BEFORE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION, SHILLONG

PETITION FOR

APPROVAL OF CAPITAL COST AND ANNUAL REVENUE REQUIREMENT FOR FY 2015-16 TO FY 2017-18

FILED BY



MEGHALAYA POWER GENERATION 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 CAPITAL COST AND ANNUAL REVENUE REQUIREMENT (ARR) FOR MYNDTU LESHKA HYDRO ELECTRIC PLANT (MLHEP) OF THE MEGHALAYA POWER GENERATION CORPORATION LIMITED (MePGCL) WITHIN THE STATE OF MEGHALAYA FOR THE FINANCIAL YEARS 2015-16, 2016-17 & 2017-18 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 GENERATION 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. MePGCL 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 Provisional Aggregate Revenue Requirement (ARR) for Myndtu Leshka Hydro Electric Plant (hereinafter referred to as "MLHEP") for FY 2013-14 and FY2014-15 in accordance with

- Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011.
- 3. The petition for approval of Capital Cost and ARR for the Control Period (FY2015-16 to FY2017-18) 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 completion cost of MLHEP and segregated financials, the projections for FY 2015-16, FY 2016-17 and FY 2017-18 are prepared and Annual Revenue Requirement for FY 2015-16, FY 2016-17 and FY 2017-18 is proposed.
- 5. The first provisional tariff order of MLHEP for FY 2013-14 was passed by the Hon'ble Commission on 30th March 2013. Thereafter the Hon'ble Commission again passed provisional tariff order on 10th April 2014.
- 6. The Annual Revenue Requirement (ARR) for FY 2015-16, FY 2016-17 and FY 2017-18 for MLHEP is projected at Rs. **233.39 Cr**, Rs. **236.77** Cr and Rs. **230.89** Cr respectively.
- 7. The Board of Directors of MePGCL have accorded approval for the capital cost and ARR of MLHEP for FY2015-16, FY 2016-17 and FY 2017-18 and authorized the undersigned to file accordingly.
- 8. The applicant, therefore, humbly prays before the Hon'ble Commission to pass appropriate orders on the following:
 - a. Approval of ARR amounting to Rs. **233.39** Cr, Rs. **236.77** Cr and Rs. **230.89** Cr for FY 2015-16, FY 2016-17 and FY 2017-18 respectively as proposed in this Petition for the MLHEP of MePGCL.
 - b. Approval of total completion cost of MLHEP at **Rs. 1297.02 Cr** and project cost submitted in the tariff petition at **Rs 1243.04 Cr** as on 1st April 2013 with addition of **Rs 53.98 Cr** in GFA when the audited figures of FY 2013-14 will be ready.
 - c. 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.
 - d. To condone any inadvertent omissions, errors & shortcomings and permit the applicant to add/change/modify/alter this filing and make further submissions as required.

Amberlight Lyngdoh,
Superintending Engineer
(Project & Monitoring)
For and on behalf of
Meghalaya Power Generation 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 has notified the 4th Amendment to the Notified Transfer Scheme dated 31st March 2010 on 29th April 2015, wherein the opening balances of all the four entities namely, MePGCL, MePTCL, MePDCL and MeECL as on 1st April 2012 have been notified.
- 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 for the Generation Company under Multi Year Tariff framework from 1st April, 2015 onwards. 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

The Commission may also determine the rate at which the Distribution Licensee can supply power to other Distribution Licensees in the State.

- 3.3 Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government pursuant to Section 63 of the Act.
- 3.4 These regulations shall not apply to renewable sources of energy which shall be governed by separate regulations of the Commission.

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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:

.....

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 & 41 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 30thNovember 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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41 Petition for determination of generation tariff

41.1 A Generating Company is required to file a Petition for determination of tariff for supply of electricity to Distribution Licensees in accordance with the provisions of Chapter 2 of these Regulations.

....

- 41.6 A Generating Company shall file a fresh Petition in accordance with these Regulations, for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts.
- 41.7 Any difference in provisional tariff and the final tariff determined by the Commission and not attributable to the Generating Company may be adjusted at the time of determination of final tariff for the following year as directed by the Commission."
- **1.2.4** As per Regulation 8 of the MYT Regulations, 2014, MePGCL 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 March2018, 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 MePGCL 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 Capital cost, ARR and Tariff of MLHEP 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 issued the MYT Regulations, 2014 on 15th September 2014 which came into force on the said date. The tariff from 01st April 2015 onwards is to be determined under Multi Year Tariff framework. Based on the Business Plan, MePGCL is required to prepare Business Plan and forecast the ARR for the first Control Period (FY2015-16 to FY2017-18). As per the MYT Regulations, 2014,

Business Plan should comprise of capital investment plan, financing plan, physical targets etc.

2.1.2 The aforementioned components of Business Plan depends 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. MePGCL 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 Commission in accordance with the provisions of MYT Regulations, 2014. 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 approval of Capital Expenditure and determination of ARR for future period.

2.2 Investment Plan

System Improvement Project

- 2.2.1 Installation & erection of UPS panel and battery bank for MLHEP DAM Control room
- 2.2.1.1 Radial gates of MLHEP are electrically operated for which adequate motors are in place. However, it is observed that during monsoon due to heavy rain, thunder and storm, power supply fails. In such case a temporary backup of power supply from 2 (two) DG sets of capacity 320kVA and 30kVA each are already installed at Dam site. However, this system is not fool-proof, since the DG sets are susceptible to lightning strikes more frequently during the pre-monsoon season when the surrounding soil is not yet saturated and risky for the hydraulic structures. In few occasions the water level has overtopped the dam for delay in opening of radial gates due to absence of power. This is entirely undesirable for the safety of the structure.
- **2.2.1.2** Therefore, it is proposed that a Battery Bank based power backup system be procured for ensuring uninterrupted power supply at the Dam control room for powering the equipment. The Erection of the UPS Panels & battery bank can be installed in the ground floor of the Dam's control room where the available area is 15mX4.5m = 67.5m2 more or less. The ground floor area is at present used as a store room-cum-multipurpose room.
- **2.2.1.3** Moreover, in the absence of A.C power from the grid, the D.G. Sets are required to be physically started and the Hydraulic Hoist System controlling the Radial Gates

need to be started at the local control panel. This procedure is time consuming and during the control of a large flood in the reservoir, time is what the operational staff on duty do not have. The provision of Battery based power backup is expected to be a fool-proof arrangement.

- **2.2.1.4** The project is estimated to cost Rs. 57.76 Lac and will be funded by taking market loan.
- **2.2.1.5** The approval of the Board of Directors and Detailed Project Report (DPR) with cost benefit analysis will be submitted along with Business Plan of MePGCL for which the Hon'ble Commission has granted the time till 30th August 2015 for the submission.

System Improvement Project

- **2.2.2** Cooling System Modification & Improvement
- 2.2.2.1 The power plant is expected to generate around 486 MU per annum. However, due to various reasons like deficit rainfall, disturbances, teething problems like clogging of the cooling water system of the units, etc, the maximum generation stays around 413 MU i.e. during FY 13 -14. The maximum generation happens during June to September every year due to heavy rainfall during this period. It is necessary that during this time the station generates 350 MU to reach designed energy generation target of 486 MU. However outages, occurring due to factors like clogging of the cooling system and tripping of machine, much of the energy, is lost during this period.
- 2.2.2.2 Due to the clogging/blockage of the pipeline there is shortfall in the supply of the water intended for Cooling system for Generator & turbine as well as the shaft seal system. To remove the clogging/blockage of the pipeline the units need to be shut down. During FY 2013-14, due to the shutdown of the Units for the purpose of maintenance of Shaft Seal and Cooling water, there is a loss of around 4 MUs. Financially, this attributes to the loss of about Rs. 1.13 Cr.
- **2.2.2.3** Therefore, two additional pipelines should be provided to facilitate quick interchange of lines in case of clogging of the pipeline in operation. Moreover Duplex filter should be provided for easy removal of debris and easy facilitation of cleaning process.
- **2.2.2.4** The following are proposed for cooling system modification and improvement:
 - Drawal of 2 new pipe lines of 200 Nominal Bore (NB) having a length of 1750m each from Chingy river. For both the lines incoming shall be provided

- with Gate Valves and Duplex Filters.
- Civil works of casting of RCC/PCC, Anchor blocks or Pedestals for resting the water pipe lines.
- The Generator/Turbine shall be made Open Looping during summer seasons.
- The system improvement project for MLHEP is expected to cost Rs. 2.51 Cr and will be funded through 90% equity and 10% loan.

