company Limited shall compare (for each time block) :- (a) Total ex-power plant MegaWatt entitlement of a given Discom (b) Total ex-power plant MegaWatt demand for a given Discom (iii) Madhya Pradesh Power Management Company Limited shall allocate the power from Madhya Pradesh Power Management Company Limited allocation to each Discom as per their power requirement for each 15 minutes time block. 	Madhya Pradesh Power Management Company Limited in consultation with Discoms
14.00 hours	Madhya Pradesh Power Management Company Limited shall intimate to State Load Despatch Centre, the Discom- wise ex-Power Plant MegaWatt requisition in each of the Generating Stations along with Long-term Bilateral transactions, Medium Term Transactions, approved Short- term Bilateral transactions and collective transactions through power exchanges.	Pradesh Power
15.00 hours	State Load Despatch Centre shall intimate to Western Regional Load Despatch Centre, Madhya Pradesh composite requisition in each of the Inter State Generating Station / Independent Power Producers along with other Long-term Bilateral transactions, Medium Term Transactions	State Load Despatch Centre
17.00 hours	Western Regional Load Despatch Centre intimates to State Load Despatch Centre, Madhya Pradesh Drawal Schedule at Ex-power plant basis and at Central Transmission Unit- State Transmission Unit Interface in each 15-minute Time Block for the next day.	Western Regional Load Despatch Centre
17.30 hours	(i) Madhya Pradesh Power Management Company Limited on receipt of Final Transaction Report of power	Madhya Pradesh Power

During the day of operation	As per the requisition submitted by the DISCOMs or Madhya Pradesh Power Management Company Limited on behalf of Discoms or the revised DC submitted by the generators State Load Despatch Centre shall revise the Drawal Schedule / Injection Schedule as per provisions of this Seller/Buyer Code.	Madhya Pradesh Power Management Company Limited / Discoms/ Seller/Buyer / State Load
23.30 hours	After receipt of final Drawal Schedule of Madhya Pradesh from Western Regional Load Despatch Centre at 23.00 hours and taking into account all the modifications indicated by Discoms, State Load Despatch Centre shall issue the final Generation Schedules to respective Seller and final Drawal Schedules to Madhya Pradesh Power Management Company Limited / respective Buyer.	State Load Despatch Centre
22.00 hour	State Load Despatch Centre shall intimate to Western Regional Load Despatch Centre, all the modifications pertaining to Inter State Generating Station / Independent Power Producers Schedules and Inter-State transactions (if any).	State Load Despatch Centre
21.30 hours	State Area Generating Station / Independent Power Producers /Discoms may inform the modifications to be made, if any, in the above Schedules to State Load Despatch Centre/Discoms	State Area Generating Station / Discoms
18.00 hours	 (i) State Load Despatch Centre shall finalize ex-Power Plant MegaWatt Generation Schedules of each seller and MegaWatt Drawal Schedules (at ex-Power Plant and State Transmission Unit-Buyer Interface) of each Buyer (ii) State Load Despatch Centre shall intimate Generation Schedules to respective Seller (iii) State Load Despatch Centre shall intimate Drawal Schedules to Madhya Pradesh Power Management Company Limited / respective Buyer. 	State Load Despatch Centre
	 through power exchanges shall run Merit Order Dispatch for State as a whole for all power plants including power plants allocated to Madhya Pradesh Power Management Company Limited. (ii) For each Discom, Madhya Pradesh Power Management Company Limited shall compare (for each time block) a. Total ex-power plant MegaWatt entitlement of a given Discom b. Total ex-power plant MegaWatt demand for a given Discom (iii) Madhya Pradesh Power Management Company Limited shall allocate the power from Madhya Pradesh Power Management Company Limited allocation to each Discom as per their power requirement for each 15 minutes time block. 	Management Company Limited in consultation with Discoms

