



## **MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION**

**In the matter of:**

Approval of Open Access Charges Meghalaya Power transmission Corporation Ltd (MePTCL) within the State of Meghalaya for the Financial Year 2014-15 under the MSERC (Terms & Condition of Open Access) Regulation 2012 and under section 62 read with section 66 of the Electricity Act 2003.

**AND**

**In the matter of:**

Meghalaya Power Transmission Corporation Ltd, Lumjingshai, Shillong Meghalaya-Petitioner

**ORDER**

Date: 12.04.2014

This order relates to the petition filed by MePTCL, the transmission licensee in the state on 09.01.14 for determining open access charges for use of transmission system under Commission's regulation. The petition was admitted on 10.01.14. MePTCL issued public notices on 13.01.14 in different newspapers in the state inviting objection. Meghalaya State Electricity Regulatory Commission (Terms and Conditions for open access) Regulations 2012 for intra-State transmission and distribution system hereinafter referred to as OA Regulations were notified by the Commission vide notification dated 27.04.2012. These Regulations are in force at present.

The power supply in the state of Meghalaya has been looked after by MeECL- the holding company, MePDCL- the Distribution licensee, MePGCL- the generating company and MePTCL -the transmission licensee. In accordance with regulations, the transmission licensee- MePTCL has filed a petition for determining the Annual Revenue Requirement for its transmission business for 2014-15 for which the Commission passed an order for 2014-15..

In the Petition, the licensee has proposed the transmission charges payable by open access customers In accordance with the regulation 21 of open access regulation and computed the transmission charges as follows:

$$\text{Transmission Charges} = \text{ATC} / (\text{ALST} \times 365) \text{ in Rs} / \text{MW/Day}$$

Where

ATC= Annual Transmission Charges as determined by the Commission for the concerned year.

ALST= Average load projected to be served by the state transmission system in concerned year

Provided that transmission charges shall be payable on the basis of contracted capacity/scheduled load or actual power flow which ever higher.

In the petition, the average load projected to be served in 2014-15 is proposed at 188.53 MW. MePTCL has projected Rs 89.27 crores as the Annual transmission charges (ATC) for 2014-15. Accordingly MePTCL has projected Rs 12972.75 per mega watt per day as the transmission charges payable by open access customers for 2014-15. Further MePTCL projected 4% loss in the transmission system for Commission's approval.

After inviting objections, only one objection has been received from BIA, the industries association in the State. The objections raised by BIA are given below:

#### **1. Objection by BIA**

##### **Average Load projected to be served by the State Transmission System (ALST)**

MePTCL has projected Average Load projection of 1651.55 MU for FY 2014-15 and computed the Transmission Charges for Open Access consumers based on the same. BIA submitted that the proposed projection of energy to be handled in FY 2014-15 is too low. In the Objections filed by BIA on the ARR and Tariff Petition of MePDCL, BIA has considered the Energy Requirement of 2275.70 MU. BIA requested that the

Commission may consider the same energy of 2275.70 MU as energy to be handled by MePTCL for FY 2014-15 and approve the demand as 259.78 MW.

They requested the Commission to consider the ALST of 259.78 MW for FY 2014-15 for the purpose of computation of Transmission Charges for Open Access, as shown in the Table below.

| Particular                             | Proposed by MePTCL | Proposed by BIA |
|--|--------------------|-----------------|
| Total Energy to be handled by STU (MU) | 1651.55            | 2275.70         |
| ALST (MW)                              | 188.53             | 259.78          |

### Annual Revenue Requirement

The Petitioner has proposed Annual Revenue Requirement (ARR) of Rs. 89.27 crores based on the Petition for ARR and Transmission Tariff. However, such ARR considered by the Petitioner is too high as submitted by BIA in the Objections filed against the ARR and Transmission Tariff Petition of MePTCL. BIA has proposed the ARR of MePTCL as Rs 59.47 crores. BIA requested the Commission to consider the same amount for the purpose of computation of Transmission Tariff for Open Access, as shown in the Table below:

| Proposed by MePTCL | Proposed by BIA |
|--------------------|-----------------|
| 89.27              | 59.47           |

Considering above mentioned values of ALST and ARR of MePTCL, the open access charges should be Rs.6271.90/MW/day.

