

Bhopal: dated 18th September 2006

No.2305 –MPERC-2006. In exercise of the powers conferred by Sub-Section (b) of Section 86 of the Electricity Act 2003 (36 of 2003) and all powers enabling it in that behalf, the Madhya Pradesh Electricity Regulatory Commission hereby makes the following Regulations, to harness the surplus generation capacity of captive power units and to reduce peak time shortages in the system.

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION (POWER PURCHASE AND OTHER MATTERS WITH RESPECT TO CONVENTIONAL FUEL BASED CAPTIVE POWER PLANTS) REGULATION, 2006
(G-30 OF 2006)**

CHAPTER I: PRELIMINARY

Short title, commencement and interpretation

- 1.1 These Regulations may be called the ‘Madhya Pradesh Electricity Regulatory Commission (Power Purchase and Other Matters with respect to conventional fuel based Captive Power Plants) Regulation, 2006 (G-30 of 2006)’.
- 1.2 These Regulations shall extend to the whole of Madhya Pradesh and shall apply only to the Captive Power Plants using conventional fuels.
- 1.3 These Regulations shall come into force on the date of their publication in the official gazette of the Government of Madhya Pradesh.

Definitions

- 1.4 In these Regulations, unless the context otherwise requires,
 - (a) “Act” shall mean the Electricity Act, 2003 (36 of 2003);
 - (b) “Billing cycle” means a period of one month commencing from 00.00 hours on the first day of the month and ending at 24.00 hours on last day of the month;
 - (c) “Captive Power Plant (CPP)” shall have the meaning assigned to the term under clause 1.5 of these Regulations;
 - (d) “CPP Holder” shall mean an individual, company or a body corporate being the owner of the Captive Power Plant;
 - (e) “Captive User(s)” shall have the meaning assigned to the user under clause 1.5 of these Regulation;
 - (f) “Commission” shall mean the Madhya Pradesh Electricity Regulatory Commission (MPERC);
 - (g) “Day” shall mean a continuous period of 24 hours;
 - (h) “Firm power” shall mean the power supplied by a CPP holder to a Licensee as per the Power Purchase Agreement (PPA) between the Licensee and the CPP Holder;
 - (i) “In-firm power” shall mean the power supplied by a CPP holder to a Licensee if it is less than 90% of the firm energy defined above;
 - (j) “Licensee” shall mean a Distribution Licensee;
 - (k) “Stand-by period” shall mean a period worked out by the Licensee as per the procedure for requisitioning stand-by support as provided in these Regulations;

- (l) “Stand-by support” shall mean the contractual arrangement between the CPP user and the Distribution Licensee of his area of supply to provide power in case of planned or forced outage of the CPP;
- (m) Words and expressions used and not defined in these Regulations but defined in the Act shall have the meanings as assigned to them in the Act, or in absence thereof, shall have the same meaning as commonly understood in the electricity supply industry.

Definition of a CPP with respect to own consumption versus sales mix

1.5 A power plant shall be identified as a Captive Power Plant only if it satisfies the conditions contained in clause 3 (1) (a) and 3 (1) (b) of the Electricity Rules, 2005 notified by the Ministry of Power, Government of India, on 8th June 2005, reproduced here for ready reference:

(1) No power plant shall qualify as a ‘captive generating plant’ under section 9 read with clause (8) of section 2 of the Act unless-

(a) in case of a power plant-

(i) not less than twenty six percent of the ownership is held by the captive user(s), and

(ii) not less than fifty one percent of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for the captive use

Provided that in case of power plant set up by registered cooperative society, the conditions mentioned under paragraphs at (i) and (ii) above shall be satisfied collectively by the members of the co-operative society:

Provided further that in case of association of persons, the captive user(s) shall hold not less than twenty six percent of the ownership of the plant in aggregate and such captive user(s) shall consume not less than fifty one percent of the electricity generated, determined on an annual basis, in proportion to their shares in ownership of the power plant within a variation not exceeding ten percent;

(b) in case of a generating station owned by a company formed as special purpose vehicle for such generating station, a unit or units of such generating station identified for captive use and not the entire generating station identified for captive use and not the entire generating station satisfy(s) the conditions contained in paragraphs (i) and (ii) of sub-clause (a) above including-

Explanation: -

(1) The electricity required to be consumed by captive users shall be determined with reference to such generating unit or units in aggregate identified for captive use and not with reference to generating station as a whole; and

(2) The equity shares to be held by the captive user (s) in the generating station shall not be less than twenty six percent of the proportionate of the equity of the company related to the generating unit or units identified as the captive generating plant.