		Despatch Centre
	The injection schedule of eligible renewable generators shall be revised by State Load Despatch Centre on receipt of requisition from such generators or coordinating agency as per provisions of Indian Electricity Grid Code and other Central Electricity Regulatory Commission / Madhya Pradesh Electricity Regulatory Commission regulations/orders on renewable generation as amended from time to time.	Renewable Energy Generating / State Load Despatch Centre
Within 3 days	State Load Despatch Centre shall prepare implemented Schedules and final ex-power plant capabilities of State Area Generating Station / Independent Power Producers within 3 days or on receipt of implemented Schedule from Western Regional Load Despatch Centre.	State Load Despatch Centre

*All Hydro Power Stations of Madhya Pradesh Power Generating Company Limited shall furnish day ahead Declared Capacity (DC) as per Madhya Pradesh Electricity Regulatory Commission (Terms and conditions for determination of Generation Tariff) Regulations, 2012 and amendment from time to time.

6. Energy Metering

(1) The State Transmission Unit shall install Special Energy Meters (SEMs) on all Interface points with intra-state entities and Discoms shall install Special Energy Meters on interface points with Discoms embedded Open Access Customers, Renewable Energy Generating and Inter-Discom interface points for recording of actual net Kwh Interchanges and kVArh injection / Drawls.

The cost of ABT meters and check meters installed in the premises of OAC & Renewable Energy Generating or in the EHV S/s of Transmission Utility shall be borne by the OAC & Renewable Energy Generating. The type of Meters to be installed, metering Scheme, metering capability, testing and calibration requirements and the scheme for collection and dissemination of metered data shall be as specified under Madhya Pradesh Electricity Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations 2006 and subsequent amendments thereof. All concerned Intra-State Entities (in whose premises the Special Energy Meters are installed) shall provide Automatic Meter Reading (AMR) facility for transmitting ABT meter data to State Load Despatch Centre remotely. If the weekly data of Special Energy Meter is not received through AMR system installed at State Load Despatch Centre, the same may be downloaded and transmitted to the State Load Despatch Centre by the owner of the ABT meter or entities who have been authorized to take

energy meter reading. In case of non-receipt of complete weekly ABT meter data through Automatic Meter Reading or manual data download by MRI, the State Load Despatch Centre shall prepare and issue Transmission losses of Madhya Pradesh, State DSM Account and State Reactive Account on monthly basis.

- (2) The State Load Despatch Centre shall be responsible for computation of actual net kWh Injection of each Seller and actual net Drawal of each Buyer on 15-minute time block wise, based on meter readings and for preparation of the State Energy Accounts. All 15-minute Energy in Kwh figures (net Scheduled, actually metered and Deviation) shall be rounded off to the Zero decimal places. All computations carried out by State Load Despatch Centre shall be open to all Intra-State Entities for checking/verifications for a period of fifteen days. In case any discrepancy is pointed out regarding energy metering, State Energy Accounts, State Deviation Accounts and State Reactive Accounts, the State Load Despatch Centre shall make a complete check and rectify the same within fifteen days.
- (3) In case of non-availability of main meter and check meter data on account of meter / metering equipment failure, State Load Despatch Centre shall assess the missing meter data as defined in clause 15 of Central Electricity Authority (Installation and Operation of meters) Regulations 2006 as amended from time to time. In case of failure of all type of ABT meters installed at interface metering point, State Load Despatch Centre shall assess the missing data on the following basis:-
 - (i) For generating stations On the basis of hourly generation data available at State Load Despatch Centre.
 - (ii) For interface points of Discoms -The data shall be assessed on the basis of data available for previous week of the ABT meter installed at the same interface point and shall be adjusted in line with load pattern of the adjoining transformers/feeder.
 - (iii) For Open Access Customers (OAC) In case of OAC's, if ABT meter data of main meter / check meter / standby meter or any other meter is not available, then State Load Despatch Centre shall substitute the actual with schedule while calculating the deviation charges.