### Unit of Transmission Charges for short term Open Access Consumers

The Petitioner has proposed the Open Access Charges in terms of Rs./MW/Day as per the Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2012. BIA submitted that since, the unit for the Open Access charges is Rs./MW/Day for all the Open Access Consumers, the short-term Open Access Consumers have to pay Transmission Charges for Open Access for the whole day even when power is consumed by the way of Open Access only for a few hours. Hence, effective transmission charges for the short term Open Access consumers are much higher than what is reflected in the Tariff Orders. It is therefore required that the Commission may approve Transmission Charges in Rs./MW/hour for the short term Open Access consumers or determine separate Transmission Charges for short-term Open Access

consumers in different blocks, depending on the hours of supply under Open Access. In this context, BIA referred to other States Commission orders which prescribe short term open access rates. BIA requested the Commission to allow Rs./MW/hour as the unit for Transmission Charges for short term Open Access consumers or charge them at the rate of 25% of the rate applicable to long term and medium term Open Access consumers for short-term Open Access for up to six hours in a day in one block.

### **Transmission Losses**

The Petitioner has proposed Transmission Losses of 4% for Open Access transactions. In this regard, BIA has already submitted its comments in the Objections on ARR and Transmission Tariff Petition of MePTCL, and the same may be considered favourably.

On the objection of BIA, the Commission required the licensee to furnish replies. MePTCL has submitted their replies which are as follows:

### **MePTCL Reply:**

#### **Average Load projected to be served by the State Transmission System (ALST)**

MePTCL submitted that the energy to be handled has been projected by considering the present scenario realistically and it stands by the projection made in the ARR for 2014-15. MePTCL submitted that the Commission should consider the energy as projected by MePTCL and accordingly approve an average load of 188.53 MW for 2014-15.

#### **Annual Revenue Requirement**

The MePTCL stands by its ARR proposed for 2014-15 and submitted that Commission may approve the ARR and ALST as projected by MePTCL for determination of open access charges.

#### **Unit of Transmission Charges for short term Open Access Consumers**

MePTCL submitted that open access charges are proposed in accordance with the Commission's regulation. Further MePTCL submitted that even though the open access consumer may procure power only for few hours during a day, MePTCL has to make the network available for the whole period for which open access sought by an open access consumer. Therefore the present approach followed by the Commission for approving OA charges in terms of Rs /MW/Day is appropriate.

## Transmission Losses

MePTCL requested the Commission to allow 4% as the transmission loss for 2014-15.

## Commission's Approach

The Commission has tried to adhere with the provisions of Commission Regulations, Electricity Act 2003 and is guided by national electricity policy and tariff policy. However, the Commission in its earlier order tried to make electricity available for industries keeping the interest of all the stakeholders associated with the power sectors in the State protected including the house hold consumers while determining charges for open access. MSERC (Terms and Conditions for open access) Regulations 2012 prescribe the methodology for determining charges payable by open access customers. Following are the regulations relating to open access charges:

### 1. Transmission Charges (Regulation 21)

Open Access customer using transmission system shall pay the charges as stated hereunder:

- (1) For use of inter-State transmission system – As specified by the Central Commission from time to time.
- (2) For use of intra-State transmission system and associated facilities – Transmission charges payable to State Transmission Utility/ transmission licensees by an open access customer for usage of their system shall be determined as under:

$$\text{Transmission Charges} = \text{ATC} / (\text{ALST} \times 365) \text{ (in Rs./MW-day)}$$

Where, ATC= Annual Transmission Charges determined by the Commission for the State transmission system & associated facilities for the concerned year.

ALST= Average load projected to be served by the State transmission system in concerned year.

Provided that transmission charges shall be payable on the basis of contracted Capacity/Scheduled Load or actual power flow whichever is higher.

### 2. Scheduling and system operation charges (Regulation 22)

Scheduling and system operation charges shall be payable by the Open Access customers at the following rates:

- (1) In respect of inter-State open access
  - (a) Long-term access and Medium-term open access
    - (i) Regional Load Dispatch Centre fees and charges including charges for the Unified Load Dispatch and Communication Scheme as specified by the Central Commission under section 28(4) of the Act.
    - (ii) State Load Dispatch Centre charges as specified by the central Commission.
  - (b) Short-term open access

(i) Regional Load Dispatch Centre and State load dispatch centre charges as specified by the Central Commission.

(2) In respect of intra-State open access

(a) Long-term access and medium-term open access

Long-term access and medium-term open access customers shall be liable to pay SLDC fees and charges as determined by the Commission under sub-section (3) of section 32 of the Act.