(2) *It shall be the obligation of the captive users to ensure that the consumption by the Captive Users at the percentages mentioned in sub-clauses (a) and (b) of sub-rule (1) above is maintained and in case the minimum percentage of captive use is not complied with in any year, the entire electricity generated shall be treated as if it is a supply of electricity by a generating company.*

Explanation: (1) For the purpose of this rule-

- (a) *“Annual Basis” shall be determined based on a financial year;*
 - (b) *“Captive User” shall mean the end user of the electricity generated in a Captive Generating Plant and the term “Captive Use” shall be construed accordingly;*
 - (c) *“Ownership” in relation to a generating station or power plant set up by a company or any other body corporate shall mean the equity share capital with voting rights. In other cases ownership shall mean proprietary interest and control over the generating station or power plant;*
 - (d) *“Special Purpose Vehicle” shall mean a legal entity owning, operating and maintaining a generating station and with no other business or activity to be engaged in by the legal entity.*
- 1.6 If in any financial year, the conditions contained in the above mentioned Electricity Rules, 2005 are not satisfied by the Captive User(s), then as per clause 3 (2) of the Electricity Rules, 2005 (reproduced above), the entire electricity (generated from the captive power plant) consumed by Captive Users in the year shall be treated as if it is supply of electricity by a generating company and shall be liable to all charges recoverable from Open Access User. In such an eventuality, the Captive User shall have the right to represent before the Commission if he is not satisfied with the claim made by the Distribution Licensee.

CHAPTER II:

GENERAL AND TECHNICAL CONDITIONS IN CASE OF INTERCONNECTION WITH GRID

- 2.1 The Captive Power Plant (hereafter in these Regulations is called in short form as CPP) and dedicated transmission/distribution lines and substations shall be established, operated and maintained, as per the technical, safety and grid standards specified by the Authority or State Transmission Utility or the Commission.
- 2.2 As per proviso to section 9 of the Act, the supply of electricity from a CPP through the grid shall be regulated in the same manner as the generating station of a generating company. For this purpose, the CPP Holder shall be required to comply with the directions issued by the State Load Despatch Centre for exercising supervision and control as may be necessary for ensuring integrated grid operations and for achieving the maximum safety, economy and efficiency in the operation of power system in the state.

Provided that if any dispute arises with reference to the quality of electricity or safe, secure and integrated operation of the State grid or in relation to any direction issued by SLDC it shall be referred to the Commission for decision. However pending the decision of the Commission, the CPP Holder shall comply with the direction issued by the SLDC.

- 2.3 Holder of the Captive Power Plant, connected in parallel with the grid, shall ensure the compliance of Madhya Pradesh Electricity Grid Code, the Indian Electricity Grid Code or the Regulations issued by the CEA as amended from time to time. The connectivity to the network shall be provided by the Licensee only after the CPP Holder completes all formalities as prescribed by the Licensee with respect to seeking connection of his CPP to the grid, including submission of all statutory clearances from the Pollution Control Board, Chief Electrical Inspector, etc. The CPP Holder shall also be required to maintain the statutory clearances so obtained throughout the term of connectivity of his CPP with the grid.
- 2.4 For the CPPs covered under these Regulations, the CPP Holders shall pay all charges as specified in these regulations, and any other charges as specified by the Commission from time to time.
- 2.5 The CPP Holder shall submit the technical details concerning generation and transmission to the concerned Licensee, as may be specified by the Authority or the Commission from time to time.
- 2.6 The CPP Holder shall provide the infrastructure for connecting the generating plant (if not existing earlier) to the network of the Transmission/Distribution Licensee as the case may be. If the CPP Holder requires the Transmission Licensee/Distribution Licensee to build the infrastructure to connect his CPP with the Licensee's network then the CPP Holder shall be required to bear the cost of interconnection equipment and associated facilities, including those necessary for network protection and metering.
- 2.7 The scheme of synchronising the CPP with the concerned Licensee's network shall be approved by the concerned Superintending Engineer (Testing) / Superintending Engineer (Operation and Maintenance), as the case may be.

CHAPTER III:

CONDITIONS FOR SALE OF CPP POWER TO A DISTRIBUTION LICENSEE

- 3.1 Any CPP Holder shall be entitled to sell power to the Distribution Licensee of the area of supply where the CPP is located.
- 3.2 The tariff of purchase of power from a CPP Holder by the Distribution Licensee shall be as determined in these Regulations. However, the concerned Distribution Licensee shall have the option of procuring medium term / long-term power from any CPP Holder based on competitive bidding, using the guidelines specified by the Ministry of Power, Government of India in this regard. In such an event, the Commission shall accept the tariff for power purchase as decided through such competitive bidding.
- 3.3 Any CPP, Holder with an exportable surplus of more than or equal to 3 MW and willing to sell such surplus power to a Distribution Licensee, shall be required to enter into a Power Purchase Agreement (PPA) with such Licensee. The minimum duration of this PPA shall be one (1) year, and renewable thereafter at the option of both the Licensee and the CPP Holder for a further duration equal to or more than (but not less than) one year. The Distribution Licensees shall prepare a standard Power Purchase Agreement (herein after in these Regulations is called in short form as PPA) to be signed with CPP Holders for the Commission's approval, within one month of issue of these Regulations.

