MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

Aggregate Revenue Requirement for FY 2013-14

For

MEGHALAYA POWER DISTRIBUTION CORPORATION LIMITED

30.03.2013

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BEFORE THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

In the matter of:

Approval of Aggregate Revenue Requirement and Retail Tariff of the Meghalaya Power Distribution Corporation Limited (MePDCL) for the FY 2013-14.

And

In the matter of:

The Meghalaya Power Distribution Corporation Limited, Lumjingshai, Shillong, Meghalaya.

CORAM

Shri Anand Kumar, Chairman

Date of Order: 30.3.2013

ORDER

This order relates to the Petition on Annual Revenue Requirement and Tariff for Financial Year 2013-14 filed by the Meghalaya Power Distribution Corporation Limited (hereinafter referred to as the "Petitioner") on 14.12.2012. This petition was filed under the MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011 and under section 62 read with section 86 of the Electricity Act, 2003(hereinafter referred to as "Act").

Section 64(1) read with Section 61 and 62 of the Act requires distribution licensee to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through its Regulations. In compliance with the Act, the Commission had notified MSERC (Conduct of Business) Regulations 2007 and MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011. These regulations cover the procedure for filing the tariff application, methodology for determining the tariff and recovery of charges as approved by the Commission from the consumers of the State.

The Government of Meghalaya vide its Power Sector Reforms Transfer Scheme 2010 transferred the assets, properties, rights, liabilities, obligations and personnel of the erstwhile MeSEB into four corporations namely (i) Meghalaya Energy Corporation Limited (MeECL), which is the holding company, (ii) Meghalaya Power Generation Corporation Limited (MePGCL), which is the generation utility, (iii) Meghalaya Power Distribution Corporation Limited (MePDCL), which is the distribution license and (iv) Meghalaya Power Transmission Corporation Limited (MePTCL), which is the transmission licensee. This transfer scheme is effective from 01.04.2012 and from this date all companies/licensee had to start functioning independently. However, it is reported that these Companies have not yet commenced commercial operation as independent entities and are in the process of preparing their statement of accounts in accordance with the transfer scheme.

The MePDCL filed the petition for determining the ARR and retail tariff for FY 2013-14 as an independent corporation for the first time on 14.12.2012. Accordingly, the Commission accepted the petition for examination and held a meeting on 20.12.2012 to discuss infirmities in the original petition. Petitioner required time up to 14.01.2013 to submit the essential information. Information for transmission and generation companies was submitted. However, essential information like actual revenue details, actual expenses and losses in 2012-13 was not filed by MePDCL. MePDCL submitted most of the important information to the Commission on 21.02.2013. Keeping in view the desirability for timely completion of the tariff process for the next year 2013-14, the Commission admitted the petition on 25.02.2013 for further processing subject to the condition that the petitioner shall furnish any further information/clarification as deemed necessary by the Commission during the processing of the petition. The Commission further directed the petitioner to publish public notice in accordance with Tariff Regulations detailing their salient features of the ARR petition and proposals filed by it for financial year 2013-14 for comments by all stakeholders and public at large. The petitioner was also directed to place the petition on its website and its Headquarter/other offices for inspection or making relevant extracts by the members of the public. The Commission also published a notice inviting objections on the petition.

After conducting number of technical sessions with the utilities staff, advisory committee meetings and public hearing, the Commission on the basis of records submitted by the licensee passed this order for determining ARR and retail tariff for FY 2013-14 of MePDCL.

For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 – Introduction and brief history

Chapter 2 – Petitioner's Submissions and Proposals

Chapter 3 – Stakeholders' Responses & Petitioner's Comments

Chapter 4 – Commission's Approach

Chapter 5 – Review & Truing up

Chapter 6 - Commission's Analysis, Scrutiny and Conclusion.

Brief History

Presently the Meghalaya Energy Corporation Limited is functioning as a holding company and other utilities namely Meghalaya Power Distribution Corporation Limited (MePDCL), Meghalaya Power Generation Corporation Limited (MePGCL) and Meghalaya Power Transmission Corporation Limited (MePTCL) are functioning as subsidiaries to it. All these companies had to be functionally independent w.e.f. 01.04.2012. Accordingly, this year these companies filed separate applications for determination of their tariff for 2013-14. However, till date they have not completed their statement of financial accounts separately. In the last tariff order, the Commission allowed revised tariff for 2011-12 & 2012-13 for MeECL which is currently under use and shall apply up to 31.03.2013.

The MeSEB has been restructured into four corporations namely MePGCL, MePTCL, MePDCL and a holding company MeECL. Out of these four companies, the Commission finalised the ARR for Generation Company and ARR for transmission licensee for 2013-14. Now by this order the Commission shall finalise the ARR of Distribution Company for 2013-14 which includes the ARR of transmission and generation companies. Similarly, the cost of MeECL which is the holding company is distributed equally in the ARR of these three companies.

Provision of law:

The Commission notified the MSERC (Terms and Conditions for Determination of Tariff) Regulation 2011 on 10.02.2011. This regulation provides the approach and methodology for determining the annual revenue requirement of generation, transmission and distribution. The regulation also specifies the procedure of filing of tariff petition and process of tariff determination. Further the Act provides the powers to the Commission to determine tariff of generation, wheeling and retail tariff under section 61 & 62. National Tariff Policy and National Electricity Policy also give guidelines for determination of tariff of retail and wheeling.

Approach adopted by MePDCL

MePDCL has submitted their ARR for FY 2013-14 on the basis of provisional and segregated financial data for the financial year 2011-12 and the transfer scheme. They have submitted that the statements of accounts are not final as the date of independent functioning was due from 1.4.2012. Since MeECL is in the process of restructuring and transferring of their assets and liabilities, their accounts as a whole is not audited after FY 2009-10.

Filling of Petition

MePDCL filed its ARR for 2013-14 on 14.12.2012. After preliminary examination, the Commission issued notice for a technical meeting held on 20.12.2012. The Commission raised number of queries regarding the ARR and issued a letter to MePDCL's Board to furnish their observations and records on the following issues:

General comments:-

1) Audited/pre-audited financial statement of accounts for the year 2011-12. In accordance with the regulations, the information in the ARR for the previous year should be based on audited accounts and in case audited accounts are not available, audited accounts for the year immediately preceding the previous year i.e. 2010-11 should be filed along with un-audited accounts for the previous year i.e. 2011-12.
2) Actual cost and revenue for the period April 2012 onwards for at least 6 months.
3) Details of equity share capital issued for all subsidiaries of MeECL in accordance with the provisions of Indian Company Law.
4) Details of grants received for capital investment made so far.
5) Details for employees' category wise in each subsidiary of MeECL.

ARR for Distribution Tariff:-

1) Actual power consumption by HT & EHT category in 2012-13 on the basis of format issued by MSERC and demand estimation for HT/EHT category for industries and commercial on the basis of CAGR for 2013-14.
2) Energy availability from all sources without power regulations by CGS.
3) Details of power purchase expenditure made against the power regulated by CGS during 2012-13 and proposal for 2013-14.
4) Copies of bills issued received from central utilities like NTPC, NHPC, PGCIL, NEEPCO, etc and payment made so far.
5) Details of capital expenditure made in 2012-13 and proposal for 2013-14 with complete funding details. Certificate of electrical inspector for all EHT work completed and energised.
6) Details of distribution losses at 33 KV, 11 KV and LT on the basis of actual meter reading.

7) Details of actual Operation & Maintenance expenses for distribution for first six months of FY 2012-13 and estimates for the remaining six months (October – March 2013) for FY 2012-13.
8) Details of actual revenue from each category of consumer on the basis of consumption, tariff structure for first six months of FY 2012-13 and estimates for the remaining six months (October – March 2013) for FY 2012-13.

The Commission granted time up to 14.01.2013 to file the response on these queries to the Commission. MePDCL requested time up to 31.01.2013 for submission of replies to the Commission vide its letter dated 15.01.2013. The Commission granted time to the licensee as requested. On 31.01.2013, MePDCL submitted their response on some of the queries. MePDCL mentioned that the accounts for 2010-11 & 2011-12 are still to be audited as the reform and restructuring of MeECL is yet to be finalised. Accordingly, they submitted the pre audited financial statement of accounts for the year 2010-11 and 2011-12 which are approved by their Board of Directors. In its reply they submitted the actual cost excluding capital expenditures for the period from April to September 2012. Similarly, they furnished the actual revenue from sale of power within the state for the period April 2012 to September 2012. MePDCL submitted that the existing issued equity share of MePDCL is 50000 @ Rs.10 amounting to Rs.5, 00,000 only. The annual accounts of MePDCL for FY 2009-10 are audited and duly adopted in the annual general meeting. Pursuant to Government Notification dated 31.03.2010, the equity share capital of MePDCL is Rs.135.47 crores. The Government of Meghalaya (GOM) issued amendment that the holding company MeECL shall transfer its assets w.e.f. 01.04.2012. MePDCL mentioned that due to the above amendment notification, addition of assets and liabilities during this period have been changed and actual figures will be notified after the financial statements of accounts are audited for 2011-12.

The cost of MeECL relating to Employees, R&M and A&G are uniformly distributed in the ARRs of MePTCL, MePDCL and MePGCL. MePDCL submitted that actual consumption of HT & EHT category of consumers is being updated on the formats issued by the Commission. They submitted the bills and copies of the invoices received by Central utilities like NTPC, NHPC, PGCIL, NEEPCO, etc. However, MePDCL could not supply the information on the energy audit at different voltages and therefore the position of losses at different voltages of 33 KV/11 KV could not be validated.

The Commission required the MeECL to submit the information on open access at different voltages and supply information in consistent with national tariff policy on cross subsidy surcharge and other charges. MePDCL informed the Commission that they are in the process of submitting the separate petition for open access shortly. However, they replied that they are unable to determine the distribution losses at 132 KV, 33 KV and 11 KV as energy audit is yet to be initiated. MePDCL informed that it requires replacement of metering at number of points to conduct a proper energy audit. However they submitted that energy audit at 33 KV & 11 KV for nine towns is being undertaken under the R-APDRP part A package. MePDCL informed that they have taken the energy audit of Keating Road substations with associated 11 KV feeders. This pilot project shall be replicated for all 33 KV substations and 11 KV feeders. MePTCL has taken some initiative for installing boundary meters with ABT features and specified accuracy class for the purpose of energy audit. The Commission had held technical sessions with the licensee on 8.02.13 and 12.2.13 to discuss gaps in the ARR.

The Commission admitted the petition on 25.02.2013 and required the licensee to publish the salient features of the ARR for seeking comments from the public by 21.03.2013. MePDCL published the notice along with the abridge version of the ARR and distribution tariff proposal in the following newspapers on 27.02.2013.

Table:1 Details of Public Notice issued by MePGCL

Sl. No	Language	Newspapers
1.	English	The Shillong Times/Shillong & Tura Edition
2.	Garo	Salantini Janera, Tura
3.	Khasi	U Mawphor
4.	Jaintia	Chitilli

The Commission also notified a public notice on 28.02.2013 inviting comments from the public on the ARR in different newspapers. Meetings were held on 5.3.13 and 20.3.2013 to discuss number of issues relating to the ARR so as to validate their claims.

Table:2 Details of Public Notice issued by MSERC

Sl. No	Language	Newspapers
1.	English	Meghalaya Times
2.	Local languages	Kynjatshai

The Commission also held meetings with the Advisory Committee members on 8, 12 February and 12th March 2013. The minutes of meetings are attached with the order.

The Commission held a public hearing on 25.03.2012 in Shillong. The Commission considered all the objections received by it, suggestions made in the advisory committee meetings and in the public hearing while disposing of this petition.

MePDCL has in its petition for FY 2013-14 has explained their overall approach for the present filing.

Approach for ARR of FY 2013-14

In accordance with the provisions of the Tariff Regulations, 2011, MePDCL submitted the ARR for FY 2013-14 based on provisional & segregated financials for the FY 2011-12/FY 2012-13 and transfer scheme. MePDCL submitted that since the notified date of independent functioning is from 1st April 2012, it has not yet finalized the commercial agreement with MePGCL and MePTCL.

ARR for FY 2013-14

Segregation of Annual Accounts

The segregation of annual accounts for restructured entities is yet to be finalized and provisional figure of Opening Balance of Gross Fixed Assets is available. The opening balance of GFA of MePDCL as on 1.4.2012 is Rs. 240.69 Crores.

Estimation of Energy Sale

The Regulation 90 of the Tariff Regulations, 2011 provides the provisions for estimation of Energy Sales. The relevant provisions are mentioned below:

"The accurate projection of category-wise sales is very essential for the assessment of energy input requirement so as to determine the quantum of generation and quantum of energy to be purchased for the correct assessment of revenue requirement for generation and power purchase. The licensee may adopt a suitable methodology like CAGR to arrive at the category wise sales for the base year i.e., for the current year.The distribution licensee shall also indicate the particulars of open access consumers, traders and other licensees category wise using its system. The demand and energy wheeled for them shall be shown separately for,(a) supply within the area of supply and (b) supply outside the area of supply. Based on the provisions as mentioned above, MePDCL analyzed the trends of the category-wise consumer data for the past years and estimated the category wise energy sale. MePDCL did separate estimation for Energy Sale within the state and outside the state. It is submitted that due to dependency on hydro projects, MePDCL faces power shortage during winter months and therefore, during winter months it need to resort to load regulation primarily for Industrial HT & EHT consumers. As a result, sales outlined in the Table reflected the regulated sale for FY 2012-13. The Energy sale for FY 2013-14 is projected based on the 7 year CAGR till FY 2012-13 and on the consideration that continuous power shall be supplied without any regulation. The proposed Energy Sale (MU) for FY 2013-14 is shown in Table.

	Consumer Category	Energy Sales (MU)								
		2007-08 (A)	2008-09 (A)	2009-10 (A)	2010-11 (A)	2011-12 (A)	5 Year CAGR (%)	2012-13 (Based on CAGR) (C)	2012-13 (Based on Provisional Sale) (D)	2012-13 (E) (Average of C & D)
	LT CATEGORY									
1	Domestic (DLT)	191.25	209.72	208.71	245.64	286.73	10.7%	317.28	276.28	296.78
2	Commercial (CLT)	32.10	33.62	39.88	47.62	55.60	14.7%	63.79	56.51	60.15
3	Industrial (ILT)	4.99	4.95	5.63	6.50	6.85	8.2%	7.41	8.05	7.73
4	Agriculture (AP)	0.61	0.50	0.63	0.36	0.41	5.0%	0.43	0.43	0.43
5	Public Lighting (PL)	1.50	1.50	1.49	1.33	1.10	5.0%	1.16	1.05	1.10
6	Water Supply (WSLT)	5.84	5.74	6.30	6.74	8.84	10.9%	9.81	7.29	8.55
7	General Purpose	9.42	9.20	11.85	13.57	14.90	12.1%	16.71	15.15	15.93
8	Kutir Jyoti	3.05	4.31	4.90	6.68	9.81	34.0%	13.14	12.82	12.98
9	Crematorium		0.22	0.22	0.77	0.18	5%	0.19	0.25	0.22
10	MeECL's offices & Employees	32.00	36.32	36.79	37.27	37.76				39.76
	HT CATEGORY									
11	Water Supply (WS HT)	19.12	23.96	25.28	27.02	29.15	11.1%	32.39	31.63	32.01
12	General Purpose including Domestic (DHT) and Bulk Supply	83.67	81.83	81.58	82.34	90.51	5.4%	95.36	88.02	91.69
13	Commercial (CHT)	7.06	10.03	12.14	15.68	19.95	29.7%	25.87	30.17	28.02
14	Industrial (IHT)	245.52	294.99	219.69	272.28	289.45	5.0%	303.92	283.40	293.66
	EHT CATEGORY									
15	Industrial	257.15	228.60	243.31	205.16	223.63	10.0%	245.99	254.17	250.08
	OUTSIDE SALE									
16	Assam (33kV)	9.75	10.88	13.16	15.22	19.10				19.30
17	U.I / Bilateral	155.08	88.23	40.65	40.38	37.32			64.50	64.50
18	Swapping (NVVN)	-	-	26.63	80.75	50.35			51.60	51.60
	Total	**1,058.10**	**1,044.60**	**978.84**	**1,105.31**	**1,181.64**		**1,133.45**	**1,181.31**	**1,274.49**

Energy Availability

Energy Available from MePGCL

All the generating stations of MePGCL are hydro and hence are dependent on monsoon. The maximum generation recorded during the last decade was 665.38 MU in FY 2007-08. The Net generation projected for FY 2013-14 is given in the Table.

Sl. No.	Name of Power Station	Net Generation (MU)
1	Umiam Stage I	107.00
2	Umiam Stage II	54.00
3	Umiam Stage III	131.60
4	Umiam Stage IV	198.00
5	Umtru Power Station	26.00
6	Micro Hydel (Sonapani)	6.00
7	Leshka HEP	401.00
8	Lakroh HEP	6.00
	Total	**929.60**

Energy Available from Inter-State Generating Stations

Purchases from Inter-State Generating Station:

In addition to power procured from MePGCL, MePDCL procures power on Long Term basis from sources such as InterState Generating stations of NEEPCO, NHPC and NTPC located in ER and NER region. The quantum of power procured from these sources is as per allocation made by Central Government. All Generating stations are located in NER except for existing stations of NTPC. The energy availability from the existing sources is projected based on MePDCL share, PLF, Auxiliary Consumption and past trend. For the upcoming stations such as BTPS of NTPC and OTPC, the unit wise tentative Commercial Operation Date (COD) is considered for projecting the energy availability in FY 2013-14.

Purchases from Short Term Market:

MePGCL's generation is 100% hydel and among the inter-state share about 57% is hydel, the energy availability is dependent on monsoon. Further past trends indicate that during winter months the Industrial Demand grows while the overall availability to meet the demand drops down, leading to sudden deficit scenario. Therefore to meet any short term requirement of power, MePDCL procures power from Short Term Market such Exchange, SWAP/Bi-lateral arrangement etc.

Renewable Purchase Obligation:

In accordance with the Meghalaya State Electricity Regulatory Commission (Renewal Energy Purchase Obligation and Compliance) Regulation 2010 as notified on 21st December 2010, MePDCL is obligated to purchase electricity from renewable energy sources. Clause 4 of the said Regulation specifies the quantum of Renewable Purchase Obligation (RPO) by the Licensees. It is submitted that Hon'ble commission is yet to determine the RPO for FY 2013-14, hence as per Regulation 4(3) of Meghalaya State Electricity Regulatory commission (Renewal Energy Purchase Obligation and Compliance) Regulation 2010, the RPO % for FY 2013-14 will be same as FY 2012-13. The MePDCL proposes to procure 92 MUs of energy from small hydro which is categorized as Non-solar. MePDCL's obligation to purchase electricity from Non-solar sources has therefore been met. MePDCL proposes to procure 6.04 MUs from solar sources as shown in Table to meet its Renewable Purchase Obligation. The projected energy availability from the outside the state sources detail is mentioned in Table below. The FY 2011-12 (Actual), FY 2012-13 (Provisional) and FY 2013-14 (Projected) figure of power procurement is attached as Format D3.

Particulars	FY 2013-14
Solar Renewable Purchase Obligation (%)	0.40%
Energy Sale to Consumers within the State (MU)	1,509.69
Energy to be procured from Solar sources (MU)	**6.04**

Sl No.	Source/ Station	Capacity (MW)	Firm allocation		PLF %	Aux Consn (%)	Energy Available (MU)
			%	MW			
1	NTPC						
	NTPC Farakka	1,600	0.6%	9.28	85%	8.0%	64
	NTPC Talcher	840	0.6%	5.80	85%	8.0%	40
	NTPC Kahalgaon I	1,500	1.6%	4.87	85%	8.0%	33
	NTPC Kahalgaon II	1,000	0.6%	24.00	85%	8.0%	164
	NTPC-BTPS	250	16%	40.00	85%	8.0%	30
2	NHPC						
	a) Loktak HEP	105	12.4%	12.99	45%	1.0%	51
3	NEEPCO						
	Free Power						60
	Kopili Stage-I HEP	200	17.4%	34.76	45%	1.0%	85
	Kopili Stage-II HEP	25	13.7%	3.41	45%	1.0%	9
	Khandong HEP	50	16.9%	8.44	45%	1.0%	17
	Ranganadi HEP	405	11.5%	46.49	45%	1.0%	128
	Doyang HEP	75	11.5%	8.60	45%	1.0%	24
	AGBPP	291	11.8%	34.28	85%	3.0%	195
	AGTPP	84	11.8%	9.72	85%	3.0%	70
4	OTPC - PALLATANA GPP	726	10.9%	78.99	85%	3.0%	428
5	Other sources						
	a) UI/ Bilateral/ Exchange						24
	b) Solar						6.04
	c) Swapping						130.00
	Total						**1,558.60**

Distribution Losses

At present, there is considerable number of un-metered consumers in domestic category mainly in rural areas. Moreover, there are many HT feeders that do not have meters. The consumption of un-metered consumers is being assessed, and thus there is a possibility of higher actual consumption resulting in lower computation of Distribution loss. The distribution loss for FY 2013-14 is estimated to be 26.28%.

Remedial Measures

MePDCL is planning to hire a 3rd party agency to conduct energy audit up to Distribution Transformer level for knowing the actual loss level at all voltage level. This will enable MePDCL to know the areas of potential loss reduction.

Energy Balance

MePDCL submited that it shall procure power from MePGCL, Inter-state Generating stations located in NER & ER region, UI/Bilateral, Exchange, Swap etc. As per the agreement between MePDCL and Inter-state generators MePDCL need to bear the losses from the Generators Ex-Bus, hence while calculating the energy available at Transmission periphery from Generating Stations located at NER, only NER POC loss is taken while for Generating Stations located in ER region, ER and NER POC losses are considered. The detailed Energy Balance as shown in Format D2 is summarized in the Table.

Particular	**Units**	**FY 2013-14**
Power Purchase Within Meghalaya		
Power Procurement from MePGCL	MU	929.60
Total Purchase within Meghalaya	*MU*	*929.60*
Power Purchase outside Meghalaya		
Power Purchase from NER Source	MU	1,257.51
North Eastern Region Loss	%	2.6%
Net NER Power available at Transmission Periphery	***MU***	***1,224.82***
Power Purchase from ER Source	MU	301.09
Eastern Region Loss	%	1.7%
Total Applicable loss for ER Sources	%	4.3%
Net ER Power available at Transmission Periphery	***MU***	***288.29***
Total Power Available at Transmission Periphery	MU	2,442.70
Intra-State Transmission (MePTCL) Loss	%	4%
Total Power Available at Distribution Periphery	**MU**	**2,345.00**
Outside the State Sale	MU	269.99
Net Power Available at Distribution Periphery*	MU	2,075.01
Distribution Loss	%	26.28%
Distribution Loss	MU	545.31
Energy Available for Sale within the State	**MU**	**1,529.69**

** After deducting sale to Outside State*

Aggregate Technical & Commercial Loss (AT & C Loss)

Collection Efficiency

The collection efficiency is an important parameter in calculating the AT & C loss. Other than the disputed FYs of FY 2008-09 & 2009-10, on an average the collection efficiency of MePDCL was around 96 %. In FY 2011-12 the collection efficiency was more than 100% due to arrears from earlier FY realized. In FY 2013-14 the collection efficiency is estimated at 98 %. To assess the overall efficiency of the Licensee the concept of AT & C was introduced. As per Regulation 91(a) of the Tariff Regulations, 2011, MePDCL need to assess the actual AT & C loss for the previous year, estimated for the current year and to project AT & C loss figure for the next Financial Year. The AT & C loss is arrived after taking into consideration the energy for which revenue is realized as indicated in Format D2 (A) enclosed, summary of which is shown in Table in the petition.

FY	2011-12 (Pre-Audit)	2012-13 (Estimated)	2013-14 (Projected)
AT & C Loss (%)	24.3%	26.9%	26.6%

Annual Expenses of MePDCL

As per Regulation 98 (1) of Tariff Regulations, 2011 the Annual Expenses of Distribution Licensee shall comprise of:

(a) Power Purchase Cost

(b) Capital Cost

(c) Debt-equity

(d) Return on equity

(e) Interest on Loan Capital

(f) Operation and Maintenance Expenses

(g) Interest on working capital

(h) Income Tax

(i) Depreciation

(j) Bad and doubtful debts

(k) Depreciation as may be allowed

Power Purchase Cost

Regulation 93 of the Tariff Regulations, 2011 provides provisions for Power Purchase Cost, some of the relevant clauses are mentioned below:

"93. Power Purchase Cost (1) The Licensee shall procure power from approved sources. Additional energy required after taking into account the availability of energy from such approved sources, shall be reasonably estimated well in advance and procurement arrangements made for such long and medium term purchases, by following standard contractual procedures. All such purchases shall only be made with the prior approval of the State Commission. (2) For purchase of electricity from sources outside the state, the transmission loss level agreed to in the Power Purchase Agreement (PPA) or worked out from energy accounts of RLDC ./ SLDC shall be taken into account for purchase of power from such sources.(3) The cost of power purchased from the central generating companies shall be worked out based on the tariff determination by the Central Electricity Regulatory Commission (CERC). (4) Where power is purchased by the licensee from State-owned existing generating stations, the cost of power purchase shall be worked out based on the price determined by the State Commission.(5) The cost of power purchase from IPPs shall be considered based on existing Power Purchase Agreement if any, till the agreement period is over.(6) In case of power purchased from Renewable energy sources the quantum and the cost shall be as per the policy approved by the State Commission / Central Commission.(7) In case of short-term power purchase necessitated based on unprecedented development, the licensee may resort to short term procurement."

The Power Purchase cost from Inter-State Generating Stations is projected based on the prevailing CERC Tariff and historical data. However the cost of procurement of power from MePGCL is projected based on the information received from MePGCL. For power procurement from Short Term sources the cost is considered to be the present market price. Since MePDCL need to meet the Solar RPO by way of purchasing Solar Power, the cost of Solar Power is considered at Rs 13.40 per unit based on the forbearance price of Solar REC notified by CERC. The power purchase cost projection is mentioned in Table 9 below. The Power Purchase Cost for FY 2011-12 (Actual), FY 2012-13 (Estimate) and FY 2013-14 (Projection) is shown Format 4.

