Before Meghalaya State Electricity Regulatory Commission, Shillong

PETITION

FOR

APPROVAL OF BUSINESS PLAN AND ANNUAL REVENUE REQUIREMENT FOR FY 2015-16 TO FY 2017-18

FILED BY



MEGHALAYA POWER TRANSMISSION CORPORATION LTD.

Lum Jingshai, Short Round Road, Shillong - 793 001

BEFORE THE HON'BLE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

FILE / PETITION NO......

IN THE MATTER OF

APPROVAL OF BUSINESS PLAN AND ANNUAL REVENUE REQUIREMENT FOR FINANCIAL YEARS 2015-16, 2016-17 & 2017-18 OF THE MEGHALAYA POWER TRANSMISSION CORPORATION LIMITED (MePTCL) UNDER THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (MULTI YEAR TARIFF) REGULATIONS, 2014 AND UNDER SECTION-62 READ WITH SECTION 86 OF THE ELECTRICITY ACT 2003.

AND IN THE MATTER OF

MEGHALAYA POWER TRANSMISSION CORPORATION LIMITED; LUMJINGSHAI, SHILLONG – 793001, MEGHALAYA

PETITIONER

IT IS RESPECTFULLY SUBMITTED BY THE PETITIONER THAT:

- 1. In exercising its powers conferred under the section 131 and 133 of the Electricity Act 2003, the State Government of Meghalaya notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" on 31st March 2010 leading to restructuring and unbundling of erstwhile Meghalaya State Electricity Board (MeSEB) into four entities namely (i) Meghalaya Energy Corporation Limited (MeECL), the Holding Company; (ii) Meghalaya Power Distribution Corporation Limited (MePDCL), the Distribution Utility; (iii) Meghalaya Power Generation Corporation Limited (MePGCL), the Generation Utility; & (iv) Meghalaya Power Transmission Corporation Limited (MePTCL), the Transmission Utility. However, the holding company MeECL carried out the functions of distribution, generation and transmission utilities from 1st April 2010 to 31st March 2012. Therefore, through notification dated 31st March 2012, State Government notified an amendment to The Power Sector Reforms Transfer Scheme leading to effective unbundling of MeECL into MeECL (Holding Company), MePDCL (Distribution Utility), MePGCL (Generation utility) and MePTCL (Transmission Utility) from 1st April 2012 onwards.
- 2. MePTCL has begun segregated commercial operations as an independent entity from 1st April 2013 onwards. The Meghalaya State Electricity Regulatory Commission (MSERC, hereinafter referred to as "The Hon'ble Commission") has determined the segregated Aggregate Revenue Requirement (ARR) for MePTCL for FY 2013-14 and FY 2014-15 in accordance with Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011.

- 3. The petition for determination of ARR for the first Control Period (FY 2015-16 to FY 2017-18) has been prepared in accordance with The Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 (hereinafter referred to as "MYT Regulations, 2014") which have been notified by the Hon'ble Commission on 15th September 2014.
- 4. Based on the provisional segregated financials and transfer scheme, estimates for the FY 2014-15 and projections for FY 2015-16 to FY2017-18 are prepared and ARR for FY 2015-16 to FY2017-18 is proposed.
- 5. The Net Annual Revenue Requirement (ARR) for FY 2015-16, FY 2016-17 and FY 2017-18 of MePTCL is projected at Rs. 183.23 Cr, Rs.211.69 Cr & Rs. 226.50 Cr respectively.
- 6. The Board of Directors of MePTCL have accorded approval for the Transmission ARR and Tariff petitions for the first control period FY2015-16 to FY2017-18 and authorized the undersigned to file accordingly.
- 7. The applicant, therefore, humbly prays to the Hon'ble Commission to pass appropriate orders on the following:
 - a. Approval of Business Plan for the Control Period of FY 2015-16 to FY 2017-18
 - b. Approval of Net ARR amounting to **Rs. 183.23 Cr** for FY 2015-16 as proposed in this Petition.
 - c. Approval of Net ARR amounting to **Rs. 211.69 Cr** for FY 2016-17 as proposed in this Petition.
 - d. Approval of Net ARR amounting to **Rs. 226.50 Cr** for FY 2017-18 as proposed in this Petition.
 - e. To pass such orders, as Hon'ble Commission may deem fit and proper and necessary in view of the facts and circumstances of the case.
 - f. To condone any inadvertent omissions, errors & shortcomings and permit the applicant to add/change/modify/alter this filing and make further submissions as required.

L.M.F. Sohtun,
Additional Chief Engineer
Transmission & Transformation,
For and on behalf of
Meghalaya Power Transmission Corporation Ltd

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1 Background

1.1 Introduction

- 1.1.1 The Power Supply Industry in Meghalaya had been under the control of the erstwhile Meghalaya State Electricity Board (MeSEB) with effect from 21st January 1975. On 31st March 2010, the State Government issued a Notification "The Meghalaya Power Sector Reforms Transfer Scheme 2010" thereby giving effect to the transfer of assets, properties, rights, liabilities, obligations, proceedings and personnel of the erstwhile MeSEB to four successor companies. On 31st March 2012, Government of Meghalaya issued further amendment to the above mentioned transfer scheme, to transfer Assets and Liabilities including all rights, obligations and contingencies with effect from 1st April, 2012 to namely:
 - Generation: Meghalaya Power Generation Corporation Ltd. (MePGCL)
 - Transmission: Meghalaya Power Transmission Corporation Ltd. (MePTCL)
 - Distribution: Meghalaya Power Distribution Corporation Ltd. (MePDCL)
 - Meghalaya Energy Corporation Limited (MeECL), a holding company.
- **1.1.2** The Government of Meghalaya issued further notification on 23rd December 2013 thereby notifying the revised statement of Assets and Liabilities as on 1st April 2010 to be vested in Meghalaya Energy Corporation Limited.
- 1.1.3 The MSERC is an independent statutory body constituted under the provisions of the Electricity Regulatory Commissions (ERC) Act, 1998, which was superseded by Electricity Act (EA), 2003. The Hon'ble Commission is vested with the authority of regulating the power sector in the State inter alia including determination of tariff for electricity consumers.

1.2 Provision of Law

- **1.2.1** The Hon'ble Commission has notified the MYT Regulations, 2014 on 15th September, 2014.
- **1.2.2** As per Regulation 3, 4 & 7 of the MYT Regulations, 2014, the Hon'ble Commission will determine ARR & Tariff for the Transmission Licensee under Multi Year Tariff framework from 1st April, 2015. The relevant regulations are reproduced below for reference.

"3 Scope of Regulation

- 3.1 The Commission shall determine tariff within the Multi-Year Tariff framework, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:
- i. Supply of electricity by a Generating Company to a Distribution Licensee: Provided that where the Commission believes that a shortage of supply of electricity exists, it may fix the minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a generating Company and a Distribution Licensee or between distribution licensees, for a period not exceeding one year to ensure reasonable prices of electricity;

ii. Intra-State transmission of electricity and SLDC charges;

iii. Intra-State Wheeling of electricity;

iv. Retail supply of electricity:

Provided that in case of distribution of electricity in the same area by two or more Distribution Licensees, the Commission may, for promoting competition among Distribution Licensees, fix only maximum ceiling of tariff for retail sale of electricity:

Provided further that where the Commission has allowed open access to certain consumers under sub-section (2) of Section 42 of the Act, the Commission shall determine the wheeling charges, cross subsidy surcharge, additional surcharges and other open access related charges in accordance with these regulations and MSERC (Terms and Conditions of Open Access) Regulations 2012 as applicable and as amended through Orders issued by the Commission from time to time

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4 Multi-Year Tariff framework

4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii) and (iv) of regulation 3 above under Multi- Year Tariff framework with effect from April 01, 2015.

Provided that the Commission may, either on suo-moto basis or upon application made to it by an applicant, exempt the determination of tariff of a Generating Company or Transmission Licensee or Distribution Licensee under the Multi-Year Tariff framework for such period as may be contained in the Order granting such an exemption.

4.2 The Multi-Year Tariff framework shall be based on the following elements, for determination of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Company, Transmission Licensee, and Distribution Business:

a) A detailed Business Plan based on the principles specified in these Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval:

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7 Applicability

- 7.1 The Multi-Year Tariff framework shall apply to applications made for determination of tariff for a Generating Company, Transmission Licensee, and Distribution Licensee for Distribution Business."
- **1.2.3** The Regulation 6 of the MYT Regulations, 2014, provides the guidelines for filing of Multi Year Tariff. The relevant sections are reproduced below:

"6 Accounting statement and filing under MYT

- 6.1 The filing under MYT by the Generating Company, Transmission Licensee, and Distribution Licensee, shall be done on or before 30th November each year to the Commission and in compliance with the principles for determination of ARR as specified in these Regulations, in such formats and at such time as may be prescribed by the Commission from time to time. The filing of truing up of petitions prior to MYT period shall be done in the manner and at such time as may be decided by the Commission.
- 6.2 The filing of MYT Petition for the Control Period under these Regulations shall be as under:
- a) MYT Petition shall comprise of:
- i. Multi-year Aggregate Revenue Requirement for the entire Control Period with year-wise details;
- ii. Revenue from the sale of power at existing tariffs and charges and projected revenue gap, for the first year of the Control Period under these Regulations.
- iii. Application for determination of tariff for first year of the Control Period.

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1.2.4 As per Regulation 8 of the MYT Regulations, 2014, MePTCL has to file a Business Plan for the control period of FY 2015-16 to FY 2017-18. The relevant regulation is reproduced below:

"8 Business Plan

8.1 The Generating Company, Transmission licensee, and Distribution Licensee for Distribution Business, shall file a Business Plan for the Control Period of three (3) financial years from 1st April 2015 to 31st March 2018,

which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets, in accordance with guidelines and formats, as may be prescribed by the Commission from time to time:

Provided that a mid-term review of the Business Plan/Petition may be sought by the Generating Company, Transmission Licensee and Distribution Licensee through an application filed three (3) months prior to the specified date of filing of Petition for truing up for the second year of the Control Period and tariff determination for the third year of the Control Period.

- 8.2 The capital investment plan shall show separately, on-going projects that will spill over into the Control Period, and new projects (along with justification) that will commence in the Control Period but may be completed within or beyond the Control Period. The Commission shall consider and approve the capital investment plan for which the Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Business, may be required to provide relevant technical and commercial details.
- 8.3 The Distribution Licensee shall project the power purchase requirement based on the Merit Order Dispatch principles of all Generating Stations considered for power purchase, the Quantum of Renewable Purchase Obligation (RPO) under Meghalaya State Electricity Regulatory Commission (Renewal Energy Purchase Obligation and Compliance) Regulations, 2010 and the target set, if any, for Energy Efficiency (EE) and Demand Side Management (DSM) schemes.
- 8.4 The Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Business, shall get the Business Plan approved by the Commission.

1.3 Submissions to the Hon'ble Commission

1.3.1 MePTCL hereby submits the petition under section 61, 62(c) & 62(d) of the Electricity Act, 2003 and MYT Regulations, 2014 as amended from time to time for approval of Business Plan & ARR for the period of FY 2015-16 to FY 2017-18.



2 Business Plan

2.1 Preamble

- 2.1.1 The Hon'ble Commission has notified the MYT Regulations, 2014 on 15th September 2014 which came into force on 25th September, 2014. The tariff from 01st April 2015 onwards is to be determined under Multi Year Tariff framework. Based on the Business Plan, Meghalaya Power Transmission Corporation Limited (MePTCL) is required to forecast the Aggregate Revenue Requirement (ARR) for the first Control Period (FY2015-16 to FY2017-18). As per the MYT Regulations, Business Plan should comprise of capital investment plan, financing plan, physical targets etc.
- 2.1.2 The aforementioned components of Business Plan depend upon various factors such as historical data, current and future financial estimates, growth estimates, economic, financial and business related assumptions, current operational requirements, other foreseeable changes/ requirements in future etc. MePTCL has taken a rational and scientific approach while forecasting various components of Business Plan in order to arrive at realistic forecast with minimal expected deviations. However, due to a number of uncontrollable externalities, deviations are expected and shall be brought to the notice of the Hon'ble MSERC in accordance with the provisions of MYT Regulations. The approach undertaken for preparation of various plans and forecasts is explained in detail in the relevant sections of Business Plan. This Business Plan, as submitted under MYT Regulations 2014 will be considered as a base for determination of ARR.

MePTCL 1 0

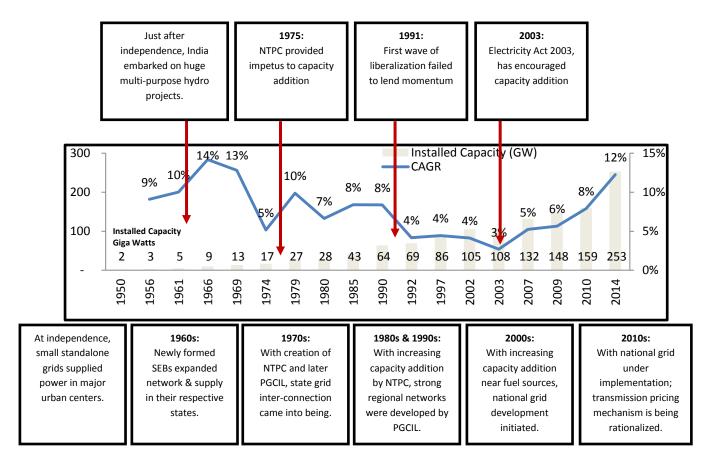
2.2 Indian Power Sector Scenario

2.2.1 India is the fourth largest consumer of energy in the world after USA, China and Russia, the second most populous country and one of the fastest growing economies of the world. It must, therefore, meet its development needs by using all available domestic resources of coal, uranium, oil, hydro and other renewable resources, and supplementing domestic production by imports. High reliance on imported energy is costly especially keeping in view the rising energy prices; it also impinges adversely on energy security. Meeting the energy requirement of country, with a targeted economic growth rate of 8%-9% every year and a fast growing population, at affordable prices therefore presents a major challenge. Therefore a sustained effort at increasing energy efficiency is required while increasing domestic production as much as possible to keep import dependence at a reasonable level.

With the growing demand in energy requirement, the annual per capita energy consumption has grown significantly. The low per capita consumption of electric power in India compared to the world average presents a significant potential for sustainable growth in the demand for electric power in India. According to the 18th Electric Power Survey (EPS), India's peak demand is expected to grow at to 207 GW in 2016-17 and 294 GW in 2021-22.

2.2.2 Sector Evolution

Electricity sector in India has evolved over the years. After independence, in order to fuel India's growth, the government embarked on multi-purpose hydro projects. During this time, the sector was underdeveloped and consisted of small standalone grids which supplied power in major urban centres. Evolution of the electricity sector from 1947 to its current state has been detailed below:



Electricity Act 2003 has overhauled the sector framework and has catalysed capacity addition. Fundamental changes brought about by the Electricity Act, 2003 are detailed below.

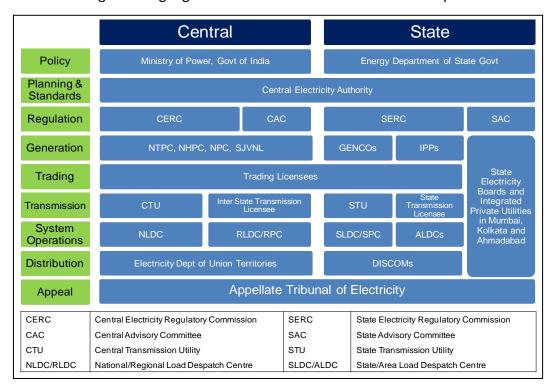
The most critical change brought about by Electricity Act, 2003 is competition – at wholesale as well as retail level – across the functions of generation, transmission, trading and distribution. While each sub-segment is at a different stage of implementation, competition is most pronounced in generation and trading.

Other than competition, the most critical element of EA 2003 is open access. Open access which provides for non-discriminatory access to networks of all transmission & distribution licensees actually facilitates competitions amongst power generators, traders and suppliers.

2.2.3 Key features of Indian Power Sector

 Sector governed by Ministry of Power and Ministry of Renewable Energy with technical support by CEA and Regulatory support by CERC;

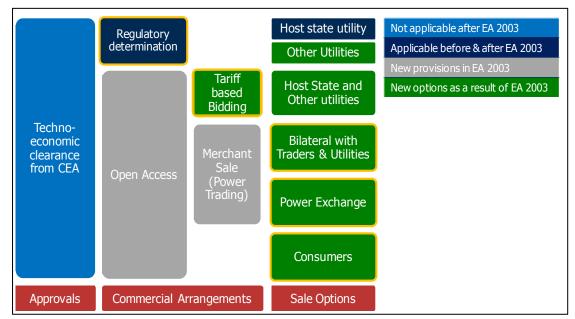
- Generation has been delicensed and is owned by a mix of Central, State and Private entities;
 - Private Sector contributes to ~ 36% of the total capacity with Adani Power being the largest with an installed capacity of 9240 MW;
- Transmission is largely owned by State and Central utilities with a few private sector participants;
 - India's national grid comprises of five regions connected to each other through inter-regional links;
 - Operation owned by state and central entities only;
- Distribution is largely state owned;
 - o Few exceptions in Mumbai, Delhi, Kolkata;
 - Franchisee model is gaining ground Uttar Pradesh, Maharashtra, Bihar,
 Madhya Pradesh and few others
- Following chart highlights the structure and entities of Indian power sector:



2.2.4 Sale Options after EA 2003

Prior to Electricity Act, 2003 (EA 2003), IPPs sold power only to the host state utility through a cost plus tariff mechanism. EA 2003 opened up new avenues of power sale like sale to other utilities (other than host state), tariff based bidding, trading and direct sale to consumers.

While options for sale of other state utilities, power traders and power exchange



have taken off, sale to consumers is still not as prevalent, largely due to limited

development of open access at intra-state level governing such sale.

2.2.5 Renewable Energy

The supply from renewables is expected to increase rapidly from 24503 MW by the end of the Eleventh Plan to 54503 MW by the end of the Twelfth and 99617 MW by the end of the Thirteenth. This fourfold increase in the next 10 years is expected to continue in subsequent years as policies provide a strong incentive for the renewables. Nevertheless the base is small and the share of renewables in total commercial energy used will remain small. It is expected to rise from about 1 per cent in 2011–12 to 1.43 per cent in 2016–17 and just under 2 per cent in 2021–22. Though small, the share of renewable energy in India is comparable with that in many other countries: USA (1.7 per cent), Indonesia (1.4 per cent), Thailand (1.0 per cent) and China (0.5 per cent). Brazil at 3.1 per cent is significantly higher.