3.4 CPP Holders with a firm exportable surplus of less than 3 MW shall also be allowed to sell power directly to the Distribution Licensee of concerned area of supply, albeit, without the need for a PPA. All such CPP holders shall comply with the following minimum requirements:

- (a) All such CPP Holders shall register their details with respective Distribution Licensee in which CPP is physically located. Format to capture necessary details shall be developed by respective Distribution Licensee.
- (b) All such CPP Holders would not be required to furnish their injection schedules, only if the CPP power is not being sold to any third party consumer and / or not being wheeled to a place of self-use. If, however, wheeling or third party sale is also involved together with sale to Distribution Licensee, the provisions of scheduling and balancing and settlement shall apply as per the current practice till such time the Balancing and Settlement Code is notified by the Commission.
- (c) The payment of energy injected by such CPP will be linked to frequency-based UI rates as defined in Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 (G-26 of 2005) dated December 05, 2005. Such payment shall be restricted to 2/3 of UI rate relevant at the time of injection.
- (d) All such CPP Holders will be required to install main and check Special Energy Meters capable of time differentiated measurements (15 mins) of active and reactive energy.
- (e) For energy accounting and the payment of energy injected, the Distribution Licensee of CPPs area of supply shall obtain the raw electronic data from both the main and check meters (downloaded through Meter Reading Instrument) within 5 days of completion of billing month. The representative of the CPP Holder shall also be required to be present at the time of meter readings.
- (f) Actual injected energy accounted for as sale to the Distribution Licensee shall be determined after deducting from total injection, the amount of injection attributable to self-use (only if self-use is at a location different from where the CPP is located, since self-use within premises will not be recorded in the interface meter in any case) and third party sales, if any.

$$FE = \frac{D * PLF * 1000}{4}$$

3.5 For CPP Holders having a PPA with the Licensee, energy for each time block of 15 minutes equivalent to firm power declared in the PPA shall be worked out as under:

Where,

FE = Firm Energy in kWh

D = Firm power availability as per PPA (in MWs)

PLF = Plant Load Factor as agreed in the PPA with a minimum limit of 70%

For the purpose of above, the Plant Load Factor of the CPP (subject to minimum limit as indicated above) shall be agreed in the PPA between the CPP Holder and the Licensee concerned.

Firm and In-firm rates for power purchase from CPPs:

- 3.6 The rate of purchase of firm power shall be differentiated between power purchased during peak-time and off-peak time. For this purpose, peak-time shall be the period between 1800 hours to 2200 hours on any day, and the remaining period shall be considered off-peak time.
- 3.7 For CPP Holders having a PPA with a Licensee, the rate of purchase of firm power during peak time shall be equal to the weighted average of power purchase costs of the Licensee (inclusive of fixed and variable charges) of top 5% power at the margin (excluding liquid fuel based generation and generation from renewable sources) as approved by the Commission in its Tariff Order for the year in question. For FY 2006-07, this rate as approved by the Commission in its Tariff Order is Rs. 2.65 / unit. Power injected by the CPP during off-peak time shall be paid for at rate less than 15% of the power purchased rate during peak time. For FY 2006-07, therefore, this rate shall be equal to Rs. 2.30 / unit (2.65/(1.15)).
- 3.8 The rate of purchase of in-firm power shall be 80% of the rate specified for firm power, for both peak and off-peak times. Therefore, for FY07, in-firm power rate during peak time shall be Rs. 2.12 per unit (80% of 2.65 per unit), and during off-peak time, it shall be Rs. 1.84 per unit (80% of 2.30 per unit).
- 3.9 The energy delivered shall be measured at the interface point of the Distribution or Transmission Licensee and the CPP, as the case may be. The Current Transformer (CT) of the synchronising breaker shall be considered as the commercial interface for this purpose.

Scheduling, Balancing and Settlement

- 3.10 CPP Holders shall be required to provide injection schedules as per section 8 of the Madhya Pradesh Electricity Grid Code, dated 6th August 2004, and subsequent amendments thereof.

Provided that such CPPs shall be bound by appropriate provisions of Scheduling and Balancing and Settlement once Intra-State ABT is introduced in the State of MP

- 3.11 There shall be no provision for deemed generation and all payments for Firm and In-firm energy shall be done as per the following methodology:
 - (a) Step-1: Energy, for each time-block of 15-minutes, equivalent to firm power in MWs declared in the PPA shall be worked out as per clause 3.5.
 - (b) Step-2: At the end of a billing cycle, the raw data downloaded from the interface meters shall be used to compute actual energy generated on a 15-minute time-block-wise basis. The actual energy delivered to the Licensee shall be determined after deducting any third party shares and energy allocated to own consumers, if any from the total net exported energy as recorded at the CPP premises.
 - (c) Step-3: Payment settlement for firm and in-firm energy: Settlement shall be done at the end of the billing cycle for energy injected on a 15-minute basis. This shall be done as per the following table (abbreviations are explained under the table):

If,	Then,
TE _{Act} > FE	Payment for all energy actually injected (TE _{Act}) shall be at firm rates.