Sl No.	Source/ Station	Energy Received (MU)	Variable Cost (Paise/ Unit)	Total Variable Cost (Rs Cr)	Total Fixed Cost (Rs Cr)	Total Cost (Rs Cr)
1	**MePGCL**					
	Old Stations	517	-	-	-	75.36
	Sonapani	6	-	-	-	1.28
	Myndtu Leshka	401	-	-	-	222.86
	Lakroh	6	-	-	-	1.61
2	**NTPC**					
	NTPC Farakka	64	319.66	20.46	7.55	28.01
	NTPC Talcher	40	157.60	6.30	5.25	11.55
	NTPC Kahalgaon I	33	253.20	8.36	4.81	13.17
	NTPC Kahalgaon II	164	241.86	39.66	26.07	65.73
	NTPC-BTPS	30	250.00	7.50	5.12	12.62
3	**NHPC**					
	a) Loktak HEP	51	138.00	7.04	4.42	11.46
4	**NEEPCO**					
	Free Power	60				
	Kopili Stage-I HEP	85	44.49	3.78	3.45	7.23
	Kopili Stage-II HEP	9	91.37	0.82	0.86	1.68
	Khandong HEP	17	108.13	1.84	0.59	2.43
	Ranganadi HEP	128	117.64	15.06	20.02	35.08
	Doyang HEP	24	147.70	3.54	5.00	8.54
	AGBPP	195	190.57	37.16	10.83	47.99
	AGTPP	70	252.14	17.65	6.54	24.19
5	OTPC -PALLATANA GPP	428	240.68	103.01	61.77	164.78
6	Other sources					
	a) UI/Bilateral/ Exchange	24				12.75
	b) Solar	6.04				8.09
	c) Swapping	130				
	Total	**2,488.20**				**756.42**

Transmission Charges

Inter-State Transmission Charge

MePDCL submits that it needs to pay Inter-State Transmission charge for the power procured from outside the state. The Inter-State Transmission Charge includes Power grid charge, Scheduling and Operating charge of RLDC and other Open Access charges. The comparison of Inter-State Transmission Charge for FY 2011-12, FY 2012-13 and FY 2013-14 is shown in Table. MePDCL submits before the Hon'ble Commission to kindly approve Rs 64.80 Crs as

Inter-State Transmission Charge.

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
a) POWERGRID	45.53	49.90	60.00
b) ASEB	-	-	-
c) POSOCO	1.05	1.05	1.10
d) OAC	2.50	2.50	2.50
e) Reactive Charges	0.80	0.80	1.20
Inter-State Transmission Charge	**49.88**	**54.25**	**64.80**

MePTCL Transmission Charges

It is submitted that as per as Regulation 95 of the Tariff Regulations, 2011 the Transmission, wheeling and other charges payable to the transmission licensee or wheeling of power purchased shall be considered as expense. It is submitted that as per information received from MePTCL, the projected annual transmission charge admissible to MePDCL is Rs 75.35 Cr. MePDCL submits before the Commission to approve the same as pass through in Distribution ARR.

Capital Investment Plan

It is submitted that MePDCL will be implementing Distribution Scheme under RAPDRP Part-B which is financed by the Ministry of Power. Also RGGVY 2nd Phase is proposed to be implemented under the finance of Ministry of Power. Further MePDCL is implementing a program for installation and replacement of meter under the State Plan.

Gross Fixed Assets

The provisional gross fixed assets (GFA) as on 31st March 2012 for segregated entity of distribution company is Rs. 240.69 Cr. The closing GFA for FY 2013-14 is worked out considering additional capitalization for each station. The table below provides closing GFA of MePDCL for FY 2013-14.

Particulars	MePTCL (Rs Cr)
Opening GFA as on 1.4.2012	240.69
Add: Additions to GFA during FY 2012-13	66.16
Less: Retirements to GFA during FY 2012-13	-
Closing GFA as on 31.3.2013	306.85
Opening GFA as on 1.4.2013	306.85
Add: Additions to GFA during FY 2013-14	340.72
Less: Retirements to GFA during FY 2013-14	-
Closing GFA as on 31.3.2014	**647.57**

Determination of Return of Equity

The relevant regulations for determination of debt-equity ratio are extracted for reference as below:

"100. Debt-equity Ratio (1) For the purpose of determination of tariff, the debt-equity ratio of 70:30 will be applied for all new investments during the financial year. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance shall be treated as loan. Where actual equity employed is less than 30%, the actual equity shall be considered. Provided that the Commission may, in appropriate case, consider equity higher than 30% for the purpose of determination of tariff, where the distribution licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of general public. (1) The debt and equity amounts in accordance with clause (1) above shall be used for calculating interest on loan, return on equity, advance against depreciation and foreign rate variation."

As per State Government Notification No. 37, dated 31.03.10 equity for MePDCL has been notified at Rs 135.48 Crores and the same is considered as equity for calculation of RoE. As per Tariff Regulations, 2011 Return on Equity shall be computed on the equity base determined in accordance with regulation 101 and shall be at least 14%. It is submitted that the assets added during FY 2012-13 & FY 2013-14 are proposed to be funded through grant and loan. Therefore for FY 2012-13 & FY 2013-14 no equity component is taken. The equity held at end of FY 2013-14 is projected to be Rs 135.48 Cr. MePDCL submitted before the Commission to approve the RoE of Rs. 18.97 Cr. for FY 2013-14.

Particulars	2012-13	2013-14
Opening Equity	135.48	135.48
Additions during the year	-	-
Closing Equity	135.48	135.48
Equity Considered for RoE	92.06	135.48
RoE %	14%	14%
RoE (Rs Crores)	**12.89**	**18.97**

Interest on Loan Capital

As per Regulation 102(a) of the Tariff Regulations, 2011 Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the prevailing lending rate of bank and financial institution. MePDCL submitted that the interest on State Government Loan has not been considered. The summarized computation of Interest on Loan is shown in the

Table. The detail of the MePDCL Interest on loan capital is attached as Format 7. MePDCL submitted before the Commission to approve Interest on Loan Capital at Rs. 9.74 Crores for FY 2013-14.

Particulars	**FY 2012-13**	**FY 2013-14**
Opening Balance	51.42	64.41
Addition during the year	12.99	-
Repayment during the year	0.00	-
Closing Balance	64.41	64.41
Average Interest Rate	***6.6%***	***10.0%***
Interest Payable	4.26	6.43
Add Finance Charges	3.15	3.31
Total Interest and Finance Charges	**7.41**	**9.74**

Operation and Maintenance Expenses

As per Regulation 103(1) of the Tariff Regulations, 2011 the Operation and Maintenance Expenses will be a sum of the following

(a) Employee cost

(b) Repairs and Maintenance

(c) Administration and General Expenses

Employee Cost

The employee cost projected for FY 2013-14 is 15% lower than the estimated Employee Cost of FY 2012-13. The reason behind higher Employee Cost in FY 2012-13 is payment of arrear of Rs 20.67 Cr due to pay revision. The employee cost detail is shown in Table 14 below and attached in Format 1 (A). MePDCL submitted before the Commission to approve Employee Cost of Rs. 114.28 Cr for FY 2013-14.

Sl. No.	Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
	Salaries & Allowances			
1	Basic Pay	46.90	86.92	63.57
2	Dearness Pay	-	-	-
3	Dearness Allowance	12.56	15.48	17.03
4	House rent Allowance	-	-	-
5	Fixed Medical Allowance	8.14	10.03	11.03
6	Medical re-imbursement charges	1.33	1.64	1.80
7	Over time payment	0.69	0.85	0.94
8	Other allowances	-	-	-
9	Generation incentive	0.11	0.14	0.15
10	Bonus	-	-	-
	Sub-Total	***69.73***	***115.06***	***94.52***
	Terminal Benefits	-	-	-
11	Leave encashment	1.23	1.52	1.67
12	Staff welfare	0.02	0.02	0.02
13	CPS	0.06	0.07	0.08
14	Workman compensation	0.01	0.01	0.01
15	Ex-gratia	1.42	1.75	1.93
	Sub-Total	***2.74***	***3.37***	***3.71***
	Pension Payment	-	-	-
16	Basic Pension	11.26	16.08	15.27
17	Dearness Pension	-	-	-
18	Dearness Allowance	-	-	-
19	Any other expenses	0.58	0.71	0.78
	Sub-Total	***11.84***	***16.79***	***16.05***
20	**Total**	**84.31**	**135.22 ***	**114.28**
21	Amount capitalized	-	-	-
22	Net Amount	84.31	135.22	114.28
23	Add prior period expenses	0.80	-	-
	Grand Total:	**85.11**	**135.22**	**114.28**

Repairs and Maintenance (R & M) Expenses

Meghalaya being a hilly terrain and due to recent expansion in rural areas under RGGVVY scheme, state demands comparatively more expenditure for maintaining the distribution network. Under these circumstances there is a genuine need for incurring repair & maintenance expenses to keep the current assets under satisfactory running condition. The R & M Expenses for FY 2011-12 (Provisional), FY 2012-13 (Estimated) & FY 2013-14 (Projected) are given below in Table 15 and attached in Format 4. MePDCL submitted before the Commission to approve R & M Cost of Rs. 13.30 Cr for FY 2013-14.

Sl.	Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
1	Plant & Machinery	0.4	0.5	0.6
	TOTAL:	0.4	0.5	0.6
2	Building	1.8	2.1	2.3
3	Hydraulic & Civil Works	0.7	0.8	0.9
4	Line Cable & Network	6.6	7.5	8.2
	TOTAL:	9.1	10.3	11.4
5	Vehicles	0.2	0.2	0.2
6	Furnitures & Fixtures	0.2	0.2	0.3
7	Office equipments	0.1	0.2	0.2
8	Civil Works	0.6	0.7	0.7
9	TOTAL:	1.1	1.3	1.4
10	Add/deduct share of other (To be specified)	-	-	-
11	Total expenses	10.7	12.1	13.3
12	Less capitalized	-	-	-
13	Net expenses	10.7	12.1	13.3
14	Add prior period	-	-	-
	Total expenses charges to revenue as R&M expenses	**10.7**	**12.1**	**13.3**

Administrative and General (A & G) Expenses

The administrative and general expenses of the MePDCL are also increasing gradually due to expansion of the power sector in the state and also to keep pace with the inflation. The A & G Expenses for FY 2011-12 (Provisional), FY 2012-13 (Estimated) & FY 2013-14 (Projected) are given below in Tabl and attached in Format-5. MePDCL submitted before the Commission to approve A & G Cost of Rs. 7.51 Cr for FY 2013-14.

Sl. No.	Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
1	Rent, Rates & Taxes	0.07	0.08	0.09
2	Insurance	0.23	0.27	0.31
3	Telephone, Postage & Telegrams	0.14	0.16	0.18
4	Consultancy fees	0.68	0.78	0.90
5	Technical fees	0.01	0.01	0.01
6	Other professional charges	0.16	0.19	0.22
7	Conveyance & travel expenses	3.63	4.17	4.80
8	Electricity & water charges	0.01	0.01	0.01
9	Others	0.47	0.54	0.62
10	Freight	-	-	-
11	Other material related expenses	0.28	0.32	0.37
12	Total Expenses	5.68	6.53	7.51
13	Less Capitalized			
14	Net Expenses	5.68	6.53	7.51
15	Add prior period	0.03		
	Total expenses charged to revenue	**5.71**	**6.53**	**7.51**

Summary of Operation and Maintenance (O & M) Expenditure

The summarized Operation and Maintenance Expense is shown in Table below. MePDCL submitted before the Commission to approve a total O & M of Rs 135.09 Cr for FY 2013-14.

Sl. No.	Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
1	Employee costs	85.11	135.22	114.28
2	Repair & Maintenance Expenses	10.69	12.09	13.30
3	Administration & General Expenses	5.71	6.53	7.51
	Total O & M Expense	**101.51**	**153.84**	**135.09**

Interest on Working Capital

As per Regulation 104 (1) of Tariff Regulations, 2011 Working capital shall consist of (a) Operation and maintenance expenses for one month,

(a) Budget for maintenance spares at the rate of 1% of the historical cost escalated at the rate of 6% per annum from the date of commercial operation.
(b) Receivables equivalent two months on fixed and variable charges for sale of electricity. Further as per the Format 11 of Appendix D of the MSERC Tariff Regulation the working capital components will be.
(c) One Month Fuel Cost.
(d) One Month Power Purchase Cost
(e) Operation and maintenance expenses for one month,
(f) Two months receivables

The Working Capital required is calculated as shown in the Table in the petition.

Sl. No.	Particulars	FY 2013-14 (Projected)
1	Power Purchase cost for 1 month *	74.71
2	One month employees cost	9.52
3	One Month Administrative & General Expenses	0.63
4	One month R&M Cost	1.11
5	Two months Receivables	181.12
	TOTAL	**267.09**

** Includes Transmission Cost*

MePDCL submits before the Hon'ble Commission to kindly approve Interest on Working Capital of Rs. 39.40 Cr for FY 2013-14.

Sl. No.	Particulars	FY 2013-14 (Projected)
1	Working Capital	267.09
2	Short Term PLR of SBI on 1.4.12	14.75%
	Interest on Working Capital	**39.40**

Depreciation

Depreciation is calculated as per Regulation 106 of Tariff Regulations, 2011. A comparative analysis of depreciation for FY 2011-12, FY 2012-13 and FY 2013-14 is shown in the Table given in the petition. MePDCL submitted before the Commission to approve Depreciation of Rs. 30.96 Cr for FY 2013-14

Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
Land	-	-	-
Buildings	0.21	0.21	0.23
Hydraulic works	-	-	-
Other Civil works	0.06	0.11	0.11
Plant & Machinery	0.68	1.70	3.48
Lines & Cables	8.15	12.11	26.63
Vehicles	0.08	0.25	0.27
Furniture	0.05	0.09	0.10
Office equipment	0.10	0.14	0.14
TOTAL:	**9.33**	**14.61**	**30.96**

Bad and Doubtful Debts

The entire sale of MePDCL is on credit basis. Energy Sales of MePDCL are mostly in semi urban and rural areas in a wide geographical spread and there may be occurrences of bad debts. As per Regulation 107 of Tariff Regulations, 2011 a provision of Bad and Doubtful equal to 1 percent of receivables in the revenue requirement of the licensee may be kept. Accordingly a provision of Rs 10.87 Cr is kept. The detail is shown in Format D6. Hon'ble Commission is requested to allow the same.

Particular	Amount
Net Annual Revenue Requirement (Rs Cr)	1,086.72
Provision of Bad and Doubtful Debt	1%
Bad and Doubtful Debt (Rs Cr)	**10.87**

Other Income

As per Regulation of Tariff Regulations, 2011 the other Income of a Distribution Licensee is to be deducted from the total expenses to arrive at the net ARR. The components of the other income (Non Tariff Income) as per Regulation 112 (2) are:

a) Delayed Payment Surcharge

b) Meter Rent

c) Customer Charges

d) Income from investments

e) Miscellaneous receipts from consumers

f) Trading income

g) Prior period income

h) Interest on staff loans and advances

i) Recovery of theft and pilferage of energy

j) Any other income

The details of Non Tariff Income are mentioned in the Table below and attached as Format D5. MePDCL submitted before the Commission to approve Net Non Tariff Income of Rs 37.18 Crs.

Sl. No.	Particulars	FY 2011-12 (Pre-Audit)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)
1	Meter / Service rent	1.58	1.66	1.74
2	Late payment surcharge	85.64	25.10	20.00
3	Theft/pilferage of energy charges	-	-	-
4	Misc. Receipts	0.42	0.38	0.34
5	Misc. Charges	3.96	4.16	4.24
6	Wheeling charges	3.14	4.72	5.90
7	Interest on staff loans & advance	-	-	-
8	Income from Trading	0.01	0.01	0.01
9	Income from welfare activities	-	-	-
10	Discount / Rebates from Suppliers Contractors	0.58	0.59	0.60
11	Investments & bank balances	4.41	4.60	4.35
12	Total Income	99.74	41.22	37.18
13	Add prior period income	2.07	-	-
	Total Non Tariff Income	**101.81**	**41.22**	**37.18**

Cross Subsidy Surcharge

It is submitted that after introduction of Open Access within the State, MePDCL earns Cross-Subsidy surcharge from the Open Access Consumers of the state. The projected Cross-Subsidy surcharge to be earned from the Open Access consumers for FY 2013-14 is Rs 1.70 Crs. MePDCL submitted before the commission to approve the same to be deducted from the ARR.

State Government Subsidy

The State Government has provided RE Subsidy of Rs 13.28 Cr in FY 2011-12 and kept a provision of Rs. 15.36 Cr in FY 2012-13. MePDCL expects the State Government to provide Rs 16 Cr as RE subsidy in FY 2013-14.

Annual Revenue Requirement

Based on the detailed computation of ARR components, the abstract of ARR is shown in Table below and attached as Format D7. MePDCL submitted before the Commission to approve Net ARR of Rs 1,086.72 Crs.

Annual Revenue Requirement (Rs Cr)

Sl. No	Item of expenditures 2013-14	Rs. Cr.
1	Cost of Power Purchase	756.42
2	Inter-State Transmission Charge	64.80
3	MePTCL Transmission Charge	75.35
4	Employee costs	114.28
5	R&M expenses	13.30
6	Adm. & Gen. Expenses	7.51
7	Depreciation	30.96
8	Interest on Loan Capital	9.74
9	Interest on Working Capital	39.40
10	Return on equity	18.97
11	Income Tax -	
12	Provision for bad and doubtful debt	10.87
13	Total revenue requirement	1,141.59
14	Less: Non tariff income	37.18
15	Less: Cross Subsidy Surcharge	1.70
16	Less: RE Subsidy for FY2013-14	16.00
17	Net revenue requirement	1,086.72

Revenue Gap

Revenue at Current Tariff

The Revenue at Current Tariff is calculated based on the current tariff and projected sales of energy category wise. The detailed calculation of revenue at current tariff is shown in Format 14 A, B, C, and D. The total revenue at current tariff works out to be Rs. 760.37 Cr.

Revenue Gap/Deficit at Current Tariff

The projected ARR is clause 4 and Revenue at current tariff in clause 5.1 is compared and a Revenue Gap/Deficit of 326.35 is arrived. From the above section it may be seen that Revenue Gap for FY 2013-14 is Rs 326.35 Cr. Under the circumstances the proposed category-wise tariff for FY 2013-14 under LT,

HT and EHT categories are indicated below:

Particulars	FY 2013-14
Net ARR Projected	1,086.72
Revenue at Existing Tariff	760.37
Revenue Gap	326.35

LOW TENSION (LT) SUPPLY:

Classification of supply at Low Tension shall be as per the Meghalaya Electricity Supply Code, 2012 at clause 2.1 (1) (a).

CATEGORY I: DOMESTIC LOW TENSION (DLT)

This category shall be applicable to domestic consumption, which includes consumption-

(a) for lighting, heating, cooling, fans and other household appliances in a private dwelling house;

(b) in temples, churches, mosques, gurudwaras and other places of religious worship;

(c) in hospitals, dispensaries, health centres run by Government or by charitable, religious or social organisations on a no-profit or non-commercial basis:

(d) in schools, colleges, hostels boarding houses for students run by Government or by charitable, religious or social organisations on a no-profit or non commercial basis; and

(e) in ashrams, dharamsalas, community halls and institutions run by recognised welfare organisations .

KUTIR JYOTI / BPL

Kutir Jyoti Connections have been grouped under domestic category with two subcategories of Un-metered Kutir Jyoti Connections and Metered Kutir Jyoti Connections (including BPL).

Unmetered Kutir Jyoti

The tariff for this category of consumers is Rs. 75.00 per connection per month. MePDCL proposes to increase the tariff to Rs 90 per connection per month.

Category	Existing Rate (Rs)	Proposed Rate (Rs)
Kutir Jyoti (KJ-U)	75	90

As no more connections shall be given without meter, hence this tariff is only applicable for the existing un-metered Kutir Jyoti connections until they are metered.

Metered Kutir Jyoti (Including BPL)

MePDCL propose that the tariff shall be as per consumption at the rate of Rs. 2.25 per unit for monthly consumption within 0-30 units. If it is found that their monthly consumption in any month exceeds the limit of 0-30 units, then the billing of excess units shall be done based on the tariff prescribed for normal domestic consumers.

Category	Current Tariff	Proposed Tariff
Kutir Jyoti (KJ-M) including BPL	Rs. 1.80 per unit for monthly consumption within 30 units In case consumption in any month exceeds 30 units, then the billing of excess units shall be on the tariff prescribed for appropriate slab for normal domestic consumers.	Rs. 2.25 per unit for monthly consumption within 30 units In case consumption in any month exceeds 30 units, then the billing of excess units shall be on the tariff prescribed for appropriate slab for normal domestic consumers.

DOMESTIC (DLT)

Fixed Charge: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Domestic(DLT)	30	41

Energy Charge: MePDCL proposes to continue the same slabs for the energy charges. The proposed energy charge for unit consumption of electricity in the various slabs is given below.

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Domestic (DLT)	First 100 Units	245	343
	Next 100 Units	275	385
	Above 200 Units	350	492

CATEGORY II: COMMERCIAL LOW TENSION (CLT)

This category shall be applicable to commercial consumption, which includes Consumption-

(a) in shops, banks, hotels, restaurants, cinema halls, petrol pumps, garages and other commercial and business establishments;

(b) in nursing homes, dispensaries, pathological laboratories, x-ray clinics and other such commercial establishments;

(c) in fairs and exhibitions and for signboards and hoardings; and (d) other consumption not falling under any other category under the clause.

Note - Where a connection serves both domestic and commercial purposes, the consumption shall be classified as commercial.

Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Commercial (CLT)	60	81

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Commercial (CLT)	First 100 Units	425	527
	Above 100 Units	450	563

CATEGORY III: INDUSTRIAL LOW TENSION (ILT)

This category shall be applicable to industrial consumption, which includes consumption in factories and other industrial or manufacturing establishments. A. Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Industrial (ILT)	60	81

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Industrial (ILT)	All units	380	513

CATEGORY IV: PUBLIC SERVICE LOW TENSION (PSLT)

This category shall be applicable to public service consumption, which includes consumption

(a) in government and district council offices, municipal boards municipal corporations and other local bodies;

(b) for street lighting, park lighting and traffic signal systems.

PUBLIC LIGHTING (PL)

Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Public Lighting (PL)	60	81

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Public Lighting (PL)	All units	450	585

The Street Light supply has also to be generally metered without any separate minimum charge concept, but only with Fixed Charges. However, the billing of existing un-metered connections (until they are metered) shall be done as below. The tariff includes repairs, attendance and renewal of lamps subject to a maximum of 4 (four) renewals per point per lamp per annum, but with initial fitting at the cost of the customer. The rates given below are in addition to the fixed charge as applicable to metered supply.

Particulars	Existing Rate (Rs per Lamp per point per month)	Proposed Rate (Rs per Lamp per point per month)
Incandescent Lamp		
40 Watts	80	112
60 Watts	125	175
100 Watts	200	280
For Fluorescent Lamp		
Up to 40 Watts	125	175
For Mercury Vapour Lamp		
80 Watts	170	238
125 Watts	260	364
250 Watts	540	756
500 Watts	1010	1414
For Sodium Vapour Lamp		
Up to 150 Watts	390	546
250 Watts	610	854
400 Watts	-	1477
CFL Fittings		
Up to 45 Watts	-	177
Abobe 45 Watts and up to 85 Watts	-	280
LED Fittings	-	522
Metal Helide	-	615

PUBLIC WATER SUPPLY/SEWAGE TREATMENT PLANTS (WSLT)

Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below:

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Public Water Supply (WSLT)/ Sewage Treatment Plants	60	81

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Public Water Supply (WSLT)/ Sewage Treatment Plants	All units	450	563

GENERAL PURPOSE (GP)

Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
General Purpose (GP)	60	81

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
General Purpose (GP)	All units	450	563

CATEGORY V: AGRICULTURE (AP)

This category shall be applicable to agricultural consumption for pumping water for irrigating cultivable lands.

Fixed Charges: The MePDCL proposes to levy fixed charge per KW per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Agriculture Purpose (AP)	35	47

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Agriculture Purpose (AP)	All units	150	260

CATEGORY VI: CREMATORIUM

Fixed Charges: The MePDCL proposes to levy fixed charge per month as below.

Category	Existing Fixed Charge (Rs per KW/month)	Proposed Fixed Charge (Rs per KW/month)
Crematorium (CRM)	4800	6480

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Crematorium (CRM)	All units	275	385

CATEGORY VII: EMPLOYEES

Fixed Charges: The MePDCL proposes not to levy fixed charge to this category of consumers.

Energy Charges: MePDCL proposes to levy energy charge for unit consumption of electricity as given below.

Category	Slabs of Units	Existing Energy Charge (Paise/Unit)	Proposed Energy Charge (Paise/Unit)
Employees	All units	315	441

HIGH TENSION (HT) SUPPLY:

Classification of supply at High Tension shall be as per the Meghalaya Electricity Supply Code, 2012 at clause 2.1 (1) (b).In the Tariff Order dated 20th January, 2012 the Commission had approved implementation of kVAh billing for Industrial and Water Supply categories. In this petition, MePDCL propose to implement kVAh billing for all HT categories. Metering shall be on the HT side. In case where metering is on the LT side, 2% transformation loss shall be added to arrive at the demand (kVA) on HT side and 3% transformation loss shall be added to arrive at the consumption (kVAh) at HT side.

CATEGORY VIII: DOMESTIC HIGH TENSION (DHT)

This category shall be applicable to domestic consumption, which includes consumption-

(a) for lighting, heating, cooling, fans and other household appliances in a private dwelling house;

(b) in temples, churches, mosques, gurudwaras and other places of religious worship; Petition for ARR & Tariff of FY 2013-14

(c) in hospitals, dispensaries, health centres run by Government or by charitable, religious or social organisations on a no-profit or non-commercial basis:

(d) in schools, colleges, hostels boarding houses for students run by Government or by charitable, religious or social organisations on a no-profit or non commercial basis; and

(e) in ashrams, dharamsalas, community halls and institutions run by recognised welfare organisations .