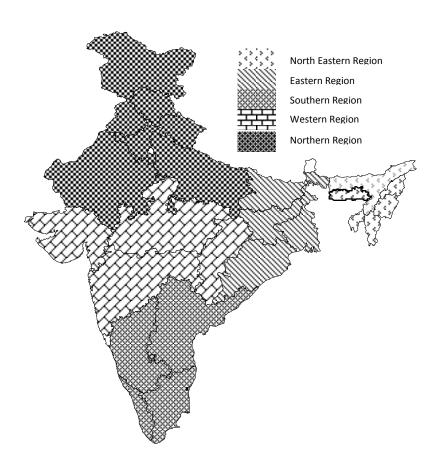
The Eleventh Plan was the period in which the Electricity Act of 2003, which was enacted during the Tenth Plan period was to be fully operationalized. The objectives of the Act are "to consolidate the laws related to generation, transmission, distribution, trading and use of electricity, and taking measures conducive for the development of electrical industry, protecting interests of consumers and supply of electricity to all areas, rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of regulatory commission and establishment of Appellate Tribunals". While substantial progress was made in setting up the institutional

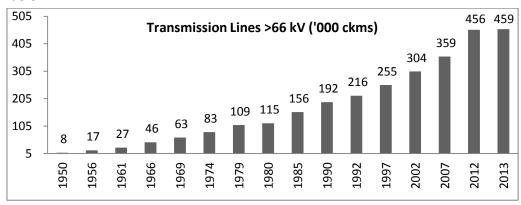
structure, there are several important areas where reforms have yet to pick up the pace.

An important gain in the Eleventh Plan was the ramping up of the pace of addition to generation capacity.

2.2.6 Transmission Sector

Transmission forms a critical link in the power sector value chain. India's power generation capacities are unevenly dispersed across the country creating an imbalance between the distribution of power demand and supply centres. The country has been demarcated into five transmission regions viz. Northern, Eastern, Western, Southern and North Eastern. The Northern, Eastern, Western and North Eastern regions have been synchronously interconnected and operate as a single grid – National Grid. The Southern region is asynchronously connected to the National Grid through HVDC links. Following figure outlines the GRID stricture of India:





Plan wise growth of transmission line > 66 kV during 1950 to 2013* are presented below:

The main physical milestones achieved in the power sector during the Eleventh Plan are summarized in the table below:

Table 1: Achievements during 11th Plan

Туре	Target Outlay (Rs. Crs)	Actual Expense (Rs. Crs)	Achievement (%)
Transmission	140,000	122,991*	87.85%
Central	75000	56,370	75.16%
State	65000	66,379	102.12%

^{*} Includes Rs. 242 Cr in Private Sector which was not envisaged earlier.

Source: CEA & Working Group Report 11th Plan

2.2.7 12th Plan Target

The expected transmission capacity addition during 12th Plan is 1,09,440 ckm which is expected to result in the total transmission capacity of 3,79,011 ckm by the end of 12th Plan. Significant capacity expansion is expected in 765kV AC transmission system. The total Inter Regional transmission capacity addition for 12th Plan has been planned at about 38,000 MW.

Also, Central Transmission Utility in consultation with CEA has designed Transmission and Distribution schemes in NER and Sikkim to evacuate the power generated from projects in this region. Fund requirement for Transmission and Distribution schemes in NER and Sikkim, with likely benefits during 12th Plan, has been estimated at around Rs. 26,392 Crore.

To achieve these targets, total outlay of Rs. 1, 80,000 Crores has been allocated to the transmission sector development.

^{*} At the end of 1st year of 12th Plan Source: CEA

2.3 Company Profile

- **2.3.1** The Company is a Transmission Licensee within the meaning of Section 2 (73) of Electricity Act 2003. Further, Section 42 and 43 of the Electricity Act 2003 prescribes the following major duties of the Transmission Licensee:
 - To undertake transmission of electricity through intra- State transmission system.
 - To build, maintain and operate an efficient, co-ordinated and economical intra-State transmission system.
 - To comply with the directions of the Regional Load Despatch Centre and the State Load Despatch Centre.
 - To comply with such technical standards, of operation and maintenance of transmission lines, in accordance with the Grid Standards, as may be specified by the Authority.
 - To provide non-discriminatory open access to its transmission system for use by any licensee or generating company on payment of the transmission charges or any consumer as and when such open access is provided by the State Commission, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission.
- **2.3.2** As per Meghalaya Power Sector Transfer Scheme, MePTCL has been vested with the function of transmitting power by the State Government of Meghalaya, the Business Scope of the Company falls within the legal framework as specified in the Act and includes:
 - Undertaking transmission of electricity through intra-State transmission system.
 - Ensuring development of an efficient, co-ordinated and economical system of intra-State transmission lines for smooth flow of electricity from a generating station to the load centres.
 - Discharging all functions of planning and co-ordination relating to intra-state transmission system with Central Transmission Utility, State Government, Generating Companies, Regional Power Committees, Authority and Licensees.
 - To provide non-discriminatory open access to its transmission system for use by any licensee or generating company or any consumer as and when such open access is provided by the State Commission.
 - Engaging in any business for optimum utilisation of assets, with prior intimation to the State Commission.
- 2.3.3 MePTCL has inherited a very old network from MeSEB which itself had inherited the network from Assam State Electricity Board (ASEB) in 1975. However both erstwhile MeSEB and MePTCL have added significant network assets in previous few years in order to sustain the load growth and to provide reliable power transmission corridor

to the state of Meghalaya. The Key Achievements of MePTCL are highlighted below:

Table 2: Key Achievements from 2006 to 2014

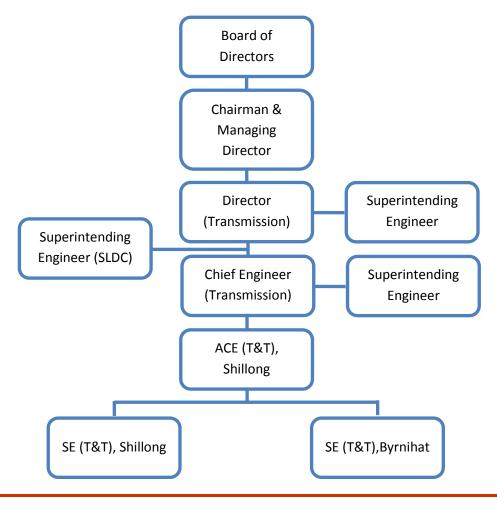
Details	2006	2014
Length of 400 KV lines	Nil	4 CKM
No. of 400KV/ 220KV Grid Substations	Nil	1
Capacity of 400KV/ 220KV Grid Substations	Nil	630 MVA
Length of 220 KV lines	Nil	226 CKM
No. of 220KV/ 132KV Grid Substations	Nil	3
Capacity of 220KV/ 132KV Grid Substations	Nil	520 MVA
Length of 132 KV lines	684 KM	993 CKM
No. of 132KV/33KV Grid Substations	12	13
Capacity of 132KV/33KV Grid Substations	357 MVA	465 MVA

2.4 Human Resource

2.4.1 Organisation Structure

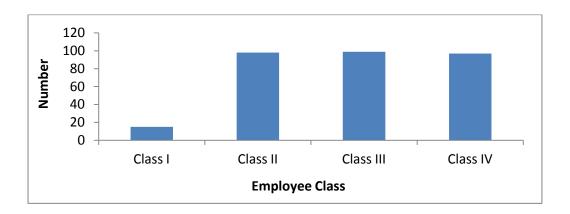
MePTCL has its Corporate Office at Shillong. Shri P.B.O. Warjri, IAS as CMD, heads the Company. The broad organisation chart is shown below:

Figure 1: Organisation Chart of MePTCL



2.4.2 Existing human Resource

2.4.2.1 Currently MePTCL has 309 Regular employees on permanent payroll and 142 casual employees. The class-wise number of permanent employees is highlighted in the graph below:



2.4.3 Capacity Building

2.4.3.1 In order to meet the increasing demand for electricity, there is a requirement for addition of generating capacity, expansion of associated transmission and distribution networks and upgrading of technology. The challenge to provide power to all requires a corresponding increase, not only in the quantity, but also in the quality of human resources. Hence, the purpose of establishing the Human Resources Development Centre (HRDC) is to ensure that skilled manpower in adequate numbers is made available across various activities of MeECL. The HRDC therefore identify the skill gaps, frame occupational standards, facilitate development of practical as well as high quality training contents and ensure adequate availability of faculty for capacity building. Thus training and upgrading the skills of the manpower is the primary objectives of HRDC.

At the national level, a statutory body, namely, the Central Electricity Authority (CEA) was constituted under the Electricity Act to promote measures for advancing the skill of persons engaged in electricity industry. CEA has already setup the standards for mandatory training required for various skill for the generation, transmission, distribution, etc. The CEA has recognized 74 (seventy four) training institutes throughout the country under the Government and Private Sector, for providing such training at various levels.

Basically three types of training infrastructures and facilities are available for personnel in the power industry:

- Training institutes recognized by CEA for imparting statutory induction training: There are 74 (seventy four) training institutes recognized by the CEA through the country. These institutes cater to the training needs of personnel working in thermal power stations, hydro generating stations, transmission and distribution utilities. For example, the National Power Training Institute (NPTI) has established a Centre for Advanced Management & Power Studies (CAMPS) at its Faridabad campus. In addition to a number of short-term courses on Technology-Management interface, NPTI also conducts a twoyear full time MBA Program in Power Management. NPTI also conducts professional courses, integrating power-training experience with academics, like PDC & PGDC in Power Plant Engineering and B.E./B.Tech. in Power Engineering etc. The other institution, the Central Board of Irrigation & Power (CBIP) also conducts power industry interfaced placement oriented long term training programmes in generation, transmission and distribution, besides high end short term programmes in advance technologies in all disciplines of power sector.
- Lineman Training Institutes: Most utilities are having at least one linemantraining center. These institutes are set up by the respective organizations for imparting training to their own employees.
- Other training facility include training program with academic institutions outside power sector.
- 2.4.3.2 Statutory training requirement: The Central Electricity Authority notifies the mandatory training (measures relating to safety and electricity supply) Regulations 2010, specifically the regulations 6 & 7 of the said CEA Regulations 2010. For implementing the above regulations effectively and on rational basis, the CEA has framed guidelines and norms to prescribe the procedure to be followed by CEA/MoP for recognition and grading of the training institutes for power sector in the country. Presently, following types of training are provided to the workforce in power segment for electricity generation, transmission and distribution personnel:
 - Operation & Maintenance Training to all existing employees engaged in O&M
 of generating projects and transmission & distribution system ranging from 4
 Weeks to 30 Weeks. This includes the classroom training, Simulator training
 for Thermal & Hydro and On-Job training.

- Induction level training for new recruits for 1 month (Technical & Non-Technical).
- Refresher/Advanced training of 5 Days in a year to all existing personnel of varying degrees in various specializations in line with National Training Policy for Power Sector.
- Management training of 5 Days in a year to the senior Executives/Managers in India/abroad in line with National Training Policy for Power Sector.
- Distance Learning Certificate Programs on Power Distribution Management for JEs/ AEs.
- Certificate of Competency in Power Distribution (CCPD).
- Training under Distribution Reforms, Upgrades and Management (DRUM).
 C&D Employees Training (Non-executives in secretarial staff, accounts wing, technical staff in nonexecutives and Class-IV are categorized as C&D employees).
- Franchisee Training.
- Training under R-APDRP etc.
- Linemen training at linemen training centres.

2.4.3.3 Capacity Building in Meghalaya Energy Corporation Limited (MeECL)

Human Resources Development Centre (HRDC), Umiam, MeECL is entrusted with the training for the officers and staffs of the 3 (three) subsidiary corporations of MeECL, namely, Meghalaya Power Generation Corporation Limited (MePGCL), Meghalaya Power Transmission Corporation Limited (MePTCL) and Meghalaya Power Distribution Corporation Limited (MePDCL). Various initiatives taken for capacity building are highlighted as below:

- Capacity building under Accelerated Power Development Reforms
 Programme (APDRP) Capacity Building for MePDCL is being funded by the
 Ministry of Power (MoP) through Central Institute of Rural Electrification
 (CIRE), Hyderabad, under Accelerated Power Development Reforms
 Programme (APDRP). Under this scheme, training for Group C&D employees
 of MePDCL is being taken up by in-house resources persons as well as by
 outside agencies. This scheme is expected to continue for 3 (three) more
 years.
- Capacity building under World Bank Project The World Bank has proposed funding for capacity building for MePTCL and MePDCL for the next three

years. Proposal under this scheme is being prepared by the nodal officers of the two corporations, namely, Chief Engineer (Transmission) & Chief Engineer (Distribution).

- Capacity building in various Training Institutes Officers from the 3 (three) subsidiary corporations are being sent regularly to free training programme organised by various training institutes like National Power Training Institute (NPTI), Indian Institute of Technology (IIT), Roorkee, National Thermal Power Corporation Limited (NTPC) and many more. For such training, the respective corporations bear the expenditure of travelling and boarding only.
- Capacity building through own resources The capacity building measures
 mentioned above are required to be supplemented by training programmes
 specifically required for the 3 (three) corporations. These include training for
 field engineers in technical areas, management and human relationships,
 among others. For such training programmes, funding is being allocated in
 the budget of the respective corporations.

2.4.3.4 Way forward

In accordance with the CEA Guidelines & Apprentices Act as stated above, the HRDC, MeECL has been imparting On-the-job training, Induction training, C&D Trainings, R-APDRP Trainings, trainings on behavioral attitudes, etc as required. The HRDC is striving to develop the entire human resources of MeECL by meeting the growing and evolving demands of the technological advancement. Accordingly, in addition to the existing work, the following tasks are proposed for the next three years.

- Create skill for the current and future requirements, both in terms of numbers as well as types of skills and investigating the underlying reasons for skill gaps.
- Identify changing technologies and collate technology specific skills which
 may be required in future. Besides technical skills, identification of soft skill
 requirement in terms of content, the depth of coverage required and
 practical training requirement etc.
- Build capacity for training delivery Coordinate with all various agencies in the area of skill development specially need based.

2.5 Loss Trajectory

2.5.1 Transmission Loss Trajectory

It is submitted that majority of transmission lines and grid substations of MePTCL utilized for transmission within the state operate at 132 KV level and are very old. Inspite of significant capacity addition in last few years, there is still a substantial need for replacement and upgradation of assets to achieve loss reduction. At the same time substantial network addition is also required to support load growth and to ensure quality and reliable transmission of power within the state. The present transmission network is overloaded and has deteriorated over time, which is the main cause for technical losses. Moreover, transmission at 132 KV network leads to higher line losses as compared to transmission at higher voltage levels. The inhospitable terrain and remote load centres also create hurdles in adequate maintenance of transmission network, leading to higher losses.

Based on internal Energy Audit conducted by the Energy Management Cell the average Transmission Losses for the period of November'13 to October'14 have been determined to be 5.51%. Therefore MePTCL currently estimates the loss level for FY 2014-15 as 5.51% only.

As the metering of transmission network needs to be upgraded in accordance with applicable Regulations/ Guidelines, MePTCL has taken up a project for replacement of existing interface meters with ABT meters and establishment of Central Data Centre for monitoring and energy audit. As the currently installed meters are old and of lower accuracy class, it is difficult to identify the area-wise, network asset wise or voltage level wise losses within the transmission system. Therefore MePTCL is currently not in a position to project the Transmission loss reduction trajectory during the first Control Period. MePTCL proposes that currently established level of losses be approved for the first Control Period, as highlighted in table below:

Table 3: Transmission Loss Trajectory

Particular	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Tranmisssion Loss (%)	5.51	5.51	5.51	5.51

MePTCL has embarked on a path of accelerated renovation, upgradation of network assets and assessment of loss reduction through various schemes which will aid in reduction of losses as well as reliable power supply. Details of these schemes have been provided in the Capital Investment Plan section of Business Plan.

2.6 Normative Annual Transmission Availability Factor

The Regulation 70.3 of the MYT Regulations, 2014, provides the norms of operation of MePTCL. The relevant regulation is reproduced below for ready reference:

70.3 Target Availability of the Transmission System for recovery of full transmission charges. The Normative Annual Transmission Availability Factor (NATAF) of the Transmission System shall be 98%.

Based on the said regulation, the Normative Annual Transmission Availability Factor has been considered at 98%.

2.6.1 Capital Investment Plan (CIP)

- 2.6.1.1 The purpose of the Capital Investment Plan (CIP) is to provide MePTCL with a roadmap for planning and implementation of proposed capital investment for the control period of FY 2015-16 to FY 2017-18. The CIP has been prepared keeping in view various long term needs and areas for capital expenditure as highlighted below:
 - Strengthening of Aging Network
 - Evacuation of Power from upcoming generating stations
 - Transmission Corridor development for new load centres.
 - Increasing Transmission capacity for increased load
 - Increased Quality and Reliability of Power Transmitted
 - Appropriate Loading of Transmission Network
 - Increased Control and Protection for Grid Stability
 - Metering and Loss Assessment
 - Loss Reduction
 - Outage Reduction

CIP prepared by MePTCL includes the projects which were under implementation or commenced/ expected to commence from FY 2012-13 to end of first control period i.e. FY 2017-18. As CIP includes schemes envisaged to be implemented in future, several assumptions have been taken to project the various attributes such as scope of work, funding pattern, funding sources, project cost, commencement/ completion dates and construction period etc. The assumptions have been taken considering historical inputs and anticipated project attributes. These attributes are expected to become clearer with preparation of Detailed Project Reports, Approval by concerned authority/ financial institution and commencement of execution. Similarly certain project attributes such as construction period, actual project cost, completion dates etc. for ongoing projects are also expected to change in future due to uncontrollable externalities. Therefore the project particulars are expected to change in future and

- shall be updated during subsequent filings of Business Plan petitions and Mid-Term Review.
- 2.6.1.2 To Finance the capital expenditure, MePTCL primarily depends on financial assistance provided by Government of Meghalaya and Government of India through various schemes as well as external aided funding by international institutions such as World Bank. Most of the funding is available/ expected to be available to MePTCL in form of Grants. A small loan component is also expected to be provided by Government of Meghalaya. The details of funding and sources are available as Investment Plan Format.
- 2.6.2 The Capital Expenditure from FY2012-13 to FY2017-18 is provided as Investment Plan Format as per prescribed format of MSERC and summarized in the table below:

Calculation	Project Cost	Funding Pattern (Rs. Cr)		
Schemes	(Rs. Cr)	Loan	Grant	Equity
New Schemes				
Construction/ Upgradation of Transmission lines	180	18		162
Construction/ Upgradation of Substations	105	24		81
System Protection, Control system, metering etc.	98	10		88
Scheme funded by Power System Development Fund	103		103	
NER Power system Improvement Project	599	30	569	
Ongoing/ Completed Schemes				
Construction/ Upgradation of Transmission lines	162	16		146
Construction/ Upgradation of Substations	193	19		174
System Protection, Control system, metering	8	1		7
Total	1447	118	671	658

Table 4. Summary of Draigets from EV2012 12 to EV2017 19

The details of various schemes are provided in following sections.