If,	Then,
$TE_{Act} < FE$	As long as actual energy injected is greater than or equal to 90% of declared FE, the payment of all energy injected shall be at “firm rates”. If, however, actual energy injection is less than 90% of FE, payment for all energy injected shall be at “in-firm” rates.
$TE_{Act} = FE$	All actual energy injected shall be paid at firm rates

For the table above:

TE_{Act} means the total actual energy injected in a 15-minute time-block as per interface meter reading.

FE: already explained above.

CHAPTER IV: OTHER MATTERS

Stand-by support

- 4.1 The Stand-by support shall be provided to the following type of captive users (hereinafter is referred to as “user(s)”):
- (a) Where the user and his CPP are located within the same premises but the CPP is not connected to the grid at all (operating in an islanded mode) and thus are not consumers of the Distribution Licensee.
 - (b) Users whose CPP is connected with the grid, but the user does not have any other supply contract, other than a Contract Demand with the Licensee of user’s area of supply;
- 4.2 The Stand-by support shall not be allowed to any consumer who is holding a supply contract with any other generator (not being captive) other than having a Contract Demand with the Licensee of such area of supply.
- 4.3 The following table presents the different types of transactions involving Captive Power Plants and its users, and the applicability of stand-by support in each situation:

Part	CPP type / location	Supply arrangements of the CPP consumer	Stand-by support
A	Islanded CPPs (physical connection to grid provided if CPP user requests Stand-by support)	No arrangements except own CPP	Allowed
B	CPP located in-premises	Contract Demand with Licensee only	Allowed
C	CPP located at premises A and user located at premises B	Load has Contract Demand with Licensee only and no other supply arrangements	Allowed after Balancing and Settlement Code is made applicable in MP

Part	CPP type / location	Supply arrangements of the CPP consumer	Stand-by support
D	CPP located in-premises	Contract Demand with Licensee Other Supply arrangements, including procurement from third party generator	Not allowed
E	CPP located at premises A and user located at premises B	Contract Demand with Licensee Other supply arrangements, including procurement from third party generator	Not allowed

- 4.4 Users allowed Stand-by support as per the table above shall have the right to contract for Stand-by support with the Distribution Licensee of his area of supply. If requested, the Distribution Licensee shall be obliged to provide such facility to the users.
- 4.5 Such users existing in the State of Madhya Pradesh as on the date of notification of these regulations and requiring Stand-by support shall apply for the same to the distribution licensee of the area of supply within 30 days of notification of these regulations. The prospective users shall disclose their willingness to avail of stand-by support at the time of submitting their application for connection / open access
- 4.6 For the purpose of Stand-by support, such user, as the case may be, and the Distribution Licensee shall have to enter into an agreement for such support. For this purpose, the Distribution Licensees shall prepare a model agreement within one (1) month of notification of these regulations and shall take Commission's approval for the same.
- 4.7 The user shall not avail Stand-by support more than the Contracted Stand-by Demand.
- 4.8 The following Sections of the Regulations shall describe the conditions for provision of stand-by support applicable on each "Part" or type of transaction described in the table above, which are allowed the facility of Stand-by support from the Licensee (i.e. Parts A, B and C).

PART – A:

Conditions for availing Stand-by support

- 4.9 Such users, if requiring Stand-by support, shall have to seek connection to the grid and pay appropriate charges for interconnection infrastructure as mentioned in clause 2.6. The Interconnecting breaker on the grid end shall be kept open, and shall be charged by the Licensee only when the notification of requirement of Stand-by support is provided by the user to the Licensee as per clause 4.10 below.
- 4.10 Such users shall notify the Distribution Licensee of his area of supply about the requirement of Stand-by support. It shall be the responsibility of the Distribution Licensee to charge the interconnecting line and inform the user about the same within a period of 2 hours from the time of receipt of such notification. When the user ceases to require Stand-by support from the Licensee, it shall again notify the Licensee about the same. The Licensee, on receiving such notification, shall re-open the Interconnecting breaker on the grid end.

- 4.11 User's notification to the Licensee shall indicate the amount of Stand-by demand the user wishes to requisition against his total Stand-by Contracted Demand for daily scheduling purposes by the Distribution Licensee.
- 4.12 The total period for the purpose of billing for stand-by support shall be from the time the Licensee notifies the user of the availability of stand-by support upto the time the Licensee receives notification from the user that stand-by support is no longer required.
- 4.13 The notification from the user shall be sent to the Superintending Engineer (Commercial), of the concerned Circle, or any other authorised officer as designated by the licensee. The detailed process of sending and acknowledgements of these notifications shall be worked out between the Licensee and the user and shall be stated in the Stand-by contract.
- 4.14 Stand-by support cannot be requisitioned by a user for more than 5 times in a financial year, with no more than one requisition in any billing month.

Charges for Stand-by support

- 4.15 In case of such users, the maximum demand that can be contracted under Stand-by support cannot be more than the total rated capacity of all the generating units of the CPP holder.
- 4.16 Wherever an agreement for Stand-by support exists between the user and the Distribution Licensee of his area of supply, the user shall be required to pay to the Distribution Licensee a fixed charge equal to Rs. 20 per kVA per month, applied on the capacity contracted under Stand-by support with the Distribution Licensee.