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
Domestic(DHT)	115	161

Category	Slabs of Units	Existing Energy Charge (Paise/unit)	Proposed Energy Charge (Paise/kVAh)
Domestic (DHT)	All units	415	540

CATEGORY IX: COMMERCIAL HIGH TENSION (CHT)

This category shall be applicable to commercial consumption, which includes consumption-

(a) in shops, banks, hotels, restaurants, cinema halls, petrol pumps, garages and other commercial and business establishments;

(b) in nursing homes, dispensaries, pathological laboratories, x-ray clinics and other such commercial establishments;

(c) in fairs and exhibitions and for signboards and hoardings; and (d) other consumption not falling under any other category under the clause.

Note - Where a connection serves both domestic and commercial purposes, the consumption shall be classified as commercial.

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
Commercial (CHT)	115	161

Category	Slabs of Units	Existing Energy Charge (Paise/unit)	Proposed Energy Charge (Paise/kVAh)
Commercial (CHT)	All units	400	596

CATEGORY X: INDUSTRIAL HIGH TENSION (IHT)

This category shall be applicable to industrial consumption, which includes consumption in factories and other industrial or manufacturing establishments.

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
Industrial (IHT)	115	161

Category	Slabs of Units	Existing Energy Charge (Paise/kVAh)	Proposed Energy Charge (Paise/kVAh)
Industrial (IHT)	All units	424	614

CATEGORY XI: PUBLIC SERVICE HIGH TENSION (PSHT).

This category shall be applicable to public service consumption, which includes consumption -

(a) in government and district council offices, municipal boards municipal corporations and other local bodies;

(b) for street lighting, park lighting and traffic signal systems.

PUBLIC WATER SUPPLY/SEWAGE TREATMENT PLANTS (WSHT)

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
Public Water Works (WSHT)	115	161

Energy Charges: MePDCL proposed to continue the single slab for the energy charges. The proposed energy charge for unit consumption of electricity is given below.

Category	Slabs of Units	Existing Energy Charge (Paise/kVAh)	Proposed Energy Charge (Paise/kVAh)
Public Water Works (WSHT)	All units	428	601

GENERAL PURPOSE / BULK SUPPLY (BS)

EXTRA HIGH TENSION (EHT) SUPPLY:

Classification of supply at Extra High Tension shall be as per the Meghalaya Electricity Supply Code, 2012 at clause 2.1 (1) (c).

In the Tariff Order dated 20th January, 2012 the Commission had approved implementation of kVAh billing for Industrial (EHT). In this petition it is proposed to continue with the kVAh billing for all EHT consumers.

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
General Purpose/Bulk Supply (BS)	115	161

Energy Charges: MePDCL proposed to continue the single slab for the energy charges. MePDCL proposes to implement paise per kVAh billing for Energy Charge.

Category	Slabs of Units	Existing Energy Charge (Paise/unit)	Proposed Energy Charge (Paise/kVAh)
General Purpose/Bulk Supply (BS)	All units	418	564

CATEGORY XI: INDUSTRIAL EXTRA HIGH TENSION (IEHT)

This category shall be applicable to industrial consumption, as per the Meghalaya Electricity Supply Code, 2012 at para 3.6 (I)A. Fixed Charge: MePDCL proposes to levy fixed charge per KVA per month as below.

Category	Existing Fixed Charge (Rs per kVA per month)	Proposed Fixed Charge (Rs per kVA per month)
Industrial (EHT)	115	161

Energy Charges: MePDCL proposed to continue the single slab for the energy charges. The proposed energy charge for unit consumption of electricity is given below.

Category	Slabs of Units	Existing Energy Charge (Paise/kVAh)	Proposed Energy Charge (Paise/kVAh)
Industrial (EHT)	All units	410	631

CATEGORY XII: TEMPORARY SUPPLY (LT & HT)

This category shall be applicable to temporary consumption, as per the Meghalaya Electricity Supply Code, 2012 at clause 3.6 (F).

MePDCL proposed to continue with the existing arrangement where the fixed and energy charges shall continue to be double the standard applicable rate for all categories.

BILLING FOR EXCESS DEMAND

HT & EHT Consumers

Billing in case of excess demand recorded shall be as per clause 10.1 (16) (1) of Meghalaya Electricity Supply Code, 2012.

LT Consumers

Billing in case of enhanced connected load shall be as per clause 10.1 (16) (2) of Meghalaya Electricity Supply Code, 2012.

BILLING IN CASE OF STOPPED/DEFECTIVE METERS:

Assessment where average can be computed. Assessment of energy where meter is defective or stopped and where average consumption can be computed, the bill shall be prepared based on the average consumption of the preceding six months.

ASSESSMENT WHERE AVERAGE CANNOT BE COMPUTED

Assessment of energy where meter is defective or stopped and where average consumption cannot be computed shall be calculated as per clause 7.5 (3) of Meghalaya Electricity Supply Code, 2012.

COMPENSATION CHARGE FOR LOW POWER FACTOR:

MePDCL proposes to discontinue the current procedure for compensation charges against low power factor for EHT, HT and LT supply. Henceforth, the consumer shall be billed for kVAh units should the average monthly power factor of the consumer installation fall below 0.85.

Current Rate	Proposed Rate
If the average monthly power factor of the consumers installation falls below 0.85, the consumer shall, for each 1 %, pay to the MePDCL at the rate of Rs. 2.00 per KVA per month of the maximum demand as compensation charges.	If the average monthly power factor of the consumer installation falls below 0.90, the consumer shall be billed on kVAh units, at the rate applicable for kWhr units.

Current Rate Proposed Rate If the average monthly power factor of the consumers installation falls below 0.85, the consumer shall, for each 1 %, pay to the MePDCL at the rate of Rs. 2.00 per KVA per month of the maximum demand as compensation charges. If the average monthly power factor of the consumer installation falls below 0.90, the consumer shall be billed on kVAh units, at the rate applicable for kWhr units. The above charges shall be applicable for the power factor within the range of 0.84 to 0.70. Should the power factor fall below 0.70, supply to such consumer shall be disconnected without notice.

STAKEHOLDER'S RESPONSE AND PETETIONER'S COMMENT

In order to determine the tariff of generating company, transmission and distribution licensees, the Commission followed its regulations made under the Act. The regulation provides that each year all utilities shall file their tariff application by 30^{th} November so as to apply the revised tariff from the beginning of next financial year. After acceptance of the application, the petitioner publishes the tariff petition in at least 2 daily newspapers one in English and other in local language having vide circulation in the area of supply inviting objections/suggestions within the specified date. After getting suggestions or objections, the petitioner files his response on the suggestions received by the Commission. Regulation provides that the Commission may hold public hearing to decide on the ARR. The procedure for public hearing of the tariff application shall be in the manner as specified by the Commission.

The Commission, as done in past, adopted a consultative process for fixing the tariff in the State. After public notice given by the distribution licensee, the Commission on its own published another notice inviting comments. In the meantime the Commission sent information on the ARR to those consumers who had participated in the last year tariff proceedings. The Commission tried to get suggestions from Headmen in Shillong on the tariff. The Commission held number of Advisory Committee meetings where apart from members of the committee, the Commission invited important stakeholders/associations like industries association, pensioner's association, water works, government nominees, public institutions, etc.

In this chapter, the Commission would like to deal with all kind of suggestions/objections on the ARR received by it at different occasions.

(1) Meghalaya Pensioner's Association

Pensioner's Association objected to the hike of the domestic tariff and submitted that MeECL is not delivering goods resulting in burden on consumers especially to the pensioners who have served the State over the years. They mentioned that their income is limited and if the tariff is risen beyond a limit, it shall give undue burden to them. They made a request to the Commission to allow them 240 units slab at a lowest tariff as they suffer severe cold during eight months in a year. They need heaters to face the climatic condition. They requested the Commission to give 240 units in the first slab instead of 100 units so that they get benefit of lower tariff.

(2) Mr. D. M. Pariat on behalf of many others

Mr. D. M. Pariat agreed in principle for the rise in tariff for the FY 2013-14 to meet the market trend. However, he requested the Commission not to increase the tariff beyond 5% as electricity is needed by all including the poor. He has demanded a rebate to senior citizen and BPL category of consumers. He pointed out that there is no improvement in services by MeECL after conversion of Meghalaya Electricity Board to Corporation. People are generally concerned most with the rate which for an average consumer is Rs.3.50/unit. Considering there is large number of consumer in lakhs paying for the overall cost required by the Corporation for running itself, there is a scope to reduce the rate. Energy supplied is hydro generated which depends upon rainfall. He pointed out that Umiam Lake is half filled with mud, sand, garbage and dust curbing the capacity of the lake and in turn limiting the generation of electricity. The supply of lake water to the army especially during the dry weather should also be stopped as huge amount of water is required by them. He suggested that MeECL should explore the expertise required to clean up the lake. He made observation on Leshka project that status of completion of the project is not known to a common man. Public is concern with the project for the benefit reaps out of them. He pointed out that industrial units in Byrnihat area are not producing anything worthwhile and if that is so why electricity is being given to them. He also suggested that various factors relating to number of employees, vehicles, facilities, work culture in MeECL should be reviewed and recasted. He also pointed out that supply should not be given to any one without meters even to MeECL employees. He has requested the Commission to give lesser tariff to street lighting, water supply and crematorium because their services are indispensible. He also suggested that PHE requirement should be given due consideration as break down of electricity supply to their plants is often said to be cause for cut off water supply to Shillong city.

(3) **PHE (Water works)**

The response is relating to the tariff applicable to public water works. PHE submitted that providing water supply should not be considered as commercial activity and it should be treated as no profit no loss activity. In Meghalaya available water in rivers, streams and dams including ground water are required to be lifted and transported against considerable heads and distances to a place of treatment to make it safe for drinking and thereafter require to be transferred again over long distance to consumer in urban as well as rural areas. Accordingly high amount of energy is required for lifting and transportation of water. PHE has given that energy cost is as high as 70% of O & M cost of water works. Providing water supply to urban and rural areas is essential services. In rural areas supply is made free of cost and in urban areas is supply made with nominal charges. In respect of areas covered under Municipal Board cost realisation is difficult as Municipal Board is unable to pay. PHE gave the example of ASEB tariff before 1975 which was applicable up to 1982. Now their tariff is consider being commercial tariff and their rates are similar to commercial, industrial and general bulk supply. PHE submitted a comparison of rates in a table showing rates from 1992-2012 for high voltage and low voltage. They showed that before 2010 their energy rates were lower than commercial and industrial category. However, their fixed/demand charges were higher than industrial and commercial before 2010. The PHE formulated water supply rules and users charges 2008 which was approved by State Government. Between 2008 and 2012 the energy charges in respect of water works is raised by 52.82%. However, for rural areas there is no charge and therefore realisation of bulk charges is not possible. State PHE depend upon the grant from the state government to meet O & M and therefore any increase in the tariff PHE will be not able to spend O & M cost. They requested to review the public water works tariff and it should not be considered as commercial activity.

(4) Crematorium

The consumer's body looking after the interest of electrical crematorium in Shillong approached the Commission in the public hearing as well as they submitted a representation to the Commission on the proposed hike in their tariff in 2013-14.The main concern of this consumer is that the fixed charges were proposed on per kilio watt basis while at present they are paying on per connection basis. The Commission enquired from the MePDCL on their proposed fixed charges. The licensee admitted the mistake and informed the Commission that there was a typographical mistake and their intention is not to change the present structure of the tariff.

(5) Byrnihat Industries Association (as a special invitee in the meeting of Advisory Committee)

During an Advisory Committee Meeting held on 12th March 2013, BIA raised number of issues relating to ARR of distribution licensee for 2013-14. Shri Shyam Sundar Agarwal on behalf of BIA strongly objected to the ARR proposal of MePDCL which have only projected figures and no data or supporting documents is provided in the petition. They requested the Commission to fix the tariff only on the basis of actual figures of the previous year ending 31st March 2012 and that too after checking the prudency of the expenses.

Shri Agarwal objected to power purchase cost projected by MePDCL as Rs.756.42 crores including 222.86 crores for Leshka project which shows a generation cost of Rs.5.56 per unit for 401 MU. They have also raised inconsistency in the figures given in the petitions.

BIA raised objection for T & D losses projected for 2013-14.They submitted that in the last year the Commission has allowed only 26.8% whereas this year MePDCL has projected a loss of 33.24%. BIA mentioned that due to KVAH billing there was an increase of 25% on the industries and the power factor should also be improved. They suggested to the Commission that the Commission should reduce the tariff for HT & EHT consumers for 2013-14. Similarly, they raised the objection of truing up exercise which has not been done since 2009-10. They have made a strong objection to the tariff proposal for IHT consumer at Rs.6.14 paisa per unit. BIA has suggested that the Commission should direct them to provide the data for 2012-13 before proceeding to determine the revenue requirement for the tariff 2013-14.

Shri Rahul Bajaj on behalf of BIA submitted in the State Advisory Committee meeting that following points should be considered by the Commission for 2013-14 ARR.

(i) Power Purchase Cost – The projection for 2013-14 for Leshka project is extremely perverse and AFC of Rs.222.86 crores need to be disallowed. They have also objected to additional power purchase cost relating to sale outside the state.

(ii) Transmission charges – MePDCL claimed Rs.75.35 crores as transmission charges to be paid to MePTCL. This needs to be reduced so that affect to consumers of distribution network is less.

(iii) Gross fixed assets – The GFA claimed in highly over-stated and without any basis. It is rather strange that until 31.03.2012, the total GFA of MePTCL is Rs.240.69 crores and in one year, namely 2012-13, MePGCL has added distribution assets worth Rs.66.16 crores. Similarly, MePDCL has projected additions of Rs.340.72 crores to the GFA in the year 2013-14 which is more than the total GFA as on 01.04.2013 i.e. of Rs.305.85 crores. There are absolutely no details of what the amount of Rs.340.72 crores been spent by MePDCL. Similarly, the figure of Rs.66.16 crores seems to have been proposed out of the hat without any details as to what assets will be purchased out of the said amounts.

(iv) Return on Equity/ Debt Equity Ration – There can be no question of mechanically allowing the ROE of Rs.18.97 crores as claimed by MePTCL. The statutory regulations once notified have to be fully followed. Regulation 101 also gives the discretion to the Commission to fix the ROE at a rate that shall not exceed 14%. Therefore, it is for the Commission to decide whether the ROE at 14% should be given or based on the performance of MePDCL, the same needs to be reduces.

(v) Operation & Maintenance Expenses – Regulation 103 of the Tariff Regulations, 2011 have to be strictly followed. Detailed submissions on the 3 aspects of O & M are being filed.

(vi) AT & C losses – AT & C losses for 2011-12 has been shown as 24.3% which has gone up to 26.9% for 2012-13 and 26.6% for 2013-14. MePDCL is also showing other disputed amounts of FY 2008-09 and 2009-10. It is respectfully submitted that the Hon'ble Supreme Court in relation to the disputes between the objector and the MePDCL regarding the disputed amounts of FY 2008-09 and FY 2009-10 has passed an Order on 28.08.2012 which is not being implemented by MePDCL. The detailed submissions are being filed. This Commission must give a direction to MePDCL to revise the bills.

(vii) Tariff should be reflective of cost – With regard to the principle that tariff must be reflective of the cost of supply, it is submitted that MePDCL has not given any proposal or roadmap for reduction of the existing level of cross subsidies in the system. There is a proposal to substantially increase the IHT and EHT categories. For IHT category, the fixed charges are proposed to be increased from Rs.115 per KVA per month to Rs.161 per KVA per month and the energy charges have been proposed to be increased from Rs.4.24/KVAH to Rs.6.14/KVAH. IHT tariff has been proposed as more than Rs.6 per unit which is much more than the tariff of any of the states including Chhattisgarh, Jharkhand, Andhra Pradesh and in command area of Damodar Valley Corporation for HT consumers is much lesser. Similarly, for EHT category, the fixed charges are proposed to be increased from Rs.115 per KVA per month to Rs.161 per KVA per month and the energy charges have been proposed to be increased from Rs.4.10/KVAH to Rs.6.31/KVAH. The EHT tariff has been also been proposed as more than Rs.6 per unit which is much more than the tariff of any of the states including Chhattisgarh, Jharkhand, Andhra Pradesh and in command area of Damodar Valley Corporation for HT consumer is much less.

(viii) Under the EA 2003 the cost of supply to the consumer is to be the criteria to determine the tariff for that category. Though in the initial years the cost of supply was calculated on average cost of supply basis, it is the mandate of law that the cost of supply is to be calculated on voltage wise and the actual cost incurred by the licensee for supply of electricity to each category of consumer.

(6) Byrnihat Industries Association (objection to ARR)

BIA in response to the ARR petition filed by MePDCL has filed objection on 20.03.2013. They have raised the following objection:

(1) Inconsistencies in the petition

BIA raised that there are several inconsistencies in the petition and they demanded that the actual figures for FY 2012-13 should be considered in the tariff application. They suggested to the Commission that actual financials for 2012-13 should be examined while allowing ARR for 2013-14.

(2) **Tariff shock to industrial consumers**

BIA objected to the ARR proposal for 2013-14 wherein they have claimed that the ARR is highly inflated, arbitrary and estimated levels with the sole objective of unduly increasing the revenue requirements and consequent tariff to be charged from the consumers. They demanded that there should not be any rise in the tariff of industry consumers.

(3) Review and Truing up

BIA has referred to the Commission's regulation regarding review and truing up and required that projection made by MePDCL is arbitrary and liable to be rejected.

(4) **Suo Motto exercise for truing up**

BIA demanded that there should be review of expenses for 2011-12 & 2012-13 and thereafter tariff fixation of 2013-14 should be taken up.

(5) **Inflated revenue requirement**

BIA gave example of inflated ARRs given by MePDCL in the past without producing the audited accounts for FY 2010-11 & 2011-12. They requested the Commission to see the actual of either 2011-12 or 2012-13 so as to know the actual position of expenses and then allow ARR for 2013-14. They requested to consider the audited records of 2009-10 and projection of MePDCL should not be considered.

(6) **Power purchase cost**

The power purchase cost in 2009-10 was Rs.222.62 crores, Rs.303.62 crores in 2010-11 and this year they had projected Rs.756.42 crores against the power purchase in 2013-14. Similarly, for Leshka project the generation cost is very high due to huge cost overrun incurred by MePGCL they requested the Commission not to allow this cost in the tariff.

(7) **Estimation of sales**

The outside state sale should not be considered for tariff purpose as this is increasing the power purchase cost of MePDCL and resulting in higher revenue requirement. BIA also objected that MeECL is not taking any serious effort for procurement long term power at competitive rates. They suggested that UI should not be treated as source of power purchase and therefore any over drawal should be avoided.

(8) **Transmission charges**

Projection of Rs.66.80 crores for inter-state transmission charges without any details should not be allowed. Similarly, MePTCL revenue requirement of Rs.75.35 crores is also over stated and should be checked.

(9) **Gross fixed assets**

The opening of GFA is shown as Rs.2490.69 crores as on 01.04.2012 and Rs. 66.16 crores is added as fixed assets in 2012-13 without any details. Similarly, for 2013-14 MePDCL has added Rs.340.72 crores in the GFA which is more than a total GFA. There is no detail and therefore it should not be allowed.

(10)**Return on equity**

BIA suggested that there should not be allowance of ROE at Rs.18.97 as claimed by MePDCL. They requested the Commission to reduce the ROE entitlement at 14% and it should be related with the performance of the licensee.

(11)**O & M expenses**

BIA has suggested that there is a reduction in number of employees in 2013-14 and therefore the cost of employees should be reduced proportionately. They have requested the Commission to pass an order for creation of pension trust fund rather than allowing cost related to pension in the ARR. They have referred to a judgment passed by Hon'ble ATE regarding improvement of performance efficiency of the employees in the State of Punjab Therefore MePDCL should also improve efficiency in order to claim high increase in employees cost.

(12)Repair & Maintenance

R & M should be related to the size of the asset and there should be some limit for these expenses. MePDCL should be directed to file a proper budget with maintenance of actual asset.

(13)A & G expenses

Without any details the Commission should not allow Rs.7.51 crores as A & G expenses in 2013-14.

(14)Depreciation

MePDCL has claimed substantial increase in depreciation cost with regard to previous year claims. Without capitalisation of the asset MePDCL should not be allowed to claim depreciation. BIA suggested that MePDCL should get the approval cost of any project from the Commission for checking of prudence.

(15)Bad & doubtful debts

Without the receivable are audited there should not be any provision for bad and doubtful debt.

(16)AT & C losses

BIA has referred to the Commission's order dated 20.01.2012 regarding trajectory of loss reduction up to 2015-16 and minimum improvement of metering and defective meters. They suggested to the Commission that it should not be open to MePDCL to propose any loss reduction targets other than trajectory approved by the Commission.

(17)Revenue gap

The revenue gap of Rs.326.35 crores in 2013-14 is artificial and should be checked and they demanded that there should not be any rise in the tariff if truing exercise of previous year is taken.

(18)Tariff should be reflective of cost

BIA claimed that the proposed tariff hike shall make their tariff very high in comparison to other states like Chhattisgarh, Jharkhand, etc. They have claimed that the tariff should be reflective of average cost. BIA requested to get a competitive tariff for industries so that they are not sick and affect the economic health of the state.

(19)Voltage wise tariff

BIA suggested that in accordance with EA 2003, the cost of consumer should be related to their supply voltage. A substantial part of supply is unmetered and MePDCL has not taken any step for 100% metering. They requested for determination of cost of supply category wise and voltage wise. They have also referred to a judgment by Hon'ble ATE for PSERC for working out the cost of supply at different voltages. They have referred to numbers of judgment given by Hon'ble Tribunal in order to work out the cross subsidy on the basis of cost to supply of each category.

(20)KVAH billing

They have requested the Commission to introduce rebate in the tariff for good power factor in excess of .95 so that these consumers are benefited.

Finally they have submitted that the Commission should allow BIA to make oral submission in the public hearing.

MePDCL Reply

(1) Pensioner's Association

MePDCL made their reply on the suggestions given by Pensioner's Association. MePDCL pointed out that their tariff application is filed in accordance with MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011 and under section 62 to be read with section 86 of the EA 2003. The rate arrived at is based on the ARR and tariff proposal. They appreciated the points raised by the retired people for using electricity for warm and comfort in winter timings. However, they have not agreed with the proposal of the pensioner's association that first slab of electricity bills should be made to 240 units in a month. The reason given by them is that they are not sure that whether the electricity is used by a pensioner or his family. They gave the cases of daily wage workers, farmers, small vendors and other consumers who are also paying same domestic tariff which pensioners are paying.

(2) Mr. D. M. Pariat (Domestic consumer)

MePDCL responded to Mr Pariat objections and submitted that tariff petition was filed under the Commission's tariff regulation and is based on the data. Information to substantiate their claims have been submitted to the Commission. The Commission may accordingly determine the tariff for different category of consumers. MePDCL submitted that percentage loss of life storage due to siltation of Umiam reservoir is at the rate of 0.12% per year. Thus siltation of Umiam lake has not much affected the life storage of the reservoir and the generation of power is not affected by siltation till date. However, MePDCL has agreed that steps have been initiated to control siltation in the Umiam reservoir.

The water supply to Umroi cantonment from Umiam lake is restricted to a maximum limit of 2.5 cusec per day. Each of the four units in the power house requires 250 cusecs. The rate of drawal of water from Umiam reservoir is therefore very small compared to the requirement of generating units. Thus power generation is not affected due to this. Nontheless during lean season the drawal is restricted to the minimum limit. MePDCL has further submitted that the following projects are under construction

(a) Lakroh Small Hydro Electricity Power Project (1.5 MW) – to be commissioned in May 2013.

(b) New Umtru Hydro Project (40 MW) – to be commissioned in September 2014.

(c) Ganoi Hydro Project (22.5 MW) – construction work are expected to start soon.

(d) 1st & 2nd unit of Myntdu Leshka Hydro Project (3x42 MW) were commissioned in 2011-12 and 3rd unit is commissioned in 2012-13 (8th March).

MePDCL further informed that rates are fixed by the Commission without any discrimination to any category of consumers. It is submitted that setting up of industries is within the jurisdiction of Government of Meghalaya and not of MePDCL. MePDCL responded that every effort is made to reduce the expenditure and present electricity to all consumers is provided through meters only. The theft of energy and unauthorised use of electricity are being dealt with in accordance with the provisions of Electricity Act. BPL consumers have been classified under supply code and the tariff levied to them is lowest. There is no separate category for senior citizen and therefore no separate tariff can be determined. Moreover, it is difficult to verify that the consumption is made by a senior citizen in a household. MePDCL has treated water supply category as essential services and the Commission may determine the tariff for them.

(3) Byrnihat Industries Association

MePDCL has responded vide their letter dated 22.03.2013 to the objections made by BIA on the tariff petition for 2013-14.

Inconsistencies in the petition

MePDCL has submitted that they have filed the petition as per the provision of MSERC tariff regulations. However, the record of actual expenses shall be available for FY 2012-13 only on 31.03.2013 and after that the financial statement of accounts shall be prepared. MePDCL further replied that as per regulation 15 (2) and 15 (3) they will be filing a true up application for FY 2012-13 only after audited accounts are prepared.

Review and Truing up

It is submitted that accounts of FY 2011-12 is being segregated for MePDCL and it is in progress. Audit data for 011-12 shall only be available after the completion of accounts aggregation for all three companies. MePDCL has submitted that true up financial of FY 2007-08 & 2008-09 has already been filed. However, due to appeal against the tariff order 2008-09, trued up financials of FY 2009-10 onwards were held up pending implementation of the judgment thereof.