(b) Short-term open access

A composite operating charge per day shall be payable by a short-term open access customer for each transaction to the SLDC or as determined by the Commission from time to time.

The SLDC fees and charges includes fee for scheduling and system operation, energy accounting including infrastructure support system, fee for affecting revisions in schedule on bonafide grounds and collection and disbursement of charges.

### **3. Cross subsidy surcharge (Regulation 24)**

(1) Cross-Subsidy Surcharge

In addition to transmission charges and wheeling charges, a consumer availing open access to the transmission system/distribution system shall pay a Cross-Subsidy Surcharge on per unit basis for actual energy drawn through open access. The Open access users, except those availing open access facility to transfer power from their captive generating plants to the destination of their own used, shall pay the surcharge to the distribution licensee of their area as determine by the Commission from time to time. The amount of surcharge shall be so calculated so as to meet the current level of cross subsidy from that category of consumers and shall be paid to the distribution licensee of area of supply where the consumers is located.

### **4. Additional Surcharge (Regulation 25)**

(1) Additional Surcharge

(a) A consumer availing open access and receiving supply of electricity from a person other than the distribution licensee of his area of supply shall pay to the distribution licensee an additional surcharge, in addition to wheeling charges and cross subsidy surcharge, to meet the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act.

(b) The additional surcharge for obligation to supply shall become payable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments including

transmission charges etc, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such contract.

(c) The distribution licensee whose consumer intends to avail open access shall submit to the Commission within thirty days of receipt of application an account of fixed cost paid by such open access user which the licensee is incurring towards his obligation to supply and demonstrate if any part of the fixed cost has become stranded.

#### **5. Energy Losses (Regulation 29)**

(1) Transmission losses:

(a) Inter-State transmission:

(i) Long-term access and medium-term open access: The buyers shall bear apportioned energy losses in the transmission system in accordance with the provisions specified by the Central Commission.

(ii) Short-term Open Access: The buyers and sellers shall absorb apportioned energy losses in the transmission system in accordance with the provisions specified by the Central Commission.

(2) The open access users for intra-state shall bear average energy losses in the transmission System and/or Distribution system as determined by the Commission from time to time.

(3) The loss in the transmission system and/or distribution system shall be compensated by additional injection/drawl at the injection/drawl points.

#### **6. Imbalance Charge (Regulation 30)**

(1) Scheduling of all transactions pursuant to grant of long-term access or medium term open access or short-term open access shall be carried out on day-ahead basis in accordance with the relevant provisions of IEGC for inter-State transactions and in accordance with State Grid Code/ Commission's order for intra-State transactions.

(2) In case of deviation by open access consumers with load of less than 5 MW, the difference between the applicable sanctioned Open Access load and the actual drawal shall be accounted through the Time of Day (TOD) Meters on monthly basis and settled at the rate of the imbalance charge as determined by the Commission or where imbalance charge has not been determined by the Commission, UI charges as specified by the Central Commission shall be applicable. Unless specified otherwise by the Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for under-drawals or over generation) of UI rate at the periphery of regional entity.

(3) Deviations between the schedule and the actual injection/drawal in respect of open access consumers with load of 5 MW and above and the Generating Stations irrespective of the capacity, shall be settled based on the composite accounts for imbalance transactions issued by SLDC on a weekly cycle based on

net metering in accordance with the charges specified by the Commission or as specified by the Central Commission. Unless specified otherwise by the Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for under-drawals or over generation) of UI rate at the periphery of regional entity.

#### **7. Reactive Energy Charge (Regulation 31)**

(1) In respect of open access consumer having a load of 5 MW or above, the payment for the reactive energy charges by open access consumers shall be in accordance with provisions stipulated in the State Grid Code or if not mentioned in the state grid code, the provision of IEGC will apply.

(2) In respect of open access consumers of load less than 5 MW, reactive energy charges shall be calculated on Power Factor basis as specified by the Commission.

#### **8. Standby charges (Regulation 43)**

Charges for backup supply from the grid shall be payable by the open access customer, if he required so, in the event of failure of contracted supply. In case of outages on the part of the generator meeting open access load, standby arrangements should be provided by the licensee on payment of charges applicable to temporary connections for the relevant category of consumer.”