Provided that the charges referred to above shall apply uniformly every month, irrespective of whether the user avails stand-by support or not.

- 4.17 In addition to fixed charges shown above, the users, shall also be required to bear energy charges and demand charges for the power consumed during period of Stand-by support in the following manner:

Within a Financial Year	Rate
Stand-by support availed upto 750 hours	Applicable Energy and Demand charges in force at par with regular consumers
Stand-by support availed for greater than 750 hours and upto 1000 hours	Applicable Energy and Demand charges in force on power consumed during the first 750 hours and 1.1 times the applicable energy and demand charges on power consumed for the balance period
Stand-by support availed for greater than 1000 hours	Applicable energy and demand charges in force on power consumed upto first 750 hours, 1.1 times the applicable energy and demand charges on power consumed thereafter upto 1000 hours and temporary tariff* on power consumed beyond 1000 hours.

* Temporary tariff shall be as approved by the Commission for High Tension categories in its Tariff Orders from time to time

- 4.18 For the purpose of above, the applicable Demand and Energy charges shall be determined as below:

$$D C_{stand-by} = \frac{D C_{approved}}{\Sigma T} * T$$

Subject to a minimum Demand Charge ($DC_{stand-by}$) of 40% of the Demand Charges applicable to the category to which the CPP would belong if it were a normal HT consumer of the Licensee

$$E C_{stand-by} = EC_{approved}$$

Where,

$DC_{stand-by}$ = Demand Charges applicable on demand in kVA consumed during stand-by support

$DC_{approved}$ = Demand Charges approved by the Commission for the relevant consumer category in its Tariff Order in force

$\sum T$ = Total number of 15 min. time blocks in the month when settlement takes place

T = Total number of 15 min. time blocks for which stand-by support is availed of by the user, determined from Clause 4.12

$EC_{stand-by}$ = Energy charges in Rs./unit applicable for stand-by support

$EC_{approved}$ = Energy charges approved by the Commission for the relevant consumer category in its Tariff Order in force

- 4.19 The demand charges arrived at from Clause 4.18 shall be applied on the contracted demand across all time blocks covered under stand-by period, and the energy charges shall be applied on the total energy consumed across all time-blocks covered under stand-by period, the duration of which is determined as per Clause 4.12.
- 4.20 In case the recorded maximum demand at the CPP premises exceeds the Stand-by contract demand, the excess demand recorded shall be billed for at 2 times the demand charges arrived at from Clause 4.18.
- 4.21 The Stand-by support consumed by the user shall be entitled for rebates, incentives and penalties, approved by the Commission for retail supply consumers in its Tariff Order, only if the stand-by support is availed of for a continuous duration of monthly billing cycle.
- 4.22 There shall be no minimum energy charges on power consumed under Stand-by for such users.

Note – A worked out example of levy of charges for stand-by support is given in Annexure I

PART – B:

Conditions for availing Stand-by support

- 4.23 The user shall notify the Distribution Licensee of his area of supply about the requirement of stand-by support two (2) hours before the time the captive consumer intends to avail power from the Distribution Licensee. The user shall provide the Distribution Licensee with the date and time of the stoppage of its captive power plant. When the user's CPP starts functioning again, the user shall, within a period of one (1) hour, notify the Distribution Licensee about the same duly giving the actual date and time since the plant started functioning again. The total period of stand-by support shall be worked out accordingly.

Provided that the Distribution Licensee may verify the actual date and time of both commencement and ending of the Stand-by period, as provided by the user, with the actual meter readings, and other records as may be necessary, at the CPP / Captive User's premises.

- 4.24 User's notification to the Licensee shall indicate the amount of Stand-by demand the consumer wishes to requisition against his total Stand-by Contracted Demand for the purpose of daily scheduling by the Distribution Licensee.
- 4.25 The notification from the user shall be sent to the Superintending Engineer (Commercial), of the concerned Circle, or any other authorised officer as designated by the Licensee. The detailed process of sending and acknowledgements of these notifications shall be worked out between the Licensee and the user and shall be stated in the Stand-by contract.
- 4.26 The user cannot avail Stand-by support for more than 5 times in a financial year, with no more than one requisition in any billing month.

Charges for Stand-by support

- 4.27 The maximum demand that can be contracted under Stand-by support cannot be more than the total rated capacity of all the generating units of the user's CPP.
- 4.28 Wherever an agreement for Stand-by support exists between such user and the Distribution Licensee of his area of supply, the user shall be required to pay to the Distribution Licensee a fixed charge equal to Rs. 20 per kVA per month, applied on the capacity contracted under Stand-by support with the Distribution Licensee.

Provided that the charges referred to above shall apply uniformly every month, irrespective of whether the user avails stand-by support or not.