7. Energy Accounting and Settlement

State Energy Account (SEA)

(1) The State Load Despatch Centre shall prepare and issue (to all Intra-State Entities) provisional monthly State Energy Account (SEA) by 7th day of the next month or on later date after issue of Regional Energy Account (REA) by Western Region Power Committee. The State Load Despatch Centre shall revise the State Energy Account as and when required from time to time. SEA shall broadly contain the following information:

- (a) Details of PAFM (Plant Availability Factor achieved during the Month in %) for each State Area Generating Station/ Independent Power Producer;
- (b) Details of mis-declaration of Declared Capability by State Area Generating Station/ Independent Power Producer (if any);
- (c) Details of Energy scheduled to Discoms from Inter State Generating Station and State Area Generating Station /Independent Power Producer;
- (d) The details of energy injection of Renewable Energy Generators (REG) at common metering point, energy purchased by Madhya Pradesh Power Management Company Limited and energy wheeled to Discoms for own use / third party sale as furnished by respective Discoms/ Madhya Pradesh Power Transmission Company Limited; and
- (e) Any other details which State Load Despatch Centre feels necessary to complete the State Energy Account;
- (2) Discoms (through Madhya Pradesh Power Management Company Limited) shall pay to the respective Inter State Generating Station Capacity Charges corresponding to Plant Availability and Energy Charges and PLF incentives (if any) for the Scheduled Despatch (on ex-Power Plant basis), as per the relevant notifications and orders of Central Electricity Regulatory Commission. The bills for these charges shall be issued by the respective Inter State Generating Station to each Discom (through Madhya Pradesh Power Management Company Limited) on monthly basis.
- (3) Discoms (through Madhya Pradesh Power Management Company Limited) shall pay to the respective State Area Generating Station/Independent Power Producers Capacity Charges corresponding to Plant Availability and Energy Charges for the Scheduled Despatch (on ex-Power Plant basis), as per the relevant notifications and orders of Madhya Pradesh Electricity Regulatory Commission. The bills for these charges shall be issued by the respective State Sector Generating Station to each Discom (through Madhya Pradesh Power Management Company Limited) on monthly basis.

State DSM Account (SDSMA)

- (4) The State Load Despatch Centre shall prepare and issue (to all Intra-State Entities) Weekly State Deviation Settlement Method Account (DSMA) within ten days from the last day of the Week and shall revise the same at a later date if required. The Deviation Settlement Method account shall be prepared by State Load Despatch Centre in accordance with Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations 2014 and subsequent amendments thereof. Deviation Settlement Method Account shall broadly contain the following information:
 - (a) Details of Deviation Settlement Method Tariff Structure currently in force;
 - (b) Details of Day-wise and total Deviation transactions for each Entity (details shall include Scheduled Energy, actual Energy, Deviation Charges (unadjusted) and Deviation charges (Adjusted), capping amount and additional deviation charges);
 - (c) Summary table listing all paying Entities (along with net amount payable by them) on left-hand side and all receiving Entities (along with net amount receivable by them) on right-hand side;
 - (d) Details of time-blocks of suspension of Deviation due to Transmission constraints and Grid disturbances;
 - (e) Any other details which State Load Despatch Centre feels necessary to complete the Deviation Settlement Method Account.
- (5) Composite Deviation amount payable/receivable by the Madhya Pradesh in the Regional Deviation Settlement Method Pool Account shall be obtained from the Weekly Regional DSM Account prepared and circulated by Western Region Power Committee.
- (6) Comparison of the Actual Drawal and Scheduled Drawal for each Buyer will be carried out to calculate Deviation. The Deviation energy of each Buyer is calculated by deducting Scheduled Drawal from the Actual Drawal on 15-minute basis. Similarly, Deviation Energy of each Seller is calculated by deducting Scheduled Injection from the Actual Injection on 15- minute basis. This Deviation Energy is then converted into Deviation charge by multiplying the deviation rate for each time block corresponding to average Grid frequency in that time block. Similar calculations are to be carried out for all the time blocks in a Week. The deviation Settlement shall not be applicable for Renewable Energy Generators (REG) except for those which are covered under

Renewable Regulatory Fund Mechanism as per para 5 of Annexure-1 to the Indian Electricity Grid Code (Complementary Commercial Mechanism) and subsequent amendment thereof.