Inflated revenue requirement

MePDCL submitted that ARR calculation was projected on the basis of previous year estimated figures along with certain information expected to be derived at that year. Hence, accurate projections could not be made at the time of submission of ARR to the Hon'ble Commission. They have refuted the allegation that it is unfairly inflating the ARR with the intention to make the consumer pay a much higher tariff than the legitimate revenue requirement. They have submitted that their audited statements of account will be prepared when the financial year

Power purchase cost

MePDCL submitted that due to increase in allotted share from various generating station power availability is projected at 2488.20 MU during 2013-14 at a total cost of Rs.756.42 crores. MePDCL justified that cost of power purchase from Leshka HEP are based on the petition filed by MePGCL. It is submitted that MePDCL is mostly dependent on power procured from Hydro generating stations. Therefore, during monsoon season MePDCL has surplus power and during winter months MeECL has deficit scenario. To utilise the surplus power and meet the deficit power, MePDCL resorts to swap and bilateral exchange. MePDCL has further submitted that projected power purchase quantum and cost are based on the allotted share of various generating station at the rate fixed by the appropriate commission and prevailing market rate. It is further submitted that details about the interstate transmission charges is shown in the petition itself.

Gross fixed assets and Depreciation

For capitalisation of work MePDCL intimated that they have submitted the details for 2012-13 to the Commission.

Return on equity

MePDCL informed that to determine return on equity they have followed the Commissions' regulation.

O & M expenses

MePDCL intimated that the numbers of employees got reduced but employees expenses is dependent on grade wise number of employees, promotions, increase in allowances, etc. Due to this reason though the number of employees got reduced but employees expenses may not necessarily get reduced proportionately. MePDCL informed that all expenses relating to R&M, Employees Cost, A & G are given for distribution function only.

Bad & doubtful debts

MePDCL submitted that there is a reason for charging bad debt as MePDCL sell power on credit and therefore they have claimed 1% provision of receivables as bad debt. This is within the regulation of the Commission. MePDCL has followed Commission's directive and propose a 1.5% loss reduction in 2012-13.

AT & C losses

It is further submitted that actual data for FY 2012-13 will only be available after the financial year is over.

Tariff should be reflective of cost/voltage wise

There is no discrimination for proposing rate for different category of consumer and there is not special tariff given to its employees.

KVAH billing

MePDCL has denied the objection regarding introduction of power factor rebate in the industries as there bill is based on KVAH tariff which takes care of incentive and disincentive.

(4) PHE

MePDCL responded on the objection raised by Public Water Work tariff given by PHE Department, GoM. The PHE submitted its representation seeking lower tariff for public water works (PWW), on the ground that providing water supply is not a commercial activity but a public service. The PHE also mentioned that the tariff for PWW is not only the highest in the country but the highest among all category of supply. In this context, it may be mentioned that the MePDCL being a commercial organization has to keep in mind the commercial principles while proposing the tariff without showing any discrimination among its consumers.

The MePDCL submitted the tariff proposal to the Commission, which the Commission shall decide as it deemed fit and proper as per provisions of law. However, in case the PHE is of the opinion that the proposed rates for PWW is too high, the Department may approach the State Government, as provided in the Section 65 of the Electricity Act, 2003, which enable the State Government to grant subsidy to any consumer or class of consumers.

Public Hearing

The Commission held a public hearing on the ARR & Tariff Petition filed by MePDCL (Distribution), MePTCL (Transmission), MePGCL (Generation) & SLDC for the FY 2013-14 on 25.3.2013. This Hearing was attended by MePDCL, MePTCL, MePGCL and SLDC, representatives from Industries, Pensioner's Association, PHE, Senior Electrical Inspectorate,Domestic consumers and Institutions. Adequate opportunity was given to everyone in the hearing to make suggestion. The main concern of the consumers was that the tariff proposal is based on forecasted figures and therefore the Commission should consider actual records while approving the tariff for 2013-14. BIA representatives raised that the truing up exercise for previous year should also be considered in the proceedings so that actual expenditure are examined. Director (Distribution) MePDCL informed the Commission that MePDCL is in the process of complying with the order of the Hon'ble Supreme Court for making correction as required in order and require time up to 30.4.2013 to file the truing up petition with duly audited records. BIA has not raised any objection to it. However their main concern was to validate the expenses given in the ARR. The Commission explained in the public hearing that a prudent check shall be made while approving the tariff and it will allow the level of losses as approved in the tariff order 2012-13. It was explained that this year the Commission is allowing only 23.5% T & D loss for tariff purpose. Similarly, the Commission has, in the absence of audited statement of accounts for previous year, validated the actual expenses met in 2012-13 on the basis of records made available to the Commission. It was also explained in the public hearing that the Commission has also verified the expenses in 2011-12 from the pre-audited records of financial statements as approved by the Board of Directors of MeECL. Meghalaya Pensioner's Association requested the Commission that since they have limited source of earning, their tariff should not be increased to the level as proposed by the Distribution Company. MePDCL responded to the objection of Pensioners and informed them that differentiation among the consumers on the basis of paying capacity is difficult as it is not in accordance with the act. PHE requested the Commission that their tariff should not be higher than industry and commercial and should be based on purpose of use. MePDCL has no objection to it and left the matter to the Commission for decision.

Commission's View

After considering all suggestions/objections raised by different categories of consumers during the consultative process, the Commission finalised the ARR and determined the tariff for

2013-14. In the exercise of determining ARR of all utilities the Commission has generally followed the guidelines of CERC/NTP/MSERC keeping in view the ground realities in the State. The Commission agree with most of the suggestions raised during the proceedings and has tried to address the same in the current proceedings. However where it was difficult to take immediate corrective action like complete energy audit, correct assessment of losses without energy audit, voltage wise true assessment of cost, truing up without audited accounts and in the situation when MePDCL is in process of complying with the Hon'ble Supreme Court order, the Commission would address these issues in the future tariff orders.

The Commission has accepted the petition for 2013-14 without having the audited accounts of previous years on the following grounds:

1. To perform its statutory function given to it through Act and Regulations.
2. Regulation provides that in absence of audited result the Commission may consult actual expenses in current year and provisional account of previous years.
3. Submitted provisional accounts are duly approved by the Board of MeECL.
4. MeECL submitted to the Commission that their accounts are under process and the restructuring of Board is yet to be completed. The Government of Meghalaya in its notification gave the date of transfer as 1.4.2012.
5. MeECL has also submitted their actual expenses to the Commission prepared by their accounts on Oath.
6. The Commission assure every stakeholder that if there is any deviation between the actual figures and approved figures, the Commission shall take necessary corrections in accordance with Act and Regulations.

The Commission has also done internal exercise on provisional true of 2009-10, 2010-11 and 2011-12 on the basis of provisional accounts. This exercise was initiated suo-motto and directions were issued to MePDCL to file accounts. However MePDCL informed the Commission that MePDCL is in the process of complying with the order of the Hon'ble Supreme Court, which may require them to revise their accounts. Accordingly the Commission has not considered the deficit in 2011-12, which shall be considered at the time proper petition is filed. Since tariff process is a continuous exercise, the Commission is ready to issue the tariff order before the beginning of financial year 2013-14 so that the impact of the revised tariff is uniformly distributed over 12 months and gives relief to common man . However, the Commission issue directive to MePDCL to final their accounts in accordance with law, get it audited and submit a truing up petition for taking necessary corrections in future tariff.

In the absence of audit accounts the licensee and other utilities were not allowed return on equity and bad debts as they claim. This year the Commission has allowed the ROE as allowed last year to all companies. According it is advised that the licensee get this work done on top priority or suffer for not getting legitimate claims.

The Commission propose to get revenue audit of the licensee by an independent auditor to get correct position of expenses and revenue in the distribution licensee's work. This exercise shall be done prior to finalisation of next tariff order. Similarly the Commission has already directed the utilities to get revenue audit of billing and an expert committee to be set up for review of capital cost of Leshka project and study on efficient operation in generation utility. Till such time the Commission is allowing interim tariff to these projects where no audit is done so far. However, the Commission's view on the remaining issues is deliberated in ensuing sections of this order at appropriate places.

COMMISSION'S APPROACH

The Tariff petition was filed under MSERC (Terms and Conditions for Determination of Tariff) Regulation 2011. Under Section 61 of the Act, the Commission is required to specify terms and conditions for determination of tariff and in doing so it shall be guided by the following:

(a) The principles and methodology specified by CERC for determination of generation and transmission tariff.
(b) Business of generation, transmission and distribution are to be conducted on commercial principles.
(c) The factors which encourage competition efficiency, good performance and optimum investments.
(d) Safeguarding consumers interest and at the same time recovery of the cost of electricity in a reasonable manner.
(e) Principles rewarding efficiency in performance.
(f) Multiyear tariff principles based on efficiency target.
(g) Tariff should reflect cost of supply.
(h) Promotion of generation from renewable energy.
(i) National Electricity Policy and Tariff policy.

National Electricity Policy prescribes a tariff for ensuring recovery of cost of service from consumer to make the power sector sustainable. But it also requires that a minimum level of support may be given to it to make the tariff affordable to consumer of a very poor category. Consumers below poverty line may receive a special support in terms of tariff which are cross subsidised. It requires that existing cross subsidies should also be corrected to hide inefficiencies and losses. The act requires all consumers to be metered within two years time and TOD meters for large consumers with a minimum load of 1 MVA shall also be encouraged. Regarding transmission and distribution losses, the policy prescribe that State Government would prepare a 5 year plan with annual milestone to bring down T & D losses expeditiously. Continuation of present level of losses would not only owes a threat to the power sector but also jeopardise the growth of the economy as a whole. Similarly electricity policy envisages encouragement of energy conservation and demand side management. Periodic energy audits are mandated for power intensive industries and encouragement of solar, water heating system is also encouraged.

Similarly the National Tariff Policy has the objective to ensure electricity to consumers at reasonable and competitive rate, ensure financial viability of the sector and improvement in the quality of supply. The following aspects are defined to be considered in determining tariff of distribution licensee:

(a) All power purchase cost need to be considered legitimate unless it is establish that merit of the principles have been violated or power have been purchased at an unreasonable rates.
(b) The reduction of AT & C losses needs to be brought about but not by denying revenue required for power purchase for 24 hours supply and necessary and reasonable O & M cost.
(c) Sale should be considered at T & D losses as set by Regulatory Commission and allow power purchase cost subject to reasonableness.
(d) SERC shall institute a system of independent scrutiny of financial and technical data.
(e) There should be segregation of technical and commercial losses.
(f) Working capital should be allowed duly recognising the transaction issues faced by utilities in recovering their dues.
(g) Bad debts should be recognised as per policies subject to Commission's approval.
(h) Pass through of past losses or profit should be allowed to the extent passed by uncontrollable factor.
(i) Tariff should be within plus minus 20% of the average cost of supply with an approach of a gradual reduction in cross subsidy.

Keeping in view the intent of electricity act, National Electricity Policy and Tariff Policy, the Commission has framed tariff regulations for generation, transmission and distribution tariff. The tariff regulations prescribe the following:

(a) **Application for Determination of Tariff** – The distribution licensee shall file application for determination of tariff along with Annual Revenue Requirement in accordance with the procedure laid down by the Commission. The application should cover the energy requirement with demand and sales projections. It should also cover the aggregate technical and commercial losses including sources of power. Distribution licensee shall also submit the details of revenue, billed during the current year and expected revenue at the current tariff for the ensuing year.
(b) **Estimation of Sales** – Regulation prescribes the licensee shall adopt a suitable methodology like CAGR in computing category wise sales for the base year and ensuing year. It also prescribes that forecast for sale should be done on monthly basis to properly capture the seasonality in demand. For unmetered sales, the licensee shall estimate on the basis of

consumption norms. In this tariff order, the Commission has determined projected sales for 2013-14 on the basis of five years CAGR. However in order to make un-interrupted power supply in all part of the State without discrimination, the Commission has allowed full purchase of available power subject to minor correction in avoiding purchase of most expensive power following merit order.

(c) **Distribution losses** – The licensee shall furnish information on distribution losses for previous year and current year and the basis on which such losses have been worked out. The licensee shall also propose a loss reduction programme for the ensuing year as well as for the next three years duly indicating the measures proposed for achieving the same. The licensee shall conduct regular energy audit and submit reports to substantiate its estimation of energy losses. In the absence of energy audit reports, the Commission may sue motto determine the loss level on the basis of information available to it. The Commission has already framed a trajectory for reduction of losses for next five years which is given below:

Particulars	2012-13	2013-14	2014-15	2015-16
Distribution losses	26.87%	25%	24%	23%
Commercial losses	1.5%	1.5%	1.5%	1.5%
Overall losses	25.7%	23.5%	21%	20%
Collection efficiency	98%	98.5%	99%	99.5%
AT& C losses	26.86%	24.64%	21.79%	20.4%

Accordingly to allow power purchase, the Commission allowed 25% T&D losses with an improvement in sale by reduction of 1.5% commercial losses. The overall losses @23.5% are allowed in the Tariff for 2013-14.

(d) **Estimation of energy requirement –** Based on the estimated energy sales and the proposed distribution losses the Commission may determine the quantum of electricity required to meet the estimated sales and accord its approval. The Commission may approve the power purchase requirement with a modification as it deems fit for the ensuing year. In the tariff order for 2013-14, the Commission in accordance with regulation has allowed power purchase from all sources available/allotted to Meghalaya with 25% T&D loss as approved in the loss reduction trajectory.

(e) Power purchase cost – The licensee shall procure power from approved source. Additional energy required after taking into account the availability of the energy from such approved sources shall be reasonably estimated and procurement arrangement made for long and medium term purchases by following standard contractual procedures. All such purchases shall only be made with the prior approval of the Commission and in accordance with Commission's regulation on power purchase. In case of short term power purchase is necessary on unprecedented development the licensee shall do the purchases in accordance with Commission regulation for power purchase. The cost of power purchase from central generating station shall be based on tariff determined by CERC. However, for state own existing generating stations the cost of power purchase shall be based on prices as determined by the MSERC. The Commission has in accordance with the regulation allowed CERC rates for central generating station and commission's approved rate for MePGCL. The Commission has also allowed RPO requirement from renewable sources of energy in accordance with the Commission's regulation.

(f) Variation in power purchase – Power purchase by the licensee in excess of the approved requirement of power, the Commission shall consider the need for such additional power at the time of truing up procedure. While in the truing up, the Commission shall allow all legitimate cost except UI over drawal and power purchase without following merit order. This year the licensee has requested time for filing of true up petition as they are in the process of complying with the Hon'ble Supreme Court order which may affect their records.

(g) Transmission and wheeling charges – Transmission, wheeling charges shall be considered as expenses and included in the power purchase cost. The Commission has allowed transmission charges for intra-state operation as per Commission's order for MePTCL for 2013-14 and PGCIL plus others at the rate approved last year with escalation factor.

(h) RLDC & SLDC Charges- These charges shall be considered as expenses and determined by the Commission. However, for outside sales transmission wheeling and SLDC charges shall not be considered in the tariff. SLDC charges allowed as per Commission's order for SLDC for 2013-14.

(i) Annual Revenue Requirement – The annual expenses of distribution licensee shall comprise of the following:

- **(i)** Power purchase cost,
- (ii) Capital Cost,
- (iii) Debt Equity.
- (iv) Return on Equity.
- (v) Interest on Loan capital.
- (vi) Operation and Maintenance expenses.
- (vii) Interest on working capital.
- (viii) Income Tax.
- (ix) Depreciation as may be allowed.
- (x) Bad and doubtful debt.

The net annual revenue requirement shall be made after deducting the following formats total expenses.

1. Amount of Non Tariff Income.
2. Income from surcharge from open access consumers.
3. Wheeling charges recovered from open access consumers.
4. Any grant received other than subsidy.

(j) Capital cost – The capital cost includes the actual capital expenditure till the date of commercial operation subject to prudence check by the Commission. Scrutiny of the cost shall be limited to reasonableness of the capital cost, financial plan, interest during construction as considered by the Commission. Any abnormal delay causing cost and time overrun attributable to the failure of utility, the Commission may not approve the full capitalisation of interest and overhead expenses. The Commission's approach is to allow only those assets in the tariff which are put in commercial operation with a certificate of completion by Electrical Inspector for HT/EHT work.

(k) Debt Equity Ratio - For the purpose of determination of tariff the debt equity ratio of 70:30 will be applied for all new investments. Where equity employer is more than 30% the amount of equity for the purpose of the tariff shall be limited to 30% and where equity is less than 30% the actual equity shall be considered. The distribution licensee is to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of general public.

(l) Return on Equity – Return on equity shall be computed on the equity based determined as above at a fixed rate of 14% per annum. The equity amount appearing in the audited balance sheet or as per transfer scheme will be taken into account for the purpose of calculating ROE. In absence of audited accounts the Commission is unable to accept return on equity as projected for 2013-14 and therefore on provisional basis the Commission has allowed same return on equity as allowed last year. This return on equity is distributed in three corporations equally subject to correction at the time of truing up after the audited results are submitted.

(m) Interest on loan capital – Interest on loan capital shall be computed on the outstanding loan at the prevailing lending rate. However, it should not exceed the loan ceilings as defined above. The interest attributable to capital work in progress shall not be allowed. In case of any moratorium is availed depreciation provided for such period shall be treated as repayment and interest on loan shall be calculated accordingly. The Commission has considered all outstanding loans. However, there is no separate information on interest paid on loans or loan from working capital for 2012-13. According as done in past, the Commission has allowed interest on loan including working capital.

(n) Operation and maintenance expenditure – Operation and maintenance expenses shall include the following:

a. Employees cost.

b. Repair and maintenance.

c. Administration and General expenses.

The distribution licensee shall submit to the Commission a statement of an O & M expenses under each head the actual of last year, estimates for the current and projection for the next year. In the absence of any norms the Commission shall determine O & M expenses based on prudence check. Increase in O & M expenses due to natural calamities not within the control of distribution licensee may be considered by the Commission. This year in the absence of audited accounts after 2010-11, the Commission has tried to validate expenses by looking at Pre Audited Results of 2011-12 and actual in current year 2012-13.The Commission shall put a control over O & M expenses for 2013-14 by keeping a ceiling on it. At the time of truing up the Commission may not allow over and above this ceiling until and unless there is a proper justification for considering any excess over and above approved O & M cost.

(o) Interest on working capital – The working capital for supply of electricity shall consists of:

A. Operation and maintenance expenses for one month.

B. Budget for maintenance sphere.

C. Receivables equivalent to 2 months for sales of electricity.

Interest on working capital shall be equal to short term prime lending rate of SBI as on 1st April 2012 for FY 2013-14 Tariff. In order to meet the need of the utility in day to day function the Commission has allowed interest towards working capital as per actual.

(p) Income Tax – Income Tax shall be passed through if it is actually paid for income of licensee business. In absence of any evidence of actual expense, the Commission has not allowed tax in the ARR for 2013-14.

(q) Depreciation – The depreciation shall be computed on the cost of fixed assets as approved by the Commission on the opening assets values recorded in the Balance Sheet as per transfer scheme notification. For new assets the depreciation shall be given on the date of commercial operation. Consumer contribution or grant subsidy shall be excluded from the asset value for purpose of depreciation. Depreciation shall be calculated as per CERC norms. Depreciation shall be chargeable from the 1st year of commercial operation. The Commission has allowed depreciation on the assets which has started commercial operation and put in use. Without completion certificate and clearance from electrical inspector to charge HT/EHT works, no depreciation is allowed. This is being done to ensure that asset is in use and the electrical inspector has checked safety requirement of the assets as per law.

(r) Bad and Doubtful Debt – The Commission may after the distribution licensee gets the receivable audited allow a provision for bad debts not exceeding an amount equal to 1% receivable in the revenue requirement. In absence of audit accounts, the Commission is allowing Bad debt as allowed last year. This shall be validated at the time of truing up.

(s) Forecast of Revenue – The revenue of the distribution licensee shall be calculated from the sale of power to each category of consumer, non tariff income and income from other sources. The non tariff income shall consist of delay payment surcharge, meter rent, income from investment, etc. The Commission has followed the projection of the revenue from sale of electricity within the State and outside on the similar line as proposed by the licensee. The revenue from bilateral sale is allowed as projected by the licensee.

(t) Revenue gap – For the tariff year, the difference between the net annual revenue requirement and expected revenue at the current tariff shall be the revenue gap. This gap shall be bridged by improvement in internal efficiency, utilisation of reserves and tariff changes as approved by the Commission. The Commission adjusted the efficiency gain of reduction of commercial losses by 1.5% in the revenue gap.

(u) **Tariff Design** – Tariff should be designed in two parts comprising fixed charges and energy charges. Tariff shall be applicable to consumer categories and as per slab as determined by the Commission. The Commission may rationalise the tariff structure so that is beneficent to consumers and the licensee. While rationalising tariff the Commission took note of section 62 of the Electricity Act 2003 which prescribes that the Appropriate Commission shall not, while determining the tariff show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. A differential tariff for peak and off peak may be designed to promote demand site management. The Commission has directed the licensee to propose time of day tariff for all HT/EHT consumers. However, the distribution licensee has requested the Commission to allow them time up to next year for programming their existing meters in accordance with the peak hours. Accordingly, the Commission has decided to introduce TOD tariff in 2014-15. However the Commission has not allowed KVaH tariff for other HT consumers on the proposal of MePDCL in the absence of proper records of power factor of all HT consumers.

(a) Validation of ARR – Regulation prescribes that previous year expenses should be based on audited accounts of the licensee so as to validate the details of expenses and revenue in the ARR for ensuing year. In the absence of audited accounts for 2010-11 and onwards of MeECL, the Commission has validated the numbers on the basis of actual data in the current year. The Commission has provisionally accepted the expenses and revenues on the basis of actual records submitted by the licensee on oath. The Commission has also gone through the pre-audited accounts of 2010-11 & 2011-12.

(b) Truing up of previous year

The Regulation prescribes that the Commission shall undertake a review of the expenses and revenue approved by the Commission in the tariff order. While doing so, the Commission shall consider variation between approvals and pre-actual of sale, income, expenditure for relevant year and permit necessary changes in case of such variation are of adequate and justifiable reasons. The Commission shall take similar exercise when the audited results are made available. This exercise shall be called truing up. The Commission has required MeECL to file the truing up/review application in accordance with the regulations. However, MeECL has required time up to 30th April 2013 for filing the application after complying with the order of Hon'ble Supreme Court dated 24.08.2012. Accordingly, the Commission is not taking a truing up at this stage. However, the Commission directs MePDCL to submit the true up petition by 30.04.2013.

(c) Fuel and Power Purchase Adjustment

In accordance with the commission's regulation, the MePDCL has proposed a formula to adjust the fuel and power purchase in the tariff which is under examination of the

Commission. Objections have already been invited and the Commission shall decide the proposed formula after public consultation with in this quarter.

(d) Directions by Hon'ble Appellate Tribunal

While determining the tariff, the Commission has also kept in mind the directives issued by Hon'ble APTEL in OP No. 1 of 2011 to State Electricity Regulatory Commission for timely revision of tariff in accordance with Electricity Act 2003. These directives were:

- Every State Commission has to ensure that Annual Performance Review, true-up of past expenses and Annual Revenue Requirement and tariff determination is conducted year to year basis as per the time schedule specified in the Regulations.
- It should be the endeavour of every State Commission to see that the tariff for the financial year is decided before 1st April of the tariff year. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff.
- In the event of a delay in filing of the ARR truing-up and Annual Performance Review, beyond 31st December, the State Commission must initiate suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.
- In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset shall be allowed to the utilities to avoid problem of cash flow.
- Truing up shall be carried out regularly and preferably every year.
- Fuel and Power Purchase cost is a major expense of the distribution Company and is uncontrollable. Every State Commission must have in place a mechanism for adjustment of Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. Any State Commission which does not already have such formula/mechanism in

place must within 6 months of the date of this order must put in place such formula and ensure its implementation latest by 1.4.2013.

The Commission while determining the tariff for FY 2013-14 has followed its Regulation, National Tariff Policy, CERC Regulations and directives issued by Hon'ble Courts/APTEL keeping in view the ground realities of the State. The Commission has tried to make a balance between the interest of the consumers and the interest of licensee.

Review and Truing up exercise for previous year

Regulation 15 of MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011 which is presently in use provides reviewing and truing up exercise. The regulation provides that the Commission shall undertake a review of the expenses and revenues approved by the Commission in the tariff order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actual of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments in case such variations are of adequate and justifiable reasons. This exercise shall be known as review. After audited accounts of the year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called truing up. As per the regulation each utility has to file application for truing up of the previous year by 30th September of the following year on the basis of audited accounts and the audit report thereon. The utility and the licensee shall get their accounts audited within a specified time framed either by CAG or by a statutory auditor drawn from the panel of statutory auditors approved by the CAG of India from time to time to enable them to file the application for truing up within the specified date i.e. 30th September of the following year. It means that truing up for 2011-12 should be filed by 30th September 2012. In case the utility fails to make an application for truing up, the Commission may take sue-motto this exercise and direct the utility to produce the data as may be required.

The intent of the regulation is to allow any revision in the approvals subject to condition that the licensee shall satisfy the Commission that the revision is necessary due to conditions beyond its control. In the last tariff the Commission has mentioned that the cost allowed in the tariff order for 2011-12 & 2012-13 shall be validated at the time of truing up exercise. Regulation also provides to file a truing up application by 30th September 2012 for 2011-12 true up. The Commission has also required MeECL to file truing up applications for Commission's approval. In one of the letter dated 20.02.2013 the Commission has forwarded a copy of Order passed by Hon'ble APTEL on 15.02.2013 wherein it was directed that truing up exercise shall be carried out regularly and preferably every year. The Commission has given the following direction to MeECL:

(1) Regulation 15 of MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011 prescribes that the Commission shall undertake a truing up exercise of previous year where actual cost and revenue data is filed after the audited accounts and audit reports are final. Similarly, the Commission can review the tariff orders of previous year where variation between approvals and pre-actual of sale of electricity, income and expenditure for the

relevant year so as to permit necessary adjustments in cases where variations are adequate and justifiable reasons. In case the licensee fails to make an application for truing up of the ARR the Commission may undertake sue motto truing up of the ARR of previous year.

(2) MSERC has already passed Orders for truing up of financial year 2007-08 and 2008-09 on the basis of audited accounts and reports. Accordingly, MeECL is required to file truing up application to the Commission for FY 2009-10 onwards with the audited balance sheet and necessary justifications. In years where accounts are not audited so far, MeECL may approach the Commission to file a review for the year where variations between approve and actual are adequate and reasons are justifiable.

