

MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

In the Matter of:-

Approval of Open Access charges of Meghalaya Energy Corporation Ltd., (MeECL) within the State of Meghalaya for the FY-2012-13 under the MSERC (Terms and Conditions of Open Access) Regulations, 2012.

AND

In the Matter of:-

Meghalaya Energy Corporation Ltd, (MeECL),
Lumjingshai, Shillong-793001, Meghalaya.

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Petitioner.

DATE OF ORDER: 21ST August, 2012

Coram: Anand Kumar

The Commission, after previous publication, consultation and public hearings has notified the MSERC (Terms and Conditions of Open Access) Regulations, 2012 on 27th April, 2012 in the Gazette of Meghalaya. This has come into existence from the date of publication. These regulations are applied to Open Access consumers for use of intra-state transmission system and distribution system in the State, including when such system is used in conjunction with interstate transmission system. While framing the regulations the Commission after notifying Draft Regulation, made wide publicity and held number of meetings including Public Hearings. The Draft was also sent to the MeECL, Consumer's Association & GOM for their suggestions and comments. Adequate time was given for getting inputs from every stakeholder and finally the Commission has notified the Regulation on 27.4.2012.

This Order relates to determination of Open Access charges in the State. Meghalaya Energy Corporation Ltd (MeECL), the holding company in the State has filed a Petition on 31.05.2012 for determination of charges applicable to the customers

getting Open Access on intra state transmission and distribution system in accordance with MSERC Regulations. In the State there are 40 industrial consumers, 9 bulk consumers and 1 water supply consumer who have 1 MW and more connected load. These 50 consumers are consuming approximately 500 MU and contributing Rs.200 crores which is approximately 40% of State revenue.

In order to have a consultative process in determining the appropriate transmission and wheeling charges in the State, the Commission has admitted the Petition on 08.06.2012. The Commission has directed MeECL to publish a Public Notice giving the salient features of the Petition in newspapers covering the entire state and invite objections from public at large within 15 days time. The Commission has also sought required information from MeECL regarding details of fixed assets, audited balance sheet for 2010-11, details of loans/grants for creation of assets, information on losses in transmission/distribution and actual expenditures/revenue in 2011-12. The Commission has also required MeECL to furnish the breakup of distribution ARR into wheeling and retail business for FY 2012-13.

The Notice was published in the Shillong Times, Mawphor and Salantini Janera inviting comments from the public given 15 days time to respond. The Commission has received 10 comments up to the last date i.e. 27th June 2012. All industrial consumers have requested 45 to 90 days extra time to file the comments on the petition of MeECL.

In order to validate the claims of MeECL and to know the ground realities, the Commission has held a Technical Validation Session with Directors of MeECL on 27th June, 2012. The Commission discussed the methodology of determination of OA Charges based on the provisions of Open Access Regulations, Indian Electricity Act, 2003 and National Tariff Policy.

The Commission has held a State Advisory Committee meeting on 28th June, 2012 on Open Access charges. The Commission has also invited representatives from industries to participate in the Advisory Committee meeting to get their view point and suggestions on the petition. The record note of proceedings is attached with the Order.

A Public Hearing was also held on 29th June, 2012 in Shillong where representatives of industries, water works, captive power producer, existing open access consumers and officers of MeECL were present. The Commission has explained in the hearing the details of the ARR, issues related with Open Access, losses and applicability of charges for FY 2012-13. Industries and open access consumers made a request to the Commission to give them at least 30 days time to respond on the petition as they need a thorough study of the proposal of MeECL. The existing consumers of open access have submitted before the Commission that they have no objection in paying their dues for full financial year 2012-13 in case extension is allowed. The Commission agreed to their proposal and granted time up to 28th July, 2012 to send their comments on the petition. The Commission has also fixed another public hearing on 30th July, 2012.

The Commission has received comments from several HT & EHT industries, Captive Power Plant on the proposal of MeECL. Their comments are grouped subject wise and given as below:

i) Non compliance of legal requirement:

BIA has raised objection towards non compliance of Government of Meghalaya Notification dated 19.05.2011 wherein MeECL was given time up to 31.03.2012 for transfer of their assets and liabilities to the generation, transmission and distribution utilities and make their separate accounts. MeECL has not separated their accounts till date and have not started independent functioning of the individual utilities.

Response of MeECL:

The Government of Meghalaya vide Notification dated 31.03.2012 has amended the Meghalaya Power Sector Transfer Scheme 2010 allowing the transfer of assets and liabilities including all rights, obligations and contingencies of MeECL into the four different entities w.e.f 01.04.2012. In one of their reply, MeECL has submitted to the Commission that their composite accounts for the year 2011-12 is under final stage subject to statutory audit and they have assigned trifurcation of accounts to the consultant.

ii) Projections are without basis:

BIA has raised that MeECL petition is arbitrarily and proceeds on conjectures and surmises an attempt to get higher tariff for open access. They have objected that the charges are not in accordance with the objective of Electricity Act 2003 and National Tariff Policy.

Response of MeECL:

MeECL has filed its petition in accordance with Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2012.

iii) Cross subsidy surcharge:

It is objected that cross subsidy surcharge has not been worked out on the basis of formula given under National Tariff Policy. BIA has also submitted that Hon'ble ATE in the case of RVK Energy has directed Commissions to use the formula for determining cross subsidy surcharge for open access. They have also raised an objection that MeECL is not able to supply continuously to industrial consumer so their claim for cross subsidy surcharge from open access consumers is unjust, arbitrary and improper. Further, they have suggested MeECL to submit the calculation of the applicable cross subsidy surcharge in terms of the above formula. M/s Shyam Century Ferrous has objected to levy of cross subsidy surcharge on those consumers who are forced to take power from outside because of non availability of power in the state. Since there will not be any loss to the utility, cross subsidy surcharge should not be applicable in Meghalaya.