- (7) Following rules shall apply for Active Energy transactions in the State:
 - (a) Amount payable (+) by Intra-State Entity for Over-Drawal;
 - (b) Amount receivable (-) by Intra-State Entity for Under-Drawal;
 - (c) Amount payable (+) by Intra-State Entity for Under-Generation;
 - (d) Amount receivable (-) by Intra-State Entity for Over-Generation.

In addition to above Charges for Deviation, Additional Charge for Deviation shall be applicable for over-injection/under-drawal of electricity for each time block by a seller/buyer as the case may be when grid frequency is 50.10 Hz and above, as per Central Electricity Regulatory Commission (Deviation and Settlement Mechanism) Regulations, 2014 as amended from time to time.

- (8) For a given day, amount payable/receivable by each Intra-State Entity and Regional Deviation amount payable/receivable by the Madhya Pradesh shall be matched with the average of total payables and total receivables. Net Deviation payable (+) / receivable (-) for any Intra-State Entity for a given Week shall be the Arithmetic sum of matched Deviation charges payable (+) / receivable (-) for all the days in a Week. The imbalance settlement of Deviation charges of the Intra State entities shall be done by State Load Despatch Centre as per Appendix.
- (9) In-firm Power from any State Sector Generating Station / Independent Power Producers shall be accounted as Deviation and paid for from the State Deviation Settlement Mechanism Pool Account at the applicable Frequency-linked Deviation ratein accordance with the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 excluding hydro power stations of Madhya Pradesh Power Generating Company Limited. Further, the start-up power drawn by Generating Unit under commissioning phase from the grid shall be settled as per Deviation Settlement Mechanism in accordance with Central Electricity Regulatory Commission approved Procedure issued vide letter No. L1/(93)/2009-Central Electricity Regulatory Commission dated 12.08.2014 and amendments thereof from time to time.
- (10) Imbalances of Inter-State Open Access Customers (if any) embedded in the State system shall be settled as per the methodology specified in Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2008 and amendment thereof. Till such time the Commission specifies the details of

settlement of imbalances of Intra-State Open Access Customers (if any), the Deviation rate of Intra State Entity shall be 105% (for Over-Drawal or Under-Generation) and 95% (for Under-Drawals or Over- Generation) of Deviation rate at the periphery of Regional Entity.

- (11) Settlement of Deviation charges shall be done through State DSM Pool Account to be operated by State Load Despatch Centre. The State Load Despatch Centre shall open and maintain a separate Bank Account with a Nationalized/Scheduled Commercial Bank (having Branch Office in Jabalpur).
- (12) Payment of Deviation charges shall have a high priority and the concerned Entity shall pay the indicated amount, within ten days from the date of issue of State Deviation Settlement Method Account, into a State Deviation Settlement Method DSM Pool Account operated by State Load Despatch Centre. The Entity which has to receive the money on account of Deviation charges would then be paid out from the State Deviation Pool Account within next two working days of receipt of payments in the "State Deviation Pool Account Fund". Separate books of accounts shall be maintained for the principal component of charges for Deviation and Additional Charges.
- (13) If payments against the Deviation Charges are delayed by more than two days, i.e. beyond twelve days from date of issue of State Deviation Account, the defaulting Entities shall have to pay Simple Interest @ 0.04% for each Day of delay. The Interest so collected shall be paid to the Entities who had to receive the amount and whose payment has got delayed.
- (14) All Intra State entities which had at any time during the previous quarter of the year failed to make payment of Charges for Deviation including Additional Charges for Deviation within the time specified in these regulations shall be required to open a Letter of Credit (LC) equal to 110% of its average payable weekly liability for Deviations in the previous quarter of the year, in favour of the pool account maintained by State Load Despatch Centre with a nationalised/scheduled commercial bank having branch office in Jabalpur.

Provided that -

(i) if any Intra State entity fails to make payment of Charges for Deviation including Additional Charges for Deviation by the time specified in these regulations during the current quarter of the year, it shall be required to open a Letter of Credit equal to 110% of weekly outstanding liability in favour of Madhya Pradesh Power Management Company Limited or State Load Despatch Centre pool account as the case may be. (ii) Letter of Credit amount shall be increased to 110% of the payable weekly liability for Deviation in any week during the quarter, if it exceeds the previous Letter of Credit amount by more than 50%.