2.2.2.5 The benefits will be:

- Reduction in maintenance cost. Spares costing around Rs. 6.00 lakhs per annum for maintaining the same are reduced.
- Outages accounted for 617400 units = Rs. 17,47,242/- @ Rs. 2.83 per unit.
- Reduction of energy consumption of power station, by not having to operate 3 Nos of 45 kW primary cooling water pumps and 3 Nos 55 Kw secondary cooling water pumps for a period of 6 months and therefore the energy saved @ Rs. 2.83/unit = (3 machines*45kw*24hr*184days*Rs. 2.83)+(3 machines*55kw*24hrs*184days*Rs 2.83)= Rs 37,49,184/-
- Therefore the total amount saved per annum is around Rs 60,00,000/-(Rupees Sixty lakhs).
- **2.2.2.6** The approval of Board of Directors and Detailed Project Report (DPR) with cost benefit analysis will be submitted along with Business Plan of MePGCL for which the Hon'ble Commission has granted the time till 30th August 2015 for the submission.

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, MePGCL hereby submits ARR for FY 2015-16, FY 2016-17 and FY 2017-18 based on restructured segregated audited financials of FY 2012-13 and the 4th Amendment to the Notified Transfer Scheme. The audited statement for FY 2012-13 and the actual capital expenditure incurred up to the date of commercial operation, duly certified by the statutory auditor is appended as **Annexure –A &B** respectively.
- **3.1.2** MePGCL submits that Power Purchase Agreements (PPA) for supply of power to MePDCL has been signed and as per the PPA, power will be supplied on cost plus basis. Therefore, MePGCL submits that the tariff for hydro generating stations may be determined on cost plus basis.

3.2 Capital Cost and Tariff Determination – Leshka

3.2.1.1 The Regulation 41 of the MYT Regulations, 2014 provides the norms for determination of Generating tariff. The regulation is reproduced below for ready reference:

Regulation 41 – Petition for determination of generation tariff

"41.1 A Generating Company is required to file a Petition for determination of tariff for supply of electricity to Distribution Licensees in accordance with the provisions of Chapter 2 of these Regulations.

.....

41.6 A Generating Company shall file a fresh Petition in accordance with these Regulations, for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts.

41.7 Any difference in provisional tariff and the final tariff determined by the Commission and not attributable to the Generating Company may be adjusted at the time of determination of final tariff for the following year as directed by the Commission."

Based on the above provisions, Final Tariff petition is submitted for approval of capital cost and determination of ARR of MLHEP for the FY 2015-16, FY 2016-17 & FY 2017-18.

Regulation 44 - Sale of Infirm Power

"44.1 Any revenue other than the recovery of fuel cost earned by the generating company from sale of infirm power shall be taken as reduction in capital cost and shall not be treated as revenue.

3.3 Capital Cost:

Regulation 52

"Capital cost

- 52.1 The actual capital expenditure on the date of commercial operation in the case of new investment shall be subject to prudence check by the commission.
- 52.2 Scrutiny of cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, and interest during construction period, use of efficient technology, and such other matters for determination of tariff.

....

- 52.6 The project cost already admitted by the Commission for purpose of tariff determination shall be considered as the original project cost.
- 52.7 The Commission shall issue guidelines for:
- a. Verifying the capital cost of Hydro electric projects by an independent agency or expert and in such a case, the capital cost as vetted by such agency or expert may be considered by Commission after prudence check while determining the tariff for hydro generating station."
- **3.3.1** It is submitted that in the Tariff Order dated 30th March, 2013, the Hon'ble Commission had approved the AFC of MLHEP on a provisional basis. However Hon'ble Commission has not approved the project cost of MLHEP.
- **3.3.2** The direction of the Hon'ble Commission in the Tariff Order dated 30th March, 2013 is produced here for reference:

"Accordingly the Commission is directing MePGCL the following:

- (i) To request to the State Government to constitute an expert committee for examining the cost of the project and take necessary steps to get the approval of CEA after completing the COD of all three units.
- (ii) To file a tariff petition to determine final tariff for Leshka project after COD is achieved in accordance with CERC Regulations.
- (iii)The filing should be based on audited accounts of expenditures incurred on Leshka Project."

"Considering the financial commitments of MePGCL towards repayment of loans along with interest of PFC and GoM, the Commission is allowing an interim tariff of Rs. 2.83/kWh on the basis of normative standards. SLDC charges of Rs.0.5 crores shall be payable by MePGCL to SLDC. This amount shall be recovered from MePDCL separately. This in an interim arrangement till such time final determination of tariff is completed with due public consultation. This tariff shall give MePGCL Rs.135.54 crores in 2013-14 subject

to condition that it generates designed energy in 2013-14 and units are available for generation. This interim tariff is allowed for 2013-14 subject to validation after application of final tariff is received. The Commission has already taken a view that without audit records the Commission is allowing the same ROE as allowed last year to be allotted equally to each company in the State. To enable the MePGCL to ensure that its financial commitments are met, MePDCL is also directed to release the payments against the fixed charges of Rs.67.77 crores distributed equally in 12 monthly instalments provided units are available for generation subject to verification by SLDC. Energy charges shall be paid at the rates approved in table 18 @Rs.1.415/unit for the actual energy generated from MLHEP units on monthly basis. Any adjustment on account of final tariff to be determined by the Commission on the petition of MePGCL after approval of the capital cost by CEA shall be made thereafter."

- 3.3.3 It is further submitted that as directed by the Hon'ble Commission in the Tariff Order dated 30th March, 2013, MePGCL had approached the Central Electricity Authority (CEA) and requested the State Government to set up a technical committee, for vetting of the completion cost of MLHEP. However the Central Electricity Authority (CEA) cited that as per Electricity Act 2003, the tariff of the project is decided by the regulatory commission, and therefore CEA has no mandate of vetting revised Cost estimate and advised MePGCL to approach the Hon'ble Commission for vetting the same. As requested by MePGCL, the State Government of Meghalaya has formed the State level technical committee for review of the project cost.
- 3.3.4 The Government of Meghalaya vide its letter No. PE 85/2008/84 dated: 28th November, 2013 constituted the Technical Committee for submission of final reports on completion cost of MLHEP stating the terms of reference for the committee. The notification from the Government of Meghalaya is appended as Annexure- C
- **3.3.5** The Hon'ble Commission in the Tariff Order dated 10th April, 2014, gave an interim order provisionally approving the ARR, same as that for FY 2013-14. The statement of the Hon'ble Commission is reproduced below for reference:

"17. MePGCL has prayed that the Commission approve the completion cost of the MLHEP at Rs 1286.53 crores. Commission has made its stand known that it is not within its ambit to approve or vet the cost of the project as it also involves factors relating to hydrological and other technical aspects apart from financial consideration as a whole. This matter concerning the completion cost has been discussed in para 15 above and Commission will only await the Technical Expert Committee's report and examine if any further information or data is required. To simply approve it for Rs 1286.53 crores as prayed for will be an empty formality with no factual or legal

ground. For the present, the ARR is provisionally accepted for Rs 135.54 crores, same as that for 2013-14, which will include Rs.67.77 crores as fixed charges and Rs.1.415 per unit as energy charges. The fixed charges shall be paid by MePDCL in twelve monthly installments provided that machines are available for generation. Similarly, energy charges shall be paid on actual generation.

- 18. This order is ad interim. The Commission will take a final view when the report of the independent expert panel and the audited accounts are made available and if necessary, suitable modifications will be made."
- **3.3.6** The convener of the Technical committee has submitted the report vide letter dated: 23rd Feb, 2015 and the abstract of the findings of the same are produced below:
 - I. The main Project components were generally executed as per construction drawings received from Central Water Commission and Central Electricity Authority.
 - II. The realization of the impact of acidity of water and the preventive measures adopted were in line with the recommendations of authorities like Central Soil and Materials Research Station (CSMRS) and other authorized consultants.
 - III. The payments have been made as per conditions of agreement and sanctions accorded by the competent authorities of the project.
 - IV. The project work actually started in 2005 and completed in 2012. Thus it took seven years instead of scheduled 5 years. Extended rainy season in the Project area, poor geology, addition of one more unit and the unprecedented floods of 2009 and 2010 are the major reasons to justify the marginal time overrun.
 - V. The road network of almost 44km in the Project area is more or less as per prior projection and has been laid well in the difficult hilly terrain. The stipulated specification has been adhered to and has been done in reasonable rates.
 - VI. The specifications and the cost incurred for buildings are not as per the prior projection. This is understood as many buildings were constructed only for the construction phase of the Project and are makeshift in nature. However, the preparation for buildings in the steep terrain was costly as many slope protection walls had to be constructed and these added to the cost.
 - VII. The afforestation work under the catchment treatment plant did not go well because of rocky landscape. The survival rates of planted trees are not satisfactory. The afforestation in the catchment will continue till 2018.
 - VIII. In totality, no intentional wrong doings could be detected in the perused documents and the completion cost of Rs 1286.53 Crore seems to be

justified. The Cost/MW came to be Rs 10.20 Crore which is reasonable against the difficult backdrop of the project execution. Rs 10.20 Crore per MW cost can be compared with the other hydroelectric projects of the region.