Response of MeECL:

Cross subsidy surcharge has been filed in accordance with clause 24 of Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2012. In one of their Responses, they have apprised the Commission that on non supply of continuous power, adequate relief is given to industrial consumer by reduction in fixed charges.

iv) Losses:

The losses proposed by MeECL for the adjustment while drawing power through open access has been objected that it is not in accordance with the provision of the Electricity

Act and National Tariff Policy. 4% losses in transmission are excessive and the same should not be more than 1%. Similarly, the losses at the industry feeder consumer at 33 KV claimed by MeECL at 15% is arbitrary and unacceptable. They have suggested that MeECL should furnish the details of relevant feeder line on which industrial consumers are situated and the exact loss level on such feeder line should be claimed. They have also quoted the decision of Hon'ble ATE in case of Tata Steel Ltd & OERC wherein the Hon'ble Court has shown its concern on the importance of energy audit and determination of cost of supply at different voltages.

Response of MeECL:

MeECL in its petition has indicated that energy audit of the MeECL has not been carried out and therefore it is not in the position to file the loss percentage at different levels. In this circumstance, MeECL proposes that system losses at 132 KV should be fixed at 4%. MeECL has quoted the content of Tariff Order dated 20.01.2012 that the CEA and for that matter the MOP/GOI has circulated through R-APDRP that the standard accepted loss level in the country should be 15%. Accordingly, MeECL has proposed system losses at 33 KV level is fixed at 15%. Further MeECL informed that losses in NE in previous year were 3.94% average.

v) **Transmission and Wheeling charges:**

Objections were raised that Annual Revenue Requirement of the concerned utilities formed the basis of transmission and wheeling charges to be levied on the open access consumer should be equitable, just and proportionate. The charges should be levied on the basis of the utilisation of capacity of the line in MU terms and not on MW terms. They have mentioned that the charges should only be levied on the basis of number of unit transferred actually in the process of open access. In determining the charges MeECL should follow the CERC Regulation as power is to be procured from inter-state purchase.

Response of MeECL:

MeECL has calculated transmission and wheeling charges in accordance with clause 21 and clause 23 of Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2012 respectively for reservation of capacity in the transmission corridor.

vi) **Scheduling and system operation charges:**

BIA has raised the objections towards the proposal of scheduling and system operation charges as excessive and this should be based on actual expenditure.

Response of MeECL:

MeECL has filed its charges for scheduling and system operation in accordance with clause 22 of Meghalaya State Electricity Regulatory Commission (Terms and Conditions of Open Access) Regulations, 2012. The MeECL has justified that the expenditure proposed for system operation charges is for the following activities:

- a. *Constant monitoring of power flow.*
- b. *Downloading of data for each 15 minutes block of energy scheduled.*
- c. *Preparation of daily/monthly statement for scheduled and actual drawal of power.*
- d. *Hourly/daily downloading of meter readings from ABT meters.*
- e. *Preparation of weekly/monthly UI bills, including revised bills, if any.*
- f. *Preparation of weekly /monthly reactive charges, including revised bills, if any.*
- g. *Operation and Maintenance of UI accounts, including collection & disbursement.*
- h. *Speech and Data Communication with NERLDC/ IEX including consumable items.*
- i. *Posting & Uploading of open access information on the website.*
- j. *Preparation of monthly/annual report on open access information.*
- k. *Inspection of meters at site whenever required.*

vii) **Captive power:**

M/s Shyam Century has suggested that transmission charges shall be payable on the energy approved for transmission and not on the energy for which a buy/sell bid is made. They have quoted CERC Regulation for trading dated 25.01.2008.

After getting the comments, the Commission heard the parties in the Public Hearing held on 30.07.2012. The Commission has given ample opportunity to all the participants from industries, captive power and utilities. The Counsel for BIA has made objections to the proposals as given in their representations. The Commission directed the Secretary to exchange the documents of each stakeholder among themselves and given one weeks time to them to respond if they required so. No response has been received by the Commission in this respect. Accordingly, the Commission initiated the proceeding of determination of Tariff for Open Access in accordance with the

Commission's Regulation, Electricity Act 2003, National Tariff Policy and superior court's decisions given in various cases. While passing the Order the Commission has tried to make a balance between the interests of every stakeholder in the business and have kept in mind the ground realities of the state and its resources. The Commission agree that it shall consider the feedback out of experiencing the process of open access in the State and financial impact of each stakeholder at the time of next determination of charges for 2013-14.

Commission's views on the objections:

The Commission has gone through all objections received by it during the proceeding of the matter and has tried to address these issues within the frame work of existing regulations of the Commission and dealt with in the following paragraphs at appropriate places. In Meghalaya State the process of Open Access has just begun and the financial implication is not known at this stage. Accordingly, after having 6 months experience i.e. by 31.03.2013, the Commission shall take necessary steps to address pending issues, if any after getting full information on cost and revenue.

MeECL proposal:

The power supply industry in Meghalaya has been under control of erstwhile MeSEB w.e.f. 21.01.1975. On 31.03.2010 the Government of Meghalaya has notified a transfer scheme and segregated MeSEB into four entities i.e. MeECL (Holding Company), MePDCL (Distribution Company), MePGCL (Generation Company) and MePTCL (Transmission Company). However, the Government has given time to MeECL to transfer their assets by 01.04.2012.

MeECL has proposed that MeECL is functioning as a holding company and have yet to start their business as independent entities for transmission, distribution and generation and their accounts are not separated. They have also proposed that the Tariff Order for 2011-12 and 2012-13 was determined on the basis of composite business. Therefore, they are separating the approved figures of ARR for 2012-13 for income and expenditure in three separate functions of generation, transmission and distribution. Accordingly, they are proposing transmission and wheeling charges for open access for 2012-13.

Transmission charges:

MeECL has calculated Annual Transmission Charges on the basis on the formula prescribed by the Commission. MeECL has proposed Rs.6159/MW/day for transmission charges which shall be equivalent to 25.66 paisa per unit. They have further added charges paid to AGCEL (Assam Grid Corporation Ltd) for transmission of electricity @ 36.4.

