

CE/Comm/CP/Open Access/ CPP/ **16411**

Date: **13/06/2012**

**COMMERCIAL CIRCULAR NO.: 170**

**Sub:** Grant of Open Access Permission for **Fossil Fuel based Captive Power Plants (CPP) – EMBEDDED and NON EMBEDDED CPP's**-Procedure for Application, levy of Cross Subsidy Surcharge, Standby Charges & Additional Charge, Metering & Billing, etc.

**Ref.:** i. Electricity Act, 2003 & all other enabling provisions.  
ii. MERC Order dated 9<sup>th</sup> September 2011 in Case No. 43 of 2010  
iii. Commercial Circular No. 156 dated 23.01.2012

"This Circular deals only with specific issues for the fossil fuel based Captive Power Plants (CPP)- EMBEDDED & NON EMBEDDED & is issued without prejudice to any of the rights & contentions of MSEDCL that have already been raised or will be raised in any of the presently pending or future proceedings before any Court or Authority, as the case may be.

**1. PREAMBLE:**

- 1.1 Open Access is one of the most important features of the Electricity Act 2003, wherein, Distribution Companies and eligible consumers have the freedom to buy electricity directly from generating companies, Trading Licensees or Energy Exchanges of their choice and correspondingly the generating companies have the freedom to sell it to any Licensee or to any eligible consumer.
- 1.2 As per EA 2003, Open Access may be allowed on payment of Cross Subsidy Surcharge, "Additional Surcharge", "Wheeling Charges", etc. as may be determined by the State Commission. The purpose of Cross Subsidy Surcharge has been clearly spelt out as a charge to be paid by Open Access Consumer to offset, the Cross Subsidy which he would have normally paid to the Distribution Licensee had he continued to be the consumer of the said Distribution Licensee.
- 1.3 MSEDCL had filed a petition on 25.08.2010 (Case No. 43 of 2010) in the Commission for determination of CSS as per the provisions of the EA 2003 and had requested for review of its order dated 05.09.2006. The Commission has disposed of the review Petition without any relief but has re-determined the CSS and has also determined the Stand by charges for Open Access consumer in the state of Maharashtra vide its order dated 09th September 2011. In the said order, the Commission has also dealt with the other issues related to Open Access.

**2. Captive Power Plants:**

- 2.1 **Electricity Act, 2003:** Captive Power Plant under section 2(8) as- "*A power plant set up by any person to generate electricity primarily for his own use and includes a power plant*

*set up by any co-operative society or association of persons for generating electricity primarily for use of members of such Co-operative society or association."*

## 2.2 **Section (9) OF The Electricity Act-2003: Captive Generation:**

*(1) Notwithstanding anything contained in this Act, a person may construct, maintain or operate a captive generating plant and dedicated transmission lines:*

*Provided that the supply of electricity from the captive generating plant through the grid shall be regulated in the same manner as the generating station of a generating company.*

*(2) Every person, who has constructed a captive generating plant and maintains and operates such plant, shall have the right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use:*

*Provided that such open access shall be subject to availability of adequate transmission facility and such availability of transmission facility shall be determined by the Central Transmission Utility or the State Transmission Utility, as the case may be:*

*Provided further that any dispute regarding the availability of transmission facility shall be adjudicated upon by the Appropriate Commission.*

## 2.3 **Electricity Rules 2005** – defined the eligibility criteria for the Captive Power Plant (CPP).

*"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"*

Thus, any generator not complying with the above mentioned Electricity Rule shall not be treated as CPP and will be governed by action/ punitive action as per the Law. The onus of compliance of Electricity Rules 2005 is completely on the generator and it will be mandatory to supply the generation data to CE (Commercial) on email: seruc.aa@mahadiscom.in in every quarter. Also, MSEDCL reserves right to refuse / withdraw grid connectivity in case of non compliance of the above mentioned Electricity Rules 2005.

