

CE/Comm/CP/Open Access/ RE/ **29853**

Date: **30.09.2011.**

COMMERCIAL CIRCULAR NO.: 147

Sub: Grant of Open Access to Consumers Sourcing power from **Renewable energy generators** (Such as **Wind, Biomass, Bagasse, Solar, Small Hydro etc.**) --- 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 9th September 2011 in Case No. 43 of 2010.

"This Circular 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 or Trading Licensees 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.
- 1.4 In Maharashtra, there is a huge potential of Renewable energy sources such as Wind, Solar, Bagasse and to some extent bio-mass and small hydro; for generation of electricity. The Government of Maharashtra in co ordination with MEDA and MSEDCL have encouraged and promoted development of generation of electricity from renewable sources by providing suitable measures and conducive atmosphere. MERC, the State commission has determined preferential tariff for sale of Renewable Energy as a promotional activity and has also prescribed annual target for renewable energy purchase for all Distribution licensees and open access consumers.

- 1.5 Thus, it is obligatory for the Distribution Licensees and the open access consumers to purchase certain quantum of Renewable energy annually and correspondingly the RE generators have been given choice either to sell their Renewable energy to the DISCOMs or other consumers (Third Party Sale) or use it for their own consumption (Self Use) under open access.

2. ELIGIBILITY CIRETERION:

- 2.1 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.
- 2.2 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.
- 2.3 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.

3. APPLICATION /PROCEDURE FOR OPEN ACCESS :

- 3.1 Any eligible consumer or person as the case may, who so ever may desire to opt Open Access shall apply in prescribed format and shall pay requisite "Processing Fee" as prescribed.
- 3.2 Application Form in prescribed format & duly filled shall be submitted to Chief Engineer (Commercial), MSEDCL having office at 5th 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.
- 3.3 The provisions of the order of MERC as per ref. no (ii) above shall be applicable/effective from 09th 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.
- 3.4 The consumer or person, if found eligible for grant of Open Access, shall have to execute Tri-Partite Agreement for Connection & Use of Distribution System.
- 3.5 Distribution Open Access procedure, Standard Application Form & the format of Connection & Use of Distribution System Agreement are available in downloadable form on the website of MSEDCL – www.mahadiscom.in.
- 3.6 The SE (O&M), MSEDCL shall be the nodal officer to implement the permission from Chief Engineer (Commercial). Every month soft copy of the 15 minutes time block readings (for the generation as well as consumption) shall be sent by email to: seruc.aa@mahadiscom.in by the nodal officer.

- 3.7 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.

4. Distribution Open Access is availed by RE generator for exercising following options:

- 4.1 Self Use i.e. own consumption
- 4.2 Third Party Sale i.e. sale to another open access consumer
- 4.3 Sale to Other Utility / Distribution Licensee i.e. Discom
- 4.4 Sale to Other Utility / Third Party Sale through Trader having Trading License.

As per the EA, 2003, CSS is not applicable if the open access is availed for self use or sale to Utility. But it is applicable for sale to Third Party. Various such provisions of Act, Regulations and the MERC order in the subject matter are given as below.

5. METERING:

As provided under Regulation No. 7.1 of the MERC (Distribution Open Access) Regulations, 2005, every consumer, person who so ever has been granted Open Access or Generating Company or Licensee shall have to install "Special Energy Meter" at both the ends, i. e. at injection point & drawal point.

- 5.1 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 .
- 5.2 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.

6. BILLING:

- 6.1 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. The bill shall include the following charges :
 - i) Wheeling Charges / Transmission Charges, as may be applicable;
 - ii) Wheeling Losses & Transmission losses
 - iii) Cross Subsidy Surcharge, as may be applicable;
 - iv) Additional Surcharge on the Charges of Wheeling;
 - v) Standby Charges;
 - vi) Any other charge or other sum recoverable
- 6.2 The person / consumer shall be allowed credit of energy at drawal point after deduction of applicable losses from the energy injected in the Grid.
- 6.3 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:

- 6.4 It is necessary that the consumer / person 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 consumer / person in every 15 minutes time block shall match with the energy received at the drawal point during corresponding 15 minutes time blocks.
- 6.5 Whenever the consumer / person 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:
- 6.5.1 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 consumer shall neither be permitted banking of such excess energy nor shall be paid for the same, unless there is a separate agreement for banking or sale/purchase of this over injection.
 - 6.5.2 The facility of banking will be applicable in case of self use only; if permissible as per GOM policy/ MERC Order/Regulations.
 - 6.5.3 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 consumer / person 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 consumer / person shall also be liable to pay "Electricity Duty", "Tax on Sale of Electricity", etc. on such excess energy consumed from the Grid.
 - 6.5.4 In case of partial open access consumer, where partial demand is met through open access, the excess consumption shall be charged at temporary tariff and applicable MSEDCL tariff proportionately as per applicable Rules and Regulations.
 - 6.5.5 Till installation of Special Energy Meter, the energy accounting and billing will be carried out on the basis of existing TOD time slots.