Proposed Transmission charges = 62.06 Paisa per unit

Wheeling charges:

MeECL has calculated wheeling charges in accordance with clause 23 of Open Access Regulation and proposed 39.03/unit. Subsequently, they have revised their proposals on 28.06.2012 and given wheeling charges @114 paisa/unit. The proposals was revised on the ground that earlier proposal had included income from delayed payment surcharge amounting Rs.81.28 crores which is not part of the wheeling business. This proposal was duly published and a copy of the proposal was given to the participants in the Public Hearing held on 30.06.2012.

Proposed wheeling charges = Rs.27324/MW/day

Cross subsidy surcharge:

MeECL has determined average Tariff for IEHT and IHT consumers on the basis of their actual tariff with 75% contracted demand and 0.85% power factor. They have determined average tariff at Rs.4.84 for IEHT and Rs.5.02 for IHT category of consumers. The average costs of supply they have considered Rs.4.16 as given in the tariff order. Accordingly, they have worked out the cross subsidy surcharge as the difference of average cost and average tariff.

Proposed cross subsidy surcharge

IEHT consumer - 68 paisa per unit

IHT consumers - 86 paisa per unit

Additional surcharge:

No additional surcharge was proposed by MeECL in their petition.

Scheduling and system operation charges:

MeECL has projected the following charges for open access consumers:

In respect of inter-state open access – Rs.3000 per day per transaction

In respect of intra state open access – Rs. 5000 per day per transaction

Losses:

MeECL has projected 4% losses in the transmission and 15% at 33/11 KV.

Commission's Analysis

In this order, the Commission has determined Transmission charges, scheduling and system operation charges, wheeling charges, cross subsidy surcharge, additional surcharge, and energy losses for FY-2012-13, in accordance with MSERC (Terms and Conditions of Open Access) Regulation, 2012 and MSERC (Terms and Conditions for Determination of Tariff) Regulation, 2011. Remaining charges and terms and condition for open access shall strictly be as per Commission's regulation on Open Access. The Commission has determined Annual Transmission Charges (ATC) and Annual Wheeling Charges for MeECL on the basis of combined ARR for MeECL approved vide Tariff order dated 20.01.2012 for their generation, transmission and distribution business for FY-2012-13. However, the Commission directs MeECL to file its ARR for next year i.e. 2013-14 separately for transmission and distribution and submits its annual audited accounts for 2011-12 so that validation of expenses and revenue is done. MeECL is also being directed to immediately start energy audit at 11 and 33 KV in distribution system and at 132 KV & above in Transmission system, so that in next tariff filing the Commission should be provided with such figures to determine charges at each level of voltage.

At present MeECL is still functioning as single entity and do not have separate accounts for generation, transmission and distribution. Even the Notification issued by GOM on 09.04.2012 also allowed time up to 31.03.2012 for separation of accounts. Accordingly, the MeECL in its petition has segregated expenditures and incomes between generation, transmission and distribution on the basis of the composite Tariff Order issued by the Commission for FY 2012-13. In their petition, MeECL has projected 3 separate ARR for their businesses.

1. Open Access charges for using intra-state transmission at 132 KV and above

➤ Annual Transmission Charges:

As per MSERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, the Transmission Licensee has to file a Petition for approval for ARR and Transmission Tariff in the manner specified in the Regulations. Since MeECL is still a holding company looking after all 3 businesses together. In such circumstance, when the accounts for Transmission & Distribution have not been separately prepared, the Commission has no option but to determine the Annual Transmission charges for MeECL on provisional basis in terms of MSERC Tariff Regulations. The Commission has already approved the combined ARR for MeECL for FY-2012-13, and accordingly within the approved figure, has allowed Transmission charges to be recovered from Open Access customers. The Commission has in principle agreed to MeECL proposal in allowing expenses for 2012-13 for Open Access customers that shall be trued up/validated in accordance with regulation and on the basis of actual data at the time of filing of next ARR for Transmission, Generation and Distribution for FY-2013-14. The breakup of Annual Transmission ARR is discussed below:

(a) Employees Cost:

The Commission has allowed employees cost for a combined business as Rs.197.80 crores for 2012-13 on the basis audited Balance Sheets of 2009-10, provisional accounts for 2010-11 and actual expenses made as per their board's orders for enhancing the wages for staff. At present no audited records are available for transmission business separately, the Commission has agreed to MeECL proposal for allowing provisionally Rs.23.42 crores for 2012-13, which shall be validated at the time accounts are submitted to the Commission.

(b) R & M Expenditures:

The Commission has allowed Rs.29.94 crores for 2012-13 as R & M expenditures in the Tariff Order dated 20.01.2012 and on the same principles the Commission has agreed to R & M expenditures for transmission at Rs.3.35 crores for 2012-13.

(c) A & G Expenses:

In the last Tariff Order the Commission has approved A & G expenses for a combined business of Generation, Transmission and Distribution as Rs.11.67 crores for 2012-13. On the basis of the MeECL's proposal the Commission allows Rs 1.61 crores as A & G expenses for 2012-13.

(d) Depreciation

The Commission has allowed Rs.42.68 crores as depreciation charges in 2012-13 for the combined ARR of holding company. MeECL has proposed depreciation for 2012-13 for transmission project as Rs.2.23 crores. MeECL in its subsequent letter dated 18.06.2012 informed the Commission that the total asset of the transmission in 2012-13 at the beginning of the year is Rs.68.32 crores and at the end of the year it will be Rs.75.15 crores. MeECL has projected Rs.3.76 crores as depreciation charges for 2012-13. The Commission is provisionally allowing this amount subject to the condition that at the time of finalisation of the ARR for 2013-14 the Commission shall validate it and adjust it in trueing up exercise.

