#### Notified on 01.01.2016

#### Bhopal, the 21st December, 2015

No. 2267-MPERC.2015- Whereas, the first control period of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations 2005 (G-26 of 2005) expired on 31<sup>st</sup> March, 2009, the Commission notified revision (RG-26(I) of 2009) of these Regulations dated 30<sup>th</sup> April, 2009 on 08<sup>th</sup> May 2009 to specify the principles and methodologies for the second Multi Year Tariff control period from FY 2009-10 to FY 2011-12. Further, vide second amendment dated 24<sup>th</sup> February, 2012, the Commission extended the control period up to March, 2013. The Commission notified revision {RG-26(II) of 2012} of these Regulations on 12<sup>th</sup> December, 2012 to specify the principles and methodologies for the third Multi Year Tariff control period from FY 2015-16. In order to specify the terms and conditions for determination of Generation tariff for the next control period from FY 2016-17 to FY 2018-19, it has become necessary to notify these Regulations;

Now therefore in exercise of the powers conferred by section 181(2) (zd) read with section 61 of the Electricity Act, 2003 (36 of 2003) thereof and all other powers enabling it in this behalf, and after previous publication, the Madhya Pradesh Electricity Regulatory Commission, hereby, makes the following Regulations:

### CHAPTER - 1 PRELIMINARY

#### 1. Short title and commencement:

- These Regulations may be called the Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for determination of Generation Tariff) Regulations, 2015 (RG-26 (III) of 2015).
- 1.2 These Regulations shall extend to the whole of the State of Madhya Pradesh.
- 1.3 These Regulations shall come in force with effect from 01.04.2016, and unless reviewed earlier or extended by the Commission, shall remain in force for a period of three years i.e., upto 31.03.2019:

Provided that where a project or a part thereof, has been declared under commercial operation before the date of commencement of these regulations and whose tariff has not been finally determined by the Commission till that date, tariff in respect of such project or such part thereof for the period ending 31.3.2016 shall be determined in accordance with the Madhya Pradesh Electricity Regulatory Commission (Terms and

Conditions for determination of Generation Tariff) Regulations, 2012 as amended from time to time.

### 2. Scope and extentof application.

These Regulations shall apply in all cases of determination of generation tariff for a generating station or a unit thereof (other than those based on renewable sources of energy) under Section 62 of the Electricity Act, 2003 read with Section 86 of the Act for supply of electricity to a Distribution Licensee, but shall not apply for generating stations whose tariff has been discovered through tariff based competitive bidding in accordance with the guidelines issued by the Central Government and adopted by the Commission under Section 63 of the Electricity Act, 2003.

#### 3. Norms to be ceiling norms:

Norms specified in these regulations are the ceiling norms and shall not preclude the generating company and the beneficiaries from agreeing to the improved norms of operation and in case the improved norms are agreed to, such improved norms shall be applicable for determination of Tariff.

#### 4. **Definitions and Interpretations:**

- 4.1 In these Regulations, unless the context otherwise requires-
  - (a) **'Act'** means the Electricity Act, 2003 (36 of 2003);
  - (b) 'Additional Capitalisation' means the capital expenditure incurred, or projected to be incurred after the date of commercial operation of the project and admitted by the Commission after prudent check, in accordance with provisions of Regulation 20 of these Regulations;
  - (c) **'Auxiliary Energy Consumption' or 'AUX'** in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station and the transformer losses within the generating station, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station:

Provided that auxiliary energy consumption shall not include energy consumed for supply of power to housing colony and other facilities at the generating station and the power consumed for construction works at the generating station;

(d) **'Auditor'** means an auditor appointed by a generating company in accordance with the provisions of Sections 224, 233B and 619 of the Companies Act, 1956

(1 of 1956)], as amended from time to time or Chapter X of the Companies Act, 2013 (18 of 2013) or any other law for the time being in force;

- (e) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;
- (f) 'Beneficiary' in relation to a generating station covered under clause (a) and (b) of sub-Section 1 of Section 86 of the Act, means a distribution licensee who is purchasing electricity generated at such a generating station through a Power Purchase Agreement either directly or through a trading licensee on payment of fixed charges and by scheduling in accordance with the grid code:

Provided that where the distribution licensee is procuring power through a trading licensee, the arrangement should be secured through back to back Power Purchase Agreement and power sale agreement;

- (g) **'Block'** in relation to a combined cycle thermal generating station means and includes combustion turbine-generator, associated waste heat recovery boiler, connected steam turbine- generator and auxiliaries;
- (h) 'Capital Cost' means the capital cost as determined in accordance with Regulation 15 of these Regulations;
- (i) **'Change In Law'** means occurrence of any of the following events:
  - (i) enactment, bringing into effect or promulgation of any new Indian law; or
  - (ii) adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or
  - (iii) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or
  - (iv) change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or
  - (v) coming into force or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station regulated under these Regulations.

- (j) **'Commission'** means the Madhya Pradesh Electricity Regulatory Commission;
- (k) 'Competitive Bidding' means a transparent process for procurement of equipment, services and works in which bids are invited by the project developer by open advertisement covering the scope and specifications of the equipment, services and works required for the project, and the terms and conditions of the proposed contract as well as the criteria by which bids shall be evaluated, and shall include domestic competitive bidding and international competitive bidding;
- (1) 'Cut-off Date' means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut- off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation:

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalization could not be made within the cut-off date for reasons beyond the control of the project developer;

- (m) **'Date of Commercial Operation' or 'COD'** The date of commercial operation of a generating station or unit or block thereof shall be determined as under:
- (1) Date of commercial operation in case of a generating unit or block of the thermal generating station shall mean the date declared by the generating company after demonstrating the maximum continuous rating (MCR) or the installed capacity (IC) through a successful trial run after notice to the beneficiaries, if any, and in case of the generating station as a whole, the date of commercial operation of the last generating unit or block of the generating station:

#### Provided that

- (i) where the beneficiaries have been tied up for purchasing power from the generating station, the trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 0000 hr after completion of the trial run:
- (ii) the generating company shall certify to the effect that the generating station meets the key provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical plants and electric lines) Regulations, 2010 and Grid Code:

- (iii) the certificate shall be signed by CMD/CEO/MD of the Company subsequent to its approval by the Board of Directors in the format enclosed (Appendix III) and a copy of the certificate shall be submitted to the SLDC before declaration of COD;
- (2) Date of commercial operation in relation to a generating unit of hydro generating station including pumped storage hydro generating station shall mean the date declared by the generating company from 00:00 hour after the scheduling process in accordance with the M.P. Electricity Grid code is fully implemented, and in relation to the generating station as a whole, the date declared by the generating company after demonstrating peaking capability corresponding to installed capacity of the generating station through a successful trial run:

Provided that:

- (i) where beneficiaries have been tied up for purchasing power from generating station, scheduling process for a generating unit of the generating station or demonstration of peaking capability corresponding to installed capacity of the generating station through a successful trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 0000 hr after completion of trial run:
- (ii) the generating company shall certify to the effect that the generating station meets key provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical plants and electric lines) Regulations, 2010 and M.P. Electricity Grid code:
- (iii) the certificate shall be signed by CMD/CEO/MD of the company subsequent to its approval by the Board of Directors in the format enclosed at **Appendix III** and a copy of the certificate shall be submitted to the SLDC before declaration of COD:
- (iv) in case a hydro generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole, and it will be mandatory for such hydro generating station to demonstrate peaking capability equivalent to installed capacity of the generating unit or the generating station as and when such reservoir/pond level is achieved:

- (v) if a run-of-river hydro generating station or a generating unit thereof is declared under commercial operation during lean inflows period when the water inflow is insufficient for such demonstration of peaking capability, it shall be mandatory for such hydro generating station or generating unit to demonstrate peaking capability equivalent to installed capacity as and when sufficient water inflow is available.
- (n) **'Day'** means a calendar day consisting of 24 hours period starting at 0000 hour;
- (o) **'Declared Capacity' or 'DC'** in relation to a generating station means, the capability to deliver ex-bus electricity in MW declared by such generating station in relation to any time-block of the day or whole of the day, duly taking into account the availability of fuel or water, and subject to further qualification in the relevant Regulation;
- (p) 'De-capitalisation' for the purpose of the tariff under these Regulations, means reduction in Gross Fixed Assets of the project corresponding to the removal/deletion of assets as admitted by the Commission;
- (q) 'De-Commissioning' means removal from service of a generating station or a unit thereof, after it is certified by the Central Electricity Authority or any other authorized agency, either on its own or on an application made by the project developer or the beneficiaries or both, that the project cannot be operated due to non performance of the assets on account of technological obsolescence or uneconomic operation or a combination of these factors;
- (r) 'Design Energy' means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;
- (s) **'Existing Project**" means a project which has been declared under commercial operation on a date prior to 1.4.2016;
- (t) 'Expenditure Incurred" means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released;

the period of useful life, as may be determined by the Commission on case to case basis;

- (v) 'Force Majeure' for the purpose of these Regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control the generating company and could not have been avoided, had the generating company taken reasonable care or complied with prudent utility practices:
  - (a) of God including lightning, drought, fire and explosion, Act earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
  - (b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
  - (c) Industry wide strikes and labour disturbances having a nationwide impact in India;
- (w) "Generating Company" means any Company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
- (x) 'Generating Station' means any station for generating electricity, including any building and plant with step-up transformer, switch-gear, switch yard, cables or other appurtenant equipment, if any, used for that purpose and the site thereof; a site intended to be used for a generating station, and any building used for housing the operating staff of a generating station, and where electricity is generated by water- power, includes penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, but does not in any case include any sub-station;
- (y) 'Generating Unit' in relation to a thermal generating station (other than combined cycle thermal generating station) means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle thermal generating station, means turbine- generator and auxiliaries; and in relation to a hydro generating station means turbine- generator and its auxiliaries;

- (z) 'Gross Calorific Value' or "GCV" in relation to a thermal generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;
  - (za) **'Gross Station Heat Rate' or 'GHR'** means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals of a thermal generating station;
  - (zb) **'Infirm Power'** means electricity injected into the grid prior to the commercial operation of a unit or block of the generating station.
  - (zc) **'Installed Capacity' or 'IC'** means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station reckoned at the generator terminals, as may be approved by the Commission from time to time;
  - (zd) **'Investment Approval'** means approval by the Board of the generating company or any other competent authority conveying administrative sanction for the project including funding of the project and the timeline for the implementation of the project:

Provided that the date of Investment Approval shall reckon from the date of the resolution/minutes of the Board/approval by competent authority.

- (ze) **'Kilowatt-Hour' or 'kWh'** means a unit of electrical energy, measured in one kilowatt or one thousand watts of power produced or consumed over a period of one hour;
- (zf) "Licensee" means a person who has been granted licence under Section 14 of the Act;
- (zg) 'Maximum Continuous Rating' or 'MCR' in relation to a generating unit of the thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, and in relation to a block of a combined cycle thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer with water or steam injection (if applicable) and corrected to 50 Hz grid frequency and specified site

conditions;

- (zh) '**New Project**' means the project achieving COD or anticipated to be achieving COD on or after 1.4.2016;
- (zi) 'Normative Annual Plant Availability Factor' or 'NAPAF' in relation to a generating station means the availability factor as specified in Regulation 39 and 40 of these Regulations for thermal generating station and hydro generating station respectively;
- (zj) **'Operation and Maintenance Expenses'** or **'O&M expenses'** means the expenditure incurred for operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, maintenance spares, consumables, insurance and overheads but excludes fuel expenses and water charges;
- (zk) **'Original Project Cost'** means the capital expenditure incurred by the generating company within the original scope of the project up to the cut-off date as admitted by the Commission;
- (zl) **'Plant Availability Factor' or '(PAF)'** in relation to a generating station for any period means the average of the daily declared capacities (DCs) for all the days during the period expressed as a percentage of the installed capacity in MW less the normative auxiliary energy consumption;
- (zm) **'Plant Load Factor' or '(PLF)'** in relation to thermal generating station or unit for a given period means the total sent out energy corresponding to scheduled generation during the period, expressed as a percentage of sent out energy corresponding to installed capacity in that period and shall be computed in accordance with the following formula:

$$\label{eq:product} \begin{split} N \\ PLF &= 10000 \ x \ \Sigma SG_i \ / \ \{N \ x \ IC \ x \ (100\text{-}AUX_n) \ \}\% \\ & i=1 \end{split}$$
   