Illustration: If the average payable weekly liability for Deviation of a intra state entity during 2009-10 is Rs. 20 crore, the intra state entity shall open Letter of Credit for Rs. 22 crore in 2010-11. If the weekly payable liability during any week in 2010-11 is Rs. 35 crore which is more than 50% of the previous quarter of the year average payable weekly liability of Rs. 30 Crore, the concerned intra state entity shall increase the LC amount to Rs. 38.5 Crore (1.1*35.0) by adding Rs. 16.5 Crore.

(iii) In case of failure to pay into the "State Deviation Pool Account Fund" within the specified time of 12 days from the date of issue of statement of charges for Deviations, the State Load Despatch Centre shall be entitled to encash the Letter of Credit of the concerned entity to the extent of the default and the concerned entity shall recoup the Letter of Credit amount within 3 days.

State Reactive Account (SRA)

- (15) The State Load Despatch Centre shall prepare and issue discoms Weekly State Reactive Account (SRA) complying with the requirements of Indian Electricity Grid Code and Madhya Pradesh Electricity Regulatory Commission Grid Code within ten days from the last day of the Week or on later date after availability of state reactive charges amount in Western Regional Load Despatch Centre website. The State Load Despatch Centre shall revise the SRA as and when required from time to time. State Reactive Account shall broadly contain the following information:-
 - (a) Details of day-wise net Reactive Energy Injection/Drawal during low Voltage (<97%) and high Voltage (>103%) for each Discom;
 - (b) Summary of weekly total net Reactive Energy Injection/Drawal during low Voltage (<97%) and high Voltage (>103%) for each Discom;
 - (c) Summary of Reactive Charges payable/receivable by the Discom [Note: Rate of reactive energy shall be taken as per Indian Electricity Grid Code and subsequent amendment thereof] and
 - (d) Any other details which State Load Despatch Centre feels necessary to complete the State Reactive Account.

- (16) Following rules shall apply for Reactive Energy transactions in the State:
 - (a) Amount payable (+) by Discom for Drawal when V<97%;
 - (b) Amount receivable (-) by Discom for Injection when V<97%;
 - (c) Amount payable (+) by Discom for Injection when V>103%;
 - (d) Amount receivable (-) by Discom for Drawal when V>103%.
- (17) Notwithstanding the above, State Load Despatch Centre may direct a Discom to curtail its Reactive Drawal/ Injection in case the security of Grid or safety of any equipment is endangered. All State Area Generating Station / Independent Power Producers /Open Access Generators (OAGs) shall generate / absorb Reactive power as per instructions of State Load Despatch Centre, within capability limits of the respective Generating Units that are without sacrificing on the active generation required at that time. No payments shall be made to the State Area Generating Station / Independent Power Producers / Open Access Generators (OAGs) for such Value Added Ratio generation/absorption. Also, State Area Generating Station / Independent Power Producers /Open Access Generators (OAGs) will not be required to make any payment for such Value Added Ratio generation/ absorption.
- (18) The Reactive Energy Settlement shall be carried out as per following procedure:

Nomenclature:

- RRC: Total of Regional Reactive Charges and Inter State Bilateral Reactive Charges payable (+) / receivable (-) by MP.
- SRCP: Total State Reactive Charges payable (+) by Discoms.
- SRCR: Total State Reactive Charges receivable (-) by Discoms.
- RRA: Reactive Reserve Amount available in State Reactive Account (i.e. surplus balance amount after settlement of all earlier Reactive transactions)
- (a) Case-I: If Regional Reactive Charges is payable (+) by Madhya Pradesh and (Regional Reactive Charges + State Reactive Charge Receivable) < State Reactive Charge Payable: Balance amount shall be kept as reserve (Reactive Reserve Amount) after paying out Regional Reactive Charges and State Reactive Charges Receivable;
- (b) Case-II: If Regional Reactive Charges is payable (+) by MP and (Regional Reactive Charges + State Reactive Charges Receivable) > State Reactive Charge Payable: Surplus amount, if any, available in reserve (RRA) shall be withdrawn to match