(3) As per Regulations, licensee is required to get their financial statements audited by 30th September next year so that truing up exercise is undertaken by the Commission in time. MeECL is required to furnish the audited accounts by CAG/Panel of approved statutory auditors by CAG w.ef. 2009-10 immediately with justification and reasons for delay. Truing up/Reviewing data shall be filed by 28.02.2013.

MePDCL has filed an affidavit dated 28.03.2013 before the Commission inter alia, to the effect that in order to comply with the aforesaid Order of the Supreme Court, MePDCL would need to rectify the bills of the concerned consumers in accordance with law and then make consequential adjustments in the Accounts for the concerned years. MePDCL has also inter alia, contended that the aforesaid exercise is a fairly complex exercise and is likely to take some time. MePDCL has stated that they would be able to furnish the said True Up Petition with supporting justification etc along with a certificate of a statutory Auditor by 30th April 2013 to the Commission. The aforesaid statement of MePDCL was also made during the course of the public hearings in the tariff Petition held on 25.03.2013 and none of the parties present raised any objection to the same. The Commission is of the view that it could only be ascertained when the full details of the same are furnished along with a True Up Petition.

In the meantime, the Commission has already undertaken a comprehensive analysis of the present tariff petition as also considered the objections and suggestions received from the various stakeholders. On a perusal of the pre-audited financial results (approved by the Board of MePDCL), it is clear that the deficit in the years 2010-11 and 2011-12, is more than the profits of MePDCL for the years 2008-09 and 2009-10. The Commission has found that a there is a sizable revenue gap which has to be met and a tariff hike is inevitable having regard to the financial details etc placed before the Commission. If the current tariff is not revised at this stage, the Utility is likely to face huge problems in terms of revenue gap, working capital inadequacy etc which ultimately would not be in the interests of the consumers at large. If the tariff is not revised to cover the existing revenue gap, the Utility may also have to bear extra borrowing costs etc which would also have to be ultimately borne by the consumers. Therefore the Commission is of the view that it is necessary and expedient to revise the tariff at this stage.

The Commission directs MePDCL to furnish the True Up Petition etc for the past years by 30th April 2013 as undertaken by it to the Commission. The Commission will consider the same in accordance with law and pass necessary orders.

COMMISSION'S ANALYSIS, SCRUTINY AND CONCLUSION FOR FY 2013-14

The Commission has scrutinised the petition filed by MePDCL for financial year 2013-14. All relevant information regarding expenditures made in FY 2011-12, actual in 2012-13 was scrutinised. The Commission in accordance with the Regulations, Tariff Policy and National Electricity Policy has tried to work out the expected expenditures in the year 2013-14. While considering the expenses for ensuing year the Commission has taken all precautions in examining the audited balance sheet for 2009-10 and provisional balance sheet for 2010-11, 2011-12 and actual expenditures as per the accounting data for the period April 2012 to December 2012. Since this is the first year of operation as a distribution company separated from MeECL, the Commission has also reconciled the consolidated ARR of MeECL with the ARRs of MePDCL, MePTCL and MePGCL for FY 2013-14.

ARR of MePDCL for FY 2013-14

Estimation of Sales – The Regulation prescribes category wise sale estimation for assessment of energy requirement for sale to different category of consumer in the ensuing year. Regulation prescribes that CAGR methodology can be used to arrive at the category wise energy sale for the current year. MePDCL has submitted the sale requirement to different consumer in 2013-14 which is given below in the Table:

Table – 3 Energy Sale (MU)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	CAGR	2012-13	2012-13	2012-13
LT	(A)	(A)	(A)	(A)	(A)		CAGR	As per TO	Actual (E)
Domestic	191.25	209.72	208.71	245.75	286.73	10.7%	317.28	278.57	296.78
Commercial	32.1	33.62	39.88	47.62	55.60	14.7%	63.78	56.40	60.15
Industry	4.99	4.95	5.63	6.5	6.85	8.2%	7.41	7.56	7.73
Agriculture	0.61	0.5	0.63	0.36	0.41	5.0%	0.43	0.52	0.43
Public Lighting	1.5	1.5	1.49	1.33	1.10	5.0%	1.16	1.63	1.10
Water Supply	5.84	5.74	6.3	6.74	8.84	10.9%	9.81	7.13	8.55
General Purpose	9.42	9.2	11.85	13.57	14.90	12.1%	16.71	16.29	15.93
Kutir Jyoti	3.05	4.31	4.9	6.68	9.81	33.9%	13.14	9.89	12.98
Crematorium	0	0.22	0.22	0.77	0.18	5.0%	0.19	0.22	0.22
MeECL	32	36.32	36.79	37.27	37.76	5.0%	39.65	38.26	39.76
HT									
Water Supply	19.12	23.96	25.28	27.02	29.15	11.1%	32.39	45.50	32.01
General Purpose including Domestic and Bulk Supply	83.67	81.83	81.58	82.34	90.51	5.4%	95.40	87.27	91.69

Commercial	7.06	10.03	12.14	15.68	19.95	29.7%	25.87	23.37	28.02
Industry	245.52	294.99	219.69	272.28	289.45	5.0%	303.92	463.36	293.66
EHT									
Industry	257.15	228.6	243.31	205.16	223.63	10.0%	245.99	456.80	250.08
Assam	9.75	10.88	13.16	15.22	19.1			18.17	19.30
UI	155.08	88.23	40.65	40.38	37.32			50.00	64.50
Swapping	0	0	26.63	80.75	50.35			0.00	51.60
Grand Total	1058.11	1044.6	978.84	1105.42	1181.64		1173.12	1560.94	1274.49

Analysis of sales projection

The Commission had allowed sale to consumers in 2012-13 at 1560.94 MU within the State of Meghalaya. Comparing the approved figures with the actual sales in 2013-14 almost all category are matching except sale to industrial consumers. MeECL informed in its Tariff Petition that due to dependency on hydro projects it had faced energy shortage during winter month and therefore MeECL had resorted to load regulation on industrial HT & EHT consumer. Accordingly the actual sale is lower than what approved by the Commission in the year 2012-13. This year the Commission is adopting the same approach as adopted last year. The Commission has examined the sales figures in the previous five years and has tried to find out the compound annual growth rate in each category of consumers for the years 2007-08 up to 2011-12 (Five years). These data are informed to be audited or pre-audited on the basis of the statement of account of MeECL. After finding the category wise CAGR, the same is applied on the actual (estimated) sale in the year 2012-13. The sale to industrial consumer in HT & EHT category is considered on the basis of the actual sale and to some extent as projected by MeECL on the premises that this year they will supply electricity unregulated. These figures are derived for the purpose of calculating power purchase requirement and revenue from sales of electricity to these consumers in 2013-14. However, actual sales shall be considered at the time of truing up application for 2013-14 on the basis of audited balance sheet. Approved sale for each category of consumer and outside sale including UI are given in Table below.

A. <u>LT category</u>

Domestic category

After analysing the previous year data, the Commission had approved for 2012-13 the sale of electricity to domestic category as 278.57 MU. The actual sales (E) to domestic category in 2012-13 are shown as 276.28 MU. Accordingly, the Commission has used the CAGR of 10.7% and approved sale to domestic category as 305.72 MU.

Non Domestic (Commercial)

The Commission in the year 2012-13 had approved 56.40 MU sales to commercial consumers. The actual sales (E) made to commercial consumers in 2012-13 are 56.51 MU. Accordingly, the Commission has allowed 64.83 MU sales to this category of consumer in the year 2013-14 after applying CAGR.

Industrial (LT)

For this category of consumer CAGR is coming around 8.2%. Last year the approved sales to this category were 9.89 MU while the actual sale to this category is reported to be 8.05 MU. Accordingly, the Commission is allowing 8.7 MU to this category of consumer in the year 2013-14.

Agriculture

This category has a very low consumption and it has marginal impact on the cost of power purchase. The Commission is allowing 0.45 MU sales to agriculture in 2013-14 at a CAGR of 5%.

Public Lighting

Last year the Commission has allowed 1.63 MU sales to public lighting. This year the Commission has considered the similar approach as taken for other category of consumers. Accordingly, the Commission is allowing 1.10 MU sales to public lighting.

Water Supply

The Commission had allowed 7.13 MU sales to water supply in 2012-13. However, actual sales are marginally more than the approved value at 7.29 MU. Accordingly, the Commission has allowed a sale of 8.09 MU to water supply on a CAGR of 10.9% for 2013-14.

General Purpose

On the actual sale to general purpose in 2012-13, the Commission has allowed 16.99 MU to this category on a CAGR of 12.1%

Kutir Jyoti

Due to the rural electrification programme the consumption in this category is coming at a CAGR of 33.9%.Accordingly, the Commission has allowed 17.17 MU to this category of consumers in 2013-14.

Crematorium

The Commission allows 0.26 MU to this category of consumer in the year 2013-14. This category has only one consumer.

MeECL

The Commission has allowed a sale of 40.17 MU in 2013-14 for employees of MeECL at a CAGR of 5%.

B. HT category

Water Supply

Last year the Commission has allowed 45.50 MU sales to water supply. The actual sales(E) is reported as 31.63 MU in 2012-13. Accordingly, the Commission is allowing 35.15 MU sales to water supply at a CAGR of 11% for 2013-14.

General purpose including domestic

For the year 2013-14, the Commission is allowing 92.77 MU at a CAGR of 5.4% applied on the actual sales in 2012-13.

Commercial

For HT category of commercial consumer the CAGR is about 30% on the basis of previous five years data. Accordingly, the Commission is allowing 39.12 MU to this category of consumers in 2013-14.

Industrial

For industrial category the pattern of demand is not uniform because of the fact that MeECL had applied restriction in sales to this category of consumer. The sale allowed to this category in 2012-13 was 463.36 MU. However, the actual sale(E) reported in this category is around 283 MU only. MePDCL in its petition submitted that due to less generation they were unable to supply to industries and applied load shedding on them. This year MePDCL has projected sales of 453 MU to industrial HT category in 2013-14. The Commission does not accept the proposal of the licensee and the matter was discussed in a technical session. It was agreed upon that sale of 350 MU shall be allowed to this category in 2013-14 depending upon their past consumption and present connected load.

EHT category

In 2012-13 the Commission had allowed 456 MU sales to EHT category of Industries. However, actual sales projected in 2012-13 are around 254 MU only. It is stated that due to load shedding the sale was restricted to 254 MU. This year MePDCL has projected a sale of 379 MU and the Commission is allowing 350 MU sales to this category of consumer in 2013-14 depending upon their present connected load, future unregulated supply and past trend.

Outside sale

The Commission has considered the proposal of MePDCL and allowed sale to Assam, Bilateral, and swapping for 2013-14. However, the Commission is making a provision for sale to outside as proposed by the licensee. The sale to outside shall only be met after meeting the requirement of the demand of the state and licensee is authorised to sale outside at a rate higher than the cost after adjustment of losses. The Table given below shows the approved figures of sale to different category of consumers in 2013-14.

Table - 4 Approved sales (MU) for FY 2013-14

Category	Actual (E)	CAGR	MeECL(P)	MSERC(A)
	2012-13	5 Year	2013-14	2013-14
LT				
Domestic	276.28	10.7%	333.82	305.72
Commercial	56.51	14.7%	71.16	64.83
Industry	8.05	8.2%	8.72	8.71
Agriculture	0.43	5.0%	0.49	0.45
Public Lighting	1.05	5.0%	1.16	1.10
Water Supply	7.29	10.9%	9.65	8.09
General Purpose	15.15	12.1%	18.25	16.99
Kutir Jyoti	12.82	33.9%	20.19	17.17
Crematorium	0.25	5.0%	0.23	0.26
MeECL	38.26	5.0%	41.55	40.17
HT				
Water Supply	31.63	11.1%	36.21	35.15
General Purpose including Dom/ Bulk	88.02	5.4%	94.54	92.77
Commercial	30.17	29.7%	40.82	39.12
Industry	283.40		453.18	350.00
EHT				
Industry	254.17		379.72	350.00
Assam	0		20	20.00
Bilateral / outside state sale /extra sale	64.5		170	315
Grand Total	1219.58		1799.69	1665.53

Transmission and Distribution loss

Regulation prescribes that Licensee shall furnish the data in losses for previous year, current year and estimation for next year. It is also prescribed that licensee shall propose a loss reduction programme for the ensuing year as well as for the next three years. The Commission shall fix suitable targets for reduction of distribution losses on the basis of information submitted by the licensee. The Commission has examined the audited result of 2008-09, 2009-10 and provisional records and found that T & D losses of MeECL were 31.13% in 2008-09, 33.95% in 2009-10.

In response to Commission's letter dated 07.02.2013, MeECL furnished information on losses and loss reduction programme vide their letter dated 18.02.2013. MePDCL has projected 28.70% as distribution loss in 2011-12 on the basis of pre-audit records. Similarly, in 2012-13 MePDCL has estimated a distribution loss of 27.78%. The distribution loss projected to be achieved in 2013-14 is given as 26.28%. However, however, in addition to the distribution loss the licensee has added 4% loss in transmission. Therefore, overall T & D loss projected as 30.28% in 2013-14.

National Electricity Policy 2005 prescribes that the regulatory commission should draw a programme for segregation for technical and commercial through energy audit, energy accounting and declaration of its results. An action plan for reduction of losses should be drawn up and results should come up in future years. The Commission has already framed a trajectory for reduction of losses by the licensee in the next 3 years. These losses were approved keeping in view the ground realities of the state. It is further segregated in to distribution losses and commercial losses. It is easier to reduce commercial losses without any investment. The trajectory of loss reduction is given below:

Particulars	2012-13	2013-14	2014-15	2015-16
Distribution losses	26.87%	25%	24%	23%
Commercial losses	1.5%	1.5%	1.5%	1.5%
Overall losses	25.7%	23.5%	21%	20%
Collection efficiency	98%	98.5%	99%	99.5%
AT& C losses	26.86%	24.64%	21.79%	20.4%

Accordingly, the Commission is allowing 25% as T & D losses for the purpose of allowing power purchase and 1.5% as additional revenue from reduction in commercial losses. Accordingly, the overall loss level for the State shall be 23.5% against the proposal of MeECL of 26.27%. MePDCL has proposed the following proposal to the Commission for reduction of losses in Meghalaya:

Action plan for reduction of losses by MeECL:

(a) Projects under Special Plan Assistance (SPA) – Loss reduction programme is to strengthen the distribution network, for which projects are proposed to be taken up under SPA funding. Accordingly, the projects approved during 2012-13 and proposed during 2013-14.

(b) Implementation of R-APDRP Part-B Package – The preparation of Detailed Project Reports (DPRs) for funding under this scheme is being taken up by the consultant, M/s Feedback Infrastructures Services Limited.

(c) World Bank funded projects –World Bank is being approached for funding under its NER comprehensive Transmission & Distribution strengthening scheme.

(d) Improvement in billing - Regularisation of irregular billing by adhering to a billing schedule, as prepared and uploaded in the MeECL website.

(e) Another initiative taken up is to computerise all manual bills in rural areas.

(f) Improvement in metering – The MePDCL is striving to achiever 100% metering of consumers and this is also an on-going initiative for loss reduction.

(g) Introduction of spot billing – This method, using a "hand held device" has been introduced in Revenue Sub Division-II, Shillong Distribution. This initiative has reduced the time lag between meter reading and payment of bills by consumers.

(h) Rural Distribution Franchise – This initiative has been launched in Eastern Circle. Letters of award have been issued to franchises in central circle too, and it is expected to commence soon.

(i) Disconnection of defaulters – Disconnection drive is being taken up intensively by all circles to reduce the outstanding dues.

The Commission has noted the action plan proposed by the licensee for reduction of losses. However, it is advised that MePDCL has to create a dedicated cell comprising skilled staff to monitor the action plan and do the analysis of sale, revenue and losses in each circle of the state. This dedicated cell should be reporting to the highest authority of the power company so that necessary and corrective decision is taken immediately.

Table - 5 Energy Balance for FY 2013-14

Particulars	FY 2013-14
MePDCL Sale (MU)	1666
Total energy Required by MePDCL for sale (MU) at 25% loss.	2222
T& D Loss level as allowed for energy input	25.00%
Total power purchase (MU) from CGS/MePGCL	2222
Purchase from CGS (MU)	1228
Purchase from MePGCL (MU)	994
Commercial loss reduction in %	1.5%
Commercial loss reduction (MU)	34
Total sale including efficiency improvement (MU)	1700

Availability of energy

At present the power availability to the state are from two major sources. One is through MePGCL from its eight hydro generating stations and another source is central generating stations. The station wise availability is given in the Table below:

Table - 6 Energy availability in 2013-14 (MU)					
Sl.No	Station	MW	Firm energy (MU)	Auxiliary consumption (MU)	Energy available (MU)
	MePGCL				
1	Umiam Stage I	36	116.29	1.40	115
2	Umiam Stage II	20	45.51	0.55	45
3	Umiam Stage III	60	139.4	1.67	138
4	Umiam Stage IV	60	207.5	3.11	204
5	Umtru	11.2	39.01	0.47	39
6	Sonapani	2	5.5	0.07	5
7	Leshka (DE=486MU)	126	450	6.75	443
8	Lakroh (DE=11MU)	1.5	6.1	0.09	6
	Outside purchase				
	NTPC				
1	Faraka STPS 1	1600	69.12	8%	64
2	KHTPS Stage 1	840	43.2	8%	40
3	KHTPS STAGE ii	1500	35.64	8%	33
4	TSTPS Stage I	1000	177.12	8%	164
5	BTPS	250	32.4	8%	30
	NHPC				
6	Loktak HEP	105	51.51	1%	51
	NEEPCO				
7	Kopli Stage I	200	85.85	1%	85
8	Kopli Stage II	25	9.09	1%	9
9	Khandong HEP	50	17.17	1%	17
10	Ranganadi HEP	405	129.28	1%	128
11	Doyang HEP	75	24.24	1%	24
12	AGBPP	291	200.85	3%	195
13	AGTPP	84	72.1	3%	70
14	OTPC Palatana GPP	726	440.84	3%	428
	Free Power				60
Total availability (MU)					**2393**

In order to avail the availability to the State, the Commission has tried to make the energy balance in such a way that there is no shortage in the state for 2013-14. In the tariff determination exercise, the Commission has allowed full power purchase available to MePDCL excluding some of the most expensive energy from Faraka, STPS I (Rs.4.11) and part of energy from OPTC Palatana (partly commissioned). Since availability shall be more than the demand of consumers of the State in 2013-14, the licensee should try to take commercial decisions in selling surplus electricity to outside. The surplus availability of electricity more than the State's demand shall give additional revenue to MePDCL which is being adjusted in the ARR for 2013-14. Therefore, there will be no extra cost borne by consumers of the State due to purchase more than the State demand. However, there will be no reason for power regulation in the State if MePDCL is allowed its full share of power from CGS provided licensee operates efficiently. Accordingly, the Commission directs MePDCL to supply electricity to all parts of the State without discrimination as the first priority and in case of no existing demand or additional demand in the State this surplus energy should be sold outside either on bilateral or competitive basis.

Energy balance

Table 7 Energy Balance (MU) for 2013-14

Sl. No	Source	2013-14
1	Power purchase from MePGCL.	994 MU
2	Power purchase from outside the State excluding 3.5% interstate transmission loss.	1228 MU
3	Total energy requirement for MePDCL	2222 (MU)

Cost of power purchase in 2013-14

Regulation 93 prescribes that licensee shall procure power from approved sources. Requirement of energy, after taking into account the availability of energy from such approved sources, shall be reasonably estimated well in advance and procurement arrangement made for such long and medium purchases by following standard and transparent practices. However, all the purchases shall only be made with the prior approval of the Commission. The Commission has already notified a regulation for procurement of power for long term, medium term and short term. Copy of the same has already been handed over to the licensee and the Commission expects that in future all such purchases shall only be made in accordance with the regulation. For purchases of electricity outside the state the transmission losses as given by concerned load despatch centre has been considered for power purchase.

The cost of power purchase from the central generating station shall be taken on the basis of the tariff as approved by the central commission. The regulation also specifies that if there is a variation in the power purchase in excess of the approved requirement of the power the Commission may take up the need for additional power at the time of truing up. This year the Commission has followed the National Tariff Policy and its regulation for determining the requirement of energy so as to meet the requirement of the state. The same has been done keeping in the following:

- All power purchase cost is considered legitimate unless it is established that merit order has been violated or power has been purchased at an unreasonable rate. The Commission has considered the cash requirement of MePDCL to meet its obligation towards power purchase dues in order to avoid any regulation by sellers.
- Reduction of losses needs to be brought about but not by denying cost of power purchase for meeting 24 hrs power supply in the State.
- Actual level of retail sale should be grossed up by normative level of T & D losses as indicated in the trajectory for allowing power purchase cost subject to justifiable power purchase mix variation.
- The Commission has considered the requirement of power purchase on the basis of target losses and the total availability of energy available to the state.
- The availability of power from MePGCL has been worked out on the basis of average generation from their existing plants and expected generation from new projects like Leshka and Lakroh. While deciding the expected generation from each plant, past five year data and for new project efficient norms have been considered.
- Generation from leshka project is considered at 450 MU as per the discussion held with Director (MePGCL). The Commission allowed recovery of 50% AFC for all 3 units of Leshka, subject to availability of machines otherwise Rs. 2.83 per unit shall be payable.
- Availability of central generating station and other has been considered on the basis of the licensee's proposal.
- Average power purchase cost of last year i.e. 2012-13 has been escalated by inflation factor for working of the average power purchase cost from each plant of central generating station. The Commission has scrutinised actual power purchase bills of last twelve months i.e. January to December 2012 and found that average cost as allowed by the Commission is matching with the actual purchase. The total expenses towards actual purchases in 2012-13 are well within the ceiling on account of regulations put by NEEPCO due to non payment of dues. However, the Commission shall consider the additional expenditures towards power purchase on the basis of audited balance sheet next year.
- Power purchase cost for MePGCL has been considered on the basis of determination of their tariff order for 2013-14.

- A normative loss of 3.5% as inter-state transmission loss is added for deriving power purchase requirement from outside from Central generating stations.

The details of cost of power purchase are given in the Table below:

Table - 8 Power purchase cost for 2013-14 (Rs. Cr)						
Sl.No	Station	MW	Energy (MU)	Power purchase cost (Rs. Cr.)		Average cost (Rs. Cr.)
				MeECL	MSERC	2013-14
	MePGCL					
1	Umiam Stage I	36	115		11.15	0.97
2	Umiam Stage II	20	45		6.2	1.38
3	Umiam Stage III	60	138		18.6	1.35
4	Umiam Stage IV	60	204		18.6	0.91
5	Umtru	11.2	39		3.47	0.91
6	Sonapani	2	5		0.62	1.24
	Total old existing plants			75.36	58.64	
7	Leshka	126	443*	222.86	131.0	2.83
8	Lakroh	1.5	6	1.61	.47	0.74
	NTPC					
1	Faraka STPS 1	1600	0	28.01	0.00	4.11
2	KHTPS Stage 1	840	33	13.17	8.45	2.56
3	KHTPS STAGE ii	1500	164	65.73	59.00	3.60
4	TSTPS Stage I	1000	40	11.55	10.60	2.65
5	BTPS	250	30	12.62	10.56	3.52
	NHPC					
6	Loktak HEP	105	51	11.46	11.68	2.29
	NEEPCO					
7	Kopli Stage I	200	85	7.23	6.89	0.81
8	Kopli Stage II	25	9	1.68	1.23	1.37
9	Khandong HEP	50	17	2.43	1.84	1.08
10	Ranganadi HEP	405	128	35.08	24.70	1.93
11	Doyang HEP	75	24	8.54	8.54	3.56
12	AGBPP	291	195	24.19	24.19	1.24
13	AGTPP	84	70	47.99	23.66	3.38
14	OTPC Palatana GPP	726	368	164.78	132.48	3.60
	Free Power		60	0.00	0.00	0.00
	RPO requirement		8.7	8.09	8.09	9.30
			2276	742.38	522.02	2.29

**including 50% fixed charges subject to availability of the Machine plus SLDC charges.*

Transmission charges

MePDCL, as a distribution licensee has to procure power from MePGCL on intra state transmission line and power from outside on interstate transmission line. For interstate transmission MePDCL has to make payments mainly toward power grid and some charges towards load handling, open access and reactive charges. The charges for power grid is allowed with escalation of 6% from the previous year approved value for PGCIL. The Commission has scrutinised the actual payment made towards power grid and confirmed that this is within the approved values of the first year. For intra state transmission the Commission has allowed transmission charges for PGCIL and others in the tariff order approved for 2013-14. The details are given below:

Table - 9 Transmission charges for 2013-14 (Rs. Cr.)		
Particulars	**MeECL proposal**	**MSERC approval**
Power grid	60	57.5
POSOCO	1.10	
OAC	2.50	
Reactor charges	1.20	
MePTCL	75.35	58.32
Total transmission charges	140.15	115.82

Gross fixed asset

MeECL has projected that their gross fixed assets as on 31.03.2012 for segregated distribution company is Rs.240.69 crores on provisional basis. The Commission has found that no balance sheet after 2009-10 was audited and therefore it is difficult to accept the values on the basis of information given in the petition. In the transfer scheme dated 31.03.2010, the gross fixed assets is shown as Rs.175.48 crores and working progress were Rs.244.56 crores. These figures were taken as on 01.04.2008. The Commission has asked MePDCL to give details of their completed assets which are in use after getting certificate from the Electrical Inspector. MeECL has provided the details of capital expenditures of Rs.69 crores in the period of 2011-12 without any certificate from Electrical Inspector. In the absence of any concrete information the Commission is unable to accept the additional GFA added in 2012-13 & 2013-14. Accordingly, the Commission is allowing the opening of GFA as on 01.04.2012 which is Rs.240.69 crores. The details are given in the table below:

Table -10 Gross Fixed Assets (Rs. Cr.)		
Particulars	MePDCL proposal	MSERC approval
Opening GFA as on 01.04.12	240.69	240.69
Add: addition to GFA during 2012-13	66.16	0
Closing balance as on 31.03.2013	306.85	240.69

Opening GFA as on 01.04.13	306.85	240.69
Add: Addition to GFA during 2013-14	340.72	0
Closing balance as 31.03.2014	647.57	240.69

Regulation 99 prescribes that capital cost includes the actual expenditure till the date of commercial operation of the distribution system subject to prudence check by the Commission. The Commission therefore, without knowing the commissioning date of the capital assets, is unable to accept the additional investments made in the distribution system during 2012-13 & 2013-14.