 Where,   
 IC = Installed Capacity of the generating station or unit in MW,   
 SG\_i = Scheduled Generation in MW for the i<sup>th</sup> time block of the period,   
 N = Number of time blocks during the period, and   
 AUX\_n = Normative Aux. Energy Consumption as a percentage of gross

#### energy generation;

- (zn) **'Project**' means a generating station and in case of a hydro generating station includes all components of generating facility such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation and in case of thermal generating stations does not include mining if it is a pit head project and dedicated captive coal mine;
- (zo) 'Prudence Check' means scrutiny of reasonableness of capital expenditure incurred or proposed to be incurred, financing plan, use of efficient technology, cost and time over-run and such other factors as may be considered appropriate by the Commission for determination of tariff. While carrying out the Prudence Check, the Commission shall look into whether the generating company has been careful in its judgments and decisions for executing the project or has been careful and vigilant in executing the project;
- (zp) **'Pumped storage hydro generating station'** means a hydro station which generates power through energy stored in the form of water energy, pumped from a lower elevation reservoir to a higher elevation reservoir;
- (zq) **'Run-of-River generating station'** means a hydro generating station which does not have upstream pondage;
- (zr) **'Run–of-River generating station with pondage'** means a hydro generating station with sufficient pondage for meeting the diurnal variation of power demand;
- (zs) **'Scheduled Commercial Operation Date or SCOD'** shall mean the date(s) of commercial operation of a generating station or generating unit or block thereof as indicated in the Investment Approval or as agreed in power purchase agreement, whichever is earlier;
- (zt) **'Scheduled Energy"** means the quantum of energy scheduled by the concerned Load Despatch Centre to be injected into the grid by a generating station for a given time period;

schedule of ex-bus generation in MW or MWh, given by the State Load Despatch Centre;

- (zv) **'Start Date or Zero Date'** means the date indicated in the Investment Approval for commencement of implementation of the project and where no date has been indicated, the date of investment approval shall be deemed to be Start Date or Zero Date;
- (zw) **'Storage type generating station'** means a hydro generating station associated with large storage capacity to enable variation of generation of electricity according to demand;
- (zx) **'Thermal Generating Station'** means a generating station or a unit thereof that generates electricity using fossil fuels such as coal, , gas, liquid fuel or combination of these as its primary source of energy;
- (zy) **'Trial Run' or 'Trial Operation'** Trial Run in relation to generating station or unit thereof shall mean the successful running of the generating station or unit thereof at maximum continuous rating or installed capacity for continuous period of 72 hours in case of unit of a thermal generating station or unit thereof and 12 hours in case of a unit of a hydro generating station or unit thereof:

Provided that where the beneficiaries have been tied up for purchasing power from the generating station, the trial run shall commence after seven days notice by the generating company to the beneficiaries.

(zz) **'Useful life'** in relation to a unit of a generating station from the COD shall mean the following, namely

1	Coal based thermal generating station	25-years
2	Hydro generating station including pumped	35-years
	Storage hydro generating stations	

Provided further that the extension of life of the projects beyond the completion of their useful life shall be decided by the Commission;

- (zza) 'Year' means a financial year.
- 4.2 The words and expressions used in these Regulations but not defined herein but defined in the Act or any other Regulation of the Commission shall have the meaning

assigned to them under the Act or any other Regulation of the Commission.

#### CHAPTER – 2

#### PROCEDURE FOR TARIFF DETERMINATION

#### 5. Tariff determination

5.1 Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block of the generating station.