#### **Public consultation**

The Commission held a Public Hearing in the matter on 28th March 2014. BIA and their representatives attended the hearing. The Chairman explained the salient features of the petition and provisions of the regulation in determining the open access charges for ensuing year 2014-15. The Commission pointed out that these charges shall be applied from 1<sup>st</sup> April 2014 and necessary action should be taken by the licensee in this regard. The Byrnihat Industries Association represented by their consultant presented a detailed presentation in the public hearing. First objection they have raised about the average load considered by MePTCL for calculation of transmission charges for Open Access. BIA stated that it should be based on total power handled by MePTCL. BIA demanded that the average demand as projected by them should be considered. Similarly, BIA stated that the charges should not be based on the MW capacity and it should be charged on consumption basis. BIA gave examples of other States where short term open access rates are reasonable and are applied on Open Access for use of transmission lines for part of the day. BIA objected to 4% transmission loss as projected in the petition. They suggested that interface metering should be completed as directed by the Commission in its earlier order and MePTCL should project their losses correctly. BIA also suggested that a correct picture of losses in transmission shall also display the actual level of losses in the distribution level. BIA pointed out that in



Uttarakhand the losses are below 2% and in Assam it is below 4%. BIA made request to the Commission that the charges for open access should be kept reasonable because open access is availed by consumers who are not given adequate supply of electricity. They also stated that consumers should be allowed to take supply from MeECL in addition to open access.

MePTCL submitted that they are in process of completing the metering and till such time the losses as projected by them should be considered which are based on the actual losses in the North East Grid. Director MePTCL stated that they will respond back on the issue of supply from MeECL side in addition to open access. However, they could not allow it because of technical issues. MePTCL did not agree to per unit charges for use of transmission line for part of the day, as capacity of the lines are kept reserved for open access. MePTCL further submitted that reactive charges should be allowed as per Regulations. MePTCL stated that the average load as mentioned in the petition matches with the actual average demand of the State met by the transmission in 2013-14 and it is approximately 178 MW.

### **Commission's Analysis**

In its order dated 10.04.2014, the Commission has fixed the ARR of MePTCL for its transmission network for 2014-15 at Rs.72.79 crores as annual transmission charges. The open access charges for using transmission network shall therefore be determined in accordance with MSERC (Terms and Conditions of Open Access) Regulations 2012. The details of computations are as follows:

### **Open access charges to be paid by customers using intra-state transmission lines.**

The Commission approved annual transmission charges (ATC) for FY 2014-15 at Rs. 72.79 crores. In the petition, MePTCL has projected 188.53 MW as the average load to be served in 2014-15 on the basis of sale as projected in the ARR. The average load was estimated on the basis of the energy to be handled by MePTCL in 2014-15. Since the average load is based on assessment and not actual, the Commission, as done in the past, tried to find out the actual average load met by MePTCL so as to find out the values near to actual. Last year the Commission allowed 181 MW on the basis of records made available by SLDC. For 2013-14, the Commission has noted the load records from Load Dispatch Centre which varies from 159 MW to 214 MW. SLDC has intimated to the Commission in a meeting that average load in 2013-14 was 178 MW. They further pointed out that this load includes the load of open access consumers. The average load as intimated by SLDC gives the actual position which is also near to what Commission allowed in last year. The Commission has decided to allow the same load as allowed last year at 181 MW as ALST for computing open access charges for 2014-15. Accordingly

the Commission approves the following charges as open access transmission charges for FY 2014-15 as given below:

**Open access charges for transmission = Rs 11018/ MW/day**

The open access charges shall be payable on the basis of contracted capacity/scheduled load or actual power flow whichever is higher. As per regulations, for contracted capacity and scheduled load the charges shall be on Rs/MW/day basis and for actual power flow an equivalent rate of 46 paisa per unit may be taken and payable shall be higher of these.

The Commission has considered the suggestion of industries that charges for open access should be based on energy rate for short term consumers as applicable in some States. In order to assess the situation in the State the Commission has examined the load flow of open access consumers. In Meghalaya the open access is being drawn 24x7 for 365 days which cannot be termed as short term open access consumers. The short term open access cannot be allowed for use of infrastructure reserved for them round the clock every month. This facility can only be given for use of system for part of the day for a few periods. In regulations also, the provisions of charging open access wheeling charges is capacity based. However, the Commission will take a view at the time of review of open access in the State. Accordingly, the Commission directs the licensees to give their feedback and suggestions to improve the existing provisions of the regulations in order to make open access viable and useful for every stakeholder. The MePTCL shall submit their views and suggestions on the open access regulation within 30 days of this order.