IX. Adequate planning and better construction and financial management would have resulted in some savings.

The report of the Technical committee is appended as **Annexure –D.**

3.3.7 The summary of the reports of the committee is as follows:

A. IIT Roorkee

- 1) As mentioned in the report, the project took seven years to complete, started in the year 2005 and completed in 2012. Considering the climatic condition (extended rainy season), poor geology, floods of 2009 and 2010, addition of third Unit in the project in 2008, additional measures adopted to resist the acidic nature of the river water at a later stage, the delay in completion may be accepted. Such delays are normal in projects in Himalayas due to its complex geology and occurrence of flash floods.
- 2) The cost of completion has increased from the revised estimate cost (2006) of project. This increase is due to increase in cost of work (hard cost), due to escalation and IDC. It is seen that hard cost increase is due to poor geological conditions encountered during execution, due to change in design for the addition of III Unit, due to the measures required to mitigate the effect of acidic nature of river water and inadequate or no provision for works which were later found necessary to complete the work.
- 3) This per MW cost shall be favourably viewed for the conditions under which the project is constructed such as:
 - i. The climatic condition (Extended rainy seasons of eight months)
 - ii. Poor Geology
 - iii. Unprecedented Floods of 2009 and 2010
 - iv. Addition of third Unit in the Project in 2008
 - v. Additional measures adopted to resist acidity of the water.
 - vi. Remoteness and backwardness of the area.

In view of these factors, the cost of Rs. 10.27 Crores per MW at the present price index appears reasonable.

The detailed report on Cost verification of MLHEP is appended as Annexure- E.

B. PWD (Road & Bldg.)

1) The report of the PWD (Road) Govt. of Meghalaya, states that the work has been laid well in difficult hilly terrain within a reasonable rate.

2) The report of the PWD (Bldg.) Govt. of Meghalaya states that the construction of building was not as per prior projection, however the difference in cost between the rate adopted at site and the PWD (B) SOR prevailing during issue of Work Order is reasonably within limit. The plinth area rate is 31.66% lower than that of PWD rates. This is due to the temporary nature of the Buildings.

The report of the Chief Engineer, PWD (Roads), Govt. of Meghalaya, vide Letter No. PW/TB/RD/13/2013/22 dated: 29th Oct, 2014 and the report of the Chief Engineer (C), PWD (Buildings) Govt. of Meghalaya, for completion Cost of Building Works of MLHEP vide letter No. PW/SE/D8/2006/126 dated: 28th Jan, 2015 are appended as **Annexure- F & G** respectively.

C. Forest Dept.

 The Chief Conservator of Forests, Govt. of Meghalaya stated that the survival of the saplings under afforestation work in the barren catchment area appears to be poor due to rocky landscape and shifting cultivation and the resultant fire.

The report from the Chief Conservator of Forests-in-charge (M&E) is appended as **Annexure-H.**

- **3.3.8** On the basis of the above report, the MePGCL would like to place the following observations:
 - It can be concluded that the project was delayed due to rains, poor geology, floods, addition of third unit and the acidic nature of the water.
 - II. The cost is reasonable and comparable with other Project recently completed or going to be completed.
 - III. There was no major fault and irregularities found by the Technical Committee.

It is therefore prayed before the Hon'ble Commission to accept the total cost of the project.

Table 1: Details of Project Cost - Myndtu Leshka

						Addition during the year 2013-14(provisional)
	Particulars	GFA as on 31.3.2013		Total Capital Cost (as on 31.3.2013)	Asset Value as on 1.4.2013	Based on bills received/ Payment made but not accounted in the FY 2012- 13 & bills received in the FY 2013-14.
		(Rs. In crore)	(Rs. In crore)	(Rs. In crore)	(Rs. In crore)	(Rs. In crore)
SI.						
1	Land	15.54	-	15.54	15.54	13.21
2	Buildings	91.52	52.27	143.79	143.79	4.77
3	Hydraulic Works	590.14	29.89	620.03	620.03	15.26
4	Other Civil works	114.10	0.00	114.10	114.10	3.33
5	Plant & Machinery	325.77	19.05	344.82	344.82	23.91
6	Lines & cables	4.32	0.00	4.32	4.32	0.19
7	Vehicles	0.24	0.00	0.24	0.24	-
8	Furniture	0.04	0.00	0.04	0.04	0.04
9	Office	0.16	0.00	0.16	0.16	0.02
10	Adjustment	-	-	-	-	(6.75)
	Total	1141.83	101.21	1243.04	1243.04	53.98

It is submitted that the Gross Fixed Asset (GFA) as on 31st March 2013 is Rs 1141.83 Cr and the Capital Work in Progress (CWIP) is Rs 101.21 Cr. Hence the total cost of the project as on 1st April 2013 is Rs 1243.04 Cr, duly certified by the statutory auditor. It is also submitted before the Hon'ble Commission that there are bills raised/ accrued but not accounted in FY 2012-13 amounting to Rs. 43.98 Cr, hence the same will form part of accounts of FY 2013-14. The balance amounting to Rs 16.75 Cr are the bills raised and accounted in FY 2013-14 and adjustment of Rs 6.75 Cr which will be reduced. MePGCL requests before the Hon'ble Commission to kindly consider this cost of Rs. 53.98 Cr in the capital cost whenever the statement of accounts of FY 2013-14 is prepared. It is also submitted that as per the Regulation 44; the capital cost shall be reduced by the sale of infirm power. Provisionally the infirm power is calculated as the total units (23.84MUs) multiplied by the approved provisional average tariff (Rs. 2.83/Unit) which comes at Rs 6.75 Cr. The actual cost of infirm power will form part of accounts of FY 2013-14. The Approval of the Board of Directors and the certificate of the statutory Auditor are appended as **Annexure-I.**

MePGCL submits before the Hon'ble Commission to kindly approve the completion cost of Myndtu Leshka HEP as Rs 1243.04 Cr as on 1st April 2013 and with addition of Rs 53.98 Cr in GFA when the audited figures of FY 2013-14 will be ready.

3.4 Additional Capitalization

- **3.4.1** The regulation 29 of the MYT Regulations, 2014 provides additional capitalization of *"29 Additional Capitalisation"*
 - 29.1 The following capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to the prudence check:
 - a) Due to Un-discharged liabilities within the original scope of work;
 - b) On works within the original scope of work, deferred for execution;
 - c) To meet award of arbitration and compliance of final and unappealable order or decree of a court arising out of original scope of works;
 - d) On account of change in law;
 - e) On procurement of initial spares included in the original project costs subject to the ceiling norm specified;
 - f) Any additional works/services, which have become necessary for efficient and successful operation of a generating station or a transmission system or a distribution system but not included in the original capital cost:

Provided that original scope of work along with estimates of expenditure shall be submitted as a part of Business Plan: Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating Unit/Station or transmission system or distribution system. Provided further that the assets forming part of the project but not put to use, shall not be considered."

As per the regulation, the works which are within the original scope of works but deferred for execution and works due to un-discharged liabilities within the original scope of work, will form the part of additional capitalization. The additional capital expenditure after date of commissioning and up to cut off date will be claimed through a separate petition in accordance with Regulation 29 of MYT Regulations 2014.

MePGCL prays before the Hon'ble Commission to allow any such additional works which are carried out within the ambit of the regulations.

3.5 Operational norms and Design Energy

3.5.1 Norms of Operation

3.5.1.1 The Regulation 58 of the MYT Regulations, 2014 provides the norms for operation of Hydro Generating stations. The regulation is reproduced below for ready reference:

"58 Norms of operation

The norms of operation shall be as under:

58.1 Normative annual plant availability factor (NAPAF)

- (a) Storage and pondage type plants where plant availability is not affected by silt and

 - (ii) with head variation between FRL and MDDL of more than 8% = (Head at MDDL/Rated Head) x 0.5+0.2
- (b) Pondage type plant where plant availability is significantly affected by silt.. ...85%
- (c) Run -of- River type plants: NAPAF to be determined plant-wise, based on 10-day design energy data, moderated by past experience where available /relevant.

Note:

- (i) A further allowance may be made by the Commission under special circumstances, eg. Abnormal silt problem or other operating conditions, and known plant limitations.
- (ii) A further allowance of 5 % may be allowed for difficulties in the North East Region.
- (iii) In case of new hydro electric project the developer shall have the option of approaching the Commission in advance for further above norms.

58.2 Auxiliary energy consumption:

- (a) Surface hydro electric power generating stations with rotating exciters mounted on the generator shaft0.7% of energy generated.
- (b) Surface hydro electric power generating stations with static excitation system ······1.0% of energy generated.
- (c) Underground hydro electric power generating stations with rotating exciters mounted on the generator shaft0.9% of energy generated.
- (d) Underground hydro electric power generating stations with static excitation system1.2% of energy generated.

58.3 Transformation losses

From generation voltage to transmission voltage0.5% of energy generated."