(Regional Reactive Charge + State Reactive Charge Receivable) and State Reactive Charge Payable. If there is no reserve or if it is inadequate to meet the gap, State Reactive Charge Receivable and State Reactive charge Payable shall be reduced appropriately to match the total payables and total receivables;

- (c) Case-III: If Regional Reactive Charge is receivable (-) by MP and (Regional Reactive Charge + State Reactive Charge Payable) > State Reactive Charge Receivable: Balance amount shall be kept as reserve (RRA) after paying out SRCR;
- (d) Case-IV: If Regional Reactive Charges is receivable (-) by MP and (Regional Reactive Charges + State Reactive Charge Payable) < State Reactive Charge Receivable: Surplus amount, if any, available in reserve (RRA) shall be withdrawn to match (Regional Reactive Charges + State Reactive Charge Payable) and State Reactive Charge Receivable. If there is no reserve or if it is inadequate to meet the gap, State Reactive Charge Receivable and State Reactive Charge Payable shall be reduced appropriately to match the total payables and total receivables;</p>
- (e) Case-V: If State Reactive Charges are receivable by Discoms and no Regional Reactive Charges (RRC) are receivable and reserve (RRA) has no balance available then no Reactive Charges shall be payable to the Discoms.
- (19) Payment of Reactive Charges shall have a high priority and the concerned Entity shall pay the indicated amounts, within ten days of State Reactive Account Statement issue, into a State Reactive Account operated by the Madhya Pradesh Power Management Company Limited. The Entity which has to receive the money on account of Reactive Charges would then be paid out from the State Reactive Account within next two working days.
- (20) If payments against the Reactive Charges are delayed by more than two days, i.e. beyond twelve days from State Reactive Account Statement issue, the defaulting Entities shall have to pay Simple Interest @ 0.04% for each Day of delay. The Interest so collected shall be paid to the Entities which had to receive the amount, payment of which got delayed.

8. Procedure for Imbalance Settlement of Deviation charges

Appendix to this Code provides the illustration of Imbalance Settlement of Deviation charges for Intra State entities.

9. **Data Archiving Requirements**

(1) All Entities shall properly preserve respective record of documents /information/Data for the period as specified in following table. The records shall be easily retrievable at any time for the purpose of Audit by the Madhya Pradesh Electricity Regulatory Commission or any other independent Audit Agency appointed by the Madhya Pradesh Electricity Regulatory Commission.

S. no.	Documents / information / data	Mode and period of	Responsibility
1	Short term Open Access and associated contracts / agreements by Intra-State Entities	Electronic -2 Years Paper - 12 months	State Load Despatch Centre
2	Declared Capacity of all State Area Generating Station / Independent Power Producers / Renewable Energy Generators And Entitlements in all Inter State Generating Station (all revisions)	Electronic -2 Years Paper - 12 months	State Load Despatch Centre, Generator Control Centre
3	Demand, Entitlement and Requisition of each Discom (all revisions)	Electronic -2 Years Paper - 12 months	State Load Despatch Centre, Delivery Control Centre
4	Short-term Open Access transactions: Bilateral transactions (direct and through Traders) and Collective transactions through Power Exchanges	Electronic -2 Years Paper - 12 months	State Load Despatch Centre, Delivery Control Centre
5	Schedules of Inter State Generating Station, Seller and Buyer (all revisions)	Electronic -2 Years Paper - 12 months	State Load Despatch Centre, Delivery Control Centre, Generator Control Centre.
6	ABT meter data from Interfaces with Seller, & Buyer in 15-minute Time Block	Electronic -2 Years	State Load Despatch Centre
7	Details of State Load Despatch Centre instructions to Intra-State Entities	Electronic -2 Years	State Load Despatch Centre
8	Details of requests from Intra- State Entities to State Load Despatch Centre	Electronic -2 Years Paper - 12 months	State Load Despatch Centre

9	Any other information deemed	Electronic -2 Years	State Load
	necessary for Operational,	Paper - 12 months	Despatch
	Commercial Delivery Control		Centre, Delivery
	Centre or Market Audit purpose		Control Centre,
			Generator
			Control Centre.