2.6.2.1 North East Region Power System Improvement Project (NERPSIP)

- **2.6.2.2** The Government of India (GoI) has formulated a plan for undertaking investments in Transmission & Distribution in North East Region (NER) to facilitate increased availability of power, improvement in service delivery and reduction of system losses. Presently, six NER States (Assam, Manipur, Mizoram, Meghalaya, Tripura and Nagaland) are connected to transmission network at 132 KV and below. In order to reduce the gap between the requirement and availability of the intra-state transmission and distribution system, it was found necessary to provide 132 KV / 220KV connectivity to all these NER states for proper voltage management and loss reduction.
- **2.6.2.3** Implementation of this project will create a reliable State power grid and improve its connectivity to the upcoming load centres, and thus extend the benefits of the

grid connected power to all the consumers. The project includes capital investments for strengthening/ augmentation of the intra-state transmission and distribution network as well as capacity building across selected six North East states of Assam, Manipur, Mizoram, Meghalaya, Tripura and Nagaland. The North East Region Power System Improvement Project (NERPSIP) is a comprehensive scheme to be funded by World Bank and Government of India. The scheme comprises of development of Transmission, Sub-Transmission/ Distribution system upto 33 KV.

2.6.2.4 Within Meghalaya, the objective of scheme is to revitalize the power sector to achieve sustainable development in long term. The NERPSIP is expected to be undertaken through funding in three tranches. The works covered under Tranche I are broadly highlighted in the following table:

Table 5: NERPSIP Asset addition

S. No	Work	Rating	Unit	Capacity Addition
1	Substations	132/33 KV	MVA	300
2	Substations	220/ 132 KV	MVA	760
3	Transmission lines	220 KV	CKm	244
4	Transmission lines	132 KV	CKm	172

The addition of new substations and construction of new lines is required for relieving the existing overloaded lines and substations catering to Shillong, areas of Khasi Hills and Garo Hills districts. The added capacity is also required for catering to growing demand throughout the state.

2.6.2.5 Under the Tranche I funding, the proposed project expenditure is ~ Rs. 599 Crore, 50% of which is to be funded by Government of India in form of Grant to MePTCL. Balance 50% counterpart funding in form of loan shall be received by Government of India from World Bank. 10% of this World Bank loan shall be passed on to the Government of Meghalaya as Loan which will subsequently be passed on to MePTCL as State Government loan. Remaining 90% of World Bank Loan shall be passed on the MePTCL as Grant from Government of India. Therefore, total 95% funds shall be received by MePTCL as Grant and balance 5% as Loan from State Government. The funding pattern for MePTCL is summarised as below:

Table 6: NERPSIP funding pattern

	State Govt. Loan	Gol Grant
Funding (%)	5%	95%
Amount (Rs. Crore)	30	569

2.6.2.6 The project approval has been received from Expenditure Finance Committee (EFC), Cabinet Committee on Economic Affairs (CCEA) and is expected from World Bank. Tranche I funding shall be utilized for first phase of construction which is expected to take 48 months. Construction is expected to begin in FY16 and shall be completed by FY19.

2.6.3 Power System Development Fund (PSDF)

- **2.6.3.1** The Government of India has approved a scheme for operationalisation of Power System Development Fund (PSDF) in year 2014. PSDF is a fund constituted under Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2014 to be utilized for the following purpose:
 - Transmission systems of strategic importance based on operational feedback by Load Despatch Centers for relieving congestion in inter-State transmission system (ISTS) and intra-State Transmission Systems which are incidental to the ISTS.
 - Installation of shunt capacitors, series compensators and other reactive energy generates for improvement voltage profile in the Grid.
 - Installation of special protection schemes, pilot and demonstrative projects, standard protection schemes and for setting right the discrepancies identified in the protection schemes and for setting right the discrepancies identified in the protection audits on regional basis.
 - Renovation and Modernization (R&M) of transmission and distribution system for relieving congestion
 - Any other scheme/ project in furtherance of the above objectives such as technical studies and capacity building
- 2.6.3.2 Based on decision taken in the in NERPC forum, a third party audit on protection was carried out in 135 sub-stations and generating stations of NER at 132KV voltage level and above. The teams comprising of members from PGCIL, NEEPCO, NHPC, NERPC and NERLDC was formed. The protection audit of the sub-stations and generating stations in NER was completed in February 2013. The findings of the audit team were discussed in the Commercial Sub-Committee and Protection Sub-Committee meetings of NERPC. Subsequently, the Ministry of Power directed for preparation of the Detail Project Report based on the recommendations of the protection audit team for rectifying the defects. The same was sent to CEA with the request for funding through PSDF or any other sources without any financial burden to the constituents.
- **2.6.3.3** In order to further its objectives of having enhanced grid stability, MePTCL plans to carry out Renovation and Upgradation of Protection & Control system with funding available through PSDF. For Meghalaya, the protection audit was carried out in 1

No. 400KV and 19 Nos. 132KV substations/generating stations. The scope of work includes the following:

- Modification in switching scheme
- Replacement of existing EM/static relays by numerical relays / bay control and protection units and substation automation system (SAS) and providing Time Stamping of Events (TSE), Disturbance Recording (DR) & Events Logging (EL).
- Replacement of old obsolete equipments (Circuit Breakers, Surge Arresters, Isolators, Earthing switches, CTs, PTs/CVTs and materials.
- Establishment of reliable communication link and providing carrier intertrip facility.
- Improvement in DC system and providing DG sets.
- Improving existing Earthing system.
- Providing required Fire fighting system.
- Providing modern diagnostic tools.
- Any other improvement required.
- 2.6.3.4 The 132/33KV transmission substations which are envisaged to be included for renovation and upgradation are at Mawlai, NEHU, NEIGRIHMS, Khliehriat, Lumshnong, Umiam, Cherrapunjee, Nongstoin, Mawphlang, Nangalbibra, Rongkhon, EPIP-I, EPIP-II and Killing.
- 2.6.3.5 The estimated cost of for renovation and upgradation of these 14 substations is Rs. 102.5 Crore which is expected to be made available in form of 100% Grant from PSDF. The DPR is under preparation after which approval shall be sought from National Load Dispatch Centre (NLDC) and Central Electricity Authority (CEA).

2.6.4 Boundary Metering

2.6.4.1 This is a consolidated scheme for replacement of meters and metering system at interface of Transmission Network with Generating stations and Distribution network along with establishment of a Central Data Centre. Meghalaya receives power from various sources such as state owned generating stations, Central Generating Stations (CGS), Bilateral Agreements etc. The transmission network of MePTCL is utilized by distribution utility MePDCL and Open Access users for both import and export of power. Therefore MePTCL has an interface with various entities such as state generating stations of MePGCL, Central Transmission Utility, Open Access Users, Distribution utility MEPDCL and Extra High Tension consumers connected at 132 KV.

The power flowing into and outside the state is measured at various interfaces by the ABT meters. These interfaces are also known as boundary as they demarcate the network of MePTCL. In addition to this, the quantum of power flow inside the

state through the intra state lines is recorded by energy meters installed at various grid substations, which are not Availability Based Tariff (ABT) compliant. Therefore, there is an urgent need to install ABT compliant meters at all boundary points at the switching stations and outgoing feeders inside the state for time block measurement of power from state owned generation to the Distribution utility.

- 2.6.4.2 The main objective of grid metering is much more than simply accounting for the energy received by a utility from the grid, and far more in an ABT regime. In ABT regime, the actual energy in time block frame is measured throughout the day and deviation from schedule is to be settled as per the Unscheduled Interchange (UI) rates, as notified by the Central Electricity Regulatory Commission from time to time. The financial impact of this deviation from schedule, if not accounted properly, might result into significant increase in cost or rate of input energy especially with the advent of Deviation Settlement Mechanism (DSM) under which the deviation charges are substantial. To manage commercial operation of the grid in a cost-effective manner, there is a need to know the real time power flow from/ to different distribution circles, open access customers and other special category consumers.
- 2.6.4.3 In addition to above, determination of accurate transmission loss in the state transmission system which is very necessary for loss compensation by the open access customers as well for the Distribution utility. Moreover, MePTCL will be able to take corrective steps if necessary to bring down the loss to the acceptable limit. The ABT grid metering system needs to be an integrated metering system, where all meters need to act in synchronism to deliver the overall intended purpose. A comprehensive ABT grid metering system (having integrated hardware and software) together with the capability of giving adequate and sufficient information for load management on a interval-wise/daily/weekly/monthly basis is hence needed for the on-line measurement and management of any deviations from schedule (UI management) for MeECL as a whole. The overall scope covers establishment of a Central Data Centre (CDC) together with operations and maintenance support and generating the daily and monthly DSM accounting reports. The overall scope covers establishment of a Central Data Centre (CDC) together with operations and maintenance support and generating the daily and monthly DSM accounting reports.
- **2.6.4.4** The Broad Scope of Work is highlighted as below:
 - Establishment of Central Data Centre
 - Installation of ABT Compliant Meters
 - Installation of Communication Media

- Installation of Terminal Equipments
- **2.6.4.5** The Boundary Metering scheme is envisaged to be covered in three phases depending on the priority of investment. The coverage under various phases is given below:

Table 7: Boundary Metering Scheme Status

Phase	Network Covered	Estimated Cost (Rs. Cr)	Status	
ı	220 Kv Lines: MISA – Killing 132Kv Lines: Sarusajai – Umtru, Kahelipara- Umtru, Panchgram – Lumshnong, Khliehriat (PG) – Khliehriat, Nangalbibra – Agia		Bidder Selected and Work Order given for Supply and Installation of equipment and establishment of CDC	
	132/33 KV Substation: Mawlai, NEHU, NEIGRIHMS, Khliehriat, Lumshnong, Umiam, Cherrapunjee, Nongstoin, Mawphlang, Nangalbibra, Rongkhon, EPIP-I, EPIP-II and Killing	3.66		
II	220 Kv Lines: MISA – Killing line 132Kv Lines: Sarusajai – Umtru, Panchgram – Lumshnong, Khliehriat (PG) – Khliehriat 132/33 KV Substation: Mawlai, Lumshnong, EPIP- I, EPIP-II, Umiam Stage I Power Station, Myntdy Leshka HEP,	3.90	DPR is under preparation	
Ш	220 Kv Lines: MISA – Killing 132Kv Lines: Sarusajai – Umtru, Sarusajai – Umtru, Kahilipara – Umtru, Panchgram – Lumshnong, Khliehriat (PG) – Khliehriat 400/220/132 KV Substations: All the remaining points Interface of all MePGCL Generating Stations	21	DPR to be prepared	

2.6.5 Schemes under Implementation

2.6.5.1 There are several schemes as mentioned under section 2.6.1.1 which are under implementation currently and have been included in the Capital Investment Plan as required under the MSERC MYT Regulations. These schemes are highlighted as below:

Table 8: Schemes under Implementation

SI. No	Scheme	Project Cost (Rs. Cr)	Purpose of Scheme
1	Construction of 132KV D/C LILO on Mawlai- Cherra S/C Line at Mawngap Substation	4.96	Catering to increasing demand in adjoining areas of Shillong

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2	Construction of 132KV multi circuit line from 220/132KV Killing substation to EPIP-I substation and 132KV double circuit line from 220/132KV Killing substation to EPIP-II substation	21.74	Power evacuation from 220/132 KV Killing Grid S/s
3	Construction of LILO of one circuit of the 400KV Pallatana — Bongaigaon line along with 400/220KV, 2 x 315MVA (GIS) substation at Killing, Byrnihat	99.6	Power Evacuation from OTPC Pallatana
4	Construction of 132KV single circuit line on double circuit towers from Rongkhon substation to Ampati & construction of 132/33KV, 2X25 MVA substation at Ampati	30.79	
5	Construction of 132KV D/C LILO line of 132 KV S/C Rongkhon-Ampati line at Prahari Nagar alongwith 1 X 25 MVA (with additional transformer bay) 132/33KV Praharinagar substation at Upper Damalgre	33.30	Catering to Load growth and improved reliability of power supply
6	Construction of 132/33 KV, 2 x 20 MVA substation with LILO of NEIGRIHMS – Khliehriat line at Lad Nongkrem	29.86	
7	Construction of 132KV D/C LILO of 132KV S/C NEHU- Khliehriat line at Jowai (Mustem) alongwith construction of 2 X 20MVA, 132/33KV substation at Mustem	26.5	
8	Construction of 132KV single circuit line from New Umtru to EPIP-II and from New Umtru HEP to old Umtru HEP	7.66	Power evacuation from New Umtru HEP
9	Stringing of second circuit of 132KV Nangalbibra-Agia line with OPGW	21.19	Transmission capacity augmentation
10	Construction of 220/132KV, 100MVA ICT at Agia	11.43	Improvement of Power
11	Construction of 132/33KV, 40MVA Mendipathar s/s	9.56	supply in Garo Hills
12	Augmentation of Rongkhon substation from 35MVA	4.69	
13	Installation of RTUs at 132 KV s/s	3.95	Improvement in communication
	Total	305.3	

2.6.6 New Schemes: Proposed/ to be Proposed for Implementation

2.6.6.1 There are several schemes which are envisaged to be implemented in future keeping in view objectives mentioned under section 2.6.1.1. For the purpose of CIP, the cost estimates, completion period, start date etc. have been projected based on MePTCL experience. These schemes are highlighted as below:

Table 9: Future Schemes

	Table 9: Future Schemes			
SI. No	Scheme	Project Cost (Rs. Cr)	Purpose of Scheme	
1	Construction of the 132 KV S/C line on D/C towers from Mawphlang substation to Balat along with I32/33 KV, 2 x 20 MVA substation at Balat and bay extension at Mawphlang substation.	64.6	Improved Reliability of power supply	
2	Re-engineering and strengthening of 132 KV Mawlai - Nongstoin - Nangalbibra single circuit transmission line	19.23	Catering to Load growth and improved reliability of power supply	
3	Construction of 132 KV double circuit line from Mustem 132KV substation to Myntdu Leshka Hydro Electric Project (MLHEP) along with bay extension at MLHEP and Mustem sub-station	61.0	Network Redundancy for power evacuation from MLHEP	
4	Installation and commissioning of OPGW Communication network and RTUs	27.0	Grid Stability and Improved monitoring	
5	Construction of 132KV double circuit LILO of the 132KV Umtru-Kahelipara transmission line at 400/220/132KV Killing sub- station including bay extension and installation & integration of SCADA with the state SLDC at NEHU substation, Shillong	29.52	Catering to Load growth and improved reliability of power supply	
6	Augmentation of 132 KV Mawlai substation form 3 x 20 MVA to 2 x 50 MVA alongwith re-engineering of 132KV bus bar	50.0	Improved quality of Power Supply, increased transmission capacity	
7	Re-conductoring of 132KV S/C Sumer- Mawlai line	7.0		
8	Construction of second circuit of 132KV Nangalbibra-Agia at Mendipathar substation.	7.0	Increased Transmission capacity	
9	Construction of LILO of 132 KV D/C transmission line from Kyrdemkulai (Stage-III HEP) to Umtru Power Station at Nongpoh including the 132/33 KV, 2 x 20MVA substation.	40.0	Network Redundancy, catering to load growth, improved reliability	
10	Augmentation of 132/33KV EPIP-II substation at Norbong, Byrnihat	7.0	Improved operations, outage reduction	
11	Upgradation and Improvement of PLCC communication for different Grid Substations and Power Stations.	9.98	Improvement of communication	
12	Installation of Capacitor Bank with accessories	36. 0	Improved Power Quality, Voltage Correction	
	Total	358.3		

2.6.7 Completed Schemes

2.6.7.1 There are few schemes which have already been completed during the period of

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FY2012-13 to FY2014-15. However these have been included in the CIP as per requirement of MSERC MYT Regulations. Some portion of the schemes is yet to be capitalized and hence considered during the current year FY2014-15 as well as control period. The details are provided as Investment Plan Format and a summary is given in table below:

Table 10: Schemes implemented from FY2012-13 to FY2014-15

SNo	Scheme	Project Cost (Rs. Cr)
1	132KV S/C line on D/C towers from Nangalbibra to Agia	43.32
2	LILO of 132KV Mawlai-Nongstoin line at Mawngap	4.94
3	LILO of 132KV Nangalbibra - Agia line at Mendipathar	5.0
	Total	53.26

ANNUAL REVENUE REQUIREMENT FY 2015-16 TO FY 2017-18

3 ARR for the 1st Control Period of FY 2015-16 to FY 2017-18

3.1 Approach

3.1.1 In accordance with the provisions of the MYT Regulations, 2014, MePTCL hereby submits ARR for FY 2015-16, FY 2016-17 and FY 2017-18 based on restructured segregated provisional financials of FY 2012-13 and the transfer scheme.

3.2 Segregation of Annual Accounts

- **3.2.1** Pursuant to Meghalaya Power Sector Reforms Transfer Scheme 2012, the Assets and Liabilities including rights, obligations and contingencies is transferred to and vested in MePTCL by MeECL on and from 1.4.2012.
- 3.2.2 The provisional segregated annual accounts post restructuring and unbundling for FY 2012-13 are being audited. The accounts for the holding company and its subsidiaries have been segregated by appropriating the Assets, Properties, Liabilities, Expenditures, and Obligations etc. as attributable to the respective companies. The Assets and liabilities of individual functions i.e. Generation, Transmission and Distribution were maintained by erstwhile MeSEB and later MeECL, and appropriation of common items to respective companies is being done by taking relevant basis/ methodology.

3.2.3 Annual Expenditure of MePTCL

The Regulation 65 of the MYT Regulations, 2014, provides the cost components of MePTCL. The relevant regulation is reproduced below for ready reference:

"65 Components of tariff

Annual Transmission Charges for each year of the Control Period:

- 65.1 The Annual Transmission Charges for each financial year of the Control Period shall provide for the recovery of the Aggregate Revenue Requirement of the Transmission Licensee for the respective financial year of the Control Period, a reduced by the amount of Non-Tariff Income, income from Other Business and short-term transmission charges of the previous year, as approved by the Commission: Provided that in case of competitively awarded transmission system projects in pursuance of Section 63 of the Act and in accordance with guidelines for competitive bidding for transmission, the annual transmission charges shall be as per the annual Transmission Service Charges (TSC) quoted by such competitively awarded transmission projects.
- 65.2 The Annual Transmission Charges of the Transmission Licensee shall be determined by the Commission on the basis of an application for determination of Aggregate Revenue Requirement made by the

Transmission Licensee in accordance with Chapter-2 of these Regulations.