## 2.4 **CPP Classification**– Depending on the location of Captive Power generator and CPP user:

- i. **Embedded CPP:** Where the Captive Power Plant and the CPP user is located in the same premises. In this case, wheeling of power is not required for self use (at other location). The CPP power is consumed from the generation bus.
- ii. **Non-Embedded CPP:** In this case, CPP and CPP users are not located in the same premises. The power is wheeled for self use (at other location). The CPP user shall have to apply for Open Access in line with the procedure defined at Sr. No. 4 below.



### 3. Eligibility Criterion:

- 3.1 As provided under Regulation No. 3.1 of the MERC (Distribution Open Access) Regulations, 2005, every consumer whose Contract Demand is 1 MVA & above shall be eligible for Open Access, subject to compliance of other provisions of the Electricity Act, 2003 as well as the above mentioned Regulations.
- 3.2 As provided under Regulation No. 3.1 the Maximum Demand of such consumer or person in each financial year subsequent to his being granted open access shall be equal to or greater than eighty (80) per cent of the threshold level at which he has become eligible for open access failing which MSEDCL shall be entitled to withdraw the facility of open access granted to such consumer or person, as the case may be.
- 3.3 As provided under Regulation No. 3.1 where the facility of open access of such consumer or person has been withdrawn on account of failure to achieve a Maximum Demand equal to or greater than eighty (80) per cent of the threshold level, then such consumer or person, as the case may be, shall be liable to pay, to MSEDCL, a penalty equal to two times the wheeling charges for the financial year or part thereof for which he had failed to achieve such Maximum Demand.

### 4. Application / Procedure For Open Access:

- 4.1 Any eligible consumer or person as the case may, who so ever may desire to opt Open Access shall apply in prescribed format (in duplicate) and shall pay requisite "Processing Fee" as may be prescribed.
- 4.2 Application Form in prescribed format & duly filled shall be submitted to Chief Engineer (Commercial), MSEDCL having office at 5<sup>th</sup> Floor, "Prakashgad", Bandra (East), Mumbai along with certified Xerox copies of the documents as may be required, which will be informed from time to time,

Applicant should submit following documents along with application.

#### **A. For New Applications:**

- i. Application Form as per Format A with processing fee.
- ii. Memorandum and Articles of Association.
- iii. Documentary Proof for **ownership 26% and above, as the case may be** (CA Certificate).
- iv. Latest Energy Bill.
- v. Undertaking for using 51 % energy on annual basis (Financial year)
- vi. Grid Connectivity Permission or Single line Diagram duly approved by the Electrical Inspector of area, if not grid connected.

#### **B. For Renewal of Permission:**

- i. Application Form as per Format A with processing fee.
- ii. Latest Energy Bill.
- iii. Undertaking for using 51 % energy on annual basis (Financial year)
- iv. Certificate to MSEDCL that his captive consumption for the last financial year is more than 51 % with sufficient documentary proof

After scrutiny at Head Office and confirming Technical Feasibility from the field office the Open Access may be granted subject to following terms and condition.

- 4.3 The provisions of the order of MERC as per ref. no (ii) above shall be applicable/effective from 09<sup>th</sup> September 2011 to all consumers of all distribution licensees in the State of Maharashtra, who opt for open access, under the MERC ( Open Access) Regulations, 2005 as amended from time to time.
- 4.4 The Open Access Permission for wheeling of power shall be only for a period of maximum one year.
- 4.5 The Captive User i.e. Open Access Consumer, if found eligible for grant of Open Access, shall have to execute Connection & Use of Distribution System Agreement.
- 4.6 Distribution Open Access Procedure, Standard Application Form & Format of Connection & Use of Distribution System Agreement is available in downloadable form on the website of MSEDCL – [www.mahadiscom.in](http://www.mahadiscom.in)
- 4.7 The SE (O&M), MSEDCL shall be the nodal officer to implement the permission from Chief Engineer (Commercial). Every month soft copy of of the 15 minutes time block readings (for the generation as well as consumption) shall be sent by email to: [seruc.aa@mahadiscom.in](mailto:seruc.aa@mahadiscom.in) by the nodal officer.
- 4.8 It will be the responsibility of the generator to supply the generation data. In case of non co-operation by the generator or non submission of generation data in 15 minutes time block by relevant authority like SLDC etc, the consumer will be required to pay the monthly bill as per the tariff of MSEDCL without any credit adjustment.