Return on Equity

Regulation prescribes that for the purpose of determination of tariff the debt equity ratio of 70:30 will be applied for all new investments. For the purpose of determination of capital assets or GFA, Regulation 99 will apply. The Commission has approved Rs.202 crores as the equity for MeECL as a whole and allowed 14% return on it in previous tariff orders. MePDCL has given the Notification issued by the Government that there is the equity of Rs.135.48 crores and thus claim 14% return on it. The Commission has examined the Notification issued by the Government on 31.03.2012 wherein it is indicated that transfer value of the assets and liabilities shall be derived from the duly audited accounts of MeECL for the FY 2011-12 and is to be notified as on 01.04.2012 accordingly. Similarly, the segregation of the assets and liabilities including equity shall be derived after the accounts of separated entities is completed. Therefore, in the absence of audited accounts after the transfer scheme is notified, the Commission is allowing the same return on equity as allowed in previous years 2007-08, 2008-09, 2009-10, 2010-11, 2011-12 & 2012-13. Accordingly, the Commission is allowing on provisional basis 1/3 of the allowed return of Rs.28.28 crores to MePDCL, MePTCL and MePGCL. The return on equity allowed for these utilities for 2013-14 shall be Rs.9.43 crores each. This will be the provisional value and shall be validated and corrected at the time of submission of audited balance sheets of all three utilities.

Interest on loan capital

Regulation 102 prescribes that interest and finance charges shall be completed on the outstanding loan considering repayment schedules at prevailing rate of interest of banks. MePDCL has projected Rs.9.7 crores as interest on finance charges for 2013-14:

The outstanding loan is Rs.142.97 crores as on 01.04.2013 which includes a loan of Rs.78.65 crores from the Government. MePDCL has claim no interest charges on the state government loans. The details are as follows:

Table - 10 Computation on interest on loan			
	MePDCL proposal		MSERC approval
Particulars	FY 2012-13	FY 2013-14	FY 2013-14
Opening balance	51.42	64.41	64.41
Addition during year	12.99	0	0
Repayment during the year	0	0	0
Closing balance	64.41	64.41	64.41
Average interest rate	6.6%	10%	10%
Interest payable	4.26	6.43	6.43
Finance charges	3.15	3.31	3.31
Total interest in finance charges	7.41	9.74	9.74

The financing of the capital projects as per the records are generally made for Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) and restructured APDRP (R-APDRP) works. As per the terms and condition this funding is 90% grant and 10% loan. The total financing on 2013-14 is Rs.142.97 crores. Out of which Rs.75.86 crores is from the State Government. The Commission has required MeECL to submit the details of the grant and loan component of the funding. The Commission has also validated the pre audited accounts given by the licensee on 20.03.2013. These are as follows:

Table 11 Actual interest paid (Rs. Cr.) 2012-13			
Sl. No.	Financial Institutions	Amount due	Amount paid
1	REC	7.6	4.38
2	RGGVY	4.41	3.26
3	RAPDRP	0.99	0
Total		13	7.64

On the basis of records and proposal, the Commission is allowing Rs.9.74 crores as loan and finance charges for 2013-14.

Operation and maintenance expenses

As per regulation the operation and maintenance expenses will be the sum of the following:

(A) Employees cost
(B) Repair and maintenance
(C) Administration and General expenses.

The licensees required to submit to the Commission a statement for O & M expenses indicating under each head of account the actual of last year, estimate for the current year and projection for next year. The Commission is required to fix norms for O & M expenses and in absence of any norms for O & M expenses the Commission shall determine O & M based on the prudent check exercise. Increase in O & M expenses due to the factors not in licensee's control, the Commission may consider the same for determination of tariff.

MePDCL has provided details of actual O & M expenses in 2012-13 vide its letter dated 13.03.2013. MePDCL has submitted that the common cost of MeECL the holding company shall be equally divided in three parts to be added in the ARR of MePGCL, MePDCL & MePTCL. The details are given as below:

Table 12 Actual expenses of MePDCL in 2012-13 (Rs. Cr.)

Expenses	April-Sept	Oct - Mar	Arrear	Outstanding	Total
R & M	2.76	2.76	0	3.59	9.11
Employees	31.32	31.32	12.02	0.19	74.85
A & G	2.01	2.01	0	0.16	4.18
Total	36.09	36.09	12.02	3.94	88.14

Table 13 Actual expenses of MeECL in 2012-13 (Rs. Cr.)

Expenses	April-Sept	Oct - Mar	Arrear	Outstanding	Total
R & M	0.09	0.09	0	9.73	9.91
Employees	28.62	28.62	11.18	0.01	68.43
A & G	1.66	1.66	0	0.12	3.44
Total	30.37	30.37	11.18	9.86	81.78

Table 14 Actual expenses MePDCL including 1/3 of MeECL in 2012-13 (Rs. Cr.)

Expenses	April-Sept	Oct - Mar	Arrear	Outstanding	Total
R & M	2.79	2.79	0.00	6.83	12.41
Employees	40.86	40.86	15.75	0.19	97.66
A & G	2.56	2.56	0.00	0.20	5.33
Total	46.21	46.21	15.75	7.23	115.40

(A) Employees Cost – MePDCL has projected the following details of the employees cost in the ARR for 2013-14. For projecting lower figure than the previous year figures, MePDCL has submitted that there would be no arrears of pay revision in 2013-14 The employees cost details is given as below:

Table -15 Employees cost (Rs. Cr.)

Sl. NO	Particular	FY 2011-12	FY 2012-13	FY 2013-14
		Pre audit	Estimated	Proj
	Salaries			
1	Basic pay	46.9	86.92	63.57
2	DA	12.56	15.48	17.03
3	Medical	8.14	10.03	11.03
4	Medical-R	1.33	1.64	1.8
5	Overtime	0.69	0.85	0.94

	Generation incentives	0.11	0.14	0.15
	Sub Total	69.73	115.06	94.52
	Terminal benefit			
6	Leave encashment	1.23	1.52	1.67
7	Staff benefit	0.02	0.02	0.02
8	CPS	0.06	0.07	0.08
9	Workmen compensation	0.01	0.01	0.01
10	Exgratia	1.42	1.75	1.93
	Sub Total	2.74	3.37	3.71
11	Pension	11.26	16.08	15.27
14	Other	0.58	0.71	0.78
	Sub Total	11.84	16.79	16.05
	Amount capitalised	0	0	0
	Net amount	84.31	135.22	114.28
	Prior period	0.8	0	0
	Grand Total	85.11	135.22	114.28

As per the information on the actual expenditure in 2012-13, the Commission is allowing Rs.95 crores for employees for distribution licensee in the year 2013-14 after adjusting arrears and inflation.

(B) Repair and maintenance – Repair and maintenance expenditures demanded by MePDCL for the year 2013-14 is Rs.13.3 crores the details are given below:

Table -16 R & M cost (Rs. Cr.)

Sl. NO	Particular	FY 2011-12	FY 2012-13	FY 2013-14
		Pre audit	Estimated	Proj
1	Plant & Machinery	0.4	0.5	0.6
2	Building	1.8	2.1	2.3
3	Hydrolic	0.7	0.8	0.9
4	Lines	6.6	7.5	8.2
5	Vehicles	0.2	0.2	0.2
6	Furniture	0.2	0.2	0.3
7	Office equipments	0.1	0.2	0.2
8	Civil works	0.6	0.7	0.7
	Total	10.6	12.2	13.4
	Less capitalisation	0		
	Net expenses	10.6	12.2	13.4
	Prior period expenses	0	0	
	Total R & M cost	10.6	12.2	13.4

The Commission has scrutinised the actual R & M expenditure made by MePDCL during 2012-13. The Commission is allowing escalation on the actual expenditures made in 2011-12 as per the pre audit reports. The Commission has allowed Rs.13.3 crores as R & M expenditures for 2013-14.

(C) Administrative and General expenses – MeECL has demanded Rs.7.51 crores as administrative and general expenditure. The Commission is allowing Rs.6.38 crores as A & G expenses on the basis of pre-audit records of 2011-12 and actual expenses made in 2012-13.

Table 17 A & G expenses in 2012-13				
	MePDCL proposal			MSERC approval
Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2013-14
A & G expenses	5.71	6.53	7.51	6.38
Less capitalisation	0	0	0	0
Total A & G expenses	5.71	6.53	7.51	6

Summarising the above expenses for working of the O & M expenses is given in the table below:

Table 18 O & M expenses for 2013-14 (Rs. Cr.)				
Particulars	FY 2011-12 (Pre-audited)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	MSERC approved FY 2013-14
Employees Costs	85.11	135.22	114.28	95
Repair & Maintenance expenses	10.69	12.09	13.30	13.3
Administration & General expenses	5.71	6.53	7.51	6
Total O & M expense	101.51	153.84	135.09	114.3

While approving the O & M cost for 013-14, the Commission would like to caution the distribution licensee to limit their expenses within the O & M cost as approved for 2013-14. It will be difficult for the Commission to allow actual expenses over and above the approved O & M cost in the truing up exercise. Until and unless there is no valid reasons beyond control of the licensee, the Commission shall not allow any extra. The licensee is directed to set up a committee or group to study and place a report to the Commission within three months suggesting bench marks for O&M expenses of standard normative cost on the basis of assets, network, consumers etc

Depreciation

Regulation 99 prescribes that capital cost includes the actual expenditures till the date of commercial operation of the system. In the transfer scheme the GoM has transferred all transferred work in three utilities. In the distribution company the Government has transferred the assets of Rs.175.48 crores as on 01.04.2008. However, transfer scheme also provides capital expenditure in progress at Rs.244.56 crores. In the ARR MePDCL has calculated depreciation as per the regulation 106 and claimed Rs.30.96 crores for the depreciation. They have projected details of assets and depreciation as follows:

Table 19 Details of Depreciation				
Particulars	Value of assets	2011-12	2012-13	2013-14
GFA as on 01.04.2011	234.15	9.33		
Addition in 2011-12	6.62			
GFA as on 01.04.2012	240.69		14.61	
Addition in 2012-13	66.16			
GFA as on 01.04.2013	306.85			30.96
Addition in 2013-14	340.72			
GFA as on 31.03.2014	647.57			

The regulation prescribes that the depreciation shall only be allowed after the commercial operation of the system and therefore depreciation for beginning of the tariff year 2013-14 shall be considered. Since no details of commercial operation are received so far, the Commission is allowing Rs.14.61 crores as depreciation charges in the ARR of 2013-14 subject to correction in next ARR.

Interest on working capital

Regulation prescribes that the working capital for electricity shall be calculated for meeting the expenses towards one month O & M expenses and receivable of two months for sale of electricity. The Commission has examined the actual amount paid towards the interest of working capital to the bank and found that no charges have been paid to the bank. In the last year the Commission has allowed working capital interest in the interest cost. The actual records show that MePDCL is paying interest towards the loan taken from the bank for capital assets and working capital. Accordingly to meet the funding of receivables/uncollectable dues, the Commission has allowed Rs.11 crores as interest on working capital in 2013-14.

Bad and doubtful debt

Regulation prescribes that after the distribution licensee gets the receivable audited the commission shall allow a provision of bad debt not exceeding an amount equal to 1% receivables in the ARR. In the last tariff the commission has allowed 5 crores towards bad debts subject to the condition that licensee will give the details of the arrear and amount of written off values of bad and doubtful debt after the audited values are final. No details of the written off is received by the Commission and therefore commission is allowing only 5 crore as bad and doubtful debt in the ARR for 2013-14 which shall be disallowed if details of written off dues is not provided to the Commission next year. The licensee shall also provide the details of arrears, doubtful debts and action taken by the licensee. This report should reach to the Commission with in 3 months time.

Other income

As per the Regulation, the other income of Distribution licensee is to be deducted from the total expenses to arrive at the net annual revenue requirement. The Components of other income are:

(a) Delay payment surcharge.
(b) Meter Rent.
(c) Customer charges.
(d) Income from investments.
(e) Miscellaneous received from consumers.
(f) Trading and income.
(g) Prior period income.
(h) Interest on staff loans.
(i) Recovery of theft.
(j) Any other income.

The details of other income are shown in the Table below:

Table 20 Non Tariff Income (Rs. Cr.)

Sl.NO	Particulars	FY 2011-12	FY 2012-13	FY 2013-14
		(Pre audit)	(Estimated)	(Projected)
1	Meter rent	1.58	1.66	1.74
2	Late payment surcharge	85.64	25.1	20
3	Theft	0	0	0
4	Miscellaneous receipt	0.42	0.38	0.34
5	Miscellaneous charges	3.96	4.16	4.24
6	Wheeling charges	3.14	4.72	5.9
7	Interest on staff loan	0.01	0.01	0.01
8	Income from trading	0.46	0.01	0.01
9	Income from welfare		0	0
10	Discount from suppliers	0.73	0.59	0.6
11	Investments	4.41	4.6	4.35
12	Total Income	100.35	41.23	37.19
13	Add prior period income	2.07		
	Total Non Tariff Income	102.42	41.23	37.19

The above table is revalidated from the schedule 17 of pre audit results of 2011-12. The Commission has noted that the income from delay payment surcharge has been reduced significantly from 2011-12. On making a query in the hearing the Director MePDCL has informed that the income from the delay payment surcharge in 2013-14 shall be reduced due to compliance of Hon'ble Supreme Court order dated 24.08.2012. The Commission is therefore treating the income from late payment surcharge on provisional basis subject to submission of final records by MePDCL after compliance of Hon'ble Supreme Court order. Accordingly, the

Commission, on the basis of previous records has allowed Rs. 40 crores as a non tariff income to be deducted from the ARR for 2013-14.

Income from Cross subsidy surcharge

MePDCL has submitted in its ARR that after introduction of Open Access within the State, the licensee has earned cross subsidy surcharge from the open access consumer of the state. The projected cross subsidy surcharge to be earned from the open access consumer in 2013-14 shall be Rs.1.70 crores. MePDCL in its reply to a Commission's query, mentioned that open access charges for wheeling cross subsidy and applicable losses shall be submitted in a separate petition to the Commission for its approval of open access charges for 2013-14. The Commission is allowing Rs.1.7 crores to be taken as income from cross subsidy surcharge to be deducted from the ARR of 2013-14.

State Government Subsidy

It is informed that the State Government of Meghalaya has provided Rs.13.28 crores subsidy in 2011-12 which is validated from the pre audited accounts of MeECL. The pre audited accounts has shown Rs.13.4 crores as subsidy from the State Government which includes Rs.13.28 crores subsidy for RE and Rs.1.36 crores as subsidy against losses on account of flood. The Commission is accepting the subsidy of Rs.16 crores as proposed by MePDCL for the year 2013-14 from the State Government. Rs.16 crores of RE subsidy should be deducted from the ARR for 2013-14.

Annual Revenue Requirement

Based on the detailed submissions of each component of ARR, the Commission is allowing Rs. 744.22 crores as the ARR for 2013-14 to be recovered from the consumer's tariff. The average cost of supply for MePDCL for 2013-14 shall be allowed at Rs.4.56 per unit. The detailed is given in the Table below:

Annual Revenue Requirement for 2013-14 (Rs. Cr.)		
Items of expenditure/income	MeECL	MSERC
Cost of power purchase	756.42	522.02
Inter State Transmission charges	64.8	57.5
Transmission charges MePTCL	75.35	58.32
Employees cost	114.28	95
R & M	13.3	13.3
A&G	7.51	6
Depreciation	30.96	14.61
Interest on Loan capital including working capital	49.14	20.74

Return on Equity	18.97	9.43
Bad & Debt	10.87	5
total	1141.6	801.92
Less non tariff income		
Non tariff	37.18	40
Cross subsidy surcharge	1.7	1.7
RE subsidy	16	16
Total deduction	54.88	57.7
Net ARR	1086.72	744.22

Revenue Gap

Revenue at the current tariff

Revenue at the current tariff is calculated based on the present tariff prevailing in the state with the projected sales as approved by the Commission for each category of consumers.

Table 21 Revenue at Current tariff for 2013-14 (Rs. Cr.) within State

Sl. NO	Consumer category	Sale	Revenue
	LT	2013-14	2013-14
1	Domestic	305.72	94.82
2	Non Domestic (Comm)	64.83	32.05
3	Industrial	8.71	4.18
4	Agriculture	0.45	0.08
5	Public Lighting	1.10	0.52
6	Water Supply	8.09	4.07
7	General purpose	16.99	8.44
8	Kutir Jyoti	17.17	2.29
9	Crematorium	0.26	0.81
10	MeECL offices and employees	40.17	12.65
	Total Revenue from LT	463.49	159.91
	HT		
11	Domestic	22.14	10.98
12	Water supply	35.15	16.77
13	General purpose including buk supply	70.63	33.94
14	Commercial	39.12	17.51
15	Industrial	350.00	173.08
	Total revenue from HT	517.04	252.28
	EHT		
16	Industrial	350.00	160.51
	Total sale income from all category of consumers within the State.	1330.53	572.70

In order to check the revenue position in 2012-13, the Commission has required MePDCL to submit actual revenue collected in the State. It is informed that they have collected Rs. 416.75 in 10 months in 2013-14. Further MePDCL informed that it is expected to collect at least Rs 500 crores up to March 31, 2013. As per MePDCL data, their collection efficiency is around 85-87%, the billed amount should not be less than 560-570 Crores in 2012-13.It validates that the calculation made in this exercise to work out 573 Crores revenue in 13-14 on current sale matches. It also validates that the tariff rise was effective from 1st February 2012 to 31st march 2013. It shows a rise of tariff in these months. However it needs to be validated.

Actual revenue collection (Rs. Cr.)			
Month	2010-11	2011-12	2012-13
April	30.25	32.67	29.44
May	34.97	31.56	29.6
June	22.77	32.96	35.29
July	27.65	42.9	37.67
August	29.98	34.53	37.37
September	26.08	41.4	34.95
October	42.18	33.41	47.15
November	35.8	32.72	36.12
December	33.94	33	30.75
January	27.67	20.72	98.41
February	26.58	35.8	42*
March	36.31	33.98	42*
Total	374.18	405.65	500.75
Source: MeECL account dated 20.03.2013 *Estimation			

However in order to get the review of the performance of commercial wing of MePDCL, the Commission directs MePDCL to get revenue audit of billing in each circle immediately from independent CAG approved auditors within three months of issue of this order. The auditor should check all industries and other revenue yielding consumers, domestic and commercial consumers in Shillong that they are being billed correctly on the basis of applied/allowed tariff and give their report to the Commission by 30th June 2013.

Revenue from sale other than consumer's of the state

The Commission has allowed full purchases on the basis of entitlement to the licensee keeping in view the state requirement, potential of growth, pending connections of industries in the State. The revenue from bilateral / outside sale is kept at a minimum rate of Rs.3.60 per unit after considering highest cost of power purchase. However, MePDCL should try to sale electricity at a rate matching average cost plus losses in transfer that power. In case MePDCL sells power to new consumers in the State then applicable tariff shall apply. If it is sold bilaterally within the State or outside the State, MePDCL shall take the prior approval of the Commission. After accounting for bilateral/market sale and Assam sale the revenue should be around Rs.121.82 crores in 2013-14. The total revenue to the MePDCL in 2013-14 is projected to be Rs.694.52 crores.

Table 22 Revenue at current tariff for 2013-14 (Rs. Cr.) outside state

Sl. NO.	Consumer category	Sale	Revenue
		2013-14	2013-14
1	Assam	20.00	8.42
2	Bilateral & others	315.00	113.4
	Total sale outside the State	335.00	121.82

Table 23 Total Revenue at Current tariff for 2013-14 (Rs. Cr.)

1	Sale within the State	1330.53	572.70
2	Sale outside the State	335	121.82
3	Total Sale in 2013-14	1680.53	694.52

The revenue gap in 2013-14 shall be approx. Rs.50 crores (Rs.744.22-Rs.694.52) without applying efficiency gain, to be recovered from the increase in tariff in 2013-14.

Efficiency improvement

In the tariff order for 2013-14, the Commission has allowed 25% T & D losses for the purpose of deriving the power purchase requirement in the State. The Commission has followed the loss reduction trajectory as approved last year @ 25% for T & D loss reduction and @ 1.5% for commercial loss reduction. This indicates that total loss allowed in the system shall be 23.5%. Therefore, the licensee is required to improve the commercial losses by 1.5% in the year 2013-14 and earn at least Rs. 8 crores. In order to compensate the consumers, the Commission is adjusting Rs.8 crores in the ARR of 2013-14. Accordingly, the revenue gap shall be adjusted by it and the increase in tariff should give Rs.42 crores in the year 2013-14.

Tariff's proposal

From the above, it is seen that revenue gap for 2013-14 shall be Rs.42 crores. To meet this gap the Commission is revising the present tariff for each category of consumers for 2013-14 by an average increase of 7%. This tariff shall be applied from 1st April 2013 and shall continue up to 31st Mach 2014 or orders.

Classification of supply:

Terms and conditions for supply shall be as per MSERC Supply Code.

Approved tariff for 2013-14

A LOW TENSION TARIFF

(1) Domestic (Low Tension)

(1.1) Kutir Jyoti/BPL

Kutir Jytoi connections have been covered under Domestic category with metered and unmetered sub categories.

(1.1.1) Unmetered Kutir Jyoti

The existing Tariff for this category of consumers is Rs.75 per connection per month. The MeECL has proposed a rate of Rs.90 per connection per month for this category. The Commission has approved Rs.80 per connection per month for all existing unmetered consumers.

Tariff for BPL (unmetered) for 2013-14			
Category	Existing Tariff (Rs/connection/ month)	Proposed Tariff (Rs/connection/ month)	Approved Tariff (Rs/connection/ month)
Kutir Jyoti (KJ-U)/ BPL U	75	90	80

This Tariff is applicable for existing unmetered consumer under Kutir Jyoti unmetered category until they are metered. No new connection should be given without meter.

(1.1.2) Metered Kutir Jyoti

The MeECL has proposed tariff of metered Kutir Jyoti consumers at Rs.2.25 per unit for monthly consumption within 0-30 units. They have also proposed that if the monthly consumption in any month exceed the limits of 30 units then their excess consumption over and above 30 units shall be done on the Tariff as prescribed for normal domestic consumers. The Commission has allowed Rs.2 per unit for BPL metered category up to a consumption of 30 units. In case, they consumes more than 30 Units then the billing of excess unit shall be done on the Tariff prescribed for normal domestic consumers for appropriate slab rates.

Tariff for BPL (metered) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff* (Rs/KWH)
Kutir Jyoti (KJ-M)/ BPL M	1.80	2.25	2.0

* *This rate is applicable if the consumers consumes up to 30 Units in a month. If he consumes more than 30 Units then this rate shall be applied up to 30 Units and over and above 30 Units the rates shall be charged on the appropriate slab level as approved for other domestic consumers.*

For example if BPL consumer consumes 30 KWH in a month he will be charged at the rate of Rs.2 per unit i.e. 2 x 30 =Rs. 60.

If he consumes more than 30 units, for example 100 units then his bill shall be determined as follows:

Rs.2 x 30 units = Rs.60

+ Rs.2.60 x 70 units = Rs.185.50.

The total bill shall be Rs.245.50.

(1.2) Domestic Consumers

The existing Tariff is 2 part Tariff. The fixed charge is levied on the basis of KW load per month and energy charges are applicable in 3 slabs with different rates for each slab. The Commission has not made any changes in the structure and approved the same. However, the Commission has revised rates for each slab and fixed charges per KW which are given below in the Tariff.

Fixed Charges

Fixed charges for Domestic consumer for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Domestic (DLT)	30	41	35

Energy Charges

Energy charges for Domestic consumer for 2013-14				
Category	Slabs	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Domestic (DLT)	First 100 units	2.45	3.43	2.60
	Next 100 units	2.75	3.85	3.00
	Above 200 units	3.50	4.92	3.75

(1.3) MeECL Employees

MeECL has proposed to levy energy charges for all unit consumed by employees of MeECL at Rs.4.41paisa per unit as against their existing rate of Rs.3.15 per unit. However, rates of MeECL employees have been increased in the same manner as was done for other Domestic Consumers. Billing is to be done on the basis of metered consumption only. No connection should be un-metered.

Energy charges

Tariff for MeECL employees for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Employees of MeECL (EMPL)	3.15	4.41	3.40

(2) Non-Domestic (Low Tension)

The existing Tariff has a structure of 2 part Tariff. The fixed charges are levied on the basis of KW load per month and energy charges are applicable for two slabs with different rates for each slab. The Commission has not made any changes in the structure and approved the same. However, the Commission has approved different rate for each slab and fixed charges per KW which are given below in the Tariff.

Fixed charges

Fixed charges for Non domestic consumer for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Non Domestic (CLT)	60	81	70

Energy charges

Energy charges for Non domestic consumer for 2013-14					
Category	Slabs	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Slabs	Approved Tariff (Rs/KWH)
Non Domestic (CLT)	First 100 Units	4.25	5.27	First 100 Units	4.50
	Above 100 Units	4.50	5.63	Above 100 Units	4.90

(3) Industrial Low Tension

This category is applicable for small and medium industrial consumer who is given supply on low tension wires. The Commission has approved the following two parts without changing the structure of the current tariff keeping in view the present cross subsidy adjustment.