- 65.3 The Annual Expenditure of the Transmission Licensee shall comprise of the following:
 - a. Return on equity as may be allowed;
 - b. Interest on loan capital;
 - c. Depreciation as may be allowed;
 - d. Interest on working capital;
 - e. Operation and maintenance expenses;
 - f. Taxes on Income
 - g. Annual License fee
- 65.4 The Annual Transmission Charge of the Transmission Licensee shall be determined after deducting the following components from the Annual Expenditure as determined above:
 - a. Income from surcharge and additional surcharge for Open Access Consumers if any
 - b. Transmission/wheeling charges recovered from Open Access Consumers, if any
 - c. Authorised portion of Income/ Revenue from other business engaged in by the Licensee for optimum utilization of assets, if any."

3.3 Transmission Network details

3.3.1 MePTCL has a total transmission network of **226** Circuit Kilometers at 220 KV level and **991** Circuit Kilometers at 132 KV voltage level. The detail of the network is provided in **Format T (1A).** The summarized transmission line detail is mentioned in **Table 11** below:

Table 11: Voltage wise Transmission Line details

Transmission	Single Circuit			Circuit
Line	No.	Ckt. Km	No.	Ckt. Km
400 KV	-	-	1	4.22
220 KV	-	-	1	226.82
132 KV	38	593.21	19	397.61

3.3.2 MePTCL fixed assets includes **16** sub-stations with a total capacity of **1615** MVA. The Sub-Station wise detail is provided in **Format T (1B)**. The summarized sub-station detail of MePTCL is mentioned in **Table 12** below.

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Table 12: Sub-Station details of MePTCL

Sub-Station	Number	Capacity (MVA)
400/220 KV	1	630
220/132 KV	3	520
132/33 KV	11	435
132/33/11 KV	1	10
132/11 KV	1	20

3.4 Gross Fixed Assets

The opening balance of GFA of MePTCL as on 1.4.2013 is **Rs. 63.37 Cr**. The closing GFA for each year of the control period is worked out considering actual capitalization during FY 2013-14, estimated capitalization during FY 2014-15 and projected capitalization during the control period.

Table 13: Gross Fixed Asset Details (Rs. Cr)

Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
Particulars	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Opening GFA	63.37	222.47	361.05	412.52	588.86	722.29
Additions during the year	159.10	138.58	51.47	176.34	133.43	45.98
Retirements during the year	-	-	0	-	-	-
Closing GFA	222.47	361.05	412.52	588.86	722.29	768.27

MePTCL submits before the Hon'ble Commission to kindly approve the GFA as submitted in the table above.

3.5 Computation of Return on Equity

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

"27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Explanation:- The premium, if any, raised by the generating company or the transmission licensee or the distribution licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure.

- 27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered.
- 27.3 Any expenditure incurred or projected to be incurred on or after 1.4.2015 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in this regulations."
- **3.5.2** The Regulation 31 of the MYT Regulations, 2014, provides for computation of Return on Equity. The extract is reproduced below:

"31 Return on Equity

31.1 Return on equity shall be computed on the equity base determined in accordance with regulation 27 and shall not exceed 14%.

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

 The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.

- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity."
- **3.5.3** For computation of RoE till 1st April, 2015, the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2011 (hereinafter referred as Tariff Regulations, 2011) have been followed. The relevant provision of Tariff Regulations, 2011 is reproduced below:

"72. Debt-Equity Ratio

For the purpose of determination of tariff, debt-equity ratio in the case of existing, ongoing as well as new projects commencing after the date of notification of these regulations shall be 70:30. Where equity employed is more than 30%, of the capital cost 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%, of the capital cost the actual equity employed 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 transmission 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.

....."

"74. Return on Equity

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 72, at a fixed rate of 14 percent, per annum.

.....

(2) The equity amount appearing in the Balance Sheet as per Transfer scheme notification will be considered for the purpose of considering the return for the first year of operation.

....."

3.5.4 Based on the above submission the Return on Equity computation is shown in the table below:

Table 14: Return on Equity Computation (Rs. Cr)

Bootisuloss	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
Particulars	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Opening Equity (Rs Cr)	211.74	300.66	348.09	365.44	511.79	631.88
Additions During the Year (Rs Cr)	88.92	47.43	17.35	146.35	120.09	41.38
Closing Equity (Rs Cr)	300.66	348.09	365.44	511.79	631.88	673.26
Equity considered of RoE	259.47	301.05	316.49	369.39	409.42	423.21
RoE (%)	14%	14%	14%	14%	14%	14%
RoE (Rs Cr)	36.33	42.15	44.31	51.71	57.32	59.25

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MePTCL submits before the Hon'ble Commission to kindly approve RoE of Rs. **51.71** Cr, Rs. **57.32** Cr & Rs. **59.25** Cr for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.6 Interest and Finance Charges on Loan Capital

3.6.1 As per Regulation 32 of the MYT Regulations, 2014, 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. It is submitted that the Interest on Loan for the control period has been computed by considering Interest obligation for existing loans as well as for future projects with a loan component. The detailed statement of Interest and Finance charge is enclosed as Format-7. The summarized statement of Interest and Finance charge for the Control Period is shown below:

Table 15. Computation of interest on Loan (NS. Ci)							
FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18				
26.98	34.64	63.20	76.55				
7.66	28.56	13.34	4.60				
-	-	-	1.50				
34.64	63.20	76.55	79.65				
9.25%	13.11%	11.97%	11.66%				
2.85	6.41	8.36	9.10				
_	-	-	-				
2.85	6.41	8.36	9.10				
	7.66 - 34.64 9.25% - 2.85	FY 2014-15 FY 2015-16 26.98 34.64 7.66 28.56 34.64 63.20 9.25% 13.11% 2.85 6.41	FY 2014-15 FY 2015-16 FY 2016-17 26.98 34.64 63.20 7.66 28.56 13.34 - - - 34.64 63.20 76.55 9.25% 13.11% 11.97% 2.85 6.41 8.36 - - -				

Table 15: Computation of Interest on Loan (Rs. Cr)

3.6.2 Multi Year Tariff Regulations, 2014 also provide for Normative Loan on capital projects funded with equity component greater than 30% of capital cost. The relevant provision is highlighted below:

"27. Debt-Equity Ratio

(27.1) For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;
...."

••••

3.6.3 The Normative loan is computed as Closing Balance of Equity less Equity Considered for RoE for every year. Based on above provisions, the Normative Loan and Interest are computed as below:

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Table 16: Interest on Normative Loan (Rs. Cr)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	
Normative Loan	48.95	142.40	222.46	250.05	
Rate of Interest	9.25%	13.11%	11.97%	11.66%	
Interest on Normative Loan	4.53	18.66	26.62	29.15	
Total Interest	7.38	25.07	34.98	38.25	

3.6.4 The total Interest on Loan Capital as well as Interest on Normative Loans is given in table below:

Table 17: Total Interest on Loan Capital and Normative Loans (Rs. Cr)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18
Interest on Loans and Finance Charges	6.41	8.36	9.10
Interest on Normative Loan	25.07	34.98	38.25
Total Interest and Finance Charges	31.49	43.35	47.35

MePTCL submits before the Hon'ble Commission to kindly approve **Rs. 31.49 Cr**, **Rs. 43.35 Cr** and **Rs. 47.35 Cr** as Interest and Finance Charges for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.7 Operation and Maintenance Expenses

3.7.1 As per Regulation 69 of the MYT Regulations, 2014, the Operation and Maintenance Expenses is a sum of Employee Cost, Repairs and Maintenance (R & M) Expense and Administrative and General (A & G) Expenses. The extract of the regulations is reproduced as follows:

"69 Operation and Maintenance Expenses

- 69.1 Operation and Maintenance Expenses or O&M Expenses shall mean the total of all expenditure under the following heads:
 - a. Employee Cost
 - b. Repairs and Maintenance
 - c. Administration and General Expenses.
 - 69.2 The Licensee shall submit O&M expenses budget indicating the expenditure under each head of account showing actual of the last financial year, estimates for the current year and projections for the next financial year.
 - 69.3 The norms for O&M expenses on the basis of circuit kilometers of transmission lines, transformation capacity and number of bays in substations shall be submitted for approval of the Commission.
 - 69.4 The Commission shall verify the budget estimates and projections and allow the expenditure depending on its views about the reasonableness of the projections.

69.5 Increase in O& M expenses due to natural calamities or insurgency or other factors not within its control may be approved by the Commission."

3.7.2 Employee Cost

3.7.2.1 It is submitted that before corporatization, Meghalaya State Electricity Board (MeSEB) used to revise pay scale of employees every 5 years. Further at the time corporatization in the year 2010 the Management and Employees Association have mutually decided that the earlier trend of revision of pay will continue in future i.e. Management will revise pay scale of all the employees every 5 years. The last pay revision was made effective in the year 2010.

Therefore, from January 2015 onwards Revision of Pay will be made effective. The employee cost for the FY 2015-16 is projected by considering the revised pay of Employees. The following assumptions were taken to arrive at the revised pay of Employees:

Basic Pay: As per the pay revision procedure, at the time of revision of pay, the
new Basic Pay is arrived by adding the existing Dearness Allowance (DA) to
existing Basic Pay and then adding the percentage increase in pay scale. In the
last two pay revisions, there has been an increase of 12% in Basic Pay.
Therefore it is expected that in the next pay revision too, there will be an
increase of 12% in the Basic Pay.

Moreover, on a yearly basis the permanent employees of MePTCL are given a nominal increment. Therefore, for FY 2015-16 the new Basic Pay is arrived at by the following methodology:

New Basic Pay= Existing Basic Pay x (1+DA Rate + 12%) + Yearly Increment

- **Dearness Allowance (DA):** The DA projected to be applicable in the control period is shown in
- Table 18.
- Housing Rent Allowance (HRA): The HRA is paid as a percentage of Basic Pay and the percentage rate of HRA remains same throughout the effective period of revision of pay. At present HRA is as follows:
 - 15% of Basic for Shillong area
 - 12.5% of Basic for District Head Quarters
 - 10% of Basic for other areas

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The above rates are further capped at a fixed amount. It is assumed that for that HRA will be 12% of Basic after pay revision

- Other Allowance: The other allowance includes Medical Allowance, Hill Allowance, Electricity Allowance, Winter Allowance etc. It is assumed that the other allowance will increase by 22% over the existing level.
- **Pension Payments:** With every pay revision the pension benefits are also increased in the same way as regular payments, i.e. The Basic Pension will be increased by taking the similar assumption as taken for Basic Pay.
- **3.7.2.2** Further, from FY 2016-17 onwards the employee cost is projected by the following assumptions:
 - Basic Pay is expected to grow at a nominal rate of 3% every year.
 - Dearness Allowance is projected by taking the following assumptions:

Table 18: DA rates for the control period

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Financial Year	Period	DA as % of Basic				
FY 2015-16	1 st Half of FY 16	0%	2% for FY 16			
L1 2012-10	2 nd Half of FY 16	4%	2% IUI FY 10			
FV 2016 17	1 st Half of FY 17	8%	10% for FY 17			
FY 2016-17	2 nd Half of FY 17	12%	10% 101 FY 17			
FY 2017-18	1 st Half of FY 18	16%	18% for FY 18			
L1 701/-19	2 nd Half of FY 18	20%	10% 101 FY 18			

- The other allowance is estimated to remain at the same level as FY 2015-16
- Terminal benefit provision for future years is not considered at present. The same will be claimed at the time of true-up as per the actual provisioning.
- The yearly recruitment of technical and non-technical staff is also considered for projection of cost. The yearly increase in number of Employees is shown in Format-2.
- **3.7.2.3** Based on above assumptions, Estimated Employee cost for FY 2014-15 and projected Employee Cost for Control period of FY 2015-16 to FY 2017-18 is shown in the **Table 19** below and attached as **Format 1**.

Table 19: Employee Cost (Rs. Cr)

SI.	Tubic 1	9: Employee	FY2015-16	FY2016-17	FY2017-18
No.	Particulars		(Projected)	(Projected)	(Projected)
	Salaries & Allowances	,		, , ,	
1	Basic Pay	8.95	15.39	16.32	17.28
2	Arrear Pay	0.98	13.33	10.52	17.20
3	Dearness Allowance	4.40	0.29	1.56	2.97
4	House rent Allowance	0.90	1.76	1.87	1.98
5	Other allowances	0.74	0.94	0.98	1.01
	Medical re-imbursement				
6	charges	0.25	0.25	0.25	0.25
7	Over time payment	0.08	0.08	0.08	0.08
8	Fixed Medical Allowance				
9	Generation incentive				
10	Bonus				
	Sub-Total	16.30	18.72	21.05	23.58
	Terminal Benefits				
11	Leave encashment	25.00	25.00	25.00	25.00
12	Staff welfare				
13	CPS	0.11	0.11	0.11	0.11
14	Workman compensation				
15	Ex-gratia				
	Sub-Total	25.11	25.11	25.11	25.11
	Pension Payment				
16	Basic Pension				
17	Dearness Pension				
18	Dearness Allowance				
19	Any other expenses				
	Sub-Total	-	_	_	-
20	Total	41.40	43.82	46.15	48.69
21	Amount capitalized	-	-	-	-
22	Net Amount	41.40	43.82	46.15	48.69
23	Add prior period expenses	0.17	-	-	-
	Grand Total:	41.58	43.82	46.15	48.69

MePTCL submits before the Hon'ble Commission to kindly approve Employee Cost of Rs. 43.82 Cr, Rs. 46.15 Cr and Rs. 48.69 Cr respectively for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.7.3 Repairs and Maintenance (R & M) Expenses

3.7.3.1 Meghalaya, being a hilly terrain, demands comparatively more investment for maintaining the transmission network. Under these circumstances there is a genuine need for incurring repair & maintenance expenses to keep the current assets under satisfactory running condition. Further with new addition of assets, there is increased requirement of repair and maintenance expense. However, due to ongoing restructuring activities and revenue deficit faced by MeECL & its subsidiaries, MePTCL has not been able to take up R&M works in extremely

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planned manner. Therefore, the R & M Expense for the control period has been projected by considering inflation rate of 9% over the last 3 years (November 2011 to October 2014). The estimated R & M Expenses for FY 2014-15 and the projected R & M Expenses for the control period of FY 2015-16 to FY 2017-18 are shown in the table below and attached as **Format 4**.

Table 20: R & M Expenses (Rs. Cr)

SI.		FY2014-15	FY2015-16	FY2016-17	FY2017-18
No.	Particulars	(Estimated)	(Projected)	(Projected)	(Projected)
1	Plant & Machinery	1.80	1.96	2.14	2.33
2	Building	0.05	0.05	0.06	0.06
3	Hydraulic & Civil Works	-	-	-	-
4	Line Cable & Network	2.08	2.27	2.47	2.70
5	Vehicles	0.04	0.05	0.05	0.06
6	Furnitures & Fixtures	0.01	0.01	0.01	0.01
7	Office equipments	0.02	0.02	0.02	0.02
8	Operating Expense	0.01	2.72	0.01	0.02
9	Total	4.00	7.07	4.76	5.19
10	Add/deduct share of other (To	-	-	-	-
	be specified)				
11	Total expenses	4.00	7.07	4.76	5.19
12	Less capitalized	-	-	-	-
13	Net expenses	4.00	7.07	4.76	5.19
14	Add prior period	_	_	_	-
	Repair & Maintenance Expense	4.00	7.07	4.76	5.19

The sudden increase shown in R&M expense in the FY2015-16 is due to additional once time liability of extensive repairs of Transmission lines which were badly damaged due to floods in Garo Hills in FY2014-15. MePTCL submits before the Hon'ble Commission to kindly approve R & M Expense of Rs. 7.07 Cr, Rs. 4.76 Cr and Rs. 5.19 Cr respectively for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.7.4 Administration and General (A & G) Expenses

3.7.4.1 The increase in A & G Expenses mainly depends upon the price inflation. As the A & G Expense is being projected for the control period as a whole, therefore A & G expense for the control period is projected by considering the average inflation rate of 9% over the last 3 year period (November 2011 to October 2014). Further, at the time of unbundling, MeECL and its subsidiaries i.e. MePGCL, MePTCL & MePDCL have mutually agreed to reimburse the expense of MeECL in the ratio of cost of respective corporations. The apportionment of MeECL expense has been added as part of A & G expense of MePGCL.

The summarized A & G expense for FY 2014-15 and the control period is shown in the table below and details from FY 2012-13 onwards are attached as **Format-5**.

Table 21: A & G Expenses (Rs. Cr)

		Z C EXPENSE.			
SI.	.	FY2014-15	FY2015-16	FY2016-17	FY2017-18
No.	Particulars	(Estimated)	(Projected)	(Projected)	(Projected)
1	Rent, Rates & Taxes	0.01	0.01	0.01	0.01
2	Insurance	0.01	0.02	0.02	0.02
3	Telephone, Postage & Telegrams	0.05	0.05	0.05	0.06
4	Consultancy fees	-	-	-	-
5	Technical fees	-	-	-	-
6	Other professional charges	0.00	0.00	0.00	0.00
7	Conveyance & travel expenses	1.19	1.30	1.42	1.55
8	Electricity & water charges	-	-	-	-
9	Others	0.06	0.07	0.07	0.08
10	Freight	-	-	-	-
11	Other material related expenses	0.02	0.02	0.02	0.02
12	Total Expenses	1.34	1.46	1.60	1.74
13	Less Capitalized	-	-	-	-
14	Net Expenses	1.34	1.46	1.60	1.74
15	Add prior period	0.18	0.19	0.21	0.23
16	Total expenses charged to revenue	1.52	1.66	1.81	1.97
17	Apportionment of MeECL expenses	24.48	25.12	27.50	27.19
18	Total expenses charged to revenue	26.00	26.78	29.31	29.16

MePTCL submits before the Hon'ble Commission to kindly approve A & G Expense of Rs. 26.78 Cr, Rs. 29.31 Cr and Rs. 29.16 Cr respectively for FY 2015-16, FY 2016-17 and FY 2017-18 respectively including apportionment of MeECL Expense.

3.7.5 Summary of Operation and Maintenance (O & M) Expenditure

3.7.5.1 The summarized Operation and Maintenance Expense is shown in the table below.

Table 22: Operation and Maintenance Expense (Rs Cr)

SI. No.	Particulars			FY2016-17 (Projected)	
1	Employee Cost	41.58	43.82	46.15	48.69
2	R&M	4.00	7.07	4.76	5.19
3	A&G	26.00	26.78	29.31	29.16
	Total O & M Expense	71.58	77.68	80.22	83.04

MePTCL submits before the Hon'ble Commission to kindly approve total O&M expenses of **Rs. 77.68 Cr**, **Rs. 80.22 Cr** and **Rs. 83.04 Cr** for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

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3.8 Interest on Working Capital

3.8.1 As per Regulation 34.3 (i) of the MYT Regulations, 2014, the components of working capital will be:

"34.2 Transmission Business

- (i) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:
- Operation and maintenance expenses for one month; plus
- Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- Receivables equivalent to two (2) month of transmission charges calculated on target availability level;

Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1_{st} April of the financial year in which the Petition is filed."