Provided that:

- (i) where all the generating units of a stage of a generating station have been declared under commercial operation prior to 1.4.2016, the generating company shall file consolidated petition in respect of the entire generating station for the purpose of determination of tariff for the period 2016-17 to 2018-19:
- (ii) in case of commercial operation of the generating station on or after 1.4.2016, the generating company shall file a consolidated petition combining all the units of the generating station or file appropriate petition for the generating units which are likely to be commissioned within four months from the date of application:
- 5.2 For the purpose of determination of tariff, the capital cost of a project may be broken up into stages, blocks, units, if required:

Provided that where break-up of the capital cost of the project for different stages or units or blocks is not available and in case of on-going projects, the common facilities shall be apportioned on the basis of the installed capacity of the unit;

- 5.3 In case of multi-purpose hydro generation scheme with irrigation, flood control and power components, the capital cost chargeable to the power component of the scheme only shall be considered for determination of tariff.
- 5.4 Where only a part of the generation capacity of a generating station is tied up for supplying power to the beneficiaries through long term power purchase agreement and the balance part of the generation capacity have not been tied up for supplying power to the beneficiaries, the tariff of the generating station shall be determined with reference to the capital cost of the entire project, but the tariff so determined shall be applicable corresponding to the capacity contracted for supply to the beneficiaries.

#### 6. Principles for Tariff determination

- 6.1 The Commission, while specifying the terms and conditions for the determination of Tariff under these Regulations, is guided by the principles contained in Section 61 of the Electricity Act.
- 6.2 These Regulations intend to encourage generating company to operate on sound commercial principles. The return on equity allowable to generating company shall depend upon its performance relative to the benchmark levels of the operating parameters fixed by the Commission. Only prudent capital expenditure shall be considered for inclusion in the asset base.
- 6.3 The Multi-Year Tariff Principles adopted in these Regulations seek to promote competition, adoption of commercial principles, efficient working of the generating company and are based on the Central Electricity Regulatory Commission (CERC's) principles. The operating and cost parameters for the Tariff period have been prescribed after duly considering the past performance, performance of similarly placed Units, fuel, vintage of equipments, nature of operation and capability of achievement in view of past performance for many years. The allowable Tariffs shall be determined in accordance with these norms. The generating company is allowed to retain most of the savings as a reward for performance better than those prescribed in these Regulations. This is expected to incentivise the generating company for efficient performance and economical use of resources by the generating company through lowering of Tariffs and improvement in availability and Plant Load Factor of generating stations.
- 6.4 The terms and conditions prescribed in these Regulations are only for conventional energy sources.

#### 7. Procedure for making application for determination of tariff:

- 7.1. The generating company may make an application for determination of tariff for new generating stations alongwith all relevant documents and details to be filled up in the formats as per Appendix IV with these Regulations within four months from the scheduled date of commercial operation.
- 7.2. The Commission shall, at all times, have the authority, either suo-motu or on a petition filed by any interested or affected party, to determine the Tariff, including terms and conditions thereof, of generating company and shall initiate the process of such determination in accordance with the procedure as may be specified:

Provided that the proceedings for such determination of tariff, including terms and conditions thereof, shall be in the same manner as set out in the Conduct of Business Regulations, as amended from time to time.

- 7.3. The generating company shall provide details, as part of the application to the Commission, in such formats, in hard and soft copy, as may be required by the Commission. The generating company shall necessarily provide details Unit-wise and Station wise as envisaged in the formats to enable the Commission to determine the Tariff, as required.
- 7.4. The generating company shall make an application as per these Regulations, for determination of tariff based on capital expenditure incurred duly certified by the auditors or projected to be incurred up to the date of commercial operation and additional capital expenditure incurred duly certified by the auditors or projected to be incurred duly certified by the auditors or projected to be incurred during the tariff period of the generating station:

The generating company is required to furnish all such additional information or particulars or documents as may be considered necessary for the purpose of processing the application:

Provided that in case of an existing project, the application shall be based on admitted capital cost including any additional capitalization already admitted up to 31.3.2016 and estimated additional capital expenditure for the respective years of the tariff period FY 2016-17 to FY2018-19:

Provided further that application shall contain details of underlying assumptions for projected capital cost and additional capital expenditure, where applicable.