(e) Interest charges

The Commission has allowed Rs.98.46 crores in the year 2012-13 which includes working capital interest and interest paid on loans. MeECL in its petition segregated this expenditure and shown Rs.0.67 crores as amount to be paid as interest and working capital charges. However as per regulation the interest on working capital shall be about Rs.0.89 crores which is higher than the interest charges as proposed by MeECL. The amount of working capital shall include one month operation and maintenance expenditure i.e Rs.2.38 crores, budget for maintenance spare 1% of the total assets values i.e. Rs.0.72 crores and receivable of two months i.e. Rs.6.66 crores. The rate of interest for short term prime lending rate of State Bank of India as on 1st April, 2012 is @10%. Accordingly interest on working capital shall be Rs. 0.98 crores. The Commission therefore allows Rs.1.65 crores as interest charges which includes working capital.

(f) Income Tax:

As per the Regulations Income Tax shall be treated as expenses and shall be recovered from consumer's through tariff. The Commission has accordingly approved that if taxes are paid by the transmission company that shall be recovered from beneficiaries in the proportion of their withdrawal of load.

(g) Bad and Doubtful Debt:

The Licensee has not proposed any amount as bad debt, however the Commission in accordance with provisions of transmission tariff regulation allowing bad and doubtful debt at 1% of receivable at Rs.0.4 Crores.

(h) Return on Equity:

As per Commission's Regulation on transmission tariff, return on equity shall be computed on the equity base which shall not exceed 14%. The equity shall be taken as appearing in the Balance Sheet as per transfer schemes notification for the purpose of considering the return. The transfer scheme dated 31st March, 2010 shows the equity base as Rs. 68.60 crores. However, the Commission has accepted the proposal and allowed Rs.9.43 crores as return on equity for 2012-13 which shall be validated after final audited accounts are submitted to the commission.

(i) Other charges:

MeECL in its proposal has proposed 36.4 paisa per unit to be charged in addition to the transmission charges towards Assam Electricity Grid Corporation for transmission of electricity in their lines. On the queries raised by the Commission on this charges, MeECL has given actual amount paid through NVVN as Rs.2.39 crores. Payment towards AGECL was not made so far. Accordingly, The Commission is provisionally allowing Rs.2.39 crores to MeECL on this behalf subject to condition that at the time of next ARR details towards these charges shall be validated. However, the Commission shall allow other charges payable to Assam Electricity Grid Corporation, if payable during 2012-13 and allocation of such charges shall be made to each beneficiary on proportionate basis separately. **MeECL is therefore directed to maintain the accounts for payment towards any transmission lines of other states being used for drawal of power during 2012-13 and submit the same to the**

Commission immediately for approval of charges to be recovered from open access consumers.

(j) Special provision for strengthening system and skill:

In a report on Ring Fencing of State Load Despatch Centre from transmission business, it is recommended that emphasis must be given to strengthen the SLDC and train their manpower so that efficiency is brought in the system. Till such time SLDC separated, the Commission directs the STU to arrange special software including hardware for facilitating open access in the State and train their manpower to ensure that quality service is delivered by SLDC. It is also directed that work environment in SLDC is to be created so that operators feel empowered to take unbiased decision during emergencies. It is also suggested that physical environment, infrastructure, lighting, temperature control, have also to be maintained in SLDCs so as to give quality service. In order to achieve the above, the Commission has earmarked Rs.3 crores in 2012-13 in the approved transmission charges. This will be validated at the time of truing up exercise.

The Aggregate Annual Transmission charges is approved and given in the table below:

Annual Transmission Charges (Rs. Crores)

SN	Item	Proposed Expenses for 2012-13	Approved Expenses for 2012-13
1	Employees Cost	23.4	23.4
2	R & M Expenses	3.53	3.53
3	A & G Expenses	1.61	1.61
4	Depreciation	2.23	3.76
5	Interest charges including working capital	0.67	1.65
6	Return on Equity	9.43	9.43
7	Income Tax	0.00	0.00
8	Other charges	2.39	2.39
9	Provision for Bad and Doubtful Debt	0	0.4
10	Provision for strengthening SLDC operation/manpower training.	-	3.00
9	Total fixed cost	43.26	49.17
10	Less Non Tariff Income	0	0
11	Net ATC	43.26	49.17

The Commission has allowed Annual Transmission charges for 2012-13 as Rs.49 .17 crores. It is informed to the Commission that there are few consumers who are already allowed for open access in transmission and therefore the transmission charges and other charges shall have to be applied on them from the beginning of the FY 2012-13. The existing consumers have also agreed to pay their dues for FY 2012-13 in full.

1.1 Determination of Open Access charges to be paid by customers for using intra-state transmission lines:

As per the Regulation, Open Access customers using transmission system of Meghalaya shall pay the charges for use of intra state transmission system and associate facility is determined as follows:

$$\text{Transmission charges} = \text{ATC} / (\text{ALST} \times 365)$$

Where-

ATC is Annual Transmission charges as determined by the Commission for the State Transmission System for 2012-13 and ALST is average load projected to be served by the State Transmission System in 2012-13

On the basis of the above calculations, ATC is determined as Rs.49.17 crores in FY 2012-13. In the petition MeECL has projected 178.92 MW as ALST served in 2011-12. However MeECL has provided actual data for 3 months in April-2012 to June 2012 which shows only 173.4 MW to be served in 2012-13. The Commission therefore allows 173.4 MW for determining OA charges in 2012-13.

The Commission has fixed Transmission charges as Rs.7768/MW/day which shall be equivalent to Paisa 32.4/Kwh.

Approved Transmission Charges= Rs 7768/MW/Day

These Open Access charges for use of intra state transmission system shall be fixed for FY 2012-13. The Transmission charges for open access shall be payable by all customers in accordance with MSERC (Terms and Conditions of Open Access) Regulations 2012 on the basis of contracted capacity/scheduled load or actual power flows whichever is higher. In case of consumers of MeECL connected through 132 KV lines, shall schedule their power in advance and no over drawal shall be allowed which

is inconsistent with the provisions of the State/Central Grid Code. Regulation also specifies that Open Access in Transmission system shall only be allowed for consumers having contracted load 5 MW and above. MeECL is therefore directed to adhere to the Regulations and make Agreement accordingly on the basis of average trend of drawal of energy by open access consumers in last 6 months.