3.5.1.2 The features of the MLHEP in terms of type of plant, type of excitation etc are provided in the table below:

Table 2: Features of	f M	vndtu	Leshka
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Sr. No.	Sr. No. Particulars				
1	Type of Station				
а	Surface/ Underground	SURFACE			
b	Purely ROR/ Pondage/ Storage	ROR			
С	Peaking/Non Peaking	NON PEAKING			
d	No. of hours Peaking	NA			
е	Overload Capacity (MW) & Period	NIL			
2	Type of Excitation				
а	Rotating exciters on Generator	Nil			
b	Static excitation	Static type			

3.5.2 Design Energy

In the Tariff Order dated 30th March, 2013, the Hon'ble Commission had approved the design energy of MLHEP as 486.23 MUs. It is submitted that for FY 2015-16, FY 2016-17 & FY 2017-18 the same Design Energy shall be adopted for computation of Energy charge. The month-wise and station wise design energy is provided in the Format HG3.

3.5.2.1 Computation of NAPAF for Run of River type plants: As per Regulation 58 (1) (c) of the MYT Regulations, 2014, the NAPAF for Run of River type plants is to be determined based on 10-day design energy data, moderated by past experience wherever relevant. Therefore, based on the past records and as per norm given in regulation, the NAPAF for MLHEP works out to be **44%.** Further as per Regulation 58 of the MYT Regulations, 2014, after considering further allowance of 5% for difficulties in north east region, the NAPAF for MLHEP is **39%**.

Net Generation for FY 2012-13 (Actual), FY 2013-14 (Actual) and FY 2014-15 (Actual) and FY 2015-16 (Projected), FY 2016-17 (Projected) and FY 2017-18 (Projected) are provided in the table below:

Table 3: Generation of MLHEP

Year	Gross Generation (MU)	Aux Cons (MU)	Transfor mation Loss (0.50%) (MU)	Net Generation (MU)	Remarks
FY 2012-13	199.82	0.31	1.00	198.51	Actual Aux
FY 2013-14	413.37	0.94	2.07	410.36	Consumption
FY 2014-15	409.39	0.64	2.05	406.70	
FY 2015-16	428.07	4.28	2.14	421.65	1% Aux
FY 2016-17	428.07	4.28	2.14	421.65	Consumption
FY 2017-18	428.07	4.28	2.14	421.65	

3.5.2.2 MePGCL submits before the Hon'ble Commission to kindly approve the total net generation as provided in table above for MLHEP.

3.6 Components of Tariff

The Regulation 54 of the MYT Regulations, 2014, provides the Components of tariff for MePGCL. The relevant regulation is reproduced below for ready reference:

"54 Components of tariff

- 54.1 Tariff for supply of electricity from a hydro power generating station shall comprise of two parts, namely, annual capacity charges and energy charges to be in the manner provided hereinafter.
- 54.2 The fixed cost of a generating station eligible for recovery through annual capacity charges shall consist of:
 - (a) Return on equity as may be allowed
 - (b) Interest on Loan Capital;
 - (c) Operation and maintenance expenses;
 - (d) Interest on Working Capital;
 - (e) Depreciation as may be allowed by the Commission;
 - (f) Taxes on Income.
- 54.3 The annual capacity charges recoverable shall be worked out by deducting other income from the total expenses"

Based on above provisions, MePGCL computes and provides herewith various cost elements for determination of tariff.

3.7 Gross Fixed Assets (GFA)

3.7.1 Gross Fixed Asset for Myndtu Leshka HEP

The closing GFA for each year of the control period is worked out considering actual capitalization during FY 2012-13, FY 2013-14 and FY 2014-15, and projected capitalization during control period of FY 2015-16 to FY 2017-18.

Table in Cross I mean reserve (i.e.,							
Particulars	FY2012-13 (Audited)	As on 01.04.2013 (Statutory Auditor Certificate)	}	FY 2014-15 (Estimated)	FY 2015-16 (Projected)	FY 2016-17 (Projected)	FY 2017-18 (Projected)
Opening Value of Gross Fixed Assets (Rs. Cr)	-	1,141.83	1,243.04	1,297.02	1,297.02	1,297.60	1,297.60
Addition during the year (Rs. Cr)	1,141.83	101.21	53.98 *	-	0.58	-	2.51
Retirements during the year (Rs. Cr)	-		-	-	-	-	-
Closing Value of Gross Fixed Assets (Rs. Cr)	1,141.83	1,243.04	1,297.02	1,297.02	1,297.60	1,297.60	1,300.11

Table 4: Gross Fixed Asset Details (Rs. Cr)

MePGCL submits before the Hon'ble Commission to kindly approve Gross Fixed Assets for MLHEP as submitted in the above table.

3.8 Computation of Return on Equity

3.8.1 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.

^{*} Figures are on Provisional basis, final figures will be submitted after audited accounts of FY 2013-14 are available.

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 31.3.2015shall 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."
- 3.8.2 However, the MYT Regulations, 2014, is applicable from 1st April, 2015 onwards. Therefore, for arriving at Equity to be considered for computation of Return on Equity (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) is applicable. Therefore for arriving at the Equity to be considered for computation of RoE from FY 2012-13 to FY 2014-15 the provisions of Tariff Regulations, 2011 is used. The relevant provision of Tariff Regulations, 2011 is reproduced below:

"51. Debt equity ratio

1) For the purpose of determination of tariff, debt-equity ratio in the case of a new generating station commencing commercial operations after the notification of these regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance shall be treated as normative loan. Where actual

equity employed is less than 30%, the actual equity employed shall be considered.

2) In the case of existing generating stations the debt equity ratio as per the Balance Sheet on the date of the Transfer notification will be the debt equity ratio for the first year of operation, subject to such modification as may be found necessary upon audit of the accounts if such Balance Sheet is not audited.

......

Therefore for arriving at the Equity to be considered for computation of RoE the provisions of Regulation 27 of the MYT Regulations, 2014 and Regulation 51 of the Tariff Regulations, 2011 are used.

3.8.3 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.

..."

3.9 Funding Pattern – MLHEP

The following table shows the list of actual loans that have been availed by MePGCL from various financial institutions in order to fund the project cost of Myntdu Leshka Power station.

Table 5: Loan details of MLHEP

Particulars Particulars	Rs. Crores
Loan availed from REC	253.04 Crores
Loan availed from PFC	240.20 Crores
MeECL Bonds	120.00 Crores
MeECL Bonds	50.00 Crores
Central Bank of India	75.00 Crores
State Government Loan	11.80 Crores
Federal Bank Loan	50.00 Crores
Total Loans availed till date for MLHEP	800.04 Crores
Total Loan Eligibility as per Regulations (70% of Capital Cost)	907.91 Crores
Additional Loan to be availed for MLHEP	107.87 Crores
Eligible Equity Funding (30% of Capital Cost)	389.11Crores
Equity to be infused	1.89 Crores

As seen from the above table, MePGCL is eligible to avail for additional loans to the tune of **Rs. 107.87 Crores** for Myntdu Leshka Project. This additional loan is to be availed from Rural Electrification Corporation (REC) and the existing card rate for such loans is 12.50% is appended as **Annexure J.**

MePGCL prays before the Hon'ble Commission to kindly approve the same.

The funding pattern of the MLHEP project after the addition of balance loan and equity is shown in the table below:

Table 6: Financial Pattern of MLHEP

Particulars	Rs Cr	%
Debt	907.91	70.0%
Equity	389.11	30.0%
Total	1,297.02	100.0%

The details of equity received from the government of Meghalaya and the sanction letters for all the loans is appended as **Annexure-K** and **Annexure-L** respectively.

3.10 Return on Equity – MLHEP

The Return on Equity computation for MLHEP for the control period of FY 2015-16 to FY 2017-18 is computed by considering the total Equity of MLHEP project. The Return on Equity (RoE) computation for MLHEP is shown in the table below:

Table 7: Return on Equity Computation- MLHEP

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Particulars	(Estimated)	(Projected)	(Projected)	(Projected)
Opening Equity (Rs. Cr)	387.22	387.22	389.11	389.11
Additions during the year (Rs. Cr)		1.89	-	2.26
Closing Equity (Rs. Cr)	387.22	389.11	389.11	391.37
Equity Considered for RoE (Rs. Cr)	387.22	387.39	387.39	388.15
RoE % (Rs. Cr)	14%	14%	14%	14%
RoE (Rs. Crore)	54.21	54.24	54.24	54.34

MePGCL submits before the Hon'ble Commission to kindly approve Rs. **54.24** Cr, Rs. **54.24** Cr and Rs. **54.34** Cr as RoE for FY 2015-16, FY 2016-17 and FY 2017-18 respectively for Myndtu Leshka HEP.

3.11 Interest and Finance Charges on Loan Capital

3.11.1 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.