3.8.2 The Working Capital is calculated as shown in the table below:

Table 23: Working Capital Computation (Rs. Cr)

SI. No.	Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
1	One month O & M Expense	5.97	6.47	6.69	6.92
2	Maintenance Spare Budget	3.97	4.75	6.91	8.74
3	Two months Receivables	23.79	30.54	35.28	37.75
	TOTAL	33.73	41.76	48.87	53.41

3.8.3 As per Regulation 34.2 (i) of the MYT Regulations, 2014, the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed need to be considered as interest rate for computation of Interest on Working Capital. The Interest on Working Capital is computed as shown in the table below:

Table 24: Interest on Working Capital (Rs. Cr)

SI. No.	Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
1	Working Capital (Rs. Cr)	33.73	41.76	48.87	53.41
2	Bank Advance Rate (SBAR) as on 1.4.14	14.75%	14.75%	14.75%	14.75%
	Interest on Working Capital (Rs. Cr)	4.97	6.16	7.21	7.88

SBI Advance Bank Rate (SBI PLR) has not been revised since Nov' 13. SBAR rate of Nov' 13 has been considered here

MePTCL submits before the Hon'ble Commission to kindly approve **Rs. 6.16 Cr**, **Rs. 7.21 Cr** and **Rs. 7.88 Cr** respectively for FY 2015-16, FY 2016-17 and FY 2017-18.

3.9 Income Tax

As per Regulation 35 of the MYT Regulations, 2014, Income Tax on the licensed business of the Transmission Licensee shall be treated as expense and shall be recoverable from consumers through tariff. However, MePTCL submits that income tax shall be claimed in subsequent filings in mid-term review/ true-up.

3.10 Depreciation for the Control Period

Depreciation is computed as per Regulation 33 of the MYT Regulations, 2014. The depreciation is projected based on the estimated completion of ongoing and upcoming projects during the control period. The computation of depreciation is shown in the table below and attached as **Format-6**.

SI. FY2014-15 FY2015-16 FY2016-17 FY2017-18 **Particulars** No. (Estimated) (Projected) (Projected) Land 1 **Buildings** 2 0.30 0.46 0.61 0.64 Hydraulic works _ 3 Other Civil works 1.73 0.29 0.81 1.44 4 Plant & Machinery 14.86 7.57 9.57 12.55 Lines & Cables 10.27 12.24 14.67 15.50 6 7 Vehicles 0.00 0.00 0.00 0.00 Furniture 0.02 8 0.02 0.02 0.02 0.02 9 Office equipment 0.02 0.02 0.02 4.27 IT Equipments 10 0.25 0.59 2.14 Total 18.72 23.70 31.46 37.05

Table 25: Depreciation (Rs. Cr)

MePTCL submits before the Hon'ble Commission to kindly approve Depreciation of Rs. 23.70 Cr, Rs. 31.46 Cr and Rs. 37.05 Cr for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.11 Annual License fee

As per Regulation 65.3(g) of the MYT Regulations,2014 the Annual License fee payable by the Transmission Licensee is a part of the Annual Expenditure of MePTCL. In accordance with Regulation 5 and Schedule 1 of Meghalaya State Electricity Regulatory Commission (Fees and Charges) Regulations, 2009, MePTCL needs to pay **Rs. 0.03 Crore** as Annual License Fee for each Financial Year. Therefore Hon'ble

Commission may kindly allow **Rs. 0.03 Crore** to be passed through as part of annual expenditure of MePTCL.

3.12 SLDC Charges

As per as Regulation 1, 3(3), 3(6) of MSERC (Levy and Collection of State Load Despatch Centre Fees and Charges) Regulations, 2009, MePTCL will need to bear 50% of the Annual Revenue Requirement of SLDC. As per information received from SLDC, the total ARR of SLDC for the FY 2015-16, FY 2016-17 and FY 2017-18 is Rs. 2.62 Cr, Rs. 3.32 Cr and Rs. 3.73 Cr. Therefore it is submitted that the Rs. 1.31 Cr, Rs. 1.66 Cr and Rs. 1.86 Cr (50% of the total SLDC ARR) may kindly be allowed to be passed through as SLDC charges as a part of Transmission ARR.

3.13 Other Income

3.13.1 The Regulation 65 of the MYT Regulations, 2014, provides the cost components of MePTCL. The relevant regulation is reproduced below for ready reference:

"65 Components of tariff

•••••

65.4 The Annual Transmission Charge of the Transmission Licensee shall be determined after deducting the following components from the Annual Expenditure as determined above:

- a. Income from surcharge and additional surcharge for Open Access Consumers if any
- b. Transmission/wheeling charges recovered from Open Access Consumers, if any
- c. Authorised portion of Income/ Revenue from other business engaged in by the Licensee for optimum utilization of assets, if any."
- **3.13.2** The summary of Other Income is mentioned in **Table 26** below. The detail of Any Other Income is enclosed in **Format 10**. Hon'ble commission is requested to approve **Rs. 6.24 Cr** as other Income for FY 2015-16 to FY 2017-18.

Table 26: Other Income Summary (Rs Cr)

Table 20. Other income Summary (N3 Cr)											
	FY2014-15	FY2015-16	FY2016-17	FY2017-18							
Particulars	(Estimated)	(Projected)	(Projected)	(Projected)							
Charges Recoverable from OA Consumer	6.22	6.22	6.22	6.22							
Any Other Income	0.01	0.01	0.01	0.01							
Total Other Income	6.24	6.24	6.24	6.24							

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MePTCL submits before the Hon'ble Commission to kindly approve Other Income of Rs. 6.24 Cr for each year of control period.

3.14 Annual Revenue Requirement for the Control Period

Based on the detailed computation of ARR components, the abstract of ARR is shown in the table below and attached as **Format D7**. MePTCL submits before the Hon'ble Commission to kindly approve Net ARR of **Rs. 183.23 Cr**, **Rs. 211.69 Cr** and **Rs. 226.50 Cr** for FY 2015-16, FY 2016-17 and FY 2017-18 respectively. The component-wise summary of ARR is given in table below:

Table 27: Annual Transmission Charges (Rs. Cr)

SI.	Bartin Iana	FY2014-15	FY2015-16	FY2016-17	FY2017-18
No.	Particulars	(Estimated)	(Projected)	(Projected)	(Projected)
1	Return on Equity (RoE)	44.31	51.71	57.32	59.25
2	Interest on Loan capital	10.23	31.49	43.35	47.35
3	Operation and Maintenance expenses	71.58	77.68	80.22	83.04
4	Interest on Working Capital	4.97	6.16	7.21	7.88
5	Depreciation as may be allowed	18.72	23.70	31.46	37.05
6	Taxes on Income	-	-	-	-
7	Annual License Fee	0.03	0.03	0.03	0.03
8	SLDC Charges	0.86	1.31	1.66	1.86
9	Total Annual Expenditure	150.70	192.09	221.24	236.46
10	Less: SLDC ARR	1.72	2.62	3.32	3.73
11	Less: Other Income	6.24	6.24	6.24	6.24
	Net Annual Revenue Requirement	142.75	183.23	211.69	226.50

4 Computation of Transmission Charges

MePTCL submits that based on the Annual Fixed Cost approved by Hon'ble Commission it will calculate the Transmission Charges based on following provisions:

"72 Sharing of Transmission Charges

72.1 In case of more than one beneficiaries of the transmission system, the monthly transmission charges leviable on each beneficiary shall be computed as per the following formula:

Transmission charges for transmission system payable for a month by the beneficiary of that transmission system == $\left[\frac{TC}{12} - TRSC\right] \times \frac{CL}{SCL}$

Where

TC= Annual Transmission charges computed in accordance with Regulation 65.

CL=Allotted transmission capacity of the beneficiary

SCL=Sum of allotted transmission capacities of all the beneficiaries of the state transmission system

TRSC=Total recovery of transmission charges for the month from short term transmission consumers."

74. Computation and payment of transmission charge for Intra-State Transmission system.

74.1 The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users, who shall share these charges in themanner specified.

74.2 The transmission charge (inclusive of incentive) payable for a calendar month for a transmission system or part thereof shall be

= AFC x (NDM / NDY) x (TAFM / NATAF)

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NATAF= Normative annual transmission availability factor in percent

NDM = Number of days in the month

NDY = Number of days in the year

TAFM = Transmission availability factor achieved during the month, in % The transmission licensee shall raise the bill for the transmission charge (Inclusive of incentive) for a month based on its estimate of TAFM.

As per the Annexure-III of MYT

Procedure for Calculation of Transmission System Availability Factor for a Month as per latest CERC Regulations

The TAFM shall be computed in accordance with the following formula:

TAFM= (100-100 x NAFM) where

$$\begin{aligned} & \textit{NAFM} &= \left[\sum_{l=1}^{L} (\textit{OH}_{l} \times \textit{Cktkm}_{l} \times \textit{NSC}_{l}) \right. + \left. \sum_{t=1}^{T} (\textit{OH}_{t} \times \textit{MVA}_{t} \times 2.5) \right. \\ & + \sum_{r=1}^{R} (\textit{OH}_{r} \times \textit{MVAR}_{r} \times 4) \right] \\ & \div \quad \textit{THM} \quad \times \quad \left[\sum_{l=1}^{L} (\textit{Cktkm}_{l} \times \textit{NSC}_{l}) \right. \\ & + \sum_{t=1}^{T} \left. (\textit{MVA}_{t} \times 2.5) + \sum_{r=1}^{R} (\textit{MVAR}_{r} \times 4) \right] \end{aligned}$$

Where,

I identifies transmission line circuit

t identifies transformer circuit

r identifies bus reactor, switchable line reactor and SVCs.

T= total no. of transformers and ICTs.

L= total no. of line circuits

R= total no. of bus reactors, switchable line reactor and SVCs.

Ckt km= length of a transmission line circuit in km

NSC= no. of sub conductors per phase

MVA= MVA rating of transformer/ ICTs

MVAR=MVAR rating of bus reactor, switchable line reactor and SVCs.

THM= Total hours in a month

OH= Outage hours or hours of non-availability in a month, excluding the duration of outages not attributable to transmission licensee

NAFM for each HVDC system shall be calculated separately, as follows:

NAFM = $[\Sigma (TCR \times hours)] \div [THM \times RC]$

Where

TCR = Transmission capability reduction of the system in MW

RC = Rated capacity of the system in MW.

For the above purpose, the HVDC terminals and directly associated EHV / HVDC lines of an HVDC system shall be taken as one integrated system.

5 Compliance of directives

- The provisions of the State Grid Code with regard to interface meters, monitoring of drawal, record keeping and operation are being followed by MePTCL. The State Load Despatch Centre is closely monitoring the system operation and ensures that the transfer of energy is according to CERC's guidelines.
- The Statements of Accounts for FY2011-12 have been audited and the accounts for FY2012-13 are being currently audited. The preparation of Asset Register is planned to be undertaken after the segregation of accounts for MeECL and its subsidiaries.
- MePTCL has submitted the Senior Electrical Inspector certificates of completed projects to MSERC vide letter No. MePTCL/ACE/T&T/T-102/2013-14/80 dt. 20.01.2014. The certificates of other projects shall be submitted to MSERC on completion and when received from the Senior Electrical Inspector.
- Functional independence o SLDC has been notified vide Government of Meghalaya, Power Department notification no. Power-79/2009/445 dated 18.06.2013 wherein it was mandated that (i) the SLDC shall work as a Strategic Business Unit (SBU) under the State Transmission Utility (STU), MePTCL. The SLDC shall remain under administrative control of MePTCL. A separate bank account for SLDC has been opened w.e.f 27.08.2013 for SLDC. SLDC is operating the Bank account for collection of Application fee, UI charges, Reactive Energy charges etc. The complete ring fencing is expected after the total segregation of MePTCL becomes effective.
- The status of metering and mechanism for recording and collection of information required for calculation of voltage wise losses at transmission level and initiating the exercise of energy audit in the transmission sector was sent to MSERC vide. MePTCL/ACE/T&T/T-102(Pt-I)/2014-15/38 dt. 07.10.2014.
- Preparation of the Norms for Operation and Maintenance require a primary input which is segregated cost of network-wise assets. However, currently the accounts of companies are being segregated for the year FY2013-14 which will provide a base for accounting of MePTCL revenue and expenditure. Also, MePTCL is a newly incorporated entity which is in second year of its segregated operation and is yet to streamline its processes to arrive at such expenditure details required for finalization of O&M norms. Keeping in view the genuine constraints, it is submitted that MePTCL will be in a position to submit the O&M norms during filing of Mid-Term Review petition.

MePTCL is complying with the directives issued by despatch centres/ appropriate authorities in order to maintain grid discipline. There was no major incident during 2014-15.



मधालया MEGHALAYA

D1AA 330586

BEFORE THE HON'BLE MEGHALAYA STATE ELECTRICITY REGULATORY
COMMISSION

FILE/PETITION NO.

IN THE MATTER OF:

APPROVAL OF BUSINESS PLAN AND ANNUAL REVENUE REQUIREMENT FOR FINANCIAL YEARS 2015-16, 2016-17 & 2017-18 AND TARIFF PROPOSAL FOR THE FINANCIAL YEAR 2015-16 OF THE MEGHALAYA POWER TRANSMISSION CORPORATION LIMITED (MePTCL) UNDER THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (MULTI YEAR TARIFF) REGULATIONS, 2014 AND UNDER SECTION-62 READ WITH SECTION 86 OF THE ELECTRICITY ACT 2003.

AND IN THE MATTER OF

MEGHALAVA POWER TRANSMISSION CORPORATION LIMITED; LUMJINGSHAI, SHILLONG - 793001, MEGHALAYA

PETITIONER

Affidavit verifying the Petition

1 Shri Leonard M. F. Sohtun, aged about 53 years, son of (L) T. C. Syngai, residing at

Madan Labun, P.O. Laban, Shillong-793004, do solemnly affirm and say as follows:-

I am working as Additional Chief Engineer, Transformation & Transmission, office of the Director (Transmission), at Meghalaya Power Transmission Corporation Limited (MePTCL), Shillong, is the petitioner in the above matter and I am duly authorized to make this petition.

That the statement made in reply to the petition herein annexed and enclosed is based on information as derived from the records and I believe them to be true.

VERIFICATION

Solemnly affirm at Shillong on this 23 day of December 2014 that the contents of the above petition are true to my knowledge and no part of it is false and no material has been concealed there from.

In acknowledgement thereof, I swear this affidavit before the Magistrate First Class, Shillong on this \$1. Any of December 2014

(MS & Lyngleh)

(Leonard M. F. Sohtun) Petitioner

Name: MePTCL Investment Plan

Note:- Information to be provided for FY13-to - FY-18 for all heads either spilling into the period starting during FY 13

Note:- Information to be provided for FY1	:- Information to be provided for FY13-to - FY-18 for all heads either spilling into the period																
	Project	Details								SOURCE		ICING FOR	SCHEME				
			Whether				Fauity co	omponent				nponent					
		Nature of	the			Total capital expenditure			Loan	amount (R	s. Crs.)	L	oan sourc	е			
Name of scheme	Year of Start	Project (Select appropriate code from below)	scheme is part of approved Business Plan* (YES/NO)	Project Start Date (DD-MM- YY)	Project Completion date (DD- MM-YY)	ompletion approved by ate (DD-MSERC/Govt/FI (Rs. Crs.)	Internal Accrual (from free reserves and surplus)	Additional equity infused	Loan-1	Loan -2	Loan -3	Loan -1	Loan -2	Loan -3	Capital Subsidies / grants component	Consumer Contribution component	
Transmission Lines:																	
132KV S/C line on D/C towers from Nangalbibra to Agia	2007	С	Not Applicable	07.03.2007	Aug-13	43.32			4.33			State Govt.			38.99		
LILO of 132KV Mawlai-Nongstoin line at Mawngap	2011	С	Not Applicable	22.03.2011	Dec-12	4.94			0.49			State Govt.			4.45		
LILO of one circuit of 400KV Pallatana - Bongaigaon line at Killing	2011	а	Not Applicable	06.07.2011	Mar-15	11.9			1.19			State Govt.			10.68		
LILO of 132KV Nangalbibra - Agia line at Mendipathar	2009	b	Not Applicable	09.12.2009	Jan-14	5.00			0.50			State Govt.			4.50		
132KV S/C line on D/C towers from Rongkhon substation to Ampati with bay extension at Rongkhon	2010	b	Not Applicable	25.03.2010	Oct-15	16.75			1.68			State Govt.			15.08		
LILO of 132KV Mawlai - Cherra line at Mawngap (Mawphlang)	2010	С	Not Applicable	19.01.2010	Mar-16	4.97			0.50			State Govt.			4.47		
LILO of 132KV NEHU - Khliehriat line at Mustem	2012	b	Not Applicable	26.09.2012	Mar-15	4.34			0.43			State Govt.			3.91		
LILO of 132KV NEIGRIHMS - Khliehriat line at Lad Nongkrem	2012	b	Not Applicable	26.09.2012	Mar-16	5.55			0.56			State Govt.			5.00		
132KV line from New Umtru HEP to EPIP- II with bay extension at EPIP-II and Installation of RTUs etc	2012	а	Not Applicable	26.09.2012	Mar-16	5.2			0.52			State Govt.			4.68		
132KV line from New Umtru HEP to Old Umtru HEP with bay extension at Old Umtru	2012	а	Not Applicable	26.09.2012	Mar-16	2.46			0.25			State Govt.			2.21		
132KV 3 circuit line on 4 circuit towers from 220/132KV Killing substation to EPIP- I substation and 132KV D/C line from 220/132KV Killing substation to EPIP-II substation	2010	С	Not Applicable	12.02.2010	Mar-15	21.74			2.17			State Govt.			19.57		
Second Circuit of 132KV Agia-Nangalbibra line	2012	С	Not Applicable	26.09.2012	Mar-15	21.19			2.12			State Govt.			19.07		