- 4.29 The billing for Stand-by charges shall be done in the following manner:

Particulars for the month	Charges / billing / Billing conditions for the month
Stand-by period not applicable in the month	Stand-by charges of Rs. 20/kVA on Stand-by demand contracted Billing for Demand and Energy charges for demand and energy consumed from the Licensee as per the Commission's Tariff Order in force from time to time (including all rebates, minimum charges, Load Factor incentives, etc.)
Stand-by period applicable for full or part of the month Note: Stand-by period is considered applicable only if conditions with regard to validity of stand-by periods contained in clauses 4.26 and 4.33, are satisfied	Contract Demand shall be deemed revised to CD + STBY_CD for determination of penal charges for excess demand during stand-by period Stand-by charges of Rs. 20/kVA on Stand-by demand contracted Normal Demand Charges* on Contract Demand, irrespective of actual recorded demand at premises Pro-rated normal demand charges on STBY_CD (applicable only for the time blocks covered under stand-by period), irrespective of actual Recorded Demand at the premises Excess demand charges* on excess of demand, if any, over CD + STBY_CD. Energy charges* for actual energy consumption

*As approved by the Commission in its Tariff Order from time to time

For the purpose of above, CD refers to the user's Contracted Demand with the Licensee of his area of supply and STBY_CD means the Stand-by demand contracted by the user in a Stand-by period.

- 4.30 An illustrative example of levy of stand-by charges is contained in the Annexure –II.
- 4.31 The stand-by support availed by the user shall be entitled for rebates, incentives or penalties approved by the Commission for retail supply consumers in its tariff order, only if the stand-by support is availed of for a continuous duration of monthly billing cycle.
- 4.32 There shall be no minimum energy charges on standby contracted demand.
- 4.33 The total duration of all Stand-by periods with respect to any user shall not be more than 1000 hours during any financial year. As long as the Stand-by period is within these limits, the charges referred above shall apply and thereafter, if the failure or shutdown of the user's CPP still continues, any power consumed by the user shall be charged at temporary tariff as specified by the Commission in its Tariff Order from time to time.

Provided that in the event the user has not notified the Distribution Licensee about the failure or shut-down of his CPP within the time period mentioned in Clause 4.23, entire demand recorded at the user's premises till the time of notification shall be deemed to be supplied by the Distribution Licensee and the billing for normal demand, excess demand and energy consumption shall be carried out by the Licensee in the manner approved by the Commission in its Tariff Order from time to time.

PART – C:

Conditions for availing Stand-by support

- 4.34 The facility for stand-by support shall be available for such users only after the Balancing and Settlement Code is made applicable in the State of Madhya Pradesh, by the Commission. The Commission shall notify the conditions for requisitioning stand by support by such users along with the Balancing and Settlement Code.

Matters related to metering, meter reading and energy billing

- 4.35 CPP Holders / Captive Users involved either in sale of power to the Distribution Licensee of its area of supply or seeking Stand-by support from the Licensee shall be required to install at their premises, main and check Special Energy Meters capable of time differentiated measurements (15 mins.) of active and reactive energy. A request for stand-by support to eligible captive users as per these Regulations shall be entertained by the Licensee only after the captive user, has installed the required meters at their premises.
- 4.36 Meter reading, energy accounting and settlement of charges at the CPP interface point shall be the responsibility of the concerned Distribution Licensee in whose area of supply the CPP is located. In case of captive users contained in Part C of these regulations, the procedures for meter reading, energy accounting and settlement of charges, the entities involved and their individual responsibilities shall be as per the Balancing and Settlement Code.

- 4.37 The Invoice for power purchased by a Licensee shall be raised by the CPP Holder based on the meter readings at the interface point within a period of one week from the date of meter reading. The Licensee concerned shall be responsible for making payment against the invoice within the same period as provided by it to recover payments from its HT consumers. A rebate of 1.25% of the amount paid shall be provided by the CPP Holder to the Licensee for timely payment and in case of delayed payment, a surcharge at the rate of 1.25% per month of the amount in arrears shall be payable by the Licensee.
- 4.38 The CPP Holders having a PPA with a Licensee shall have the option to receive payment through a revolving self replenishing Letter of Credit (LC) of a value equal to 1/12th of the total amount billed in the previous financial year in favour of the CPP Holder. For a new CPP, it would be 1/12th of the amount for energy proposed to be supplied in the current financial year at the rate specified in these Regulations. The CPP Holder shall bear the cost of opening and maintaining this Letter of Credit.

Power to remove difficulties

- 4.39 If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by general or special order undertake steps or direct the licensees to undertake steps, which in the opinion of the Commission are necessary or expedient for the purpose of removing difficulties.

Power to Amend

- 4.40 The Commission may, at any time add, vary, alter, modify or amend any provisions of these regulations. If clarification of any of the provisions included in these regulations is required, the concerned person may approach the Commission for seeking such clarification.