3.11.2 Interest and Finance Charges on Loan Capital-MLHEP

The Interest on Loan for the control period has been computed by considering Interest obligation for present and upcoming project loans. The interest on REC additional loan of Rs 107.87 Cr is considered from September 2015 onwards. 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 8: Computation of Interest on Loan - MLHEP (Rs. Cr)

Particulars	FY2015-16	FY2016-17	FY2017-18
Opening Balance	729.00	780.47	716.30
Addition during the year	108.45	-	0.25
Repayment during the year	56.98	64.17	184.17
Closing Balance	780.47	716.30	532.38
Average Interest Rate	12%	12%	13%
Interest Payable	87.43	89.01	81.24
Add Finance Charges	-	-	-
Total Interest and Finance Charges	87.43	89.01	81.24

MePGCL submits before the Hon'ble Commission to kindly approve Rs. 87.43 Cr, Rs. 89.01 Cr and Rs. 81.24 Cr as Interest and Finance Charges for FY 2015-16, FY 2016-17 and FY 2017-18 respectively for MLHEP.

3.11.3 Operation and Maintenance Expenses

3.11.3.1 As per Regulation 56 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:

"56 Operation and maintenance expenses

- 56.1 Operation and Maintenance Expenses (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
- 56.2 Operation and maintenance expenses (O&M Expenses) for the existing generating stations, which have been in operation for 5 years or more in the base year 2007-08 shall be derived on the basis of actual operation and maintenance expenses for the year 2003-04 to 2007-08, based on the audited accounts, excluding abnormal operation and maintenance expenses, if any, after prudent check by the Commission.
- 56.3 The normalized operation and maintenance expenses after prudent check, for the years 2003-04 to 2007-08, shall be escalated at the rate of 5.17% to arrive at the normalized operation and maintenance expenses at the 2007-08 price level and then averaged to arrive at normalized O&M expenses for2003-04 to 2007-08 price level. The average normal O&M expenses at2007-08 price level shall be escalated at the rate of 5.72% to arrive at theism expenses for the year 2009-10.
- 56.4 The O&M expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay revision of employees to arrive at the permissible O&M expenses for the year 2009-10.
- 56.5 The O&M expenses for 2009-10 shall be escalated further at the rate of 5.72% per annum as arrive at the operation and maintenance expenses forth subsequent years of the tariff period.

- 56.6 In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08 and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).
- 56.7 In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years"
- **3.11.3.2** Since MLHEP has achieved CoD after 1.04.2009, its O & M expenses have been fixed as per Regulation 56 (7) at 2% of fixed cost and further escalated at 5.72% to arrive at O & M expenses for FY 2015-16, FY 2016-17 and FY2017-18.

Table 9: O & M Expenditure

Particulars	Rs.Crs
Project Cost	1,297.02
O&M Expenses for FY 2013-14 (2% of Project Cost)	25.94
O&M Expenses for FY 2014-15 (5.72% escalation over prev. year)	27.42
O&M Expenses for FY 2015-16 (5.72% escalation over prev. year)	28.99
O&M Expenses for FY 2016-17 (5.72% escalation over prev. year)	30.65
O&M Expenses for FY 2017-18 (5.72% escalation over prev. year)	32.40

3.11.3.3 MePGCL submits before the Hon'ble Commission to kindly approve the O&M expenses of Rs. 28.99 Crore, Rs. 30.65 Crore and Rs. 32.40 Crore for FY 2015-16, FY 2016-17 and FY 2017-18 respectively.

3.12 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.

3.12.1 Depreciation computation-MLHEP

The computation of depreciation is shown in the table below and attached as Format-6

Table 10: Depreciation

Particulars	FY 2015-16	FY 2016-17	FY 2017-18
Land	-	-	-
Buildings	4.47	4.47	4.47
Hydraulic works	30.20	30.21	30.27
Other Civil works	3.53	3.53	3.53
Plant & Machinery	17.20	17.20	17.20
Lines & Cables	0.21	0.21	0.21
Vehicles	0.02	0.02	0.02
Furniture	0.00	0.00	0.00
Office equipment	0.01	0.01	0.01
Total	55.65	55.66	55.72

MePGCL submits before the Hon'ble Commission to kindly approve Depreciation of Rs 55.65 Cr, Rs. 55.66 Cr, Rs 55.72 Cr for FY 2015-16, FY 2016-17 and FY 2017-18 respectively for MLHEP.

3.13 Interest on Working Capital

3.13.1 As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

"34 Interest on Working Capital

34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations."

3.13.2 As per the Regulations 34.1 (iii) the computation of Interest on Working Capital for MLHEP is shown below:

Table 11: Interest on Working Capital

0 1				
Particulars	FY 2015-16	FY 2016-17	FY 2017-18	
O & M Expenses for 1 month	2.42	2.55	2.70	
Maintenance Spares @15% of O&M plus	4.37	4.63	4.91	
escalated by 6% from date of COD				
Receivables @ 2 months of Fixed Cost	38.90	39.46	38.48	
Total Working Capital requirement	45.69	46.65	46.09	
Computation of working capital interest				
SBI Advance Bank rate as on 1.4.2015 (%)*	14.60%	14.60%	14.60%	
Interest on Working Capital	6.67	6.81	6.73	

^{*} SBI Advance rate revised on 10th April 2015, same has been taken for all the years

MePGCL submits before the Hon'ble Commission to kindly approve Rs. **6.67** Cr, Rs. **6.81** Cr and Rs. **6.73** Cr as Interest on Working Capital for FY 2015-16, FY 2016-17 and FY 2017-18 respectively for MLHEP.

3.14 Income Tax

Regulation 35 of the MYT Regulations, 2014, provides for claim of Income Tax as expenses. However MePGCL submits that income tax shall be claimed in subsequent filings in the true-up.

3.15 Connectivity and SLDC Charges

3.15.1 The Regulation 59 of MYT Regulations, 2014 provides for claim of SLDC & Connectivity charges as expenses. MePGCL submits as per the approved tariff order of SLDC, the SLDC charge applicable for MLHEP for the control period of FY 2015-16 to FY 2017-18 is as Rs. **0.42** Crore, Rs. **0.40** Crore and Rs **0.46** Crore respectively.

3.16 Summary of Annual Fixed Cost – Myndtu Leshka HEP

3.16.1 The summary of the Annual Fixed Cost for MLHEP is provided in the table below:

Table 12: Annual Fixed Cost – Myndtu Leshka HEP (Rs. Cr)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18
Interest on Loan capital	87.43	89.01	81.24
Depreciation	55.65	55.66	55.72
O&M Expenses	28.99	30.65	32.40
Interest on working capital	6.67	6.81	6.73
Return on Equity	54.24	54.24	54.34
Income Tax	-	-	-
SLDC Charge	0.42	0.40	0.46
Total Annual Fixed Cost	233.39	236.77	230.89
Less: Non Tariff Income	0.00	0.00	0.00
Net Annual Fixed Cost	233.39	236.77	230.89

MePGCL submits before the Hon'ble Commission to kindly approve the Annual Fixed Cost of Rs. **233.39** Cr, Rs. **236.77** Cr and Rs. **230.89** Cr for FY 2015-16, FY 2016-17 and FY 2017-18 respectively for MLHEP.

4 Computation of Capacity Charge and Energy Charge

MePGCL submits that based on the Annual fixed Cost approved by Hon'ble Commission it will calculate the capacity charge and energy charge based on following provisions:

57 Computation and payment of capacity charge and energy charge for Hydrogenerating stations.

57.1 Capacity Charges:

(1) The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State:

Provided that during the period between the date of commercial operation of the first unit of the generating station and the date of commercial operation of the generating station, the annual fixed cost shall provisionally be worked out based on the latest estimate of the completion cost for the generating station, for the purpose of determining the capacity charge and energy charge payment during such period.

(2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

= AFC x 0.5 x NDM / NDY x (PAFM / NAPAF) (in Rupees)

Where,

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

NAPAF= Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percentage

(3) The PAFM shall be computed in accordance with the following formula:

PAFM =10000 x Σ DCi / { N x IC x (100 - AUX) } % i=1

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the ith day of the Month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch centre after the day is over.

IC = *Installed capacity (in MW) of the complete generating station*

N = *Number* of days in the month

57.2 Energy Charges:

(1) The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at the computed energy charge rate. Total Energy charge payable to the generating company for a month shall be:

= (Energy charge rate in Rs. / kWh) x (Scheduled energy (ex-bus) for the month in kWh) x (100 – FEHS) / 100.

(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis, for a hydro generating station, shall be determined up to three decimal places based on the following formula, subject to the provisions of clause (4):

$ECR = AFC \times 0.5 \times 10 / \{ DE \times (100 - AUX) \times (100 - FEHS) \}$

Where,

DE = Annual design energy specified for the hydro generating station, In MWh, subject to the provision in clause (6) below.

FEHS = Free energy for home State as fixed from time to time, by competent authority.

- (3) In case actual total energy generated by a hydro generating station during a year is less than the design energy for reasons beyond the control of the generating company, the following treatment shall be applied on a rolling basis:
- (i) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in clause (2) with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the energy charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;
- (ii) in case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply:

Suppose the specified annual design energy for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 MWh respectively, A1 being less than DE. Then, the design energy to be considered in the formula in clause (5) of this Regulation for calculating the ECR for the third financial year shall be moderated as (A1 + A2 - DE) MWh, subject to a maximum of DE MWh and a minimum of A1 MWh.