## **5. Metering:**

- 5.1 As provided under Regulation No. 7.1 of the MERC (Distribution Open Access) Regulations, 2005, every Open Access consumer, who so ever has been granted Open Access or CPP Holder or Licensee shall have to install "Special Energy Meter" at both the ends, i. e. at CPP end & Open Access Consumer end.
- 5.2 As provided under Regulation 2 (n) of the MERC (Distribution Open Access) Regulations, 2005, such "Special Energy Meter" shall have facility of active energy recording of every fifteen minute time block and storage of data for not less than 45 days and shall have communication facility online and/or real time .
- 5.3 As provided under Regulation 7, the Open Access Consumer shall procure the Special Energy Meter either from MSEDCL or from the any Supplier of such meters. In case, where MSEDCL installs the Special Energy Meter, then the charges referred with meter cost and its installation shall be recovered from the bill of the CPP Holder/ Open Access Consumer.
- 5.4 The Open access consumer / generator is required to comply with the MSEDCL metering requirements in totality. The open access may be allowed if at least one SEM is provided at both ends exceptionally on case to case basis.

## **6. Joint Meter Reading:**

- 6.1 CPP Generator and Open Access Consumer both located in the area under MSEDCL's jurisdiction:



The energy meter reading will be taken jointly at both ends by MSEDCL and the generator / consumer every month. The SE (O&M) at the generator end shall be the nodal officer for taking the reading in 15 mins time block and informing the same to the concerned SE (O&M) located at the Open Access Consumer end. The SE (O&M) MSEDCL at the Open Access Consumer end shall be the nodal officer for taking the reading of the HT consumer in 15 mins time block and effecting the credit in 15 mins time block as informed by the SE (O&M) at the generator end in line with the guidelines issued vide this Circular.

- 6.2 CPP Generator located outside the State of Maharashtra or outside the area of supply of MSEDCL and Open Access Consumer located in the area under MSEDCL's jurisdiction:

When the generator is situated outside the state or outside the area of supply of MSEDCL, the 15 minutes reading as submitted by MSLDC will be considered for energy accounting and billing. It will be the responsibility of the generator to provide hard and soft copy of SLDC certified data in 15 minutes time block downloaded through MRI only. Manual data or data not certified by SLDC will not be accepted under any circumstance and in such event the status will be unplanned outage/ breakdown and will be dealt as per Sr. No. 11.2.

The SE (O&M) MSEDCL at the Open Access Consumer end shall be the nodal officer for taking the reading of the HT consumer in 15 mins time block and effecting the credit in 15 mins time block as informed by MSLDC in line with the guidelines issued vide this Circular.

## **7. Billing:**

- 7.1 As provided under Regulation No. 8 of the MERC (Distribution Open Access) Regulations, 2005, MSEDCL shall raise the bill to the Supplier/ Open Access Consumer whosoever located in the MSEDCL's area of supply and who have opted for Open Access for use of its distribution system for wheeling of electricity.
- 7.2 The bill shall include the following charges;
- i) Wheeling Charges / Transmission Charges, as may be applicable;
  - ii) Wheeling Losses / Transmission Losses, as may be applicable;
  - iii) Cross Subsidy Surcharge, as may be applicable;
  - iv) Additional Surcharge on the Charges of Wheeling; and
  - v) Any other charge or other sum recoverable, including but not limited to "Standby Charges".
  - vi) Standby charges shall be applicable if standby supply is availed.
- 7.3 The Open Access consumer shall be allowed credit of energy at drawal point after deduction of applicable losses from the energy injected in the Grid.
- 7.4 The generation credit units will be determined after adjustment of applicable loss to the energy injected in the MSEDCL grid and will be adjusted / set off with the consumption in corresponding 15 minutes time block and the bill will be raised for one month accordingly. The credit adjustment will be given to the open access consumer on the basis of measurement / recording of 15 minutes time block as below:

- 7.5 It is necessary that the Open Access consumer / CPP Holder who so ever has opted for Open Access shall use the entire power contracted of Open Access Generator and ensure that the consumption of the Open Access consumer in every 15 minutes time block shall match with the energy received at the drawal point during corresponding 15 minutes time blocks.
- 7.6 Whenever the Open Access consumer is unable to match every 15 minutes time block consumption with the energy received at the drawal point during corresponding 15 minutes time blocks, then in such situation:
- 7.6.1 If the net energy received at the drawal point every 15 minutes time block exceeds the net energy actually consumed during the corresponding 15 minutes time block, the excess energy received during the said 15 minutes time block shall be treated as lapsed and the CPP Holder/ Open Access consumer shall neither be permitted banking of such excess energy nor shall be paid for the same, unless there is a separate agreement for sale/purchase of this over injection.
- 7.6.2 The units over-injected in the grid by generator or the balance units due to under-drawal by CPP user shall be procured at the prevailing purchase rate decided from time to time.
- 7.6.3 In the reverse situation, if the net energy received at the drawal point every 15 minutes time block is less than the net energy actually consumed during the corresponding 15 minutes time block, the excess energy consumed by the Open Access consumer during the said 15 minutes time block shall be considered as over-drawal from the Grid and shall be billed at the rate as may be applicable from time to time for the energy charges payable by a consumer obtaining Temporary Power (for other purposes) supply from MSEDCL. Further, in such situation, the Open Access consumer shall also be liable to pay "Electricity Duty", "Tax on Sale of Electricity", etc. on such excess energy consumed from the Grid.

#### **7.6.4 Partial Open Access:**

In case of partial open access consumer where partial demand is met through open access, the consumption shall be charged as below:

Entire generated units corresponding to the generation schedule (which in any case should not be more than the capacity mentioned in open access permission) shall be offset / adjusted against the consumption units.

Balance consumption units, if any, thereafter shall be adjusted against the units permissible as per MSEDCL contract demand.

The units permissible as per MSEDCL contract demand shall be charged as per the tariff applicable to the respective consumer category as per prevalent MERC order from time to time.

The balance consumption units, over and above of generation units plus those permissible as per MSEDCL contract demand, shall be charged at temporary tariff as per applicable Rules and Regulations.

#### **7.7 Demand Charges:**

The Open Access consumer / Captive User shall be billed for the Maximum Demand recorded, at normal tariff as per MERC tariff order to the extent of Contract Demand. If the demand exceeds



the contract demand (over and above generation demand to be credited) then in such case penal demand charges shall be applicable as per MERC tariff order issued from time to time.

## **8. Scheduling:**

- 8.1 The CPP generator and the captive user connected on EHV level shall have to schedule their power injection as well as drawal on day ahead basis to CE (SLDC) Kalwa under intimation to this office.
- 8.2 The CPP generator and the captive user connected at 33 KV level or below shall schedule their power injection and drawal to SE (CP), MSEDCL, Mumbai at Email ID: [seruc.aa@mahadiscom.in](mailto:seruc.aa@mahadiscom.in). In case of non co-operation by the generator or non submission of generation data in 15 minutes time block the consumer will be required to pay the monthly bill as per the tariff of MSEDCL without any credit adjustment.
- 8.3 The demand of Open Access consumer connected at 33 KV level or below will be accounted in MSEDCL's demand. Thus, the transmission charges in this case shall be collected by MSEDCL.