10. Standing Committee for Market Audit

- (1) The Commission may appoint a Standing Committee (SC) for independent review and audit of market transactions and behavior of Intra-State Entities to which Balancing and Settlement Code is applied. The Committee shall comprise of following members:
 - (a) A Representative from State Load Despatch Centre (not below the rank of Chief Engineer) chairperson of the Standing Committee;
 - (b) A Representative from State Transmission Unit (not below the rank of Chief Engineer);
 - (c) A representative from Madhya Pradesh Power Management Company Limited (not below the rank of Chief Engineer or equivalent post);
 - (d) A representative from Madhya Pradesh Power Generating Company Limited L (not below the rank of Chief Engineer or equivalent post);
 - (e) A representative from three discoms (on rotation for one year and not below the rank of Chief Engineer or equivalent post);
 - (f) A representative from National Hydro Development Corporation, Independent Power Producers (having installed capacity 250 Mega Watt. & above) and Renewable Energy Generators (having installed capacity of 50 Mega Watt & above at single location) on rotation for one year; and
 - (g) A Certified Energy Auditor from State Load Despatch Centre /Discom/ Madhya Pradesh Power Generating Company Limited / Madhya Pradesh Power Management Company Limited / State Transmission Unit as nominated by the Standing Committee, to assist the Committee for preparation of energy audit report.
- (2) The Audit may be conducted twice a Year and the Committee shall submit the Audit Report to the Commission within sixty days of the initiation of the Audit.

(3) The Committee shall recommend modifications and suggestions(if any) to the Commission. The Commission may accordingly amend and notify, if required, the concerned Section or Order or Procedure.

11. Applicability of Code :-

(1) This Code shall apply only to State Area Generating Station, Independent Power Producers, Renewable Energy Generating, Discoms and Inter/ Intra State Open Access Entities from the date of coming into force and shall apply to such other Generators/ Entities from such date, as may be specified by the Commission separately by way of notification.

12. Powers to remove difficulties

- (1) If any difficulty arises in giving effect to any of the provisions of this Code, the Commission may, by general or special order, direct State Load Despatch Centre, State Transmission Unit and/or any of the Intra-State Entities to take suitable action, not being inconsistent with the provisions of the Act, which appears to the Commission to be necessary or expedient for the purpose of removing the difficulties.
- (2) State Load Despatch Centre, State Transmission Unit and/or any of the Intra-State Entities may also make an application to the Commission and seek suitable orders to remove any difficulties that may arise in implementation of this Code.
- **13. Power to amend :-** The Commission may from time to time add, vary, alter, modify or amend any provisions of this Code after following the necessary procedure.

14. Savings

- (1) The Code namely "Madhya Pradesh Electricity Balancing and Settlement Code, 2009 (G- 34 of 2009) notified on 23rd October, 2009 and read with all amendments thereto as applicable to the subject matter of this Code is hereby superseded.
- (2) Nothing in this Code shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuses of the process of the Commission.
- (3) Nothing in this Code shall bar the Commission from adopting, in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of this Code, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.

(4) Nothing in this Code shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no Regulations or Code have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

APPENDIX

PROCEDURE FOR IMBALANCE SETTLEMENT OF DEVIATION CHARGES OF INTRA STATE ENTITIES

The pool balancing of Deviation Settlement Account shall be done in two steps; in the first step pool balancing is done of all Intra State entities (under long term) excluding Open Access Consumers and in the second step including Open Access Consumers. The objective of including the Open Access Consumers in the second stage is that adjustment amount of Open Access Consumers is nominal even if there is large amount of Regional Deviation amount payable / receivable by MP

<u>Step -I</u>

Blockwise Deviation charges amount payable / receivable by each participant of the State Pool is calculated at the end of the week / month. The day wise Regional Deviation Settlement amount payable / receivable by Madhya Pradesh is obtained from the Regional Deviation Settlement Method Account prepared by Western Region Power Committee.