- (iii) Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by 100 / (100 AUX).
- (4) In case the energy charge rate (ECR) for a hydro generating station, as computed in clause (5) above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds { DE x (100 AUX) x (100 FEHS) / 10000} MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

Provided that in a year following a year in which total energy generated was less than the design energy for reasons beyond the control of the generating company, the energy charge rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous year has been made up.

(6) The concerned Load Despatch Centre shall finalise the schedules for the hydro generating stations, in consultation with the beneficiaries, for optimal utilization of all the energy declared to be available, which shall be scheduled for all beneficiaries in proportion to their respective allocations in the generating station.

5 **FORMATS**

Format-HG1

Name of the Hydro Generating Station: Myntdu Leshka Power Station

DET	AILS OF COD, TYPE OF HYDRO STATION		IATIVE ANNUA			OR (NAPAF)	& OTHER NO	RMATIVE	
SL			2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
NO	DESCRIPTION	UNIT	(Provisional)	(Provisional)	(ESTIMATED)	(Projected)	(Projected)	(Projected)	
1	Installed Capacity	MW			126.00)			
2	Free Power to Home State	%			N.A				
3	Date of Commercial Operation	-			-				
	Unit-I	-			1-Apr-1	.2			
	Unit-II	-			1-Apr-1	.2			
	Unit-III	-			1-Apr-1	.3			
4	Type of Station	-							
	Surface/Underground	-	Surface						
	Purely ROR/Pondage/Storage	-			ROR				
	Peaking/Non Peaking	-			Non Peak	king			
	No. of hours Peaking	-			N.A				
	Overload Capacity (MW) & period	-			-				
5	Type of Excitation	-			-				
	Rotating exciters on Generator	-			-				
	Static excitation	-			Static Ty	/pe			
6	Design Energy (Annual)	Gwh			486.00)			
7	Auxiliary consumption including Transformation losses	%			1.20				
8	Normative Plant Availability Factor (NAPAF)	%			39				
9.1	Maintenance spares for WC	Rs. Lakh							
9.2	Receivable for WC	Rs. Lakh	ch						
9.3	Base rate on return on equity	%	14%						
9.4	Tax rate	%							
9.5	Prime lending rate of SBI as on 01.04.2014	%							

Format-HG2

SALIENT FEATURES OF HYDROELECTRIC PROJECT Name of the Hydro Generating Station: Myndtu Leshka Power Station

Name of the Hydro Generating Station: Myn	Lessing Fower Station
1. Location State / Distt.	Megahalaya State, West Jaintia Hills District
River	Myntdu River.
2. Diversion Tunnel	Construction Sluice
	3.0 m x3,0 m, L = 70.80 m
Size, Shape	
Length	L = 70.80 m
3. Dam	Congreto Cravity
Type	Concrete Gravity
Maximum dam height	63.00 M
4. Spillway	Sluice
Type	
Crest level of Spillway	587.50 M
5. Reservoir	C10 00 M
Full Reservoir Level (FRL)	618.00 M
Minimum Draw Down Level (MDDL)	606.15 M
Live Storage (MCM)	7.00 MCM
6. De-silting Arrangement	-
Type Number and Size	N.A
Particle size to be removed (mm)	1
7. Head Race Tunnel	
Size and Type	3.40 M Diameter, Modified Horse Shoe
Length	3313.46 M
Design Discharge (Cumecs)	46.49 Cumecs
	40.49 Cuffiecs
8. Surge Shaft Type	Restricted Orifice Surge Tank with Orifice Diameter=1.8 m.
Diameter	8.80 M
Height	85.0 M
	63.0 V
9. Penstock/ Pressure Shafts Type	Circular (Steel) penstock
Diameter & Length	3 nos. Each 2.0 M Dia, 756.25 m
	3 1103. Editi 2.0 Wi Bia, 730.23 III
10. Power House Type	Surface
Installed Capacity (No of Units x MW)	3 x 42MW
Peaking Capacity during lean period (MW)	N.A
Type of Turbine	Vertical Francis
Rated Head (M)	300.30 M
Rated Discharge (Cumecs)	15.05 each Unit
11. Tail Race Tunnel	Ones Charrel
Diameter, Shape	Open Channel
Length	60.0 M
Minimum tail water level	286.78 m
12. Switch yard	
Type of Switch gear	Outdoor
No. Of generator bays	3 Nos.
	1 No
No. Of Bus Coupler bays	1 No.

Format - HG3

Name	of the Hydro	Gene	rating Station:	Myndtu Leshka	a									
			FY 12-13	3 (Actual)	FY 13-14	l (Actual)	FY 14-15 (Estimated)	FY 15-16 (Projected)	FY 16-17 (Projected)	FY 17-18 (Projected)
SL NO	монтн	Unit	DESIGN ENERGY (MU)	MW CONTINUOUS										
1	APRIL	I.	13.791	19.154	1.492	2.072	0.560	0.78	2.500	3.47	2.500	3.47	2.500	3.47
		П.	2.600	3.612	1.992	2.766	1.090	1.51	2.500	3.47	2.500	3.47	2.500	3.47
		Ш.		0.000	3.760	5.222	3.230	4.49	2.500	3.47	2.500	3.47	2.500	3.47
2	MAY	I.	15.133	20.340	16.248	21.838	16.248	21.84	13.500	18.15	13.500	18.15	13.500	18.15
		П.	8.396	11.285	12.433	16.710	12.820	17.23	13.500	18.15	13.500	18.15	13.500	18.15
		Ш.		0.000	11.751	15.794	14.990	20.15	13.500	18.15	13.500	18.15	13.500	18.15
3	JUNE	I.	4.877	6.774	20.925	29.062	27.930	38.79	20.000	27.78	20.000	27.78	20.000	27.78
		н.	13.356	18.550	17.887	24.843	24.950	34.65	20.000	27.78	20.000	27.78	20.000	27.78
		III.		0.000	23.777	33.024	24.950	34.65	20.000	27.78	20.000	27.78	20.000	27.78
4	JULY	I.	0.000	0.000	28.842	38.767	28.050	37.70	27.670	37.19	27.670	37.19	27.670	37.19
		н.	27.621	37.125	25.671	34.505	29.060	39.06	27.670	37.19	27.670	37.19	27.670	37.19
		III.		0.000	29.106	39.121	27.090	36.41	27.670	37.19	27.670	37.19	27.670	37.19
5	AUGUST	I.	0.000	0.000	23.355	31.392	28.520	38.33	26.670	35.85	26.670	35.85	26.670	35.85
		н.	0.959	1.290	27.203	36.563	25.620	34.44	26.670	35.85	26.670	35.85	26.670	35.85
		ш.		0.000	27.706	37.239	17.230	23.16	26.670	35.85	26.670	35.85	26.670	35.85
6	SEPTEMBER	I.	0.000	0.000	24.247	33.676	27.610	38.35	26.670	37.04	26.670	37.04	26.670	37.04
		н.	24.618	34.191	17.297	24.023	26.930	37.40	26.670	37.04	26.670	37.04	26.670	37.04
		Ш.		0.000	24.965	34.674	17.430	24.21	26.670	37.04	26.670	37.04	26.670	37.04
7	OCTOBER	I.	0.000	0.000	13.333	17.921	12.340	16.59	14.000	18.82	14.000	18.82	14.000	18.82
		П.	25.772	34.639	13.333	17.921	4.570	6.14	14.000	18.82	14.000	18.82	14.000	18.82
		Ш.		0.000	13.333	17.921	12.760	17.15	14.000	18.82	14.000	18.82	14.000	18.82
8	NOVEMBER	١.	0.000	0.000	5.667	7.870	0.000	0.00	4.000	5.56	4.000	5.56	4.000	5.56
		н.	15.263	21.198	5.667	7.870	2.320	3.22	4.000	5.56	4.000	5.56	4.000	5.56
		Ш.		0.000	5.667	7.870	6.740	9.36	4.000	5.56	4.000	5.56	4.000	5.56
9	DECEMBER	I.	0.000	0.000	3.333	4.480	0.000	0.00	2.670	3.59	2.670	3.59	2.670	3.59
		П.	7.663	10.300	3.333	4.480	0.680	0.91	2.670	3.59	2.670	3.59	2.670	3.59
		Ш.		0.000	3.333	4.480	4.860	6.53	2.670	3.59	2.670	3.59	2.670	3.59
10	JANUARY	l.	0.000	0.000	2.667	3.584	0.000	0.00	1.670	2.24	1.670	2.24	1.670	2.24
		II.	5.907	7.939	2.667	3.584	0.810	1.09	1.670	2.24	1.670	2.24	1.670	2.24
		III.		0.000	2.667	3.584	4.810	6.47	1.670	2.24	1.670	2.24	1.670	2.24
11	FEBRUARY	I.	0.000	0.000	2.000	2.976	1.000	1.49	1.670	2.49	1.670	2.49	1.670	2.49
		II.	4.928	7.333	2.000	2.976	2.000	2.98	1.670	2.49	1.670	2.49	1.670	2.49
		III.		0.000	2.000	2.976	2.000	2.98	1.670	2.49	1.670	2.49	1.670	2.49
12	MARCH	I.	0.797	1.071	2.000	2.688	1.000	1.34	1.670	2.24	1.670	2.24	1.670	2.24
		П.	1.391	1.870	2.000	2.688	2.000	2.69	1.670	2.24	1.670	2.24	1.670	2.24
		III.	2.422	3.255	2.000	2.688	2.000	2.69	1.670	2.24	1.670	2.24	1.670	2.24
	TOTAL						414.198	564.774	428.070	583.231	428.070	583.231	428.070	58 <mark>3.231</mark>