1.2 Losses for intra-state open access in transmission:

In accordance with Regulations, the Open Access users for intra-state 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/drawl at the injection/drawl points. MeECL has proposed 4% transmission losses in their proposals. These losses are projected at 132 KV level. MeECL has also submitted that they have not carried out any energy audit till date and therefore they are unable to determine the loss percentage at different level of voltages. The value of losses shall matter in implementation of open access in the system because if the losses in the system including commercial losses are high then Licensee has to compensate the amount of electricity given to an open access consumer over and above the losses as fixed level for open access consumer. Therefore, the Commission has tried to make a balance between the stakeholders so that the operation of open access is win-win for both the parties.

In order to determine energy losses the Commission has already directed MeECL in its tariff order for FY 2012-13, to do energy audit by putting energy meters on each incoming and outgoing feeders at substations. The Commission has directed the licensee to read each meter at the end of the month and should reconcile it with the billing data books so as to find out losses on each feeder. The licensee has further directed to complete the feeder metering and introduce the energy accounting within 3 months time. Since at present the transmission utility is in the process of separating out from distribution business, the Commission has agreed to their proposal of 4% losses in the transmission system. Before coming to this calculation, the Commission has also considered MeECL's information on the actual transmission losses in North East on the meter reading in 2011-12 (July 2011-July 2012) which is 3.94% average. The CERC Regulation on intervening transmission system the losses at 132 KV are shown as 4.3%. The Commission has also tried to make a balance between allocation of technical and

commercial losses on each category of consumer. Therefore, losses at each voltage level include technical as well as commercial losses. However, this will be validated in the proceedings of next tariff filing for transmission charges for FY 2013-14.

Accordingly the Commission has fixed 4% as transmission losses for intra-state transmission system for FY 2012-13 to be compensated in terms of energy by users of intra-state transmission system by extra injection or drawl. The Licensee shall maintain its accounts for energy transfer regularly and ensure that the losses as approved are compensated.

Approved Transmission Losses= 4%

1.3 Cross subsidy surcharge for IEHT consumers using intra-state open access in transmission:

Regulation prescribes that in addition to transmission charges a consumer availing open access to the transmission system shall pay cross subsidy surcharge on per unit basis on actual energy drawn through open access. The open access user except those availing open access facility to transfer power from their captive generating plants (strictly as per the definition of section 3 (1) (i) of Electricity Rules 2005) to the destination of their own use (as allowed under section 3(1) (ii) of Indian Electricity Rules 2005 for consumption not less than 51% of the aggregate electricity generated on annual basis), shall pay the cross subsidy surcharge to the distribution licensee of their area i.e. MeECL as determined by the Commission from time to time.

MeECL generation capacity from its own hydro power projects yields just about 185 MW as against the requirement of 450 MW. The balance has to acquire by purchase apart from that obtained from central share. Due to scanty rainfall during the current monsoon in the region as is the case with the rest of the country where shortage has been estimated to be around 15%, the liability of the utility in meeting the requirement of the State is bound to be more. The financial condition of the utility is not so sound and commercial losses apart from technical, due to various reasons are a fact that commission cannot overlook. In determining any sort of charges the Commission cannot ignore the ground realities of the State. At present, MeECL's revenue comprises of

revenue from sale to different category of consumers. In Meghalaya about 13 consumers contributes about 26% of the total revenue and cross subsidising rest of the consumers of the State. Similarly, less than ½% of the total consumer of subsidising nature contribute more than 55% of the total revenue of the State. The subsidising category are EHT industrial consumer (26% revenue), HT consumer (29% revenue) and commercial consumer (7% revenue). Cross subsidy has to be factored in and has been accordingly embedded in the calculation of the cost while determining the yearly tariff from time to time as otherwise it would be difficult for the utility to run the business in electricity and meet the specific need of the small states like Meghalaya. The law enables the Commission to take note of the factual position and in appropriate cases differentiate tariff according to consumers load factor, power factor, etc as specified in section 62 (3) of Electricity Act 2003. An open access consumer obtaining power from any other sources within the area of the MeECL has an obligation to pay cross subsidy surcharge in addition to payment of transmission and wheeling charges to compensate the local licensee. It would be pertinent to note that Meghalaya State has a status of special state and most of the electricity network in the State is developed from 90% grant and therefore charges for transmission and wheeling are subsidised. Considering all the facts pertaining to the business of electricity in the light discussed about and the application of the utility for fixing the charges on open access, the Commission keeping in view the current level of cross subsidy as enjoined in the act has tried to make a balance between the legal requirement and ground realities.

The current regulation on open access specify that the amount of surcharge shall be so calculated as to make the current level of cross subsidy from that category of consumer and shall be paid to the distribution licensee of area supply where the consumer is located. The Tariff Order for 2012-13 issued on 20.01.2012 has prescribed average cost of supply as Rs.4.15 paisa per unit and Tariff for IEHT (Industrial Extra High Tension) category as Rs.115/KVA/Month and energy charges at Rs.4.10 paisa/KVAH. The average rate of IEHT consumer as per the Tariff Order for 2012-13 is Rs.4.56 /KWH (Average Tariff of consumer = Total expected revenue to that consumer as per ARR/Total anticipated sale to that category as per ARR).

Accordingly, the current level of cross subsidy for all old and new consumers at 132 KV lines (IEHT) category shall be **41 paisa per unit**.

The National Electricity Policy also specifies that the computation of cross subsidy surcharge, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A cross subsidy surcharge is levied to protect the interest of the distribution licensee in accordance with the Electricity Act, 2003. Accordingly, when open access is allowed the surcharge for the purpose of sections 38,39,40 and sub-section 2 of section 42 would be computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class.