7. CROSS SUBSIDY SURCHARGE:

In line with the National Tariff Policy, the Commission has adopted the following formula for determination of the CSS:

$$\text{CSS} = T - [C (1 + L/100) + D]$$

Where; **T** is tariff payable by the relevant category of consumers

C is weighted average cost of power purchase of top 5% at margin excluding liquid fuel based generation and renewable power. Presently, **C** for MSEDCL is RS.4.69/kWh.

D is the wheeling charge & **L** is the % system loss for the applicable voltage level.

Moreover, the Commission has clarified the other issues raised by MSEDCL while determining the CSS order shall be dealt while finalizing Open Access Regulation, 2011. The guidelines for implementation of the said order of the Commission pertaining to MSEDCL Subject to change from time to time as may be determined by the MERC in its orders are as under:

7.1 Applicable CSS for Open Access Consumers of MSEDCL :

a) CSS for HT Consumers :

Consumer Category	EHV Consumers (66kV & above) Rs./Unit	HT Consumers (33kV)	HT Consumers (22/11 kV)
Industry			
Express Feeder	0.92	0.61	0.31
Non-Express Feeder	0.52	0.21	-
Seasonal Industry	2.20	1.89	1.59
Commercial			
Express Feeder			
Educational Institution & Hospitals	3.67	3.37	3.06
Others	3.97	3.66	3.35
Non-Express Feeder			
Educational Institution & Hospitals	3.16	2.85	2.55
Others	3.49	3.18	2.88
Railways	1.12	0.81	0.51
Public Water Works			
Express Feeder	-	-	-
Non-Express Feeder	-	-	-
Agriculture	-	-	-
Bulk Supply			
Residential Complex	-	-	-
Commercial Complex	2.15	1.84	1.54
Others	-	-	-

b) CSS for LT Consumers :

Consumer Category	Applicable CSS (Rs./Unit)
Non-Domestic	
Up to 20 kW	
Institution, Hospitals	
0-200 Units	-
Above 200 Units	1.57
Others	
0-200 Units	-
Above 200 Units	1.68
>20 kW & < 50kW	2.91
Above 50 kW	5.05
Industrial	
Below 20 kW	-
Above 20 kW	0.20
Domestic	
0-100 Units	-
101-300 Units	-
301-500 Units	0.81
500-1000 Units	1.76
Above 1000 Units	1.93
BPL, Agriculture, PWW, Street Lighting	-
Advertisements	11.68
Temporary Others	
Other Purpose	6.29
Religious Purpose	-

- **Note:** Though the Commission has determined different Cross Subsidy Surcharge for different consumers depending upon the category of consumer and the Voltage Level of Power Supply, it shall be noted that the consumer who has been permitted to avail power supply at a voltage level below and above the voltage level prescribed under MERC (SOP) Regulations, shall be considered as deemed consumer on the prescribed voltage level only for the purpose of levy of all the charges mentioned in Section 5.1 of this circular.
- For open **access** consumers sourcing power from Renewable Energy, only **25 % CSS** of the corresponding consumer category, as above, will be applicable.

8. WHEELING CHARGE & APPLICABLE LOSSES:

The OA consumers shall have to apply for Distribution Open Access. The existing charges and losses pertaining to Distribution OA are as under:

Particulars	EHV	33 KV	22 or 11 KV	LT
Wheeling Charge (Rs. Per unit)	0.0564	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 56.40 per MWh 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 56.40 per MWh shall be recovered by MSETCL.

9. REDUCTION IN CONTRACT DEMAND:

- 9.1 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 Distribution Open Access shall stand 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.
- 9.2 However, considering the infirm nature of RE source such as Wind, Solar, MSEDCL has decided to apply this provision with some deviation in favour of the open access consumer. In such case, the Contract demand of the open access consumer will be reduced only to the extent of CUF (Capacity Utilization Factor) of the Installed capacity. e.g. If installed capacity of a wind generator is 1 MW and the CUF is 23%, then the contract demand of the open access consumer will be reduced by CUF 23% x 1 MW i.e. by 0.23 MW.
- 9.3 In case of all the embedded RE generators 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.

10. STAND BY SUPPLY CHARGES FOR DRAWAL OF POWER BY OA CONSUMERS FROM GRID

In case of requirement, 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.

11. INCENTIVES & PENALTIES:

- 11.1 Whenever a consumer opts for Distribution Open Access (either for his entire requirement or partial requirement), such consumer shall not be eligible for any Incentive like Load Factor Incentive, Power Factor Incentive, Early Payment Incentive or any such other incentive as may be introduced by the Commission in future.
- 11.2 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.
- 11.3 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 dislocate 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 the loss that such consumer or person may sustain on any account.

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


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