Name of Generating Company: MePGCL-MLHEP

Format - HG5

ANNUAL REVENUE REQUIREMENT (Myndtu Leshka)

S.No	Particulars	2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
		(Estimated)	(Projected)	(Projected)	(Projected)	(Projected)
1	Gross Generation (MU)	413.37	409.39	428.07	428.07	428.07
2	Auxilary Consumption (MU)	0.94	0.64	4.28	4.28	4.28
3	Net Generation (MU)	412.43	408.75	423.79	423.79	423.79
4	Free Energy to home state (MU)	-	-	-	-	-
5	Royalty (Rs.)	-	-	-	-	1
6	Water Charges (Rs.)	-	-	-	-	-
7	Capacity Charges (Rs.)					
	a) Interest on Loan capital (Rs.)	8573,68,470	10872,68,800	8742,52,281	8901,40,595	8123,52,726
	b) Depreciation (Rs.)	6004,00,000	5563,55,772	5564,88,517	5566,21,261	5572,17,637
	c) Advance against depreciation (Rs.)	-	-	-	-	-
	d) O&M Expenses (Rs.)	2594,04,000	2742,41,909	2899,28,546	3065,12,459	3240,44,971
	e) Interest on working capital (Rs.)	636,52,396	666,06,666	667,02,126	681,09,649	672,97,735
	f) Foreign exchange Rate (%)	-	-	-	-	-
	g) Return on Equity (Rs)	5421,08,000.0	5421,07,160	5423,50,760	5423,50,760	5434,04,960
	h) Income Taxes (Rs.)	-	-	-	-	-
	i) SLDC Charges	31,08,178	34,44,675	42,04,004	40,03,813	46,04,385
	Total fixed expenses (5+6+7) (Rs)	23260,41,043	25300,24,982	23339,26,233	23677,38,537	23089,22,414

Format-6

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2012-13

Rs. Cr

	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Rate of Depreciation	Depreciation
1	Land	1	15.54	1	15.54	0.00%	-
2	Buildings	1	91.52	1	91.52	3.34%	3.03
3	Hydraulic works	1	590.14	1	590.14	5.28%	31.11
4	Other Civil works	1	114.10	1	114.10	3.34%	3.79
5	Plant & Machinery	1	325.77	1	325.77	5.28%	16.92
6	Lines & Cables	1	4.32	1	4.32	5.28%	0.23
7	Vehicles	1	0.24	1	0.24	9.50%	0.02
8	Furniture	1	0.04	1	0.04	6.33%	-
9	Office equipment	1	0.16	1	0.16	6.33%	0.01
	TOTAL:	-	1,141.83	-	1,141.83	-	55.11

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2013-14

Rs. Cr

	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Rate of Depreciation	Depreciation			
1	Land	15.54	13.21	-	28.75	0.00%	-			
2	Buildings	91.52	57.04	-	148.56	3.34%	4.86			
3	Hydraulic works	590.14	45.15	1	635.29	5.28%	33.07			
4	Other Civil works	114.10	3.33	1	117.43	3.34%	3.85			
5	Plant & Machinery	325.77	36.21	1	361.98	5.28%	17.99			
6	Lines & Cables	4.32	0.19	1	4.51	5.28%	0.24			
7	Vehicles	0.24	•	1	0.24	9.50%	0.02			
8	Furniture	0.04	0.04	1	0.08	6.33%	ı			
9	Office equipment	0.16	0.02	•	0.18	6.33%	0.01			
	TOTAL:	1,141.83	155.19 *	•	1,297.02	•	60.04			

^{*} Figures are on provisional basis, final figures will be submitted after audited accounts of FY 2013-14 are available.

Format-6

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2014-15

Rs. Cr

	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Rate of Depreciation	Depreciation			
1	Land	28.75			28.75	0%	ı			
2	Buildings	148.56			148.56	3.34%	4.47			
3	Hydraulic works	635.29			635.29	5.28%	30.19			
4	Other Civil works	117.43			117.43	3.34%	3.53			
5	Plant & Machinery	361.98			361.98	5.28%	17.20			
6	Lines & Cables	4.51			4.51	5.28%	0.21			
7	Vehicles	0.24			0.24	9.50%	0.02			
8	Furniture	0.08			0.08	6.33%	0.00			
9	Office equipment	0.18			0.18	6.33%	0.01			
	TOTAL:	1,297.02			1,297.02		55.64			

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2015-16

Rs. Cr

	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Rate of Depreciation	Depreciation			
1	Land	28.75			28.75	0%	-			
2	Buildings	148.56	0.06		148.62	3.34%	4.47			
3	Hydraulic works	635.29	0.52		635.81	5.28%	30.20			
4	Other Civil works	117.43			117.43	3.34%	3.53			
5	Plant & Machinery	361.98			361.98	5.28%	17.20			
6	Lines & Cables	4.51			4.51	5.28%	0.21			
7	Vehicles	0.24			0.24	9.50%	0.02			
8	Furniture	0.08			0.08	6.33%	0.00			
9	IT Equipment				-	15%	-			
10	Office equipment	0.18			0.18	6.33%	0.01			
	TOTAL:	1,297.02	0.58	-	1,297.60		55.65			

15%

6.33%

0.18

1,297.60

Name of the Generating Company: MePGCL

9 | IT Equipment

TOTAL:

10 Office equipment

Format-6

Rs. Cr

0.01

55.66

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2016-17

0.18

1,297.60

	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Rate of Depreciation	Depreciation
1	Land	28.75			28.75	0%	-
2	Buildings	148.62			148.62	3.34%	4.47
3	Hydraulic works	635.81			635.81	5.28%	30.21
4	Other Civil works	117.43			117.43	3.34%	3.53
5	Plant & Machinery	361.98			361.98	5.28%	17.20
6	Lines & Cables	4.51			4.51	5.28%	0.21
7	Vehicles	0.24			0.24	9.50%	0.02
8	Furniture	0.08			0.08	6.33%	0.00

VALUE ASSETS AND DEPRECIATION FOR MLHEP: 2017-18

	Particulars	Opening	Addition	Withdrawn	Closing GFA	Rate of	Depreciation			
	T di ciodidio	GFA	/ tadition	· · · · · · · · · · · · · · · · · · ·	Closing Clix	Depreciation	Depreciation			
1	Land	28.75			28.75	0%	-			
2	Buildings	148.62			148.62	3.34%	4.47			
3	Hydraulic works	635.81	2.51		638.32	5.28%	30.27			
4	Other Civil works	117.43			117.43	3.34%	3.53			
5	Plant & Machinery	361.98			361.98	5.28%	17.20			
6	Lines & Cables	4.51			4.51	5.28%	0.21			
7	Vehicles	0.24			0.24	9.50%	0.02			
8	Furniture	0.08			0.08	6.33%	0.00			
9	IT Equipment	-			-	15%	-			
10	Office equipment	0.18			0.18	6.33%	0.01			
	TOTAL:	1,297.60	2.51	-	1,300.11		55.72			

Format-7

Interest on Loan- MLHEP

	FY 2012-13											
SI.	Particulars	Opening	Rate of	Addition during	Repayment	Closing	Amount of					
No.		Balance	Interest	the year	during the year	balance	Interest paid					
1	NCD Bonds	17,000.00	ı	1	-	17,000.00	1,763.63					
2	REC (MLHEP)	25,304.24	ı	1	-	25,304.24	2,718.97					
3	CBI (MLHEP)	7,507.45	1	48.43	863.43	6,692.45	983.97					
4	Federal Bank	5,000.00	ı	1	535.71	4,464.29	684.06					
5	PFC (MLHEP)	9,520.00	ı	7,310.83	-	16,830.83	1,180.45					
6	State Govt.	2,115.16			-	2,115.16	183.13					
	Total	66,446.85	ı	7,359.26	1,399.14	72,406.96	7,514.21					
	Less: Capitalized											
	Finance Charge	-	1	0.19	-	0.19	-					
	Total		·				7,514.21					