week / month)				
Amount Payable by Participants		by Participants		
Rs.	Participants	Rs.		
3000	D1	4500		
2000	SSGS3	3500		
3500	Regional DSM Amount	3000		
1500				
10000	Total Receivables	11000		
	y Participants Rs. 3000 2000 3500 1500	y Participants Amount Receivable Rs. Participants 3000 D1 2000 SSGS3 3500 Regional DSM Amount 1500		

State Deviation Settlement Method Pool Account (for a given day in a week / month)

Where,

D1,D2,D3 are Discoms

State Region Generating Station 1, State Region Generating Station 2,

State Region Generating Station 3 are State Sector Generating Stations.

Regional DSM Amount is the Deviation amount payable / receivable by Madhya Pradesh.

The amount payable and receivable to / from State Deviation Pool does not match for a given day. In order to match them, the average of the "Total Payables" and "Total Receivables" is taken as a base and payable / receivables are matched to average.

Particular	Total Amount Payable	Total Amount Receivables
Sum Total	10000	11000
Average of the 'Total Amount Payable' and "Total Amount Receivables'	10500	
Adjustment Ratio# AR _{P1} (=Average / Total Amount Payable)	1.05	

First Stage Adjustment

Amount Payable by Participants - First Adjustment				
Participants	Original Payable	Adjustment Ratio AR _{P1}	Adjusted Payable	
D2	3000	1.05	3150	
D3	2000	1.05	2100	
State Region Generating Station 1	3500	1.05	3675	
State Region Generating Station 2	1500	1.05	1575	
Total Payables	10000		10500	

Amount Receivable by the Participants - First Adjustment				
Participants	Original Payable	Adjustment Ratio AR _{R1}	Adjusted Payable	
D1	4500	0.954545	4295	
State Region Generating Station 3	3500	0.954545	3341	
Regional Deviation Settlement Method Amount	3000	0.954545	2864	
Total Receivables	11000		10500	

Since regional Deviation Settlement Method amount must be paid without any adjustments, difference "actual regional Deviation Settlement Method amount" and adjusted Deviation Settlement Method amount" shall be recovered from remaining participant in proportion to their original amounts

Difference between adjusted regional Deviation Settlement Method amount and

=2864-3000=-136

Actual Regional Deviation	n Sattlamant		
J J	n Selliement		
Method amount			
Original Total receivable	s excluding Actual		
Regional Deviation Settle	ement Method	=11000-30	000=8000
amount			
Adjustment Ratio AR _{R2} f	or receivables	=-136/8000 =	= -0.017046
	Second Stage	Adjustment	
	Original	Adjustment Ratio	Adjusted
Participants	Receivables	-	Receivables
	Receivables	AR _{R1}	Receivables
D1	4500	-0.017046	-77
State Region			
Generating Station 3	3500	-0.017046	-60
Total Receivables	8000		-136
Total Receivables	0000		-130
		· · · · ·	
Amount Receiv	· · ·	(for a given day in a v	
Participants	Amount after first Adjustment	Second adjustment Amount	Total (Final) Adjusted Amount
D1	4295	-77	4219
State Region			
Generating Station 3	3341	-60	3281
Regional Deviation			
Settlement Method	3000	0	3000
Amount Total Receivables	10636	-136	10500
	10030	-130	10300

Final Balanced State Deviation Settlement Method Pool Account

Amount Payable by Participants		Amount Receivable by Participants	
Participants	Rs.	Participants	Rs.
D2	3150	D1	4219
D3	2100	SSGS3	3281
State Region Generating Station 1	3675	Regional DSM Amount	3000
State Region Generating Station 2	1575		
Total Payables	10500	Total Receivables	10500

<u>Step -II</u> Stage I & II

After obtaining the balanced Deviation Settlement Mechanism pool account in step-I, the Open Access Generators/ Open Access Consumers (under short term) are included and same methodology is applied as of step-I for obtaining the balanced Deviation Settlement Mechanism pool account.

By Order of the Commission,

Shailendra Saxena, Commission Secretary