	Project	Details								SOURCE	OF FINAN	NCING FOR	SCHEME			
			Whether				Fauity of				Debt Co	mponent				
		Nature of	the			Total capital	Equity Co	mponent	Loan	amount (R	s. Crs.)	L	oan sourc	е		
Name of scheme	Year of Start	Project (Select appropriate code from below)	scheme is part of approved Business Plan* (YES/NO)	Project Start Date (DD-MM- YY)	Project Completion date (DD- MM-YY)	expenditure approved by MSERC/Govt/ FI (Rs. Crs.)	Internal Accrual (from free reserves and surplus)	Additional equity infused	Loan-1	Loan -2	Loan -3	Loan -1	Loan -2	Loan -3	Capital Subsidies / grants component	Consumer Contribution component
132KV D/C line from MLHEP to Mustem	2015	С	Not Applicable	Oct-15	Sep-18	61.00			6.10			State Govt.			54.90	
LILO of 132KV Rongkhon - Ampati line at Praharinagar	2014	b	Not Applicable	31.03.2014	Sep-16	14.39			1.44			State Govt.			12.95	
132KV S/C line on D/C towers from Mawphlang substation to Balat	2015	b	Not Applicable	Oct-15	Sep-19	41.4			4.14			State Govt.			37.26	
Renovation of the existing 132KV S/c line from Mawlai to Nangalbibra s/s	2015	С	Not Applicable	Oct-15	Sep-16	19.23			1.92			State Govt.			17.31	
LILO of 132KV D/C line Umtru - Kahelipara line at Killing s/s	2015	С	Not Applicable	Oct-15	Mar-18	29.52			1.45	15		State Govt.	Power Finance Corp.		13.07	
LILO of both ckts of 132KV D/C Umtru- Kyrdemkulai D/C lines at Nongpoh	2015	b	Not Applicable	Oct-15	Mar-18	15.0			1.50			State Govt.			13.50	
LILO of 2nd circuit 132KV Agia- Nangalbibra line at Mendipathar	2015	b	Not Applicable	Oct-15	Mar-18	7.0			0.70			State Govt.			6.30	
Reconductoring of 132KV Mawlai- Sumer line.	2017	С	Not Applicable	Oct-17	Sep-18	7.0			0.70			State Govt.			6.30	
Substations:												State Govt.			-	
400KV Killing s/s (GIS)	2011	а	Not Applicable	06.07.2011	Jan-13	87.8			8.78			State Govt.			79.02	
220/132KV, 1 x 100MVA ICT at Agia	2011	С	Not Applicable	08.03.2011	Aug-13	11.43			1.14			State Govt.			10.29	
132/33KV, 2 x 25MVA Ampati s/s	2010	b	Not Applicable	25.03.2010	Oct-15	14.04			1.40			State Govt.			12.64	
132/33KV, 2 x 20MVA Mendipathar S/S	2009	b	Not Applicable	21.10.2009	Mar-15	9.56			0.96			State Govt.			8.60	
132/33KV, 2 x 20MVA Mustem s/s	2012	b	Not Applicable	26.09.2012	Mar-15	22.17			2.22			State Govt.			19.95	
132/33KV, 2 x 20MVA Lad Nongkrem S/S	2012	b	Not Applicable	26.09.2012	Mar-16	24.31			2.43			State Govt.			21.88	
132/33KV, 1 x 20MVA Praharinagar s/s	2014	b	Not Applicable	31.03.2014	Sep-16	18.91			1.89			State Govt.			17.02	

	Project Details									SOURCE	OF FINAN	NCING FOR	SCHEME			
			Whether								Debt Cor	mponent				
		Nature of	the			Total capital	Equity co	omponent	Loan a	amount (R	s. Crs.)	L	oan sourc	е		
Name of scheme	Year of Start	Project (Select appropriate code from below)	scheme is part of approved Business Plan* (YES/NO)	Project Start Date (DD-MM- YY)	Start Date Completion (DD-MM- date (DD-		Internal Accrual (from free reserves and surplus)	Additional equity infused	Loan-1	Loan -2	Loan -3	Loan -1	Loan -2	Loan -3	Capital Subsidies / grants component	Consumer Contribution component
132/33KV, 2 x 20MVA Balat s/s	2018	b	Not Applicable	Jan-18	Sep-19	23.2	,		2.32			State Govt.			20.88	
132/33KV, 2 x 20MVA Nongpoh s/s	2016	b	Not Applicable	Jun-16	Mar-18	25.0			2.50			State Govt.			22.50	
Augmentation of Rongkhon substation from 35MVA	2010	b	Not Applicable	08.09.2010	Dec-15	4.69			0.47			State Govt.			4.22	
Augmentation of EPIP-II substation, Norbong	2017	b	Not Applicable	Oct-17	Sep-18	7.0			0.70			State Govt.			6.30	
Augmentation of Mawlai s/s from 3 x 20MVA to 2 x 50MVA	2015	b	Not Applicable	Oct-15	Sep-16	50.0			5.00			State Govt.			45.00	
Others:												State Govt.			-	
Installation & Commissioning of Communication Network & Remote Terminal Unit at 132KV Sub-Station for Supervisory control and Data Acquisition of MeECL	2010	С	Not Applicable	23.12.2010	Mar-15	3.95			0.40			State Govt.			3.56	
Replacing the meters & the metering system at interface boundary with the Generators & Distribution along with the establishment of a Central Data Centre (CDC) at NEHU substation	2013	d	Not Applicable	23.04.2013	Mar-15	3.66			0.37			State Govt.			3.29	
Replacing the meters & the metering system at interface boundary with the Generators & Distribution (Phase-II)	2015	d	Not Applicable	Oct-15	Sep-16	3.9			0.39			State Govt.			3.51	
system at interface boundary with the Generators & Distribution with the establishment of a Central Data Centre	2017	d	Not Applicable	Oct-17	Sep-18	21			2.10			State Govt.			18.90	
Upgradation and improvement of PLCC communication for different Grid Substations and Power Stations.	2016	С	Not Applicable	Oct-16	Sep-17	9.98			1.00			State Govt.			8.98	
Installation & commissioning of OPGW communication network and RTUs	2015	С	Not Applicable	Oct-15	Sep-16	27.00			2.70			State Govt.			24.30	
Renovation & upgradation of protection & control system	2016	С	Not Applicable	Apr-16	Mar-19	102.50									102.50	

	Project	Details								SOURCE	OF FINAN	NCING FOR	SCHEME									
			Whether				Equity co	mponent			Debt Co	mponent										
		Nature of	the scheme is	l .		Total capital		Inponent	Loan	amount (R	s. Crs.)	L	oan source	е								
Name of scheme	Year of Start	Project (Select appropriate code from below)		Start Date	Completion	expenditure approved by MSERC/Govt/ FI (Rs. Crs.)	Internal Accrual (from free reserves and surplus)	Additional equity infused	Loan-1	Loan -2	Loan -3	Loan -1	Loan -2	Loan -3	Capital Subsidies / grants component	Consumer Contribution component						
Capacitor Bank with accessories etc at 132KV Nangalbibra, Rongkhon, Ampati & EPIP substations	2016	С	Not Applicable	Apr-16	Mar-18	18.00			1.80			State Govt.			16.20							
Capacitor Bank with accessories etc at 132KV Lumshnong, NEHU, Cherra & Nongstoin substations	2016	С	Not Applicable	Apr-16	Mar-18	18.00			1.80			State Govt.			16.20							
North Eastern Region Power System Impro	ovement	Projects (NERPS	SIP): Tranche	-I																		
LILO of 132KV D/C MLHEP - Khliehriat line at Mynkre																						
220KV D/C Killing - Mawphlang - New Shillong Township 132KV Ampati - Phulbari D/C line															-							
132/33KV, 2 x 50MVA Mynkre s/s	2015	С	Not Applicable	Apr-15	Mar-19	598.73			29.94			State Govt.			568.79							
220/132KV 2 x 160MVA Mawphlang & New Shillong Township s/s		Другоале																				
132/33KV, 2 x 50MVA Phulbari s/s																						

Format-1

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

EMPLOYEE COST

(Rs. in Crores)

S N	Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
0.11	1 articulars	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8
	SALARIES & ALLOWANCES						
1	Basic Pay	9.71	10.45	8.95	15.39	16.32	17.28
2	Dearness Pay						
3	Dearness Allowance	2.37	3.59	4.40	0.29	1.56	2.97
4	House rent Allowance			0.90	1.76	1.87	1.98
5	Other Allowances	1.78	1.94	0.74	0.94	0.98	1.01
6	Fixed medical allowance						
7	Medical reimbursement charges	0.17	0.17	0.25	0.25	0.25	0.25
9	Over time payment	0.07	0.10	0.08	0.08	0.08	0.08
10	Generation incentive						
11	Bonus						
12	Arrears	0.96	0.46	0.98	-	-	-
	Sub-Total	15.06	16.71	16.30	18.72	21.05	23.58
	Terminal Benefits						
13	Leave encashment	0.26	0.17	25.00	25.00	25.00	25.00
14	Gratuity						
15	Commutation of Pension	0.08	0.11	0.11	0.11	0.11	0.11
16	Workman compensation						
17	Ex- gratia						
	Sub-Total	0.35	0.29	25.11	25.11	25.11	25.11
	Pension Payment						
18	Basic Pension						
19	Dearness Pension						
20	Dearness allowance						
21	Any other expenses						
22	Sub-Total	-	-	-	-	-	-
23	Total (11+17+22)	15.41	16.99	41.40	43.82	46.15	48.69
24	Amount capitalised	-	-		-	-	-
	Net amount	15.41	16.99	41.40	43.82	46.15	48.69
26	Add prior period expenses *	0.68	0.18	0.17	-	-	-
	Grand Total	16.09	17.17	41.58	43.82	46.15	48.69

Format- 2

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

TOTAL NUMBER OF EMPLOYEES- MePTCL

S.N	Particulars		FY2013-14 (Provisional)	FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)
1	2	3	4	5	6	7	8
1	Number of employees as on 1st April	328	324	315	305	297	296
	Number of employees on deputation / foreign service as on 1st April	-	-	-	-	-	
3	Total Number of employees (1+2)	328	324	315	305	297	296
	Number of employees retired / retiring during the year	10	10	10	21	13	11
5	Number of employees joined last year	6	1		13	12	12
	Number of employees at the end of the year (3-4)	324	315	305	297	296	297

S.N	l Particulars		FY2013-14 (Provisional)				FY2017-18 (Projected)
1	2	3	4	5	6	7	8
1	Number of employees as on 1st April	410	408	400	373	366	352
2	Number of employees on deputation /						
	foreign service as on 1st April						
3	Total Number of employees (1+2)	410	408	400	373	366	352
	Number of employees retired / retiring during the year	26	16	27	15	16	19
5	Number of employees joined last year	24	8		8	2	2
	Number of employees at the end of the year (3-4)	408	400	373	366	352	335

Note: Casual Employees not included

Format- 3

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

EMPLOYEES PRODUCTIVE PARAMETERS

S.N	Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
3.IV	Failiculais	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8
1	Number of consumers in million						
2	Connected load in kW						
3	Line circuit in KM (LT+HT)						
4	Energy sold in MU						
5	Employees per MU of energy sold	1		N	A		
6	Employees per 1000 consumers	-					
7	Share of employees cost in total expenses	<u> </u>					
8	Employees cost in paise / kWh of energy sold		Τ	1	T	T	T
9	Line circuit KM (EHT Lines)	1153	1245	1349	1394	1542	1542
10	Employees per KM of EHT line (Transmission related)	0.28	0.25	0.23	0.21	0.19	0.19
11	Power station installed capacity own generation (MW)			N	A		
12	Employees per MW of capacity For generating company						

Format - 4

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

REPAIRS AND MAINTENANCE EXPENSES

(Rs. in Crores)

							(Rs. in Crores)
S.No	Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
3.NO	Farticulars	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8
1	Plant & Machinery	1.40	0.98	1.80	1.96	2.14	2.33
	-Plant and Apparatus						
	-EHV Sub-stations						
	- 33 kV Sub-stations						
	- 11 kV Sub-stations						
	-Switch gear and cable connections						
	- Others						
	Total	1.40	0.98	1.80	1.96	2.14	2.33
2	Building	0.01	0.01	0.05	0.05	0.06	0.06
3	Hydraulic works & Civil Works	-	-	=	-	-	-
4	Line cable & Network						
	- EHV Lines						
	-33 kV Lines						
	-11 kV Lines						
	-LT Lines						
	-Meters and metering equipment						
	-Others						
	Total	1.29	2.10	2.08	2.27	2.47	2.70
5	Vehicles	0.04	0.05	0.04	0.05	0.05	0.06
6	Furniture & Fixtures	0.04	0.05	0.01	0.01	0.01	0.01
7	Office equipments	0.04	0.05	0.02	0.02	0.02	0.02
8	Operating expenses	0.02	0.02	0.01	2.72	0.01	0.02
	Total	0.14	0.15	0.08	2.80	0.09	0.10
10	Add / Deduct share of other (To be						
	specified)						
11	Total expenses	2.85	3.24	4.00	7.07	4.76	5.19
12	Less capitalized	-	-	-	-	-	-
13	Net expenses	2.85	3.24	4.00	7.07	4.76	5.19
14	Add prior period *	-	-	-	-	-	-
15	Total expenses charges to	2.85	3.24	4.00	7.07	4.76	5.19
	revenue as R&M expenses						

Format - 5

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

ADMINISTRATION AND GENERAL EXPENSES

(Rs. in Crores)

							(Rs. in Crores)
C N	Destinulare	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
S.N	Particulars	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8
1	Rent, rates & taxes	0.05	=	0.01	0.01	0.01	0.01
2	Insurance	0.01	0.01	0.01	0.02	0.02	0.02
3	Telephone, postage &	0.06	0.05	0.05	0.05	0.05	0.06
	Telegrams						
4	Consultancy fees	0.00	-	-	-	-	-
5	Technical fees	-	-	-	-	-	-
6	Other professional charges	0.08	0.00	0.00	0.00	0.00	0.00
7	Conveyance & travel expenses	0.98	1.08	1.19	1.30	1.42	1.55
8	Electricity & Water charges	-	-	-	-	-	-
9	Others	0.15	0.12	0.06	0.07	0.07	0.08
10	Freight	-	-	-	-	-	-
11	Other material related expenses	0.04	0.03	0.02	0.02	0.02	0.02
12	Total expenses	1.37	1.29	1.34	1.46	1.60	1.74
13	Less Capitalised	-	-	-	-	-	-
14	Net expenses	1.37	1.29	1.34	1.46	1.60	1.74
15	Add Prior period*	-	-	0.18	0.19	0.21	0.23
16	Total expenses charged to revenue	1.37	1.29	1.52	1.66	1.81	1.97
17	Apportionment of MeECL expenses	3.43	13.51	24.48	25.12	27.50	27.19
18	Total expenses charged to revenue	4.80	14.80	26.00	26.78	29.31	29.16

Format- 6

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

VALUE ASSETS AND DEPRECIATION- FY2012-13

(Rs.Crores)

						(NS.CIOIES)
Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
	beginning of	year	year	year	ation	the year
	the year	-	-		(%)	-
2	3	4	5	6	7	8
Land	1.27	0.03	-	1.30	0.00%	-
Buildings	6.18	0.06	-	6.24	3.34%	0.20
Hydraulic works	-	-	-	-	5.28%	-
Other Civil works	0.46	5.14	-	5.60	3.34%	0.34
Plant & Machinery	11.33	52.13	-	63.46	5.81%	3.30
Lines & Cables	43.66	101.56	-	145.22	5.28%	10.74
Vehicles	0.03	-	-	0.03	9.50%	-
Furniture	0.18	0.16	-	0.34	6.33%	0.02
Office equipment	0.26	0.02	-	0.28	6.33%	0.02
IT Equipment						
Total	63.37	159.10	-	222.47		14.62
	Asset 2 Land Buildings Hydraulic works Other Civil works Plant & Machinery Lines & Cables Vehicles Furniture Office equipment IT Equipment	Asset Assets at the beginning of the year 2 3 Land 1.27 Buildings 6.18 Hydraulic works - Other Civil works 0.46 Plant & Machinery 11.33 Lines & Cables 43.66 Vehicles 0.03 Furniture 0.18 Office equipment 0.26 IT Equipment	Asset Assets at the beginning of the year 2 3 4 Land 1.27 0.03 Buildings 6.18 0.06 Hydraulic works Other Civil works 0.46 5.14 Plant & Machinery 11.33 52.13 Lines & Cables 43.66 101.56 Vehicles 0.03 - Furniture 0.18 0.16 Office equipment 0.26 0.02 IT Equipment	Asset Assets at the beginning of the year during the year during the year 2 3 4 5 Land 1.27 0.03 - Buildings 6.18 0.06 - Hydraulic works - - - Other Civil works 0.46 5.14 - Plant & Machinery 11.33 52.13 - Lines & Cables 43.66 101.56 - Vehicles 0.03 - - Furniture 0.18 0.16 - Office equipment 0.26 0.02 - IT Equipment - - -	Asset Assets at the beginning of the year during the year Assets at the year 2 3 4 5 6 Land 1.27 0.03 - 1.30 Buildings 6.18 0.06 - 6.24 Hydraulic works - - - - Other Civil works 0.46 5.14 - 5.60 Plant & Machinery 11.33 52.13 - 63.46 Lines & Cables 43.66 101.56 - 145.22 Vehicles 0.03 - - 0.03 Furniture 0.18 0.16 - 0.34 Office equipment 0.26 0.02 - 0.28 IT Equipment - - - 0.28	Assets at the beginning of the year

VALUE ASSETS AND DEPRECIATION- FY2013-14

(Rs.Crores)

							(varcioles)
S.No	Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
1	Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
1		beginning of	year	year	year	ation	the year
		the year				(%)	
1	2	3	4	5	6	7	8
1	Land	1.30	0.32	-	1.62	0.00%	-
2	Buildings	6.24	2.68	-	8.92	3.34%	0.29
3	Hydraulic works	-	ı	-	-	5.28%	-
4	Other Civil works	5.60	ı	-	5.60	3.34%	0.19
5	Plant & Machinery	63.46	72.07	-	135.53	5.81%	6.92
6	Lines & Cables	145.22	63.45	-	208.67	5.28%	10.59
7	Vehicles	0.03	ı	-	0.03	9.50%	-
8	Furniture	0.34	0.04	-	0.38	6.33%	0.02
9	Office equipment	0.28	0.02	-	0.30	6.33%	0.02
10	IT Equipment						
	Total	222.47	138.58	-	361.05		18.03

VALUE ASSETS AND DEPRECIATION- FY2014-15

(Rs.Crores)

S.No	Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
	Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
		beginning of	year	year	year	ation	the year
		the year				(%)	
1	2	3	4	5	6	7	8
1	Land	1.62	3.90	ı	5.52	0.00%	-
2	Buildings	8.92	2.33	ı	11.25	3.34%	0.30
3	Hydraulic works	-	ı	-	-	5.28%	-
4	Other Civil works	5.60	7.83	ı	13.43	3.34%	0.29
5	Plant & Machinery	135.53	18.84	-	154.37	5.81%	7.57
6	Lines & Cables	208.67	14.94	ı	223.61	5.28%	10.27
7	Vehicles	0.03	ı	ı	0.03	9.50%	0.00
8	Furniture	0.38	ı	ı	0.38	6.33%	0.02
9	Office equipment	0.30	ı	ı	0.30	6.33%	0.02
10	IT Equipment	-	3.64	ı	3.64	15.00%	0.25
	Total	361.05	51.47	•	412.52		18.72
			·				