Interest on Loan- MLHEP

			FY 20	13-14			Rs. Lac
SI.	Doutioulous	Opening	Rate of	Addition during	Repayment	Closing	Amount of
No.	Particulars	Balance	Interest	the year	during the year	balance	Interest paid
1	NCD Bonds	17,000.00	1	ı	1	17,000.00	1,763.63
2	REC (MLHEP)	25,304.24	1	ı	1	25,304.24	2,883.84
3	CBI (MLHEP)	6,692.45	1	ı	833.33	5,859.12	883.55
4	Federal Bank	4,464.29	1	-	714.29	3,750.00	614.11
5	PFC (MLHEP)	16,830.83	1	7,189.17	668.29	23,351.71	2,275.17
6	State Govt.	2,115.16		(935.16)	1	1,180.00	153.39
	Total	72,406.96	1	6,254.01	2,215.91	76,445.06	8,573.68
	Finance Charge	-	-	-	0.16	-	-
	Total						8,573.68

Interest on Loan- MLHEP

			FY 20)14-15			Rs. Lac
SI.	Particulars	Opening	Rate of	Addition during	Repayment	Closing	Amount of
No.	Particulars	Balance	Interest	the year	during the year	balance	Interest paid
1	NCD Bonds	17,000.00	1	1	1	17,000.00	1,763.62
2	REC (MLHEP)	25,304.24	-	ı	1	25,304.24	4,281.59
3	CBI (MLHEP)	5,859.12	1	1	1,041.67	4,817.45	963.30
4	Federal Bank	3,750.00	-	-	892.86	2,857.14	624.75
5	PFC (MLHEP)	23,351.71	-	1	1,610.46	21,741.25	3,129.57
6	State Govt.	1,180.00		ı	-	1,180.00	109.86
	Total	76,445.06	•	•	3,544.99	72,900.07	10,872.69
	Less: Capitalized						
	Finance Charge	1	-	-	0.08	-	-
	Total						10,872.69

Interest on Loan- MLHEP

			FY 20)15-16			Rs. Lac
SI.	Particulars	Opening	Rate of	Addition during	Repayment	Closing	Amount of
No.	Particulars	Balance	Interest	the year	during the year	balance	Interest paid
1	NCD Bonds	17,000.00	-	-	-	17,000.00	1,763.63
2	REC (MLHEP)	25,304.24	-	-	2,540.00	22,764.24	2,752.61
3	CBI (MLHEP)	4,817.45	-	-	833.33	3,984.12	580.57
4	Federal Bank	2,857.14	-	-	714.29	2,142.85	343.54
5	PFC (MLHEP)	21,741.25	-	-	1,610.46	20,130.79	2,801.09
6	REC (Additional)	-	12.25%	10,787.40	-	10,787.40	385.4248
7	Market Loan*			58.00		58.00	5.80
8	State Govt.	1,180.00		1	-	1,180.00	109.86
	Total	72,900.07	0.12	10,845.40	5,698.08	78,047.39	8,742.52
	Finance Charge						
	Total						8,742.52

Interest on Loan- MLHEP

			FY 20)16-17			Rs. Lac
SI.	Particulars	Dortioulars Opening Rate of Addition of		Addition during	Repayment	Closing	Amount of
No.	Particulars	Balance	Interest	the year	during the year	balance	Interest paid
1	NCD Bonds	17,000.00	-	ı	-	17,000.00	1,763.63
2	REC (MLHEP)	22,764.24	-	ı	2,540.00	20,224.24	2,448.19
3	CBI (MLHEP)	3,984.12	-	1	833.33	3,150.79	467.25
4	Federal Bank	2,142.85	-	ı	714.29	1,428.56	245.59
5	PFC (MLHEP)	20,130.79	-	1	1,610.46	18,520.33	2,583.68
6	REC (Additional)	10,787.40	12.25%	6 - 719.16 10,00	719.16 10,068	10,068.24	1,277.408
7	Market Loan*	58.00				58.00	5.80
8	State Govt.	1,180.00			1	1,180.00	109.86
	Total	78,047.39	0.12	-	6,417.24	71,630.15	8,901.41
	Total						8,901.41

Interest on Loan- MLHEP

			FY 20)17-18			Rs. Lac
SI.	Particulars	Opening	Rate of	Addition during	Repayment	Closing	Amount of
No.	Particulars	Balance	Interest	the year	during the year	balance	Interest paid
1	NCD Bonds	17,000.00	1	1	12,000.00	5,000.00	1,763.63
2	REC (MLHEP)	20,224.24	1	1	2,540.00	17,684.24	2,176.17
3	CBI (MLHEP)	3,150.79	1	1	833.33	2,317.46	361.99
4	Federal Bank	1,428.56	1	1	714.29	714.27	149.33
5	PFC (MLHEP)	18,520.33	1	1	1,610.46	16,909.87	2,366.27
6	REC (Additional)	10,068.24	12.25%	1	719.16	9,349.08	1,189.3109
7	Market Loan*	58.00				58.00	5.80
8	State Govt.	1,180.00		25.10	1	1,205.10	111.03
	Total	71,630.15	0.12	25.10	18,417.24	53,238.01	8,123.53
	Total						8,123.53

^{*}The rate of interest for market loan is the average interest rate for existing MePGCL loans

Format- 8

Name of the Generating Company: MePGCL

INTEREST CAPITALISED (MLHEP)

Rs. Lacs

C NI	Interest conitalized	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
S.N.	Interest capitalized	(Provisional)	(Provisional)	(Estimated)	(Estimated)	(Estimated)	(Estimated)
1	WIP	10,120.65	-	-	-	-	-
2	GFA at the end of the year	1,14,183.14	1,29,702.02	1,29,702.02	1,29,760.00	1,29,760.00	1,30,011.00
3	WIP+GFA at the end of the year	1,24,303.79	1,29,702.02	1,29,702.02	1,29,760.00	1,29,760.00	1,30,011.00
4	Interest (Excluding interest on WCL)	-	-	-	-	-	-
5	Interest Capitalised	2,468.44	-	-	-	-	-

WIP=Work -in - Progress

GFA=Gross Fixed Assets

WCL=Working Capital Loan

Format- 11

Name of the Generating Company: MePGCL

INFORMATION REGARDING WORKING CAPITAL FOR THE CURRENT AND ENSURING YEAR

(Rs. in lakhs)

S.N	Particulars	FY 2014-15 (Estimated)	FY 2015-16 (Estimated)
1	2	3	4
1	Fuel cost	NA	
2	Power Purchase Cost		
3	One month O & M Cost	2.14	2.42
4	Two Months Receivables	39.61	38.90
5	Total	41.76	41.31

Format - 15

Name of the Licensee:MePGCL

Investment Plan MLHEP

(Rs. in lakhs)

SI No.	Name of Scheme/ Project	Approved Outlay*	FY 2012-13 (Actual)		FY 2014-15 (Estimated)			(Projected)	Fynenditure
Lesh	Leshka HEP Additional Capital Expenditures								
1	Cooling System modification & improvement	251	0	0	0	0		251	251
2	Stand by Power supply in DAM	58	0	0	0	58	0	0	58

^{*} Investment Plan includes some schemes which are yet to be approved

Note: I) Information for previous year to be given in columns 1 to 7

Note: ii) Information for the current year to be given in columns 1 to 5

iii) Schemes costing Rs. Ten lakhs are above to be shown. For others lumpsum provision may be indicated.

Name: MePGCL-MLHEP
Investment Plan

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

SI.		Project Details								5	SOURCE OF	FINANCIN	NG FOR SCHEN	ΛE		
									Equity Component			Debt C	omponent			
								Lquity	Component	oan amou	nt (Rs. Crs.	Loan So	urce			
	•	Name of Scheme	Year of Start	Nature of Project (Select appropriat e code from below)	Whether the scheme is part of approved Business Plan* (Yes/No)	Project Start Date (DD-MM- YY)	Comple tion date (DD-MM- YY)	lbv	Internal Accrual (from free reserves and surplus)	Additional equity infused	Loan-1	Loan-2	Loan-1		Capital Subsidies /grants compone nt	Contribut
		Leshka HEP														
	(Cooling System modification & improvement	FY 17	С	No	April'16	Mar'18	2.51		2.26	0.25		GoME			
	9	Stand by Power supply in DAM	FY 16	С	No	Dec'15	Mar'16	0.58			0.58		Financial Institution			

Format- 17

WORKS-IN-PROGRESS (MLHEP)

(Rs. in lakhs)

		FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
S.N	Particulars	(Provisional)	(Provisional)	(Estimated)	(Estimated)	(Estimated)	(Estimated)
1	2	3	4	5	6	7	8
1	Opening balance	1,18,728.96	10,120.65	-	-	-	-
2	Add: New inverstments	4,180.78	(675.01)	•	58.00	•	251.00
3	Total	1,22,909.74	9,445.64	•	58.00	•	251.00
4	Less investment capitalised	1,12,789.09	9,445.64	•	58.00	-	251.00
5	Closing balance	10,120.65	-	-	-	-	-