Savings

- 4.41 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission.
- 4.42 Nothing in these Regulations 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.
- 4.43 Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no Codes have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

By order of the Commission

Ashok Sharma, Dy. Secretary

Annexure – I

Worked example for billing stand-by charges for islanded CPPs (Part A):-

- Captive user with Stand-by contract = 20 MVA from Eastern Discom
- As per the notification procedure given in these regulations, the actual stand-by period is worked out as 4000 time blocks (of 15 mins. each, i.e. 1000 hours) spread over two accounting months – September and October 2006, with shares of 600 hours in September 06 and the remaining 400 hours in October 06.
- Demand Charges as per MPERC Tariff Order is, say, = Rs. 200 per kVA per month for the consumer category to which the captive user would belong if it were a normal HT consumer of the Licensee
- Energy charges as per MPERC Tariff Order is, say, Rs. 3.30 per unit for the consumer category to which the captive user would belong if it were a normal HT consumer of the Licensee

Settlement for September 2006:

(total time blocks in month = 2880 since the month has 30 days)

Recorded Maximum Demand during the Stand-by period of 600 hours = 25 MVA

Excess Demand consumed under stand-by support = 5 MVA

Energy consumed during the stand-by period in September 06 = 80 Lac units (L.U.)

Applicable Demand and Energy Charges under stand-by =

$$DC_{\text{stand-by}} = \frac{200}{2880} * 2400 = \text{Rs.}166.67\text{perkVA}$$

(600 hours = 600*4 = 2400 time blocks)

$$EC_{\text{stand by}} = \text{Rs.}3.30\text{perunit}$$

Stand-by normal Demand Charges = Rs. 166.67 per kVA * 20 MVA = Rs. 33.33 Lacs

Stand-by excess Demand Charges = Rs. 166.67 per kVA * 2 * 5 MVA = Rs.16.67 Lacs

Stand-by Energy Charges = Rs. 3.30 per unit * 80 Lac units = Rs. 264 Lacs

Total Bill for Stand-by support during September 2006 (excluding Fixed Stand-by charges of Rs. 20/kVA) = Rs. 3.14 Crore

Settlement for October 2006:

(total time blocks in month = 2976 since the month has 31 days)

Recorded Maximum Demand during the Stand-by period of first 150 hours = 15 MVA

Recorded Maximum Demand during the Stand-by period of remaining 250 hours = 18 MVA

As measured from Interface meter, the energy consumed during the Stand-by period in October 06 for the period of 150 hours = 14.17 Lac units (L.U.), and the Energy consumed during the remaining period of 250 hours = 23.62 Lac units (L.U.).

Applicable Demand and Energy Charges under stand-by =

$$DC_{\text{stand-by}} = \frac{200}{2976} * 600 = \text{Rs}40.32\text{perkVA}$$

(150 hours = 150*4 = 600 time blocks)

40% of Demand Charges = Rs. 80 per kVA, which is greater than Rs. 40.32 per kVA derived from above, therefore, DC_{stand-by} for first 150 hours = Rs. 80 per kVA

$$DC_{stand-by} = \frac{1.1 * 200}{2976} * 1000 = Rs. 73.92 \text{ per kVA}$$

(250 hours = 250*4 = 1000 time blocks, 1.1 times charge for > 750 hours)

40% of Demand Charges = Rs. 80 per kVA, which is greater than Rs. 73.92 per kVA derived from above, therefore, DC_{stand-by} for remaining 250 hours = Rs. 80 per kVA

$$EC_{stand\ by} = Rs. 3.30 \text{ per unit}$$

Stand-by normal Demand Charges for first 150 hours = Rs. 80 per kVA * 20 MVA = Rs. 16 Lacs

Stand-by Demand Charges for remaining 250 hours = Rs. 80 per kVA * 20 MVA = Rs. 16 Lacs

Stand-by Energy Charges for first 150 hours = Rs. 3.30 per unit * 14.17 Lac units = Rs. 46.76 Lacs

Stand-by Energy Charges for remaining 250 hours = Rs. 3.30 per unit * 1.1* 23.62 Lac units = Rs. 85.74 Lacs

Total Bill for Stand-by support during October 2006 (excluding Fixed Stand-by charges of Rs. 20/kVA) = Rs. 1.65 Crore

Annexure – II

Worked example for billing stand-by charges for CPPs (Part B): -

- The captive user has a Contracted Demand (CD) with Licensee = 5 MVA and a Stand-by Contracted Demand of 20 MVA with the Licensee.
- The rated capacity of user's CPP = 30 MVA (2*15 MVA)
- As per the notification procedure given in these Regulations, the actual stand-by period is worked out as 4000 time blocks (of 15 mins. each, i.e. 1000 hours) spread over two accounting months – September and October 2006, with shares of 600 hours in September 06 and the remaining 400 hours in October 06.
- Demand Charges as per Commission's Tariff Order is, say, = Rs. 200 per kVA per month for the consumer category to which the captive user would belong if it were a normal HT consumer of the Licensee.
- Energy charges as per MPERC Tariff Order is, say, Rs. 3.30 per unit for the consumer category to which the captive user would belong if it were a normal HT consumer of the Licensee.