## **9. Wheeling Charge and Applicable Losses:**

The existing charges and losses pertaining to Distribution Open Access are as under:

Particulars	EHV	33 KV	22 or 11 KV	LT
Wheeling Charge (Rs. Per unit)	0.29	0.04	0.21	0.36
Wheeling Loss (%)	-	6%	9%	14%
Transmission Loss (%)	4.85%	4.85%	4.85%	4.85%

In case of Distribution Open Access, the transmission loss shall be deducted and transmission charges @ Rs 0.29 per KWh shall be recovered by MSEDCL.

The open access consumer shall also have to apply for transmission open access in case either the injection point or drawl point is connected on EHV (> 33 kV) network. In such case transmission charges @ Rs 0.29 per KWh shall be recovered by MSETCL.

## **10. Reduction In Contract Demand:**

- 10.1 As provided under Regulation 4.2.1 & 4.2.2 of MERC (Distribution Open Access) Regulations, 2005, the Contract Demand of the consumer who so ever may opt for the wheeling of power shall deemed to be reduced to the extent (in MW terms) such consumer has been granted permission to wheel energy under Open Access from the date of commencement of open access.
- 10.2 Such reduction in Contract Demand shall be perpetual till such time the consumer again opts for power supply from MSEDCL.

## **11. Standby Supply Charges For Drawal Of Power By Open Access Consumers From Grid**

- 11.1 **Planned Outage:** In case of requirement (only for Planned Shutdown or Outages of generator), the Standby supply shall be provided to the Open Access Consumers as under:

1. The standby shall be provided for a maximum period of 30 days only once in a year that too in the lean period (6 months) as specified by MSEDCL.
2. The Open Access Consumer shall apply one month in advance.
3. The Demand charges and the tariff shall be billed as per the prevailing Open Access consumer category.

11.2 **Unplanned Shutdown (HOT Standby):** In case of Unplanned Shutdown, the Standby supply shall be provided to the Open Access Consumers in lieu of the payment of temporary tariff determined by the Commission in MSEDCL's tariff order equivalent to the energy consumed. The demand charges for the standby power shall be as per the MSEDCL's tariff order issued from time to time. Currently, the additional demand charge is Rs. 20/KVA /month.

11.3 **Standby not sanctioned:** The CPP Holder shall be billed at normal tariff as per MERC tariff order to the extent of Contract Demand.

If the recorded maximum demand exceeds the contract demand (over and above generation demand to be credited) then in such case penal demand charges shall be applicable as per MERC tariff order issued from time to time.

The excess units drawn by the CPP Holder shall be billed as per the temporary tariff determined by the Commission in MSEDCL's tariff order.

## 12. Cross Subsidy Surcharge (CSS):

The Open Access Consumer wheeling power for captive use shall not be liable to pay the Cross Subsidy Surcharge as per the EA 2003.

However, the Open Access Consumer shall pay the CSS to the Host Utility i.e. MSEDCL, which may be applicable as per the MERC (Distribution Open Access) Regulations, 2005, if on annual basis the consumption for the Captive Purpose happens to be less than 51 % of total generated units as per the Electricity Rules, 2005.

Thus, the CPP Holder shall submit the certificate along with all the generation and consumption details to MSEDCL annually at the end of every financial year that his captive consumption is more than 51 % with sufficient documentary proof. The said details (duly audited by CA) shall be submitted by 30<sup>th</sup> April every year, for the previous financial year.

## 13. Incentives and penalties:

13.1 a) Whenever a consumer opts for Distribution Open Access for his entire requirement of load such consumer shall not be eligible for Incentive like Load Factor Incentive, Power Factor Incentive, Early Payment Incentive or any such other incentive applicable as per MERC Tariff Order for MSEDCL consumers, as it ceases to be a MSEDCL consumer.

b) Whenever a consumer opts for Distribution Open Access for his partial requirement of load, such consumer shall be eligible for incentives, which may be applicable as per MERC Tariff Order for MSEDCL consumer; only to the extent it uses MSEDCL supply.

13.2 However, the consumer shall be liable to pay the penalty charges which may be applicable as per MERC tariff order, amended from time to time, if the power factor is not maintained at required level as per State Grid Code.