Format- 6

VALUE ASSETS AND DEPRECIATION- FY2015-16

(Rs.Crores)

							(113.010163)
S.No	Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
	Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
		beginning of	year	year	year	ation	the year
		the year				(%)	
1	2	3	4	5	6	7	8
1	Land	5.52	14.44	-	19.96	0.00%	-
2	Buildings	11.25	8.24	-	19.49	3.34%	0.46
3	Hydraulic works	-	-	-	-	5.28%	-
4	Other Civil works	13.43	26.82	-	40.25	3.34%	0.81
5	Plant & Machinery	154.37	57.71	•	212.07	5.81%	9.57
6	Lines & Cables	223.61	67.72	1	291.33	5.28%	12.24
7	Vehicles	0.03	ı	-	0.03	9.50%	0.00
8	Furniture	0.38	ı	1	0.38	6.33%	0.02
9	Office equipment	0.30	ı	1	0.30	6.33%	0.02
10	IT Equipment	3.64	1.41	1	5.05	15.00%	0.59
	Total	412.52	176.34	•	588.86		23.70

VALUE ASSETS AND DEPRECIATION- FY2016-17

(Rs.Crores)

							(1.10.0.0.00)
S.No	Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
	Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
		beginning of	year	year	year	ation	the year
		the year				(%)	
1	2	3	4	5	6	7	8
1	Land	19.96	3.28	-	23.23	0.00%	-
2	Buildings	19.49	1.89	-	21.38	3.34%	0.61
3	Hydraulic works	-	-	-	-	5.28%	-
4	Other Civil works	40.25	15.57	ı	55.82	3.34%	1.44
5	Plant & Machinery	212.07	56.25	ı	268.32	5.81%	12.55
6	Lines & Cables	291.33	34.85	•	326.18	5.28%	14.67
7	Vehicles	0.03	-	-	0.03	9.50%	0.00
8	Furniture	0.38	-	-	0.38	6.33%	0.02
9	Office equipment	0.30	-	-	0.30	6.33%	0.02
10	IT Equipment	5.05	21.60	-	26.65	15.00%	2.14
	Total	588.86	133.43	ı	722.29		31.46

VALUE ASSETS AND DEPRECIATION- FY2017-18

(Rs.Crores)

S.No	Name of the	Value of	Addition	Withdrawn	Value of	Rate of	Depreciation
	Asset	Assets at the	during the	during the	Assets at the	Depreci	charges for
		beginning of	year	year	year	ation	the year
		the year				(%)	
1	2	3	4	5	6	7	8
1	Land	23.23	ı	-	23.23	0.00%	1
2	Buildings	21.38	•	-	21.38	3.34%	0.64
3	Hydraulic works	ı	ı	-	-	5.28%	ı
4	Other Civil works	55.82	3.60	-	59.42	3.34%	1.73
5	Plant & Machinery	268.32	32.40	-	300.72	5.81%	14.86
6	Lines & Cables	326.18	1	-	326.18	5.28%	15.50
7	Vehicles	0.03	ı	-	0.03	9.50%	0.00
8	Furniture	0.38	-	-	0.38	6.33%	0.02
9	Office equipment	0.30	-	-	0.30	6.33%	0.02
10	IT Equipment	26.65	9.98	-	36.63	15.00%	4.27
	Total	722.29	45.98	-	768.27		37.05

Format- 7

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

DETAILS OF LOANS FOR THE YEAR FY2012-13

(Rs. in lakhs)

S.N	Particulars	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid
1	2	3	4	5	6	7	8
1	PFC						
2	Total						
3	Add State Govt. Loan	1,083.13	7.84%	494.21	99.54	1,477.81	100.43
4	Add Central Govt. Loan	373.89	8.65%	-	-	373.89	32.34
5	Total (13 +14)	1,457.02	8.03%	494.21	99.54	1,851.70	132.77
6	Less capitalisation						
7	Net Interest						
8	Add prior period						
9	Total Interest						
10	Finance charges						
	Total Interest and			_			
11	finance charges						

DETAILS OF LOANS FOR THE YEAR FY2013-14

(Rs. in lakhs)

S.N	Particulars	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid
1	2	3	4	5	6	/	8
—	PFC						
2	Total						
3	Add State Govt. Loan	1,477.81	9.04%	846.51	-	2,324.32	171.83
4	Add Central Govt. Loan	373.89	8.82%	-	-	373.89	32.99
5	Total (13 +14)	1,851.70	9.00%	846.51	I	2,698.21	204.82
6	Less capitalisation						
7	Net Interest						
8	Add prior period						
9	Total Interest						
10	Finance charges			·			
	Total Interest and						
11	finance charges						

DETAILS OF LOANS FOR THE YEAR FY2014-15

(Rs. in lakhs)

	(RS. II)								
S.N 1	Particulars 2	Opening balance	Rate of Interest	Addition during the year 5	Repayment during the year 6	Closing balance 7	Amount of interest paid		
1	PFC			-	-		-		
2	Total								
3	Add State Govt. Loan	2,324.32	9.31%	766.08	-	3,090.40	252.05		
4	Add Central Govt. Loan	373.89	8.82%	-	-	373.89	32.99		
5	Total (13 +14)	2,698.21	9.25%	766.08	-	3,464.29	285.04		
6	Less capitalisation								
7	Net Interest								
8	Add prior period								
9	Total Interest								
10	Finance charges								
	Total Interest and								
11	finance charges								

Format- 7

DETAILS OF LOANS FOR THE YEAR FY2015-16

(Rs. in lakhs)

							S. III lakiis)
S.N 1	Particulars 2	Opening balance	Rate of Interest	Addition during the year 5	Repayment during the year 6	Closing balance 7	Amount of interest paid
1	PFC	1,500.00	12.50%	-	-	1,500.00	187.50
2	Total						
3	Add State Govt. Loan	3,090.40	9.31%	2,856.15	-	5,946.55	420.67
4	Add Central Govt. Loan	373.89	8.82%	-	-	373.89	32.99
5	Total (13 +14)	4,964.29	10.03%	2,856.15	-	7,820.44	641.16
6	Less capitalisation						
7	Net Interest						
8	Add prior period						
9	Total Interest						
10	Finance charges						
	Total Interest and						
11	finance charges						

DETAILS OF LOANS FOR THE YEAR FY2016-17

(Rs. in lakhs)

	(No. III					is ili lakils)	
S.N	Particulars 2	Opening balance	Rate of Interest	Addition during the year 5	Repayment during the year 6	Closing balance	Amount of interest paid
' -	2	-	-	J	<u>-</u>	1	
1	PFC	1,500.00	12.50%	0	0	1,500.00	187.50
2	Total						
3	Add State Govt. Loan	5,946.55	9.31%	1334.3	0	7,280.85	615.74
4	Add Central Govt. Loan	373.89	8.82%	0	0	373.89	32.99
5	Total (13 +14)	7,820.44	8.38%	1,334.30	-	7,654.74	648.73
6	Less capitalisation						
7	Net Interest						
8	Add prior period						
9	Total Interest						
10	Finance charges			•			
	Total Interest and				_		
11	finance charges						

DETAILS OF LOANS FOR THE YEAR FY2017-18

(Rs. in lakhs)

S.N	Particulars	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid
1	2	3	4	5	6	7	8
1	PFC	1,500.00	0.125	0	0	1,500.00	187.50
2	Total						
3	Add State Govt. Loan	7,280.85	9.31%	459.8	0	7,740.65	699.25
4	Add Central Govt. Loan	373.89	8.82%	0	0	373.89	32.99
5	Total (13 +14)	9154.74	9.78%	459.80	150.00	9464.54	910.37
6	Less capitalisation						
7	Net Interest						
8	Add prior period						
9	Total Interest						
10	Finance charges						
	Total Interest and						
11	finance charges						

Format- 8

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INTEREST CAPITALISED

(Rs. in lakhs)

C N	Interest conitalined	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
S.N.	Interest capitalized	(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	2				3	4	5
1	WIP	11,943.98	7,720.72	8,247.39	13,045.49	34,859.49	59,052.49
2	GFA at the end of the year	22,247.00	36,105.00	41,252.33	58,886.23	72,229.23	76,827.23
3	WIP+GFA at the end of the year	34,190.98	43,825.72	49,499.72	71,931.72	107,088.72	135,879.72
4	Interest (Excluding interest on WCL)						
5	Interest Capitalised						

Format- 9

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INFORMATION REGARDING RESTRUCTURING OF OUTSTANDING LOANS DURING THE YEAR

(Rs. in lakhs)

S.N	Source of loan	Amount of original loan	Old rate of interest (%)	Amount already restructured	Revised rate of interest (%)	Amount now being restructured	New rate of interest (%)		
1	2	3	4	5	6	7	8		
	Not Applicable								

MePTCL 7 0

Format- 10

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INFORMATION REGARDING REVENUE FROM OTHER BUSINESS

(Rs. in lakhs)

S.N	Particulars				FY2017-18 (Projected)
1	2	3	4	5	6
1	Total Revenue from other business	6.24	6.24	6.24	6.24
	Income from other business to be considered for licenses business as per regulations	6.24	6.24	6.24	6.24

Format- 11

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INFORMATION REGARDING WORKING CAPITAL FOR THE CURRENT AND ENSURING YEAR

(Rs. in lakhs)

S.N	Particulars	FY2014-15	FY2015-16	FY2016-17	FY2017-18
		(Estimated)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6
1	Fuel cost	-	-	1	-
2	Power Purchase Cost	-	-	1	-
3	One month employees cost and adm.& Gen. Expenses	5.97	6.47	6.69	6.92
4	Maintenance Spares	3.97	4.75	6.91	8.74
5	Two Months Receivables	23.79	30.54	35.28	37.75
6	Total	33.73	41.76	48.87	53.41

Format- 12

Format- 12

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INFORMATION REGARDING FOREIGN EXCHANGE RATE VARIATION (FERV)

(Rs. in lakhs)

S.N	Particulars	Amount
1	2	3
1	Amount of liability provided	
2	Amount recovered	
3	Amount adjusted	

Format- 13

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

INFORMATION REGARDING WHOLESALE PRICE INDEX (ALL COMMODITIES) (to be supplied with documentary evidence)

(Rs. in lakhs)

S.N	Period	WPI	Increase over
1	2	3	4
1	As on April 1 of previous years N-1, N-2		
2	As on April 1 of current year N		
3	As on April 1 of ensuing years N+1, N+2, N+3		

Format- 14 (A)

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

A. ESTIMATED REVENUE AT EXISTING TARIFF (LT)

S.No	Category	Connected Load (KW)	Fixed Charges per KW (Rs.)	Total Fixed Charges (Rs. in Lakhs)	Slab in the Category	each Slab	Existing Tar Rate (paise per Kwh)	•	Total amount for the category (lakh)	Average tariff for the year (paise per Kwhr)
1 2 3 4 5					Not App	olicable				
11	Total (LT)									

Format- 14 (B)

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

B. ESTIMATED REVENUE AT EXISTING TARIFF (HT)

S.No	Category	Contract Demand	Billing Demand	Sale of Energy	Fixed Charge	Energy Charges	Total Fixed Charges	Total Energy	Grand Total	Average tariff for
1					J					
2										
3										
4										
5										
6					N	lot Applicab	le			
7										
10	Total (HT)									
11	Total (LT)									
12	Total (LT+H									

Format- 14 (c)

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

C. ESTIMATED REVENUE AT EXISTING TARIFF

S.No	Category	Contract Demand (KVA)	Billing Demand (KVA)	Sale of Energy (MU)	Existing Tariff	Total amount for the year (lakh)	Total amount for the category (Lakh)	Average tariff for the year (Paise per kwhr)
1								
2								
3					Not Applicable			
4					Not Applicable			
5								
6	Total (LT+H							

Format- 14 (d)

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

D. ESTIMATED REVENUE AT EXISTING TARIFF

S.No	Category	Contract Demand (KVA)	Billing Demand (KVA)	Sale of Energy (MU)	Existing Tariff	Total amount for the year (lakh)	Total amount for the category (Lakh)	Average tariff for the year (Paise per kwhr)
1								
2								
3					Not Applicable			
4					Not Applicable			
5								
6	Grand Total							

MePTCL 7 2

Meghalaya Power Transmission Corporation Limited

Format - 15

Investment Plan (Scheme - wise)

S.N	Name of Scheme/ Project	Approved Outlay	FY2012-13 (Provisional)	FY2013-14 (Provisional)	FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)	(Rs. in lakhs) Progressive expenditures upto FY 2017-18 (Projected)
1	2	3	4	5	6	7	8	9	10
	Transmission Lines:								
	132KV S/C line on D/C towers from Nangalbibra to Agia	4,332.00	39.37	185.29	8.70	-	-	-	4,933.78
	LILO of 132KV Mawlai- Nongstoin line at Mawngap	494.00	108.00	28.00	4.00	-	-		397.00
3	LILO of one circuit of 400KV Pallatana - Bongaigaon line at Killing	1,186.65	929.47	248.41	129.12	-	-	-	1,307.00
	LILO of 132KV Nangalbibra - Agia line at Mendipathar	500.00	52.96	7.19	53.69	195.00	-	-	500.00
	132KV S/C line on D/C towers from Rongkhon substation to Ampati with bay extension at Rongkhon	1,675.00	756.24	304.94	57.43	272.09	-	-	1,675.00
6	LILO of 132KV Mawlai - Cherra line at Mawngap (Mawphlang)	497.00	27.00	36.00	34.00	90.00	-	-	624.00
7	LILO of 132KV NEHU - Khliehriat line at Mustem	434.00	-	-	250.00	184.00	-	-	434.00
8	LILO of 132KV NEIGRIHMS - Khliehriat line at Lad Nongkrem	555.00	-	-	90.00	465.00	-	-	555.00
9	132KV line from New Umtru HEP to EPIP-II with bay extension at EPIP-II and Installation of RTUs etc	520.00	-	-	320.00	200.00	-	-	520.00
10	132KV line from New Umtru HEP to Old Umtru HEP with bay extension at Old Umtru	246.00	-	-	175.00	71.00	-	-	246.00
	132KV 3 circuit line on 4 circuit towers from 220/132KV Killing substation to EPIP-I substation and 132KV D/C line from 220/132KV Killing substation to EPIP-II substation	2,174.00	413.53	1,089.00	-	-	-	-	2,313.67
12	Second Circuit of 132KV Agia- Nangalbibra line	2,119.00	-	235.36	664.64	1,219.00	-	-	2,119.00
13	LILO of 132KV Rongkhon - Ampati line at Praharinagar	1,439.00	-	-	150.00	850.00	439.00	-	1,439.00
14	132KV D/C line from MLHEP to Mustem (50Km)	6,100.00				1,220.00	1,830.00	2,440.00	5,490.00
15	132KV S/C line on D/C towers from Mawphlang substation to Balat	4,100.00				820.00	1,230.00	820.00	2,870.00
	Renovation of the existing 132KV S/c line from Mawlai to Nangalbibra s/s	1,923.00				1,730.70	192.30	-	1,923.00
17	LILO of 132KV D/C line Umtru - Kahelipara line at Killing s/s	2,952.00				590.40	885.60	1,180.80	2,656.80
18	LILO of one ckt of 132KV D/C Umtru-Kyrdemkulai at Nongpoh	1,500.00				300.00	450.00	600.00	1,350.00
19	LILO of 2nd circuit 132KV Agia- Nangalbibra line at Mendipathar	700.00				140.00	210.00	280.00	630.00

Meghalaya Power Transmission Corporation Limited

Investment Plan (Scheme - wise)

Format - 15

S.N	Name of Scheme/ Project	Approved Outlay	FY2012-13 (Provisional)	FY2013-14 (Provisional)	FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)	(Rs. in lakhs) Progressive expenditures upto FY 2017-18 (Projected)
1	2	3	4	5	6	7	8	9	10
20	Reconductoring of 132KV Mawlai- Sumer line.	700.00				-	-	280.00	280.00
- 04	Substations:	0.700.00	404.00	4 004 70	4 000 04				0.000.00
	400KV Killing s/s (GIS)	8,780.00	464.09	1,821.70	1,022.21	-	-	-	9,660.00
	220/132KV, 1 x 100MVA ICT at Agia	1,143.00					-	-	1,143.00
	132/33KV, 2 x 25MVA Ampati s			37.70		873.09	-	-	1,404.00
	132/33KV, 2 x 20MVA Mendipat 132/33KV, 2 x 20MVA Mustem s/s			245.22 29.16			-	-	956.00 2,217.00
26	132/33KV, 2 x 20MVA Lad Nongkrem S/S	2,431.00	-	92.72	87.98	2,250.29	-	-	2,431.00
27	132/33KV, 1 x 20MVA Praharinagar s/s	1,891.00	-	-	250.00	1,250.00	391.00	-	1,891.00
	Augmentation of Rongkhon substation from 35MVA	469.00	19.88	16.59	117.10	200.00	-	-	469.00
	Balat s/s	2,320.00	-	-			-	1,624.00	1,624.00
30	Nongpoh s/s	2,500.00	-	-		-	1,000.00	1,250.00	2,250.00
	Augmentation of EPIP-II substation along with terminal equipments for EPIP-I & EPIP-II substations	700.00	-	-	-	-	-	280.00	280.00
32	Augmentation of Mawlai s/s from 3 x 20MVA to 2 x 50MVA along with bus	5,000.00	-	-	-	2,000.00	2,500.00	500.00	5,000.00
	Others:								
33	Installation & Commissioning of Communication Network & Remote Terminal Unit at 132KV Sub-Station for Supervisory control and Data Acquisition of MeECL	395.00	1.09	170.00	224.58	-	-	-	395.67
	Replacing the meters & the metering system at interface boundary with the Generators & Distribution along with the establishment of a Central Data Centre (CDC) at NEHU substation	366.00	-	-	366.00	-	-	-	366.00
	Replacing the meters & the metering system at interface boundary with the Generators & Distribution (Phase-II)	300.00				156.00	195.00	39.00	390.00
	Replacing the meters & the metering system at interface boundary with the Generators & Distribution (Phase-III)	2 100 00					840.00	1,050.00	1,890.00
	Upgradation and improvement of PLCC communication for different Grid Substations and Power Stations.	998 00					399.00	499.00	898.00
38	Installation & commissioning of OPGW communication network and RTUs	2,700.00				1,080.00	1,350.00	270.00	2,700.00
39	Renovation & upgradation of protection & control system	10,250.00					2,050.00	3,075.00	5,125.00
	Capacitor Bank with accessories etc at 132KV Nangalbibra, Rongkhon, Ampati & EPIP substations	1,800.00					720.00	900.00	1,620.00
41	Capacitor Bank with accessories etc at 132KV Lumshnong, NEHU, Cherra & Nongstoin substations	1 800 00					720.00	900.00	1,620.00
1								I	