**Losses for intra state open access**

MePTCL in its proposal has submitted transmission loss at 4% to be considered for open access customers for 2014-15. In accordance with the regulation the open access users shall bear average energy losses in the transmission system as allowed by the Commission from time to time. The losses in the transmission system shall be compensated by additional injection or drawl at the injection power drawl points. The Commission directed MeECL in its Order dated 21.08.2012 to carry out energy audit and accounting. However, MePTCL informed the Commission in the public hearing that they are in the process of completing the metering at interface point and shall get the energy audit. They requested the Commission to allow 4% transmission loss which is prevailing in the North East Region. Since the losses in the system has a bearing in implementation of open access as licensee has to compensate the amount of electricity given to an open access customer over and above the approved level of losses, the Commission is allowing on the provisional basis **4%** losses as the

transmission loss for 2014-15 subject to validation at the time of actual results of energy audit. However, the Commission directs the licensee to submit a report within six months time on energy audit and results on losses so that the Commission set a loss reduction trajectory subject to technical conditions.

**Losses= 4%**

#### **Scheduling and system operation charges**

The Commission had approved Rs.3000/- per day for intra-state and inter-state open access transactions in 2013-14. As per the recommendation of the high power committee, SLDC operation should be ring fenced and should be equipped with state of art equipments. The capacity building in the SLDC is also one of the recommendations of the committee. This year the Commission has created a SLDC fund which will be used by the SLDC with the prior permission of the Commission for upgrading the infrastructure and related activities. This reserve will be funded by scheduling and system operation charges and application fees collected by open access customers. Accordingly, the Commission is raising the system operation charges to Rs.3500/day for intra-state and inter-state open access transaction to be payable by open access consumers in the State.

**Scheduling & System Operation Charges=Rs. 3500.00/day**

#### **Reactive energy charges for all open access users**

In respect of Open Access consumer having a load of 5 MW and above, the payment for reactive charges by open access consumers shall be accordance with provision stipulated in the IEGC approved by CERC.

In respect of open access consumers of load less than 5 MW reactive charges shall be calculated on actual power factor basis as determined by the Commission from time to time. The Commission has already introduced KVAH billing for HT and EHT consumers in the State. The licensee is directed to submit the data relating to reactive energy and bill made so far in this respect. The report shall also cover the measure to improve the power factor and the cost to overcome high power factors. The licensee shall propose charges to be determined by the Commission for billing on reactive energy drawn by open access consumers. This report shall be submitted within 30 days time of the order.

#### **Imbalances charges**

Imbalances charges are levied in accordance with MSERC (Terms and Conditions of Open Access) Regulations 2012. The rates for imbalance charges shall be as may be determined by the Commission from time to time. Accordingly, to enforce grid discipline, security of grid, load management and to avoid gaming, the Commission after careful examination of the open access transactions in the State, has decided that over

drawals or under injections shall be charged on the UI rates as notified by CERC for intra state entities or Rs.5.82 per unit whichever is higher from all open access customers including generators/traders irrespective of their load. However for under drawal or over Injections no charges shall be paid. The provisions of the grid code and regulations shall be applicable for declaration of capacity and scheduling and other parameters. In order to avoid gaming in the open access transactions the Commission either suo motto or on a petition filed by SLDC or any affected party may initiate proceedings against any open access consumer or generator on charges of gaming in accordance with the provisions of Electricity Act 2003. In case of charges of gaming is established the Commission may take penal action under the act and may decide the penalty amount.

#### **Stand-by Charges**

Stand-by Charges for backup supply from the grid shall be payable by the open access customer, if he required so, in the event of failure of contracted supply. In case of outages on the part of the generator meeting open access load, standby arrangements should be provided by the licensee on payment of charges applicable to temporary connections for the relevant category of consumer.

#### **Cross Subsidy Surcharge**

Regarding determination of cross subsidy surcharge, the Commission shall decide at the time of disposal of the petition filed by MePDCL for open access charges in distribution system.

The Commission expects the MePTCL and SLDC shall give due importance to the provisions of this order and comply with the provisions of the MSERC (Terms and Conditions of Open Access) Regulations, 2012 while allowing open access to consumers including generating plants and recovering the charges as may be due from them. This order shall be effective from 01-04-2014 till further orders.

(ANAND KUMAR)  
CHAIRMAN