Fixed charges

Fixed charges for Industrial (LT) consumer for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Industrial (ILT)	60	81	70

Energy charges

Energy charges for Industrial (LT) consumer for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Industrial (ILT)	3.80	5.13	4.20

(4) Public Service Low Tension

This category comes under Public Service connections given supply through LT lines. The public lamps are generally unmetered and their Tariff is based on the fixed charges per KW per month. However, since no connection under the Act can be given without meters, the Licensee is required to install meters on all new connections and progressively shall place meters on the existing connections. The approved Tariff for metered connections and unmetered connections is decided in a way to encourage metering at public lamps. The rates are given below:

(4.1) Public Lighting (Metered)

Fixed charges

Fixed charges for Public Lighting (metered) for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Public Lighting (PL)	60	81	70

Energy Charges

Energy charges for Public Lighting (metered) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Public Lighting (PL)	4.50	5.85	4.75

(4.2) Public Lighting (Unmetered)

Fixed charges for Public Lighting (unmetered) for 2013-14			
Type of lamp	Existing Tariff (Rs/Lamp/Point/ Month)	Proposed Tariff (Rs/Lamp/Point/ Month)	Approved Tariff (Rs/Lamp/Point/ Month)
Incandescent lamps			
• 40 Watts	80.00	112.00	85.00
• 60 Watts	125.00	175.00	135.00
• 100 Watts	200.00	280.00	215.00
Florescent lamps			
• Up to 40 Watts	125.00	175.00	135.00
Mercury vapour lamp			
• 80 Watts	170.00	238.00	185.00
• 125 Watts	260.00	364.00	280.00
• 250 Watts	540.00	756.00	585.00
• 500 Watts	1010.00	1414.00	1090.00
Sodium vapour lamp			
• Up to 150 Watts	390.00	546.00	425.00
• 250 Watts	610.00	854.00	660.00
• 400 watts		1477.00	1100.00
CFL fittings			
• Up to 45 Watts		177.00	135.00
• Above 45 Watts & Up to 85 Watts		280.00	215.00
LED fittings		522.00	415.00
Matel helide		615.00	500.00

(5) Public Water Supply /Sewage Treatment Plants

This category is related to Public Water Supply and Sewage Treatment plants and comes under public consumption. The following rates are approved for water supply and sewage treatment plants. These rates are decided keeping their nature of use and cross subsidy level,

Fixed charges

Fixed charges for Public Water Supply for 2013-14			
Category	Existing Tariff (Rs/KW/ Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Public Water Supply (WSLT)/Sewage Treatment Plants	60	81	70

Energy Charges

Energy charges for Public Water Supply for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Public Water Supply (WSLT)/Sewage Treatment Plants	4.50	5.63	4.75

(6) General Purpose

This Tariff is made for Government connections which are not covered under any other category of Public connections. The approved Tariff for this category is as follows:

Fixed charges

Fixed charges for General purpose for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
General purpose (GP)	60	81	70

Energy Charges

Energy charges for Public Water Supply for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
General Purpose (GP)	4.50	5.63	4.75

(7) Agriculture

There are only 34 consumers in the State and annual consumption in this category is only 0.49MU.

Fixed charges

Fixed charges for Agriculture for 2013-14			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Agriculture (AP)	35	47	40

Energy Charges

Energy charges for Agriculture for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Agriculture (AP)	1.50	2.60	1.65

(8) Crematorium

This category is meant for crematorium using electricity for their day to day operation. As per the proposal there is only one consumer in this category. In the last Tariff Order the Commission has considered the nature and purpose of this crematorium which is meant for service to the society and operating on no profit no loss basis. The commission has held that on the basis of their nature of job their rates are considered equivalent to domestic consumers. The similar treatment has been given this year to this category with fixed charges on per connection basis and energy charges on metered consumption.

Fixed charges

Fixed charges for Crematorium for 2013-14			
Category	Existing Tariff (Rs/Connection/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/Connection/Month)
Crematorium (CRM)	4800	6480	5200

Energy Charges

Energy charges for Crematorium for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Crematorium (CRM)	2.75	3.85	3.00

B High Tension Supply

As per the supply code this category is meant for those consumers who get supply from HT wires. The billing of this type of consumers is being done on the basis of provision of supply code.

In the last tariff order, the Commission has directed the licensee to give data on time of day tariff for HT category of consumer so that it is applied from 2013-14 onwards. The National Electricity Policy and National Tariff Policy have also mandated the Commission to introduce time of day Tariff in large consumers. Since proposals of the licensee do not contain time of day tariff for any category and no public consultation has been made so far on the subject, the Commission has decided to defer this tariff up to the next filing. In the meantime licensee is directed to prepare time of day provisions in their existing meters for consumers of HT industrial load and furnish data of the same to the Commission for implementation of time of day tariff from the date of issue of next tariff order. The Commission also directs the licensee to make a proposal to the Commission with regard to peak hours and off peak hours during winter and summer so that the new tariff shall be worked out. MePDCL has proposed KVAH tariff for all remaining consumers in HT category other than industry and water works. The Commission has not accepted the proposal of MePDCL to implement KVAH billing for all HT categories in absence of proper data.

(9) Domestic High Tension

This tariff is applicable to domestic consumer having supply from HT system of the licensee. Their tariff is approved as follows.

Fixed charges

Fixed charges for Domestic (HT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Domestic HT (DHT)	115	161	125

Energy Charges

Energy charges for Domestic (HT) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KWH)
Domestic HT (DHT)	4.15	5.40	4.40

(10) Non Domestic High Tension

This tariff is applicable to Commercial consumer having supply from HT system of the licensee. Their tariff is revised keeping in view of their present level of cross subsidy and its suitable correction. The Commission has approved their tariff as follows

Fixed charges

Fixed charges for Non Domestic (HT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Non Domestic HT (CHT)	115	161	125

Energy Charges

Energy charges for Non Domestic (HT) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KWH)
Non Domestic HT (CHT)	4.00	5.96	4.55

(11) **Industrial High Tension**

These are industrial consumers taking supply on HT. These consumers are charged on KvAh basis. This tariff was introduced so as to improve the power factor in the system. This tariff cares for the power factor of the industries and reward those performs efficiently. However in case of leading power factor suitable correction should be made. This matter shall be dealt with separately after a proper hearing. The tariff is revised as follows.

Fixed charges

Fixed charges for Industrial (HT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Industrial High Tension (IHT)	115	161	125

Energy Charges

Energy charges for Industrial (HT) for 2013-14			
Category	Existing Tariff (Rs/KVAH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Industrial High Tension (IHT)	4.24	6.14	4.54

(12) **General Purpose Bulk Supply (BS)**

Fixed charges

Fixed charges for General Purpose Bulk (HT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
General Purpose Bulk Suply (BS)	115	161	125

Energy Charges

Energy charges for General Purpose Bulk (HT) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KWH)
General Purpose Bulk Supply (BS)	4.18	5.64	4.40

(13) **Public Water Supply/Sewage Treatment Plant**

Fixed charges

Fixed charges for Public Water Supply (HT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Public Water Supply (WSHT)	115	161	125

Energy Charges

Energy charges for Public Water Supply (HT) for 2013-14			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Public Water Supply (WSHT)	4.28	6.01	4.40

C Extra High Tension Supply

(14) Industrial Extra High Tension

Fixed charges

Fixed charges for Industrial (EHT) for 2013-14			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Industrial (IEHT)	115	161	125

Energy Charges

Energy charges for Industrial (EHT) for 2013-14			
Category	Existing Tariff (Rs/KVAH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Industrial (IEHT)	4.10	6.31	4.39

Temporary supply (HT & LT)

MeECL has proposed to continue their existing arrangement where the fixed and energy charges shall continue to be double of the normal applicable rates for all categories. The Commission has agreed to their proposal. Remaining terms and conditions of the tariff rate schedule shall be same as approved last year.

Revenue from sale within State approved tariff for 2013-14

By applying new rate w.e.f. 01.04.2013, the estimated revenue on the sale approved for 2013-14 shall be Rs.615.32 crores. The detail of the revenue is given in the Table below:

Table 24 Revenue at approved tariff for 2013-14 (Rs. Cr.) within State

Sl. NO	Consumer category	Sale	Revenue
	LT	2013-14	2013-14
1	Domestic	305.72	102.75
2	Non Domestic (Comm)	64.83	34.56
3	Industrial	8.71	4.67
4	Agriculture	0.45	0.10
5	Public Lighting	1.10	0.55

6	Water Supply	8.09	4.34
7	General purpose	16.99	8.99
8	Kutir Jyoti	17.17	2.52
9	Crematorium	0.26	0.87
10	MeECL offices and employees	40.17	13.66
	Total Revenue from LT	463.49	173.01
	HT		
11	Domestic	22.14	11.69
12	Water supply	35.15	17.29
13	General purpose including buk supply	70.63	35.88
14	Commercial	39.12	19.82
15	Industrial	350.00	185.60
	Total revenue from HT	517.04	270.28
	EHT	0.00	
16	Industrial	350.00	172.02
	Total sale income from all category of consumers within the State.	1330.53	615.32

Revenue from sale outside State for 2013-14

The Commission has allowed in the tariff for 2013-14 for almost full purchase of available energy to the State so that MePDCL shall supply power in the State without any supply regulations and discrimination in any part of the State and meet the requirement of every consumer in full. There is a scope for new connections in general/ industrial/ commercial/tourism/water works/rural electrification/etc and after meeting the State requirement as the first priority, MePDCL shall make arrangement for outside the State sale in a commercial manner and maximise their return on the investment. This will add to the revenue of the state and in turn reduce the ARR to benefit the consumers of the State. The Commission has allowed the proposal of MePDCL to consider revenue for adjustment in the ARR for 2013-14 for sale outside the State at a minimum price of Rs.3.60/unit. However MePDCL shall work out the selling price after accounting for line losses and cost of service for any sale. MePDCL is directed to take prior permission for sale of electricity to anyone on bilateral/Agreement basis. In this way the total revenue from outside sale should not be less than Rs.121.82 crores in 2013-14.

Table 25 Revenue at current tariff for 2013-14 (Rs. Cr.) outside state			
Sl. NO.	Consumer category	Sale	Revenue
		2013-14	2013-14
1	Assam	20.00	8.42
2	Bilateral & others	315.00	113.4
	Total sale outside the State	335.00	121.82

Table 26 Total Revenue at approved tariff for 2013-14 (Rs. Cr.)			
1	Sale within the State (MU)	1330.53	615.32
2	Sale outside the State (MU)	335.0	121.82
3	Total allowed sale in 2013-14 (MU)	1665.53	737.14
4	Additional sale for improving 1.5% commercial losses (MU)	34	8
5	Total sale/revenue in 2013-14	1700	745.14

The total revenue in 2013-14 on the projected sale and approved tariff shall be Rs.745 crores including efficiency improvement. This income will be meeting the annual revenue requirement of MePDCL in full and there is no left out gap in revenue and cost in 2013-14. However the Commission shall consider deficit/surplus of FY 2013-14 at the time truing up exercise.

Cross subsidy

National Tariff Policy prescribes the following:

"5.5.1 There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.

5.5.2 A minimum level of support may be required to make the electricity affordable for consumers of very poor category. Consumers below poverty line who consume below a specified level, say 30 units per month, may receive special support in terms of tariff which are cross-subsidized. Tariffs for such designated group of consumers will be at least 50 % of the average (overall) cost of supply. This provision will be further re-examined after five years.

5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance without giving tariff shock to consumers. The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually."

The Commission has worked out the cross subsidy in both the years on the basis of average realisation per unit from the approved tariff in 2013-14 and previous tariff in 2012-13. The same is given below. The Commission has tried to make a balance between the provisions of the regulations and consumers interest.

Sl. NO	Table-27 CROSS SUBSIDY	2012-13	2013-14
1	Domestic (Subsidised)	28.0%	27.4%
2	Non Domestic (Commercial)(Subsidising)	15.0%	15.0%
4	Agriculture(Subsidised)	58.0%	54.3%
5	Public Lighting(Subsidising)	9%	7.0%
6	Water Supply(Subsidising)	17.0%	16.1%
7	General purpose(Subsidising)	15.0%	14.4%
8	Kutir Jyoti(Subsidised)	69.0%	68.3%
	LT CATEGORY CROSS SUBSIDY LEVEL	19.8%	19.3%
11	Domestic (Subsidising)	15.0%	14.1%
12	Water supply(Subsidising)	11.0%	6.3%
13	General purpose including bulk supply (Subsidising)	12.0%	9.8%
15	Industrial(Subsidising)	14.9%	14.6%
	HT CATEGORY CROSS SUBSIDY LEVEL	13.2%	13.0%
16	EHT Industrial (Subsidising)	6.5%	6.4%

The Commission while determining the tariff has taken due care to examine the data of the licensee, pre audited results and actual expenses and revenues in current year and has tried to make a balance between the interest of each stakeholder including consumers in the State. This year the Commission, on the basis of information on the availability of energy in the State, has tried to meet the demand of the State in full.

The economic activities in a State depend on its Power sector. The purpose of the power sector Reforms is to make all power utilities commercial viable and self financed. For any commercial undertaking, it is sheer business sense that an enterprise has to generate the resources it requires for delivering services to its clients and customers at a reasonable price. In particular, the distribution licensees have also a social responsibility to help to promote development of the State by improving their performance for optimum supply of power, by toning up efficiency and plugging loopholes in the system they administer. In the State of Meghalaya, the performance of the MeECL in this respect leaves much scope for improvement and consequently for enhancement of revenue.

Apart from examining the ARR and determining the yearly tariffs, the Commission is also mandated to see whether the performance of the licensee is at optimum level and is at par with national standards? To meet out this objective the Commission issue directives under the power given to it by Electricity Act, 2003. In case of non compliance of directives there are penal provisions given in the Act. The Commission has already issued number of directives to the licensee in its previous tariff order. The Commission tried to get compliance and status reports from the licensee from time to time. In this chapter, the Commission shall discuss the status of the compliance and extent of improvement made if any.

AT&C losses

One of the causes of the fall of revenue in the distribution sector is the AT & C losses which it has been suffering over the years. In 2006-07, the T&D losses was 36.84%,in 2007-08, the loss was 33.34% percent; in 2008-09 it was 31.36%, in 2009-10 loss was 33.95% and in 2010-11 it was 32.53 percent. While T&D losses do occur, the desired standard in the country is that the loss should not be beyond 15 percent as per guidelines issued by the Ministry of Power.

In the Tariff Order issued on 20.1.2012, this Commission had directed the licensee that the commercial loss in 2011-12 is reduced by 3 percent and in 2012-13 by 1.5 percent. While MeECL itself in its loss-reduction trajectory has assured to reduce their losses, the ARR for 2013-14 shows that the loss is still around 30%. The unhappy position as such calls for more stringent and concrete steps the Corporation has to take in order to reach the desired level as otherwise the assurance becomes only a kind of paper submission. The main areas where commercial losses often occur are in metering, billing and collection system. In the last tariff order, after analysing the commercial losses, the Commission has noticed-

(a) That there is a large number of meters which are not read;

(b) That in about 12 percent of the 2.71 Lakh consumers, their meters are defective and not replaced;

(c) That in about 53204 cases, bills are not raised on the basis of meter readings; and

(d) That in about 569 cases of consumers, arrears amounting to Rs. 1.00 Lakh each have not been recovered.

For reducing the commercial loss, the Commission in its Tariff (D) Order dated 20.1.2012 has issued directives-

(a) That the 33,134 defective meters be immediately replaced in a time bound manner and a compliance report submitted within six months;

(b) That with regard to unmetered supply remedial steps should be taken so that a minimum improvement of 3% is achieved within a year.

(c) That meter reading should be compulsorily enforced in every consumption, domestic or otherwise and to submit a monthly report for all the six circles in the State where bills are still not raised according to meter reading; and

(d) That there should not be any repeated lapse in meter reading in more than two billing cycles.

Status of unmetered consumers/ Replacement of defective meters

The Commission has issued direction in its last tariff order to provide meters to 33,134 unmetered consumers by end of 2012-13 in a time bound manner and there should be at least 3% improvement in replacement of defective meters in the State. MePDCL replied that notice inviting tenders has been done and price bids have been opened. MePDCL expects that the meters shall be made available by May 2013 and it will take some time to install the new meters. MePDCL has also informed that defective meters of the consumers are being replaced regularly that are procured by consumers.

Accordingly, the Commission directs the licensee to start sending monthly report on status of compliance to the above directive and send details of defective meters circle wise, unmetered consumers, and progress made to replace the defective meter and meter un-metered consumers. This direction should start from 1.6.2013 and report should be sent by concerned circle head.

Status of computer base billing and online payment

The Commission directed the MePDCL to introduce computerised data base of consumers so that consumer can deposit their bills at any collection centre. It was informed by MePGCL that billing of all consumers in Shillong is computerised. However, the online payment facility shall be made operational after the completion of the R-APDRP part A project. With this project nine towns of the State namely, Shillong, Tura, Nongstoin, Jowai, Mairang, Cherra, Resubelpara, Williamnagar and Nongpoh shall be considered. According a time bound action plan should be sent bt Director Distribution by 1.6.2013.

Facilities at Collection Centre

The Commission directed MeECL to provide basic minimum facilities at all collection centres in the State by 31.03.2012. MePGCL has informed that basic minimum facilities like drinking water, etc has been provided in Shillong. However, the infrastructure is being arranged in other collection centres as well.

Energy Audit

The Commission has issued direction to MePDCL to start energy audit in each distribution substation of 33 KV by recording meter reading at all incoming and outgoing feeders. The licensee has to ensure that each meter shall be read at the end of the month and it should be reconciled with the billing data book so as to find out losses on each feeder. It was also suggested by the Commission that every meter reader should be made responsible for energy accounting and there should be a system of setting targets for each substation for reduction of T & D losses.

In view of this the Commission has required MePDCL to give the status of energy meters at 11KV and 33 KV incoming and outgoing feeder at all 33 KV substations. MePDCL submitted the information on the status of energy meters at 11 KV & 33 KV feeders. MePDCL informed that out of total 354 numbers 33/11 KV feeders at 33 KV substations more than 100 feeders have damaged metering equipment (CT/PT) and 75 feeders have no meters. MePDCL has provided details of all feeders and meters. It is very strange that 50% feeders have either damaged metering or no metering. In this case it is not possible to conduct energy audit in the area of MePDCL and it will be very difficult to identify the feeders where losses are high. The Commission have also raised this issue in number of meetings with MePDCL. It is being informed that for replacement of meters adequate funding is required. The Commission directs the management to look into this matter and take action on priority to start energy audit in at least those areas where consumption and revenue are highest. The action plan should be submitted to the Commission by 30th June 2013 by Director Distribution.

Reduction in T & D losses

In the last tariff order the Commission has given a trajectory for reduction of T & D losses and improvement in metering and billing for next four years. The trajectories as set are given below:

Year	2012-13	2013-14	2014-15	2015-16
Distribution Losses	26.87%	25%	24%	23%
Commercial Losses	1.5%	1.5%	1.5%	1.5%
Overall losses	25.37%	23.5%	21%	20%
Collection efficiency	98%	98.5%	99%	99.5%
AT&C Losses	26.86%	24.64%	21.79%	20.4%

Against the above targets, the actual position of losses in the year 2012-13 is given below:

Year	2012-13 (Target)	2012-13 (Actual)*
Distribution Losses	26.87%	28.72%
Collection efficiency	98%	89.64%
AT&C Losses	26.86%	38.78%
*(April – June 2012)		

The above data shows that there is no sign of improvement with regard to efficiency improvement in AT & C losses. In the last tariff order the Commission has given necessary steps to be taken for regulating the losses in each circle. The circle wise report shows that no serious effort has been taken by the corporation to reduce their losses and improve their revenue for the state. The commission constantly monitors the performance of each circle, on the basis of quarterly information submitted by the licensee to the Commission. On the basis of such information the Commission has earmarked three circles that give about 84% revenue of the state. These are Western Circle (37%), Shillong Circle (27%) and Eastern Circle (20%). West Garo and East Garo circles are contributing only 7% revenue of the state. In the table given below the circle wise position of revenue share is projected.

Table 28: KEY REVENUE AREAS*					
Circle	Energy Received	Energy Sold	Revenue Billed	Revenue Collected	% of total revenue
*April-Jun'12	MU		Rs. Cr.		
West Garo	21.48	11.85	4.7	2.95	5%
East Garo	17.33	6.88	2.3	1.53	2%
Western	99.92	77.02	33.81	34.56	37%
Eastern	54.51	47.47	18.67	15.44	20%
Central	29.68	22.45	8.32	6.82	9%
Shillong	72.84	61.58	24.7	21.62	27%
Total	295.76	227.25	92.5	82.92	100%

Accordingly, MeECL should focus on those circles which give maximum revenue to the state and therefore losses in these areas must be checked and controlled so as to get good revenue for the state. The Commission has already informed the licensee to work out a monthly review plan for all the circles on the basis of revenue collected from each circle. The Commission has already them the average through rate from each circle so as to monitor the performance of the circles on actual collection per unit sold. The Table given below shows the performance of each circle during April to June 2012 on the basis of energy received, energy billed, revenue collected and AT & C losses.

Table 29- Performance of MeECL (circle wise) 2012-13				
Circle	Months	T & D loss (%)	Collection efficiency (%)	AT & C loss (%)
West Garo				
	April	48.6	60.32	68.97
	May	46.8	39.3	79.1
	June	38.03	90.02	44.21
	Total	44.8	62.87	65.29
East Garo				
	April	56.7	50.35	78.2
	May	60.48	72.4	71.39
	June	63.32	78.33	71.27
	Total	60.28	66.54	73.57
Western				
	April	19.53	83.37	32.91
	May	10.06	107.7	31.34
	June	35.18	114.32	25.89
	Total	22.92	102.2	21.21
Eastern				
	April	NA	58.25	35.04

	May	24.7	59.96	54.84
	June	20.44	135.01	NA
	Total	12.93	82.7	27.98
Central				
	April	24.88	80.28	39.68
	May	24.57	86.61	34.65
	June	23.65	79.15	39.57
	Total	24.36	81.91	38.03
Shillong	April	88.61	84.88	24.78
	May	89.23	82.05	26.79
	June	76.09	96.31	26.71
	Total	84.53	87.54	26.03

Similarly, the Commission in its last tariff order mentioned that for reduction of technical losses there is need to invest in the network which requires capital investment. But for improvement in commercial losses, the licensee has to put effort for improvement in meter reading, billing and facilitate in payments. This will improve their commercial losses and give better revenue. In order to assess the status of metering in the state the Commission has sought information from the licensee and it was informed that there are only 45000 consumers are still without meters. The licensee has given an action plan for 2011-12 & 2012-13 to meter these consumers in a phase manner. Accordingly, the Commission has set the following targets for improvement in metering, meter reading and replacement of defective meters as per CEA requirements. The targets are given in the Table below:

Year	2012-13	2013-14	2014-15	2015-16
Metering	MeECL is directed to adhere to their commitment as per above table		99%	100%
Minimum Improvement by % every year in meters not read.	5%	5%	5%	5%
Minimum Improvement in replacement of defective meters by electronic meters as per CEA requirements.	3%	3%	3%	3%

The Commission regularly conducts meeting with the Directors and other officers of utility to have an idea of revenue and other important parameters of the distribution system. In one of the meeting held on 13.08.2012 the Commission has reviewed the progress made by MeECL in implementing directives of the Commission. This meeting was attended by Director Distribution along with circles head of MeECL. In order to know the revenue of each circle against the approved average tariff, the Commission has computed through rate (revenue billed upon energy sold) through rate for each circle. In the meeting the Commission has suggested MeECL to start energy audit in each distribution circle by recording meter reading at all incoming and outgoing feeders at 33 KV concerned substations and reconciled the energy records with the actual billed energy in that area. The Commission found that from the average through rate (Rs.4.27) there is variation in through rates of each circles. The Commission has issued direction to the MeECL to take the following steps immediately:

- MeECL shall print the energy consumption of both electricity meters installed at substations and at consumer premises in their monthly electricity bills. This work should be immediately started and compliance should be immediately reported to the Commission.
- MeECL shall put energy meters on LT side of all distribution transformers having load above 250 KVA and supplying energy to major marketing complexes. In Shillong such as Police Bazar, etc and start energy audit from 1st September 2012 for three months. MeECL should provide result of energy losses on each transformer to the Commission by 1st week of October.
- MeECL should intimate the Commission the average rate of each circle on the basis of their sales mix and approve tariff.

To the above directive the Commission had received the reply on 29th November, 2012 on the status of progress made by MeECL. It was informed that MeECL has started printing readings of energy meters installed in the premises and in the substations on the electricity bill of HT & EHT consumers. MeECL has also taken action by installing energy meters on LT side of distribution transformers supplying energy to important marketing complexes in Shillong to record energy losses. However, they requested time from the Commission to send a report on energy audit for these transformers.

MeECL has also submitted the through rates of each circle which varies from Rs.3.97 (West Garo), Rs.3.32 (East Garo), Rs.4.39 (Western Circle), Rs.3.94 (Eastern Circle), Rs.3.71 (Central Circle) and Rs.4.01 (Shillong circle). It shows that the maximum revenue is coming from Western circle with large number of subsidising consumers.

In one of the information, MeECL has submitted that western circle of Meghalaya is contributing large portion of revenue to the state. It has three circles, namely Byrnihat, Umiam and

Nongpoh. In Byrnihat area, there are 82 consumers of HT & EHT category. There contracted load is varying from 100 KW to 17 MVA which contributes 60 % revenue of the state. It was also informed to the Commission that most of them are on 33 & 11 KV feeders with meters having features of KVAH and TOD recording. It is suggested to the MeECL that all important consumer having load above 100 KW should be provided with remote metering and there data should be compiled electronically. A key consumer cell should also be dedicated to monitor and analyse the energy pattern of such consumers. Similarly, in the Western circle there are 39 consumers of HT & EHT category having up to 9 MVA are using energy in bulk. In Nongpoh there are only four consumers connected on 11 KV and consumed electricity in bulk. Similarly, in Shillong circle there are 200 consumers mostly of commercial and non domestic meter which gives 27% revenue of the state. They also have KVH meters recording facility. In order to improve the billing and collection MeECL has to focus on above consumers which are not more than 350 in size.