- 13.3 In case of default in payment of any of the charges otherwise payable by a consumer / person who has been permitted Distribution Open Access, MSEDCL shall have the right to discontinue the arrangement of wheeling of power after giving an intimation of 24 hours to such consumer / person and in such circumstances, MSEDCL shall not be liable to pay any compensation to such consumer or person for any kind of the loss that such consumer or person may sustain on any account.

#### **14. Contract Period:**

The open access permission will be granted maximum for a period of one year and will be considered for renewal on subsequent year, on such terms and conditions as may be applicable from time to time.

#### **15. CPP holders consuming power in the same premises (i.e. Embedded CPP):**

##### **Terms and Conditions:**

- 15.1 The installation of Special Energy Meter (ABT meter) shall be mandatory for CPP project holder as specified in Clause no. 7.1 (iii), read with clause no. (2) (n) of MERC (Distribution Open Access) Regulations-2005.
- 15.2 In case of all the embedded CPP with option as self use (i.e. if the self use consumer is located in the same premises with respect to the generation), then the contract demand of the local consumer shall not be reduced since the consumer is not required to avail Open Access for wheeling the energy.
- 15.3 However, as envisaged in the MERC Open Access Regulations, if the CPP holder is fulfilling its own load requirement, the CPP Holder may reduce their contracted Demand with MSEDCL at their own option, so that MSEDCL can reduce its power purchase. MSEDCL would appreciate such steps taken by the CPP Holders. The CPP holder shall ensure that the contracted demand is sufficient to meet the requirement for start up as well as for running his production unit; during planned / unplanned shutdown of generation plant.
- 15.4 The CPP Holder shall be billed at normal tariff as per MERC tariff order to the extent of Contract Demand. If the demand exceeds the contract demand then in such case penal demand charges shall be applicable as per MERC tariff order issued from time to time. The excess units drawn (above Contract Demand) by the CPP Holder shall be billed as per the temporary tariff determined by the Commission in MSEDCL's tariff order.
- 15.5 The standby supply shall be explicitly provided to the CPP project holder as per request as under:

**i. Planned Outage:** In case of requirement (only for Shutdown or Outages of generator), the Standby supply shall be provided to the Open Access Consumers as under:

1. The standby shall be provided for a maximum period of 30 days only once in a year that too in the lean period (6 months) as specified by MSEDCL.
2. The Open Access Consumer shall apply one month in advance.
3. The Demand charges and the tariff shall be billed as per the prevailing Open Access consumer category.

**ii. Unplanned Shutdown:** In case of Unplanned Shutdown, the Standby supply shall be provided to the Open Access Consumers in lieu of the payment of temporary tariff

determined by the Commission in MSEDCL's tariff order equivalent to the energy consumed. The demand charges for the standby power shall be as per the MSEDCL's tariff order issued from time to time. Currently, the additional demand charge is Rs. 20/KVA /month.

- 15.6 The CSS shall not be applicable to the captive user as per EA 2003. However, the CPP Holder shall submit the certificate to MSEDCL annually at the end of every financial year that his captive consumption is more than 51 % with sufficient documentary proof in line with Electricity Rules 2005.

The clauses at Sr. No. 3 to 14 are applicable for Non-Embedded CPP's and Sr. No. 15 is applicable for Embedded CPP.

16. During the implementation of the open access if it is observed that there are some operational constraints or some issues regarding the procedure, the MSEDCL management may review the matter and subsequently may take suitable measures as deemed fit.
17. This circular supersedes all the previous circulars and permissions issued in respect of open access for captive use. The terms and conditions of the previous permission, which are not in line with this circular, shall stand amended in line with the terms and conditions of this circular with immediate effect.
18. The Commercial Circular No. 156 dated 23.01.2012 shall stand cancelled.

All the field officers are requested to take necessary action accordingly.

  
**CHIEF ENGINEER (COMMERCIAL)**

**Copy to:** All as per mailing list.