MePTCL 7 4

Meghalaya Power Transmission Corporation Limited

Format - 15

Investment Plan (Scheme - wise)

(Rs. in lakhs)

S.N		Approved Outlay	FY2012-13 (Provisional)		FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)	Progressive expenditures upto FY 2017-18 (Projected)
1	2	3	4	5	6	7	8	9	10
	North Eastern Region Power System Improvement Projects (NERPSIP): Tranche-I								
42	LILO of 132KV D/C MLHEP - Khliehriat line at Mynkre	4,102.00							
43	220KV D/C Killing - Mawphlang - New Shillong Township	17,263.00							
	132KV Ampati - Phulbari D/C line	5,719.00			5,674.00	14,387.00	20,573.00	12,795.00	53,429.00
45	Mynkre s/s	4,435.00							
46	Mawphlang & New Shillong Township s/s	21,624.00							
47	Phulbari s/s	5,860.00							
	Total	143,759.65	3,473.37	4,867.28	12,097.15	31,366.57	35,974.90	28,782.80	130,021.92

Format- 16

Meghalaya Power Transmission Corporation Limited

Investment Plan (Year - wise) for FY 2014-15 to FY 2017-18

(Rs. in lakhs)

S.N	Year	Originally proposed	Approved by the	Revised by the Utility	Revised approval by the	Actual expenditure
		by the Utility	Commission	line ounity	Commission	CAPCHAILAIC
		by the Othicy	Commission			
					in review	
1	2	3	4	5	6	7
			51 4 5			
			Not App	licable		

Format- 17

Meghalaya Power Transmission Corpoaration Ltd. (MePTCL)

WORKS-IN-PROGRESS

(Rs. in lakhs)

S.N	Particulars	FY2012-13 (Provisional)	FY2013-14 (Provisional)			FY2016-17 (Projected)	FY2017-18 (Projected)
0	randalaid	(i revisional)	(i rovidional)	(Lotimatou)	(i rojoutou)	(i rejecteu)	(i rojoulou)
1	2	3	4	5	6	7	8
1	Opening balance	22,466.18	11,943.98	7,720.72	8,247.39	13,045.49	34,859.49
2	Add: New inverstments	5,170.50	9,590.92	5,674.00	22,432.00	35,157.00	28,791.00
3	Total	27,636.68	21,534.90	13,394.72	30,679.39	48,202.49	63,650.49
4	Less investment capitalised	15,692.70	13,814.18	5,147.33	17,633.90	13,343.00	4,598.00
5	Closing balance	11,943.98	7,720.72	8,247.39	13,045.49	34,859.49	59,052.49

MePTCL 7 6

Format- T1 (A)

Name of the Licensee: MePTCL

DETAILS OF TRANSMISSION LINES

(A) Transmission Lines

SI. No.	Name of Transmission line	No. of Circuit	Voltage level (KV)	Line length in circuit km	Date of commercial
		Circuit	level (KV)	Circuit Kiii	commerciai
1	132KV Mawlai - NEHU line	SC	132	7.86	1967
2	132KV Mawlai- Cherra line				
		SC	132	42.14	1977
3	132KV Mawlai- Mawphlang line	SC	132	20.26	1983, 2012
4	132KV Mawphlang - Nongstoin line	SC	132	58.96	1983, 2012
5	132KV Nongstoin- Nangalbibra line	SC	132	57.13	1983
6	132KV Nangalbibra-Rongkhon line	SC	132	68.71	1987
7	Mawlai -Stg-I	SC	132	12.05	1964
8	NEHU -Umiam	SC	132	6.20	1991
9	Stg-I-Umiam	SC	132	5.06	1991
10	Stg-I- Stg-III	DC	132	35.08	1964/1979
11	Stgl- Stg-II	SC	132	3.00	1967
12	Stg-I- Mawphlang	DC	132	66.14	2011
13	Stg-III- UPS	DC	132	82.22	1964/1979
14	Stg-III-Stg-IV, Line-1	SC	132	8.02	1992
15	Stg-III-Stg-IV, Line-2	SC	132	9.69	2009
16	Stg-IV- UPS	DC	132	59.72	2004/2010
17	UPS- Sarasujai	DC	132	35.44	2004/2010
18	UPS-Kahilipara	DC	132	23.37	1959
19	220KV Misa-Killing Line	DC	220	226.82	29.01.2011
20	132kV Umtru P/S - EPIP-II line	DC	132	1.40	2007
21	132kV EPIP-I - EPIP-II line	DC	132	6.06	2003
22	132kV Leshka - Khliehriat line	DC	132	52.94	Jan'2010
23	132kV Killing - EPIP-II line	DC	132	20.53	29.01.2011
24	132kV Lumshnong - M/s CMCL line	SC	132	0.30	2002
25	132kV Lumshnong - M/s MCL line	SC	132	3.27	15.02.2006
26	132kV Lumshnong - M/s JUD line	SC	132	1.87	28.01.2009
27	132kV Lumshnong - M/s HCCL line	DC	132	7.62	November'2
		SC		5.50	009
28	132kV Lumshnong - M/s Adhunik Cements Ltd. line(D/C portion as in Sl. No. 24 above)	SC	132	3.64	February'201 0
29	132kV line tapping to M/s GVIL	SC	132	2.18	April'2012
30	132kV Umiam substation to M/s RNB Cements	SC	132	0.32	May'2012

Format- T1 (A)

Name of the Licensee: MePTCL

DETAILS OF TRANSMISSION LINES

(A) Transmission Lines

SI. No.	Name of Transmission line	No. of Circuit	Voltage level (KV)	Line length in circuit km	Date of commercial
21	12214/ EDID I to M/s Charge Contains	SC	` <u>'</u>	0.25	i
31	132kV EPIP-I to M/s Shyam Century	SC	132	0.25	15.12.2001
22	Ferro alloys Ltd.		122	0.44	07.00.2002
32	132kV EPIP-II to M/s Trishul Hitech	SC	132	0.44	07.06.2002
	Pvt. Ltd.				
33	132kV EPIP-II to M/s Nalari	SC	132	0.12	26.05.2003
34	132kV EPIP-I to M/s Maithan	SC	132	0.44	24.06.2003
	Smelters (P) Ltd.				
35	132kV EPIP-I - M/s Greystone Ispat	DC	132	0.52	07.08.2004
	Ltd.	SC		0.40	
36	132kV line tapping to Nezone	SC	132	0.32	30.09.2004
	Industries Ltd.				
37	132kV EPIP-I to M/s Sai Prakash Ltd.	DC	132	6.01	15.05.2006
		SC		4.44	
38	132kV EPIP-I to M/s Adhunik	DC	132	0.004	-
	Meghalaya Steels (P) Ltd.	SC		0.09	
39	132kV EPIP-I to M/s Meghalaya	SC	132	0.27	-
	Carbide Ltd.(Disconnected)				
40	132kV EPIP-II to M/s Meghalaya	DC	132	0.56	-
	Sova Ispat alloys Pvt. Ltd.	SC		0.07	
41	132KV NEHU - Khliehriat Line-l				1967/1991/19
		SC	132	54.79	96
42	132KV Khliehriat - Lumshnong line	SC	132	23.80	1971/2005
43	132KV Lumshnong - Badarpur line	SC	132	24.56	1971/2005
44	132KV NEHU - NEIGRIHMS line	SC	132	6.73	1991/2005
45	132KV NEIGRIHMS - Khliehriat line	SC	132	62.83	1991/2005
46	132KV Khliehriat - PGCIL line-II	SC	132	5.35	07.09.2006
47	400KV LILO at Killing substation	DC	400	4.22	
48	132KV Nangalbibra - Agia line	SC on DC	132	92.15	Aug-13
			TOTAL	1221.85	

Format- T2 (A)

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

Rs. Lakhs

TRANSMISSION LINES (WORKS IN PROGRESS)

	1			SSION LINES (_	
SI.	Name of Line	Voltage	Ckt-kM	Approved		g Pattern	Year of	Scheduled
No.		level (kV)		cost	Loan	Equity	commenc	Commissioning
1	132KV S/C line on D/C towers from Rongkhon substation to	132	32.77	1674.93	167.49	1507.437	25.03.2010	Oct-15
	Ampati with bay extension at Rongkhon	132	32.11	1074.93	107.49	1307.437	23.03.2010	OCI-13
2	132KV D/C LILO							
	of Mawlai -							
	Cherra line at	132	7.38	496.74	49.67	447.066	19.01.2010	Mar-16
	Mawngap							
	(Mawphlang)							
3	132KV multi							
	circuit line from 220/132KV							
	Killing substation	132	16.29	2174.00	217.40	1956.6	12.02.2010	Mar-15
	to EPIP-I	132	10.23	2174.00	217.40	1330.0	12.02.2010	IVIAI-13
	substation							
4	132KV D/C LILO							
	of NEHU -	132	5.00	433.59	43.36	390.231	26.09.2012	Mar-15
	Khliehriat line at	.02	0.00	.00.00	.0.00	000.20.		
	Mustem							
5	Stringing of second circuit of							
	132kV	132	92.15	2119.00	211.90	1907.1	26.09.2012	Mar-15
	Nangalbibra-	.02	020	21.10.00	266			
	Agia line							
6	LILO of one							
	circuit of 400KV							
	Pallatana -	400	4.22	1186.65	118.67	1067.985	06.07.2011	Mar-15
	Bongaigaon line							
7	at Killing 132KV line from							
'	New Umtru HEP							
	to EPIP-II with							
		132	3.00	520.00	52.00	468	26 00 2012	Mar-16
	bay extension at EPIP-II and	132	3.00	320.00	32.00	400	26.09.2012	IVIAI-10
	Installation of							
8	RTUs etc							
	132KV line from							
	New Umtru HEP							
	to Old Umtru	132	1.50	246.00	24.60	221.4	26.09.2012	Mar-16
	HEP with bay							
	extension at							
	Old Umtru							
9	LILO of 132KV							
	Rongkhon -	132	10.00	1439.00	143.90	1295.1	31.03.2014	Sep-16
	Ampati line at					, , , ,		1
	Praharinagar							
10	LILO of 132KV							
	NEIGRIHMS -	132	10.00	555.10	55.51	499.59	26.09.2012	Mar-16
	Khliehriat line at Lad Nongkrem							
	Total		182.31	10845.01	1084.50	9760.51		
						J. 30.0 .	l .	

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

Format- T2 (B)

Rs. Lakhs

SUB-STATION (WORKS IN PROGRESS)

SI. No.	Name of sub station	Capacity	No of units	Total MVA	Approved cost	Financing Pattern		Year of	Schedule date of
		(MVA)			(`in lakhs)	Loan	Equity	commencemen	Commissioning
1	Ampati	25	2	50	1404.40	140.44	1263.96	25.03.2010	Oct-15
2	Mendipathar	20	2	40	956.00	95.6	860.40	21.10.2009	Mar-15
3	Mustem	20	2	40	2216.76	221.676	1995.08	26.09.2012	Mar-15
4	Praharinagar	20	1	20	1891.00	189.1	1701.90	31.03.2014	Sep-16
5	Lad Nongkrem	20	2	40	2431.00	243.1	2187.90	26.09.2012	Mar-16
6	Augmentation of Rongkhon substation	5	3	15	469.00	46.9	422.10	08.09.2010	Dec-15
	from 35MVA	20	2	40	409.00	40.9	422.10	06.09.2010	Dec-19
	Total		14	245	9368.16	936.816	8431.344		

Format- T3

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

NORMATIVE PARAMETERS TO BE CONSIDERED FOR TARIFF CALCULATIONS

S.No	Particulars		FY2012-13 (Provisional)	FY2013-14 (Provisional)	FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)			
	1 Target Availability	%	N/A	N/A	N/A	98%	98%	98%			
:	Normative Operation and Maintenance per Ckt. Km	Rs. lakhs									
;	Normative Operation and Maintenance per bay	Rs. lakhs		Not Decreed							
•	Spares for working capital as % of O&M	%		Not Proposed							
	Recievables in Months for working capital	months									
	Rate of Return on Equity (%)	%	N/A	N/A	N/A	14%	14%	14%			

Format - T4 (A)

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

ENERGY BALANCE

(A) Energy Received (MU)

S.No	Name of the Generating Station	FY2012-13	FY2013-14	FY2014-15
		(Provisional)	(Provisional)	(Estimated)
	MePGCL			
1	Umiam Stage I	102.68	78.12	94.25
2	Umiam Stage II	50.32	41.03	50.13
3	Umiam Stage III	129.62	132.55	115.22
4	Umiam Stage IV	187.23	173.64	162.37
5	Umtru Power Station	30.27	20.83	5.45
6	Micro Hydel (Sonapani)	7.19	5.37	10.78
7	Leshka HEP	197.42	410.22	424.70
8	Lakroh HEP	-	-	-
	NTPC			
9	NTPC Farakka	62.62	73.92	40.11
10	NTPC Talcher	43.29	42.90	21.99
11	NTPC Kahalgaon I	36.81	38.52	18.48
12	NTPC Kahalgaon II	147.22	157.25	82.78
	NHPC			
13	a) Loktak HEP	10.09	67.40	-
	NEEPCO			
14	Free Power	54.54	57.64	47.20
15	Kopili Stage-I HEP	73.85	80.41	70.42
16	Kopili Stage-II HEP	7.07	5.94	6.10
17	Khandong HEP	18.08	19.41	10.80
18	Ranganadi HEP	141.16	55.75	122.06
19	Doyang HEP	22.67	23.88	20.17
20	AGBPP	130.39	13.62	177.17
21	AGTPP	38.13	6.26	65.47
22	OTPC -PALLATANA GPP	-	66.71	251.26
	Total Energy Received	1,490.66	1,571.37	1,796.91

Format - T4 (B)

Name of the Transmission Licensee:

(B) Energy Sent Out (MU)

S.No	Name of the licensee	FY2012-13	Y2012-13 FY2013-14 FY2014-15	
		(Provisional)	(Provisional) (Estimate	
	Auxilary Consumption	1.20%	1.20%	1.20%
	Gross Energy Sent Out	NA	NA	1,697.90

Format - T4

(C)

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

(C) Transmission Losses

S.No	Name of the licensee	FY2012-13	FY2013-14	FY2014-15
		(Provisional)	(Provisional)	(Estimated)
1	Total Energy Received (MU)	1,490.66	1,571.37	1,796.91
2	Gross energy sent out (MU)	NA	NA	1,697.90
3	Transmission loss (1-2)	NA	NA	99.01
4	% Transmission losses ((3/1)x100)	NA	NA	5.51%

Format - T5 (A)

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

TRANSMISSION LOSSES

(A) Historical Data of Transmission Losses

9	S.No	Year	FY2009-10	FY2011-12	FY2012-13	FY2013-14	FY2014-15 (Estimated)
	1	% Transmission Losses	NA	NA	NA	NA	5.51

Format - T5 (B)

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

(B) Proposed Transmission Loss Trajectory

S.No	Year	1 1 - 0 1 0		FY2017-18 (Projected)	
1	% Transmission Loss Trajectory	5.51	5.51	5.51	

Format - T6

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

OTHER INCOME DETAILS

Rs.Lakhs

S.No	Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
	1 41 11 04 14 1	(Provisional)					
1	Interest on Staff Loans and Advances			,			.,,
2	Income from investments deposits						
3	Interest on Advances to Others						
4	Interest from Banks (other than on Fixed Deposits)						
5	Income from Trading-Stores, Scrap etc.	6					
6	Income from staff welfare Activities						
7	Gain on sale of Fixed Assets						
8	Miscellaneous Receipts	20	123.78	0.23	0.46		
9	Contribution & Grants towards cost of capital Assets						
10	STU Charges from Open Access	153	386.68	622.31	622.31	622.31	622.31
10	Total	179.00	510.46	622.54	622.77	622.31	622.31
				I	1		

Format - T7

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

ANNUAL TRANSMISSION CHARGES

(Rs. in Lakhs)

		(RS. III						
S.No	Particulars	FY2012-13 (Provisional)	FY2013-14 (Provisional)	FY2014-15 (Estimated)	FY2015-16 (Projected)	FY2016-17 (Projected)	FY2017-18 (Projected)	
1	Employees Cost	16.09	17.17	41.58	43.82	46.15	48.69	
	1.3							
2	Repairs & Maintenance	2.85	3.24	4.00	7.07	4.76	5.19	
3	Admin & General Expenses	4.80	14.80	26.00	26.78	29.31	29.16	
4	Depreciation	14.62	18.03	18.72	23.70	31.46	37.05	
5	Advance Against Depreciation	-	-	-	-	-	-	
6	Interest and Finance Charges	5.96	8.33	10.23	31.49	43.35	47.35	
7	Interest on Working Capital	2.38	3.27	4.97	6.16	7.21	7.88	
8	Return on Equity	36.33	42.15	44.31	51.71	57.32	59.25	
9	Income Tax	-	-	-	-	-	-	
10	Others (including ULDC charges)	N/A	0.78	0.86	1.31	1.66	1.86	
11	Annual License Fee	0.03	0.03	0.03	0.03	0.03	0.03	
	Total Fixed Costs	83.06	107.79	150.70	192.09	221.24	236.46	
12	Less: Expenses Capitalised	-	-	-	-	-	-	
13	Total Transmission Charges	83.06	107.79	150.70	192.09	221.24	236.46	
14	Less: SLDC ARR	N/A	1.55	1.72	2.62	3.32	3.73	
15	Less: Other Income	1.79	5.11	6.24	6.24	6.24	6.24	
16	Net Annual Transmission Charges	81.27	101.13	142.75	183.23	211.69	226.50	

Format - T8

Meghalaya Power Transmisssion Corporation Ltd. (MePTCL)

PROPOSED TRANSMISSION TARIFF

Rs. in lakhs

S.No	Particulars	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17	FY2017-18
3.140		(Provisional)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	Annual Transmission Charges (Rs. Lakhs)	8,126.57	10,112.90	14,274.87	18,322.65	21,169.16	22,650.04
2	Total MW Allocation (MW)	NA					
3	Transmission Tariff (Rs / MW / Day)	NA					
4	Energy Transferred (MU)	NA	1,697.90	1,697.90	1,867.57	2,054.92	2,196.56
5	Transmission Tariff (Paise / Unit)	NA	59.56	84.07	98.11	103.02	103.12