MeECL in it response dated 24.08.2012 has intimated the Commission that they are taking following action on the directive issued by the Commission in its last tariff order

- To improve commercial losses, MeECL has invited notice for procurement of 50000 meters to replace all defective meters in the state. They have also started intensive disconnection drive against the defaulters in all circles.
- To check pilferages regular inspection is being carried out by different circles and in case of theft of energy, FIR are being lodged. They have also given a statement that circle wise report on theft and investigation. This report shows that in Shillong circle 520 inspections were carried out in between April to June 2012.
- In this inspection they have issued 20 compensation bills amounting Rs.7.8 lacs. Similarly in Western circle 20 inspections were carried out from April to June 2012 and Rs.1.27 lacs were demanded as a compensation bill. East Garo has also done 278 inspections and raised Rs.1.70 lacs compensation bills. However, MeECL is yet to provide the status of similar inspection in other part of the state.
- It was also informed to the Commission that no power regulation was done in the month of July 2012.
- MeECL has shown its inability to carry out the energy audit of 33 KV substations due to the requirement of improvement in the existing metering system. However, they have taken some samples of large consumers for energy audit and have submitted their records to the Commission. The loss analysis records

for 132 KV consumers fed from Umiam substation at 33 KV shows that there is a loss of 5.8% in the month of July. Similarly, other consumer in Umiam has shown a loss level of 2.4%. The loss report shows variations in the level of losses at different consumers. It varies from 1% to 4%.

The above data do not indicate whether any serious efforts have been made to comply with the directives with respect to control of losses. The Commission, therefore, once again directs MeECL to furnish the quarterly report on the AT&C losses, Defective meters, Revenue billed and collected from each circle within three months from the date of this order.

With regard to transmission and distribution (T&D) losses MeECL has given a general action plan to reduce the losses. The plan includes strengthening and re-engineering of the sub-transmission and distribution stations, inspection and detection of theft and pilferage. The expectation of MeECL is that the losses systematically climb down to reach a target of 28.38 percent by 2011-12 (from that of 32.53 % in 2010-11) and of26.87 percent by 2012-13. An analysis of the ARR proposal submitted by the Distribution Corporation, however, does not indicate that the target for reduction in transmission and distribution losses has been achieved. While overnight results may not be possible in view of the technical ramification of electricity supply system, Commission expects that the target of at least 23.5% percent is achievable in 2013-14 if diligent and pains taking efforts are made by the licensee for its own interest and the social obligation it owes to the consumers and the State at large. The Corporation is directed to take the necessary steps to achieve the target and to furnish the road map thereof to the Commission.

In metering and billing, Commission has noticed that while purchase of power has increased, the sale has not shown any corresponding increase. Logically, therefore, there is no need to increase purchase of power which then will result only in revenue loss. The conclusion is obvious. There is a failure in distribution system and the revenue recovery mechanism. The licensee, more than the regulators, should be seriously concerned with such a state of affairs and should take immediate and remedial action to plug the loopholes in the concerned areas. One of such areas is the defect in metering and billing system as pointed earlier apart from other administrative lapses.

The high consumption by the staff and offices is quite high. Licensee shall review and ensure that any supply should be in accordance with the CEA Regulations and through correct energy meters. The Commission directs MePDCL to give a report on the consumption trend read through correct meters of their employees within three months of this order.

With regard to facilities like opening of collection centres in different areas, separate counters for cash and cheque payments, payment by debit cards, payment through banks, facilities for women and senior citizens, some action has reportedly been taken by the licensee. Such facilities do afford convenience and should be extended to cover more consumers and make them feel friendly and convenient while paying their dues.

Energy audit in sub-stations and installing energy meters which are properly manned by accountable readers and engineers is an important exercise as it enables the licensee to locate the areas where losses can take place. In its tariff order dated 20.1.2012, Commission has issued directives in this regard. Licensee shall take sustained action to complete work in all sub-stations in Shillong and to submit a report by 306.2013.

Similar action should also be taken in respect of the Distribution Transformers in Shillong. The readings should be taken and reconciled with the energy bills of the consumers. The exercise taken should be reported by 30.6.2013.

The Commission wishes that the management of MeECL should pay attention on the AT&C losses in each circle of MeECL by conducting monthly meeting and take proper action against non performers. This is the high time when the corporations are to start functioning independently and headed by a professional. The management should set targets for reduction in losses, revenue collection for each circle and start monitoring them.

Comparison of Meghalaya with North East states:

The Commission has tried to compare some of the important parameters of MeECL with other distribution utilities in North East on the basis of Annual Report for 2011-12 on working of power utilities published by Planning Commission, Government of India. As mentioned in the last tariff order, the Commission has found that position of Meghalaya with regard to consumption mix and revenue mix is far better than other states in North East. The per capita consumption in Meghalaya in 2009-10 was 675.19 units against the National standard of 778 units in 2009-10.

Table 30: Per Capita Consumption (KwH)

Sl.	State	2006-07	2007-08	2008-09	2009-10
1	Meghalaya	546.83	629.19	655.38	675.19
2	Assam	175.09	188.03	199.15	204.8
3	Tripura	178.9	202.41	203.75	335.47
4	Arunachal Pradesh	299.11	456.39	447.47	470
5	Sikkim	533.37	732.22	806.29	850

6	Nagaland	173.29	199.35	225.98	218.03
7	Manipur	194.8	222.31	241.73	240.22
8	Mizoram	162.63	353.95	378.29	376.99
10	All India	671.89	717.13	733.54	778.1

Similarly, the industrial consumption in the State is about 48% of the total consumption and therefore more than 50% revenue is collected from few consumers of the State. It is also clear from the table below that in other States; there is lesser industrial consumption in comparison to Meghalaya. However the trend of industrial consumption is not encouraging and more or less same.

Table 31 - Share of Industry in Total Sale

Sl.	State	2006-07	2007-08	2008-09	2009-10	2010-11
1	Meghalaya	47.98	50.45	47.88	47.93	49.73
2	Assam	24.5	27.6	30.2	29.02	27.46
3	Tripura	2.45	3.66	3.75	4.5	4.68
4	Arunachal Pradesh	19.95	25.42	23.08	23.07	23.08
5	Sikkim	15.95	13.32	20.16	22.82	19.62
6	Nagaland	4.78	3.83	3.64	3.76	3.93
7	Manipur	2.64	2.88	3.02	3.93	3.75
8	Mizoram	0.6	0.62	0.76	0.73	0.76
10	All India	34.51	33.66	33.28	33.11	33.52

Therefore a little effort in the State shall make the power sector financially viable and profit making. This kind of consumption mix is generally not available anywhere. The State has its own source of cheaper and green generation which give it additional strength.

Consumer mix of N.E States 2012-13

Sl	**Particulars**	**Assam**	**Meghalaya**	**Tripura**	**Nagaland**	**Mizoram**	**Manipur**
1	Domestic & others	2476	503.46	589.35	298.04	301.25	338
2	Commercial	783	129.77	77.17	39	23.5	36
3	Industries	1537	927.72	54.87	13	1.5	16
4	**Total**	**4796**	**1560.95**	**721.39**	**350.04**	**326.25**	**390**
5	% of Domestic & others	51.63	32.25	81.70	85.14	92.34	86.67
6	% of Commercial	16.33	8.31	10.70	11.14	7.20	9.23
7	% of Industries	32.05	59.43	7.61	3.71	0.46	4.10

Average cost of supply

In the year 2013-14, the Commission has allowed Rs.4.55 as the average cost of supply which is comparable to other States in North East. This is given in the Table below:

Table – Comparison of average cost of supply* in North East						
Sl No	**Name of the N.E. States**	**No of Consumers**	**Energy sales/Handled (MU)**	**Aggregate Revenue Requirement (Rs in Cr)**	**Cost per Unit (Rs/unit)**	**Remarks**
1	Assam MYT (FY 2010-11 to FY 2012-13)	2310525(FY 2010-11) 3030018 (FY 2011-12) 3357111 (FY 2012-13)	3638 4161 4796	1812.63 1944.08 2250.09	4.98 4.67 4.69	
2	Tripura (FY 2012-13)	460723	1183.28	543.66	4.59	461.89 MU is Surplus power sold to other states
3	Meghalaya (FY 2013-14)	315017	1664	745.22	4.55	315MU is supposed to be sold as surplus
4	Nagaland (FY 2012-13)	202444	442.47	239.68	5.41	92.43 MU is surplus power sold outside the state
5	Mizoram (FY 2012-13)	200463	360.4	124.59	3.46 (8.66)	34.15 is surplus power & Rs 187.66 Crs is Govt Subsidy
6	Manipur (FY 2012-13)	250065	470	262.43	5.58 (8.80)	80 MU is surplus power & Rs 151 Crs is Govt Subsidy

* Source Tariff orders.

DIRECTIVES FOR 2013-14

In accordance with the provisions of Commission's Regulation the distribution Licensee has to implement the orders or directions issued by the Commission from time to time in respect of the conditions under the license. In exercising the powers given under the regulations, the Commission in order to protect the interest of the Consumers as well as the State Power Sector would like to issue following directives to MePDCL to be completed in the time frame as stipulated therein.

Compliance of Directives issued in 2012-13

1. The Commission directs licensee to send action taken report along with status of compliance in each directive issued in the last tariff order. This report should reach the Commission by 30th April 2013.

Fresh Directives

The performance of MeECL has not been satisfactory as the T & D Losses continues to be high. The Commission in the Tariff Order of 2011-12 & 2012-13 has provided a trajectory for reduction of losses in next four years. In order to improve commercial losses an efficiency improvement of 1.5% is again targeted for 2013-14. This will thus enable the licensee to get additional revenue of about Rs. 10 crores in 2013-14. Accordingly, the Commission directs the MeECL to do the following:

a. To submit to the Commission a concrete action plan to be undertaken by it in reducing the T & D Loss and the AT & C Loss in each circle. The action plan should cover time bound targets in reducing the commercial loses as per the trajectory for 2013-14. MePDCL should nominate a nodal officer in each circle to send report on actual losses, revenue billed and revenue collected each month to the Commission. List of nomination for each circle should be sent by 1.5.2013.
b. Reduction of losses can be done by using measures of change of defective meters, improvement in billing and collection and measures to check pilferages or thefts, conducting vigilances and inspection, changing from Electric mechanical meter to Electronic meters etc. This action plan should cover the targets fixed for each and every division or circle of MeECL

for collecting additional about Rs.0.66 crores per month over and above the normal sales target. This action plan should reach to the Commission by 01.05.2013.

c. MePDCL shall start monitoring the performance of all six circles in distribution by getting information on sale, revenue and AT & C losses every month. MePDCL shall forward a monthly review report of all the circles to the Commission by 15th of every month.

d. MePDCL shall send an action plan for improvement in metering and billing for 2013-14. MePDCL shall forward a monthly report on target fixed for each circle for replacement of defective meters and compliance thereof. This report should reach the Commission every quarter.

e. MePDCL shall also forward a report to the Commission every quarter on the number of cases in each circle where meters are not read, or consumers are billed on normative basis without meter reading and number of unmetered consumers. MePDCL shall also fixed target for monitoring such cases.

f. MePDCL shall forward within one month a report on the pilot study being done in Police Bazar on energy audit by metering distribution transformers. The Commission has already directed MePDCL to start this work w.e.f. 01.09.2012.

g. The Commission directs MePDCL to make serious efforts on the metering and energy audit of industries in the State so as to know the correct level of consumption and revenue from this category. A report on this exercise should be made available to the Commission within three months of this order.

(ii) Time of Day Tariff

h. MePDCL is directed to prepare time of day provisions in their existing meters for consumers of HT industrial load and furnish data of the same to the Commission for implementation of time of day tariff from the date of issue of next tariff order. The Commission also directs the licensee to make a proposal to the Commission with regard to peak hours and off peak hours during winter and summer so that the new tariff shall be worked out.

(iii) Computerised billing

i. The Commission directs MePDCL to introduce computerised data base of consumers so that consumer can deposit their bills at any collection centre. A status report on this project may be submitted within one month time.

(iv) Energy Audit

j. The Commission directs the management to look into this matter and take action on priority to start energy audit in at least those areas where consumption and revenue are highest. The action plan should be submitted to the Commission by 30^{th} June 2013.

k. A report on metering status in all 33 KV substations should be prepared and provided to the Commission with action plan for making them functional and reading of such meters are done on regular basis.

(v) Revenue Audit

l. Commission directs MePDCL to get revenue audit of billing in each circle immediately from independent CAG approved auditors within three months of issue of this order. The auditor should check all industries and other revenue yielding consumers, domestic and commercial consumers in Shillong that they are being billed correctly on the basis of applied/allowed tariff and give their report to the Commission by 30^{th} June 2013.

(vi) Improvement in supply

m. The Commission directs MePDCL to supply electricity to all parts of the State without discrimination as the first priority and in case of no existing demand or additional demand in the State this surplus energy should be sold outside either on bilateral or competitive basis. Monthly report on availability of energy, supply hours in all circles should be made available to the Commission starting from 1^{st} June, 2013.

ORDER

Having considered the submission made by the Petitioner, the responses of various stakeholders and the provisions of Electricity Act and relevant regulations, the Commission hereby approves that:

i. MePDCL shall be entitled to charge the tariff from consumers in its licensed area of supply in Meghalaya as approved in this tariff order.

ii. The revised tariff shall come into effect from the 1st day of April 2013 and shall remain effective till 31st day of March 2014 or orders.

iii. MePDCL to file the petitions for open access charges and truing up application for previous year by 30.04.2013.

iv. The Petitioner shall forward a report on compliance of directions given in this order within prescribed time.

v. The Petitioner shall forward monthly report on energy purchased, energy sold, revenue billed and revenue collected to the Commission.

The Commission would like to appreciate the response from MePDCL for submitting all relevant information to the Commission as and when required.

(ANAND KUMAR)
CHAIRMAN, MSERC.

ANNEXURE-1

RECORD NOTE OF THE 12 TH MEETING OF THE STATE ADVISORY COMMITTEE HELD AT 2.00 PM ON 12TH MARCH 2013 AT THE MSERC CONFERENCE HALL AT SHILLONG.

Present:-

1) Shri Anand Kumar, Chairman, Meghalaya State Electricity Regulatory Commission, Shillong.
2) Shri. J. Lyngdoh, Commissioner & Secretary (Power).
3) Shri. J.B. Poon, Secretary MSERC.
4) Shri. W. Rynjah, Ombudsman, MSERC.
5) Shri. D.S. Nongbri, Consultant (F & A), MSERC.
6) Shri. P. Lyngdoh, Director Distribution, MePDCL(Invitee).
7) Shri. S. K. Lato, Jowai.
8) Shri. K. Marbaniang.
9) Shri. A. Goswami, IEX.
10) Shri. A.B. Kar.
11) Shri. G.W. Syngai.
12) Shri. B. E. Wallang.
13) Shri. S. S. Agarwal, BIA (Invitee).
14) Shri. Rahul Bajaj, BIA (Invitee).
15) Shri. Manas Tiwari, Feedback Infra.
16) Shri. Sanjub Tamuli, Feedback Infra.
17) Shri. S. R. Chanda, Addl. CE. PHE.
18) Shri. H.S. Nongkynrih, SE. PHE.
19) Shri. MSS Rawat, Dy. CAO, MeECL (Invitee).
20) Shri. S.B. Umdor, SE, MePDCL.
21) Shri. S. Nongrum, Senior AO, MeECL.
22) Shri. L. Kharpran, MeECL.
23) Shri. A. Shabong, MeECL.
24) Shri. P. Sahkhar, SE, MeECL.

Calling the 12th Meeting of the State Advisory Committee (SAC) to order, the Chairman welcomed the Commissioner & Secretary Power, members of Advisory Committee and special invitees present. He gave a brief idea of the ARR for 2013-14 filed by Distribution Licensee MePGCL. He explained important issues relating with the ARR for FY 2013-14 which has bearing on the retail tariff. Chairman MSERC informed all the participants about the Hon'ble ATE Order dated 15.02.2013 regarding completion of ARR proceedings by

31.03.2013 for FY 2013-14. He also briefed the members on the present MSERC (Terms and Conditions of Tariff Determination) Regulation 2011 and implications of each of the component of ARR in the Tariff. Members of the Advisory Committee were briefed that the Commission has already admitted ARR petition for distribution petition on 25.02.2013. The Commission mentioned that the new tariff for FY 2013-14 should be applied from 1st April 2013. He invited comments in writing on the ARR of distribution to be submitted by 20.03.2013. He explained that T & D losses should be improved upon and limited to 23.5% as allowed in the loss trajectory decided by the Commission in its Tariff Order for FY 2012-13. He also explained that the consumption of industries does not match with that as approved by the Commission in the last ARR. This is affecting the annual revenue requirement of the licensee and has an impact on the retail tariff of consumers of the State. The Commission has also explained that the balance sheet and statement of accounts of MeECL after FY 2009-10 has not been audited so far. He has shown his concern on the validation exercise in the absence of audited accounts. He invited suggestions from participants on the validation exercise on the basis of actual records of last six months i.e. April 2012 to September 2012. On the ARR & Tariff Petition for the year 2013-14, the Chairman called upon the Hon'ble Members and invitees to participate in the deliberations on distribution ARR and invited their suggestions. Members of the SAC raised the following issues:

1. **Shri K. Marbaniang**

   Shri Marbaniang has required MeECL to explain the status of action taken by Distribution Company with regard to reduction of losses in previous years and plan for future. He also required MeECL to explain the status of availability of electricity in the State in 2013-14. He suggested that reduction of losses shall improve the revenue of MeECL and in turn better supply to consumer of the State.

2. **Shri. S.S. Agarwal**

   Shri. S. S. Agarwal has raised objection on the unavailability of audited accounts of the company. He strongly objected to the ARR of Distribution Company for 2013-14 which has only projections on each and every component without supporting evidences to claim that cost. He suggested the Commission to either reject the petition or satisfy itself with the actual records of expenses. He raised doubts on the expenditures on several heads like interest cost, bad debts, etc. He has also raised objection towards the projected losses of 30% in the ARR for 2013-14. He has emphasized that T & D losses should be determined by MeECL on the basis of energy audit and they should publish this audit for information of the consumers.

3. **Shri. S.K. Lato**

Shri. S. K. Lato has raised the objection towards the expenses projected in the petition and suggested the Commission that actual expenses of previous months should be considered while allowing the same in the current ARR.

4. **Shri. Rahul Bajaj**

Shri. Rahul Bajaj has also raised the high losses in the transmission and distribution and gave his objection towards the high cost of Leshka project. He has suggested that the Commission should not allow the inefficiencies and cost overrun in the projects and therefore the current tariff should not be increased as demanded by MeECL. He has also raised that demand of electricity depends upon the rates being charged to them and therefore the Commission should sympathetically consider the request of industries. He suggested that a written objection is also being filed.

5. **Shri. A Goswami**

Shri. Goswami has raised that for energy audit, proper metering and their recording should be done regularly by MeECL. There should not be any unmetered category of consumers and MeECL should take interest to reduce their AT & C losses. He has also raised the promotion of renewable energy in the State and requested the Commission to allow renewable purchase obligation and mandatory purchase of solar energy.

6. **Shri. J.B. Kar**

Shri. J.B. Kar - representative of Pensioner's Association requested the Commission to sympathetically consider their demand of low slab rates in the present ARR. They have given objections in writing to the Commission for consideration. He has also raised that MeECL should also improve their quality of supply and continuous supply of electricity in the State to every consumer.

7. **Shri. S. R. Chanda,**

Shri. S. R. Chanda - representative from PHE has requested time up to 20th March 2013 to file objection in writing. He has submitted that the Commission should consider the nature of supply of PHE and their tariff should not be more than commercial category of consumers. He explained that in rural areas PHE is supplying water free of cost and therefore the Commission also fixes their tariff keeping this in account.

8. **Shri. J. Lyngdoh,**

Shri. J. Lyngdoh, Commission and Secretary Power suggested that there is scope of improvement in the current level of efficiencies of the licensee and the State Government is taking keen interest to develop this sector in the interest of the consumers. He has emphasized the need to promote renewable energy in the State.

Summing-up the discussions, the Chairman placed on record his profound gratitude to the Hon'ble Members and invitees present, for their valuable suggestions and submissions and assured that these would be kept in view, while finalizing the Tariff for the year 2013-14.

(J.B. Poon)
Secretary
MSERC

ANNEXURE-2

RECORD NOTE OF PUBLIC HEARING ON ARR AND TARIFF PETITION FILED BY MEPDCL, MEPTCL, MEPGCL & SLDC FOR THE YEAR 2013-14 HELD BY MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION AT 12:00 NOON ON 25TH MARCH 2013 IN THE MSERC CONFERENCE HALL, LOWER LACHUMIERE, SHILLONG.

Record Note of Public Hearing

01. Chairman, MSERC welcomed all the participants who had come to attend the Public Hearing on the ARR & Tariff Petition filed by MePDCL (Distribution), MePTCL (Transmission), MePGCL (Generation) & SLDC for the FY 2013-14. The Chairman has explained the salient features of the ARR and provisions of the regulation in determining the tariff for ensuing year 2013-14. The Commission has also held meetings with members of State Advisory Committee on 30th January & 20th February wherein deliberations were made on all important issues relating to the ARR. This meeting was also attended by representatives from Industries, Pensioner's Association, and Domestic consumers as special invitees. The Commission invited suggestions from the participants on the ARRs of Generation, Transmission, Distribution and SLDC for FY 2013-14.

02. Following participants, presented their suggestions which are discussed below:

03. The Byrnihat Industries Association represented by Smt. Sneha Venkataramani, Advocate strongly objected on the proposed increase in the Industrial Tariff for FY 2013-14. She insisted that tariff proposal should be based on actual records of expenses. She has raised objection on the tariff proposal filed by MePGCL for Leshka Myntdu Hydro Electric Project without audited data. She insisted on that no final tariff should be given to Leshka Project on the basis of records without any statutory audit and without inviting objections. She has submitted that in accordance with the Commission's Regulation, MePGCL should have filed an application for provisional tariff when the unit was commercially started. She submitted that final tariff for Leshka Project should be determined at the time of filing of tariff petition with audited records and when all units are commercially operated. Similarly, she has raised objection on the projections made by MePGCL with regard to NAPAF for all the machines including Leshka in their petition. She submitted that without any study on availability, the Commission should not agree to their proposal.

04. On the transmission tariff, she raised that there is no details of assets which were put in for use. She objected that without capitalisation of the assets there should not be any claim on depreciation or equity. Similarly return on equity should also be based on size of equity in accordance with Commission's regulation in 70:30 ratios.

05. BIA has made an objection that O & M expenses should be decided on normative basis in transmission and it should be controlled in accordance with standard norms. Similarly, for employees cost also she has given a reference of the order made by Hon'ble ATE to introduce efficiency in the operation while sanctioning employees cost. Similarly, they have raised an objection on interest on working capital which should be charged in accordance with correct level of expenses.

06. On the distribution tariff, the BIA has demanded that the expenses given in the ARR petition for 2013-14 should be checked with the actual level of expenses made by MePDCL in previous years. For checking the expenses, she has suggested the Commission to do the truing up exercise. In response to BIA objection, Director (MePDCL), has informed the Commission that due to compliance of Hon'ble Supreme Court Order, MePDCL requires time up to 30.04.2013 to file the updated true up application for FY 2008-09 onwards. BIA did not comment on this.

07. Industries demanded that there should not be any hike for 2013-14 otherwise their business will suffer. They have also requested to provide uninterrupted and quality power supply to run their business smoothly. The Commission has invited suggestions/complaints from industries with regard to improvement in the present supply system and interruption in the power supply so that corrective action may be taken by the Commission at his level.

08. Meghalaya Pensioner's Association requested the Commission that since they have limited source of earning, their tariff should not be increased to the level as proposed by the Distribution Company. They have also suggested that Tariff up to consumption of 240 Units in Domestic category should not be raised and keep it at the same level. MePDCL responded to the objection of Pensioners and informed them that differentiation among the consumers on the basis of paying capacity is difficult as it is not in accordance with the act.

09. PHE has made a request to the Commission that their tariff should not be higher than industry and commercial and should be based on purpose of use. MePDCL has no objection to it and left the matter to the Commission for decision.

10. No representative from Shillong Municipality and Tourist attended the hearing as done last year.

The Hearing ended with a vote of thanks from the Chairman MSERC.

(J.B. Poon)
Secretary
Meghalaya State Electricity Regulatory Commission.

LIST OF PARTICIPANTS IN THE PUBLIC HEARING ON 25.03.2013

1. Representing the Petitioner (MePDCL/MePTCL/MePGCL/SLDC).

1. Shri. E. Lyngdoh, Director (D)
2. Shri. P. Lyngdoh, Director (D)
3. Shri. C. Kharkrang, CE (D)
4. Shri. E. Slong, CE (T & T)
5. Shri. K. N. War, ACE (Com)
6. Shri. A. Lyngdoh, SE.
7. Shri. S.B. Umdor, SE (RO)
8. Shri. L. Shilla, SE (Gen)
9. Shri. A. Kharpran, SE, (SLDC)
10. Shri. M. K. Chetri, SE (T)
11. Shri. R. Syiem, SE (T&T)
12. Shri. P. Sahkhar, SE (RA&FD).
13. Shri. F.E. Kharshiing, EE, (SLDC)
14. Shri. W.R. Basaiawmoit, CAO
15. Shri. M.S.S. Rawat, Dy CAO
16. Shri. S. Nongrum, SR. AO

2. Inspectorate of Electricity

Shri. P. K. Sohkhlet, Senior Electrical Inspector

3. Byrnihat Industries Association/Other industries.

1. Smti. Sneha Venkataramani, Advocate.

2. Shri. S S Agarwal
3. Shri. R Bajaj
4. Shri. U. Agarwal
5. Shri. R. Choudhury
6. Shri V.Kr. Agarwala
7. Shri. S. Gupta.
8. Shri. A. Suleka
9. Shri. J. Kumar
10. Shri. A. Rai, Star Cement
11. Shri. S. Agarwal, Meghalaya Steels
12. Shri. M.K. Rai, Star Cement
13. Shri. P.K. Mour, NFAPL

4. Meghalaya Pensioner Association.
1. Shri. B E Wahlang
2. Shri. J.B. Kar

5. Public Health Engineering (PHE) Department.
1. Shri. S. R. Chanda, Addl. CE (PHE)
2. Shri. H.S. Nongkynrih, SE (MSE) Electrical Circle, Shillong.
3. Shri. Y. K. B. Singh, EE

6. Greater Shillong Crematorium and Mortuary Society
Shri. J. Malakar