In case of state of Meghalaya, the current years FY 2012-13 is energy shortage stage where the licensee shall not stop purchasing marginal expensive power in case of some consumers opt for open access. Accordingly, as per National Tariff Policy formula with the average cost of power at Rs.2.78 paisa and average tariff at Rs.4.56 paisa it will be Rs.41 paisa only. However, in case of 5% marginal expensive power is taken as cost of power purchase the cross subsidy surcharge shall be negative. However the fact is that all industrial consumers are cross subsidising other consumers of the State. MeECL has also requested the Commission to allow them cross subsidy surcharge payable by all open access users whether existing or new consumers on the basis of actual level of cross subsidy and quoted the provisions of Regulation 24 of Open Access Regulation 2012, which prescribes *"The amount of surcharge shall be so calculated 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 consumer is located."*

The Commission has also tried to work out the cost of service for consumers at 132 KV voltages after allocating cost of power purchase on 132 KV at 4% losses and allocation of other charges given in the ARR it is coming around Rs.3.60. If we take the difference of actual tariff which is Rs.4.56 and cost to that consumer i.e. Rs.3.60, the cross subsidy shall be 96 paisa per unit. Since the Commission has determined the tariff on the basis of average cost of supply in 2012-13, it will not be reasonable to determine 96 paisa cross subsidy surcharge for open access consumers.

Therefore, the Commission has fixed cross subsidy surcharge for FY 2012-13 at Rs.0.41 per unit for open access customers and this surcharge shall be levied on unit basis for actual energy drawn through open access by all users in accordance with section 42 (2) of EA 2003. In case of consumers having captive power plant this surcharge is not levied only in case where their consumption for captive use is not less than fifty one percent of the aggregate electricity generated in such plant as laid in section 3(a)(11) of Electricity Rules 2005. The licensee may approach the Electrical inspector in case of any clarification with regard to application of section 3 on CPP. In this reference, the Commission advises the State Government to designate electrical inspector of the State as inspecting officer to verify the generation and consumption of captive power for the purpose of determining duties and open access charges as per Electricity Rules 2005.

Approved Cross Subsidy Charges for IEHT Consumer = Paisa 41/Kwh

2. Determination of Open Access charges to be paid by customers for using distribution lines

➤ **Wheeling charges:**

The ARR of the Distribution Company is Rs.589.82 crores and power purchase expenditure is Rs.405.83 crores including cost of transmission. In order to determine the cost of wheeling, the ARR should not include the business of retail supply to consumers. Therefore, the Commission required separate expenditure and revenue details for wheeling business and retail business. Since wheeling charges are related with the operation, maintenance and investment in network it would be justified if wheeling charges are based on wheeling business only. MeECL was directed on 22.06.2012 to furnish the accounts for the date and wheeling business separately. A technical meeting was also called upon on 27.06.2012 wherein the status of accounts was also discussed. MeECL has responded in writing that physical trifurcation of corporation is in progress and the Meghalaya Power sector reform scheme is revised vide Government Order dated 31.03.2012. Therefore, the provision or audited statement of accounts for separate businesses of transmission, distribution and generation cannot be submitted at this point of time. They have intimated that composite accounts for 2010-11 has been prepared but is yet to be audited.

In order to facilitate the process of open access in the state, the Commission tried to determine the charges on the basis of information presently available to it. The Commission shall validate the charges and assumptions taken in this Order at the time of next ARR which is due by 30.11.012.

Since no separate account was available, the Commission is determining charges as per the Regulations for distribution business after reducing the power purchase which is made only for retail business. Similarly as per the licensee proposal the Commission has also not taken into account the portion of non tariff income which is related with late payment surcharge. Accordingly, the Commission has determined the ARR for distribution for wheeling purpose in accordance with Distribution tariff regulations.

(a) Employees Cost:

The Commission has allowed employees cost for a combined business as Rs.197.80 crores for 2012-13 on the basis of audited Balance Sheets of 2009-10 and actual expenses made as per their board's orders for enhancing the wages. At present MeECL has informed that they are in the process of finalising statement of account for distribution system separately and at present they have no segregation for distribution business and retail business. The Commission has this year provisionally allowed the MeECL proposal subject to the condition that all expenditures shall be validated after finalisation of the statement of accounts separated for distribution business. The Commission has approved employee cost as Rs.121.68 crores for 2012-13.

(b) R & M Expenditures:

The Commission has allowed Rs.29.94 crores for 2012-13 as R & M expenditures in the Tariff Order dated 20.01.2012 for combined business of MeECL. The Commission has agreed on the MeECL proposal subject to validation of actual accounts at the time of next tariff filing. The Commission has agreed to R & M expenditures for distribution for 2012-13 as Rs.12.80 crores.

(c) A & G Expenses:

In the recent Tariff Order the Commission has approved A & G expenses for a combined business of Generation, Transmission and Distribution as Rs.11.67 crores for 2012-13. On the basis of the MeECL proposal the Commission has allowed Rs.6.18 crores for FY-2012-13 as A & G expenses.

(d) Depreciation:

The Commission has allowed in 2012-13 Rs.42.68 crores as depreciation charges for the combined ARR of holding company. MeECL has projected Rs.9.84 crores as depreciation charges for 2012-13. The Commission is provisionally allowing this amount subject to the condition that at the time of finalisation of the ARR for 2013-14 the Commission shall validate it and adjust it in truing up exercise. Accordingly, Rs.9.84 crores is allowed as depreciation charges for 2012-13.

(e) Interest charges:

The Commission has allowed Rs.98.46 crores in the year 2012-13 which includes working capital interest and interest paid on loans. MeECL in its petition segregated this expenditure and shown Rs.19.06 crores as amount to be paid as interest and working capital charges. The Commission agreed on the proposal of MeECL and allows Rs.19.06 crores as interest charges which shall be validated at the time of actual audited records.

(f) Income Tax:

As per the Regulations Income Tax shall be treated as expenses and shall be recovered from consumers through tariff. The Commission has accordingly approved that if taxes are paid by the distribution company that shall be recovered from beneficiaries in the proportion of their withdrawal of load.

(g) Bad and Doubtful Debt:

The Commission is allowing bad and doubtful debt at 1% of receivable as Rs.5 crores as proposed by MeECL. However, this amount shall be validated at the time of segregation of wheeling and retail supply businesses.