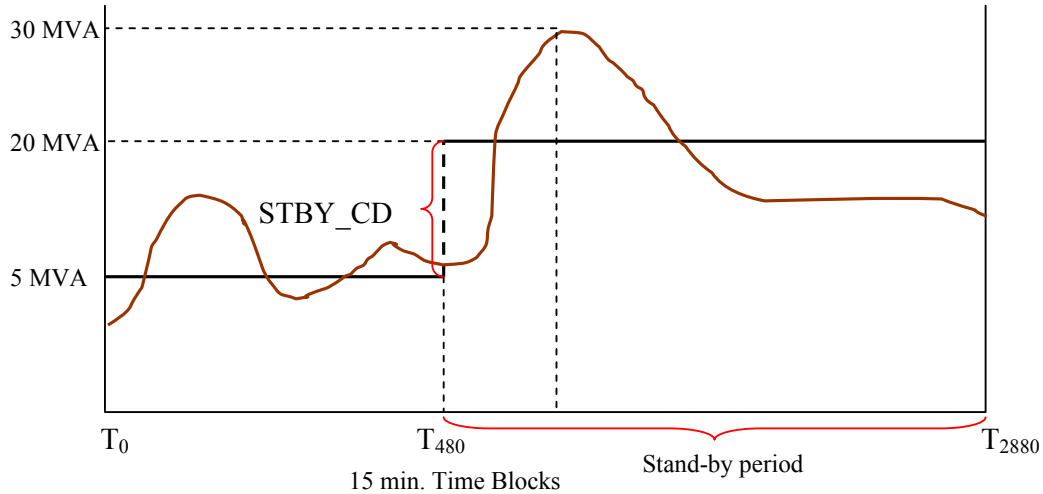
Settlement for September 2006:

(total time blocks in month = 2880 since the month has 30 days)

Recorded Maximum Demand = 30 MVA

Energy consumed in September 06 = 80 Lac units (L.U.)

Load curve for September 06 is as under:



Normal Demand Charges = Rs. 200/kVA * 5 MVA = Rs. 10 Lacs

Stand-by Demand Charges = ((Rs. 200/kVA / 2880)*2400)*20 MVA = Rs. 33.33 Lacs

Excess Demand = RMD – CD – STBY_CD = 30 – 5 – 20 = 5 MVA

Excess Demand Charges = 1.5 * Rs. 200/kVA * 5 MVA = Rs. 15 Lacs

Energy charges = Rs. 3.30 / unit * 80 Lac units = Rs. 264 Lacs

Total Bill for September 06 (excluding Fixed Stand-by charges of Rs. 20/kVA) = 3.22 Crore

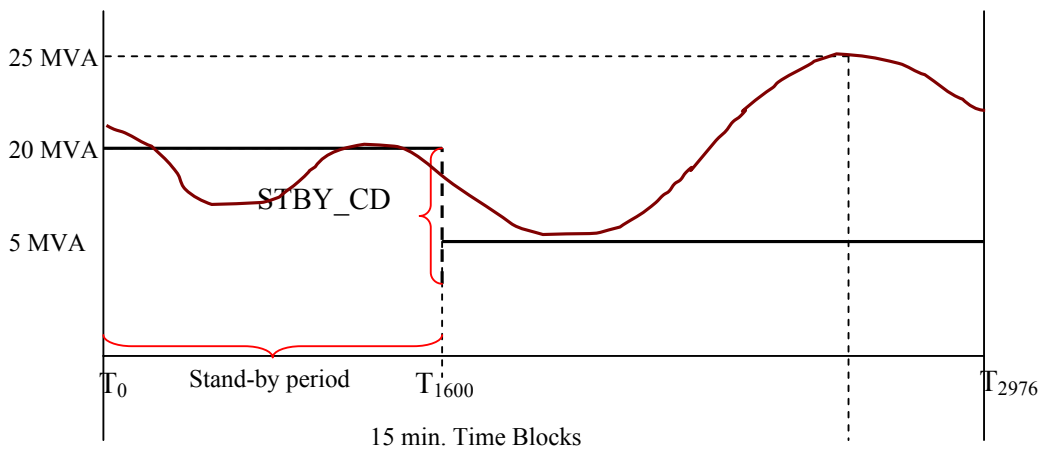
Settlement for October 2006:

(total time blocks in month = 2976 since the month has 31 days)

Recorded Maximum Demand = 25 MVA

Energy consumed September 06 = 70 Lac units (L.U.)

Load curve for October 06 is as under:



Normal Demand Charges = Rs. 200/kVA * 5 MVA = Rs. 10 Lacs

Stand-by Demand Charges = ((Rs. 200/kVA / 2976)*1600)*20 MVA = Rs. 21.50 Lacs

Excess Demand = RMD – CD – STBY_CD = 25 – 5 – 0 = 20 MVA (Peak does not occur during Stand-by period, therefore, STBY_CD for the purpose of measuring demand violation is zero).

Excess Demand Charges = 1.5 * Rs. 200/kVA * 20 MVA = Rs. 60 Lacs

Energy charges = Rs. 3.30 / unit * 70 Lac units = Rs. 231 Lacs

Total Bill for October 06 (excluding Fixed Stand-by charges of Rs. 20/kVA) = Rs. 3.22 Crore