(h) Return on Equity:

As per Commission's Regulation on distribution tariff return on equity shall be computed on the equity based at a fixed rate of 14%. The Commission allows Rs.9.43

crores as return on equity for 2012-13 as proposed by MeECL which shall be validated at the time of submission of audited accounts.

ARR for Wheeling Business of MeECL (Rs. Cr)

SN	Item	Proposed Expenses for 2012-13	Allowed Expenses for 2012-13
1	Cost of Power Purchase including transmission charges	405.83	NIL
2	Employees Cost	121.68	121.68
3	R & M Cost	12.8	12.8
4	A & G cost	6.18	6.18
5	Depreciation	9.84	9.84
6	Interest	19.06	19.06
7	Return on Equity	9.43	9.43
8	Income Tax	0	0
9	Provision for bad and doubtful debt	5	5
10	Total Revenue Requirement	589.82	183.99
11	Less Non Tariff Income & Subsidy	23.99 14	23.99 14
12	Less Outside Sale	22.33	22.33
12	Net Revenue Requirement	529.50	123.67

2.1 Wheeling Charges: The Regulation prescribes the computation of wheeling charges in the following manner:

$$\text{Wheeling Charges} = (\text{ARR of Distribution Company} - \text{Power Purchase Expenditure} - \text{Transmission Charges}) / (\text{ASLD} \times 365 \text{ days})$$

The MeECL has proposed demand in the year 2012-13 as 124 MW. However the actual demand in the Distribution system in 2011-12 as reported by MeECL is 147.26 MW. However during first 3 months in 2012-13 MeECL has provided different figures of sale to EHT consumers. The Commission therefore feels it would be reasonable to allow the actual level of demand in distribution system. Accordingly, the Commission is allowing 147.26 MW as ASLD in the open access charges. The Commission has already determined ARR of Distribution Company at Rs.123.67 crores which does not include power purchase expenditure and transmission charges. Accordingly, the Commission has determined wheeling charges at Rs.23008 per MW per day which shall be

equivalent to 95.9 paise per unit. The Wheeling charges shall be payable on the basis of contracted capacity/schedule load or actual power flow whichever is higher. The Commission directs MeECL to provide within 3 months time the following information in order to determine wheeling charges for 2013-14.

- Voltage wise distribution cost at 33 KV, 11 KV and LT.
- Voltage wise losses at above voltages.
- Energy input and energy sales at above voltages.

Approved Wheeling Charges= Rs 23008/MW/Day

2.2 Losses for open access in distribution:

MSERC (Terms and Conditions of Open Access) Regulations 2012 prescribes that average energy losses in distribution system shall be compensated by the Open Access user for intra state as determined by the Commission from time to time. In the Petition MeECL have proposed 15% losses in 33 KV/11 KV distribution network for 2012-13. They have mentioned that there is no energy audit carried out and therefore it is difficult for them to determine the loss level at different voltages. The Commission has allowed 26.87% T & D losses for 2012-13 in its Tariff Order dated 20.01.2012. These losses have been allowed for the combined business of MeECL and therefore it would be difficult without energy audit to determine losses for different voltages. The Commission therefore provisionally allows 15% losses in distribution for open access users. Since, the consumer has to compensate these losses in the form of extra energy injection or withdrawal, the licensee has to provide the amount of energy as required by an open access consumers. If losses are more than 15% in 33KV and 11KV system the licensee has to bear additional losses just to compensate the consumer. Similarly, if losses are less than 15% then the consumer shall have to borne the additional losses over and above the actual. MeECL has requested the Commission to allow segregation of losses between 33 KV and 11 KV as 6% and 9% respectively. However, they have intimated the Commission that it would not be possible for them at this juncture of time to segregate cost of service at 33 and 11 KV. Therefore, to start with the Commission is allowing 6% losses for open access consumers taking supply on 33KV and 9% for consumers taking supply at 11KV system subject to the condition of truing up at the

time of next filing. Further, the Commission directs MeECL to start immediately compiling data at sub stations level for 132 KV, 33 KV and 11 KV feeders on energy input and output. In next year Tariff filing MeECL shall give an account of energy losses at these levels to the Commission.

Accordingly the Commission has fixed 6% as wheeling losses for FY 2012-13 for 33 KV consumers and 9% for 11 KV consumers which are to be compensated in terms of energy by users of distribution system by extra injection or drawl. The Licensee shall maintain its accounts for energy transfer regularly and ensure that the losses as approved are compensated.

Approved Distribution Losses at 33 KV=6%

Approved Distribution Losses at 11 KV=9%

2.3 Cross subsidy surcharge for IHT consumers using open access in distribution:

The Cross subsidy for distribution consumers shall be applied on 1 MW and above getting supply at either 11KV or 33 KV depending on their entitlement as per Rate Schedule prescribed by MeECL. The intent of the National Tariff Policy is to allow Open Access to any consumer who wants it and at the same time to levy surcharges to compensate the distribution licensee of the area. Section 42 (2) of IEA 2003 prescribes that State Commission may make Regulations for payment of wheeling and other charges by an Open Access user. One of the components of the charges is the cross subsidy surcharge which an Open Access user has to pay to the distribution licensee. A statutory regulation namely, the MSERC (Terms and Conditions of Open Access) Regulations 2012, have been framed under the Electricity Act, 2003. According to the regulations, MSERC shall determine the surcharge. Regulation 24 lays down that the surcharge shall be so calculated so as to meet the current level of cross subsidy for the category of consumers and paid to the distribution licensee concerned. The Commission has tried to work out the cost of service for consumers at 33/11 KV after allocating cost of power purchase on 33/11 KV at 15% losses respectively and allocation of other charges given in the ARR it is coming around Rs.3.91. If we take the difference of actual tariff which is Rs.4.83 and cost to that consumer i.e. Rs.3.91, the cross subsidy shall be

92 paisa per unit. Since the Commission has determined the tariff on the basis of average cost of supply in 2012-13, it will not be reasonable to determine 92 paisa cross subsidy surcharge for open access consumers.

Taking into account the provisions of regulation the cross subsidy level now allowed in the State, the power scenario and other factors, the Commission after due consideration determines the Open Access cross subsidy surcharge as follows:

- (a) As per the Tariff Order dated 20.01.2012, the Commission has approved average cost of service as Rs.4.15 for the Financial Year 2012-13.
- (b) The average Tariff projected to be recovered in FY - 2012-13 for HT category consumers connected on 33/11 KV is Rs.4.83.
- (c) Accordingly, the cross subsidy surcharge for HT category of consumers is 68 paisa to be paid by them against the actual energy drawn through Open Access.
- (d) These charges shall be applied to all open access users except that availing open access facility to transfer from their captive generating plants (as per the definition of section 3 (1) (i)) to their destination of their own use provided it meets the requirement of section 3 (1) (ii) of Electricity Rules, 2005.
- (e) These charges shall be recovered from open access users and paid to distribution licensee.

In determining the above amount of cross subsidy, the interest of the distribution licensee whose system is used by an open access users have been taken into account in conformity with the objective of the National Tariff Policy as mentioned earlier. The ground realities in Meghalaya is that there is a gap between demand and supply and if licensee allows open access to some of it consumers it is still does not imply that the licensee shall save money by not buying expensive marginal power in 2012-13.

Approved Cross Subsidy Charges for IHT Consumers = Paisa 68/Kwh
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3. Additional surcharge for all open access users:

The Licensee has not proposed any additional surcharge for open access consumer. The regulation prescribes that additional shall be levied on the Open access customers to meet the fixed cost of such distribution licensee arising out of its obligation to supply. However, these charges shall be payable only if it is conclusively demonstrated that the obligation of a licensee in terms of power purchase commitment and continue to be stranded or there is an unavoidable obligation and incidents to bear fixed cost consequent to such contracts. Therefore, the Commission at this stage without any proposal of the licensee for additional surcharge is not allowing such charges. In case of stranded cost of the licensee arising out of open access, the licensee shall put up a proposal to the Commission within 30 days of receipt of open access applications.

4. Scheduling as System operation charges for all open access users:

Regulation prescribes that scheduling and system operation charges shall be payable by an open access customers. The licensee has proposed that the following activities have to be undertaken by them for every open access customers.

- (a) Constant monitoring of power flow.
- (b) Downloading of data for each 15 minutes block of energy scheduled.
- (c) Preparation of daily / monthly statement for scheduled and actual drawal of power.
- (d) Hourly / daily downloading of meter readings from ABT meters.
- (e) Preparation of weekly / monthly UI bills, including revised bills, if any.
- (f) Preparation of weekly / monthly reactive charges, including revised bills, if any.
- (g) Operation and Maintenance of UI accounts, including collection & disbursement.
- (h) Speech and Data Communication with NERLDC / IEX including consumable items.
- (i) Posting & Uploading of open access information on the website.
- (j) Preparation of monthly / annual report on open access information.
- (k) Inspection of meters at site whenever required.

MeECL has proposed Rs.3000/- per day for each transaction for interstate open access transaction and for intra state open access they have proposed Rs.5000/- per day for each transaction. The Commission has agreed in principle that till such time the Commission approves separate ARR for SLDC, Rs.3000/- per day is approved for intra-state and inter-state open access transactions. The Commission directs the licensee to

complete the process of independent working of SLDC as per the Government of India guidelines and submit a final compliance report on ring fencing of SLDC and also for separation of assets & accounts of SLDC within 3 months of this order. The Petitioner is also directed to file a separate ARR Petition for SLDC from the next year onwards.

Approved Scheduling & Operation Charges = Rs. 3000 per day per Transaction

5. Application of RPO to captive power plant owners and all open access consumers

The obligation towards renewable purchase obligation (RPO) shall be applicable to captive power plant owners and open access consumers in accordance with the terms and conditions specified in Commission's Regulations on RPO.

6. 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 in 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.

7. Imbalances charges for all open access users:

Imbalances charges are levied in accordance with MSERC (Terms and Conditions of Open Access) Regulations 2012.

8. Compliance of State Grid Code, CEA-Metering Regulations & MSERC-OA Regulations 2012

The Commission hereby directs SLDC, MeECL and STU to adhere with the provisions of State Grid Code with respect to interface meters, monitoring of drawal, record of keeping, scheduling and operation. SLDC is also directed to adhere with CEA (installation and operation of meters) Regulation 2006 and their amendments with regard to installation of Static ABT meters at every OA consumers and shall record readings of such Meters regularly. Scheduling shall also be done in accordance with the OA regulations and downward revision shall only be allowed as a general practice in accordance with the regulations.

9. Conclusion:

The Commission has determined transmission charges and losses for using State Transmission System payable to transmission licensee and wheeling charges and losses in distribution system payable to distribution licensee for using their systems separately. Every open access user shall pay for the transmission charges, Distribution charges for the use of such network and compensate for the losses approved at each level of 132 KV, 33 KV & 11 KV depending upon use at such level. All open access consumers shall pay cross subsidy surcharges depending upon their category as may be due under Rate schedule of MeECL for 2012-13. The Commission has determined cross subsidy surcharges for IEHT consumers (connected on 132 KV and above) and for IHT consumers (connected on 33 or 11KV) separately. Rest of the terms and conditions shall be applied in accordance with open access regulation. These charges shall be applied for financial year 2012-13 and recovered by MeECL in accordance with MSERC (Terms and Conditions of Open Access) Regulations 2012 from Open Access users. The Licensee, MeECL shall compute capacity availability for Open Access in Transmission and Distribution system as provided in Open Access Regulation and publish the capacities available at their website. Payment terms and other conditions shall be applied in accordance with the Regulations. If any clarification is required, the matter with specific detail may be referred to the Secretary of the Commission. This is the first order on fixing open access charges in the State for financial year 2012-13 in accordance with Regulations and shall be applicable up to 31.03.2013 or the date of the order. The commission shall review all relevant parameters fixed in this Order according to circumstances and experiences emerging at the time of fixing open access charges for FY 2013-14.

(Anand Kumar)
Chairman, MSERC.