7.5. Upon receipt of the complete application accompanied by all requisite information, particulars and documents in compliance with all the requirements, the application shall be deemed to have been received and the Commission or the Secretary or the Officer designated for the purpose by the Commission shall intimate to the generating company that the application is ready for publication, in such abridged form and manner, as may be specified by [Refer MPERC (Details to be furnished and fees payable by Licensee or generating company for determination of Tariff and manner of making an application) Regulation 2004 (as amended from time to time)]. The generating company shall put all the details of the petition filed before the Commission on its website not later than seven working days of its acceptance by the Commission.

- 7.6. The generating company shall furnish to the Commission all such books and records or certified true copies thereof, including the Accounting Statements, operational and cost data, as may be required by the Commission for determination of Tariff.
- 7.7. The Commission may, if deemed necessary, make available to any person, at any time, such information as has been provided by the generating company to the Commission including abstracts of such books and records (or certified true copies thereof):

Provided that the Commission may, by order, direct that any information, documents and papers/materials maintained by the Commission, shall be confidential or privileged and shall not be available for inspection or supply of certified copies, and the Commission may also direct that such document, papers or materials shall not be used in any manner except as specifically authorised by the Commission.

- 7.8. If the petition is inadequate in any respect as required under these Regulations, the petition shall be returned to the generating company for resubmission of the same within one month after rectifying the deficiencies as may be pointed out by the staff of the Commission.
- 7.9. If the information furnished in the petition is in accordance with the Regulations and is adequate for carrying out prudence check of the claims made, the Commission shall consider the suggestions and objections, if any, received from the respondents within one month from the date of filing of the petition or any time period specified by the Commission and any other person including the consumers or consumer associations. The Commission shall issue the tariff order after hearing the petitioner, the respondents and any other person specifically permitted by the Commission.
- 7.10. In case of the new projects, the generating company may be allowed tariff by the Commission based on the projected capital expenditure from the scheduled COD in accordance with the provisions under these Regulations:

Provided that:

- (i) The Commission may grant tariff up to 90% of the annual fixed cost of the project determined by the Commission after prudence check subject to adjustment as per Regulation 8.15 of these Regulations after the final tariff order is issued.
- (ii) if the date of commercial operation is delayed beyond 180 days from the date of issue of tariff order in terms of Regulation 7.9 of these Regulations, the tariff if granted shall be deemed to have been withdrawn and the generating company shall be required to file a

fresh application for determination of tariff after the date of commercial operation of the project:

- (iii) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure exceeds the actual capital cost incurred on year to year basis by more than 5%, the generating company shall refund to the beneficiaries the excess tariff recovered corresponding to excess capital cost, as approved by the Commission alongwith interest at 1.20 times of the bank rate as prevalent on 1st April of respective year:
- (iv) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure falls short of the actual capital cost incurred on year to year basis by more than 5%, the generating company shall be entitled to recover from the beneficiaries the shortfall in tariff corresponding to reduction in capital cost, as approved by the Commission alongwith interest at 0.80 times of bank rate as prevalent on 1st April of respective year.
- 7.11. In case of the existing projects, the generating company may be allowed tariff on Commission based on the admitted capital cost as on 1.4.2016 and projected additional capital expenditure for the respective years of the tariff period 2016-17 to 2018-19 as per the provisions as these Regulations:

Provided that:

- (i) the generating company shall continue to bill the beneficiaries at the tariff approved by the Commission and the same shall be applicable as on 31.3.2016 for the period starting from 1.4.2016 till approval of tariff by the Commission in accordance with these Regulations:
- (ii) the difference between the billing done in accordance with proviso (i) above and the tariff determined in accordance with Regulation 5 of these regulations shall be recovered or refunded by the generating company with simple interest at the rate equal to the bank rate as on 1st April of the respective year, within six months from the date of tariff order issued by the Commission"
- (iii) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure submitted by the generating company, exceeds the actual capital cost incurred on year to year basis by more than 5%, the generating company shall refund to the beneficiaries the excess tariff

recovered corresponding to excess capital cost, as approved by the Commission alongwith interest at 1.20 times of the bank rate as prevalent on 1<sup>st</sup> April of respective year within six months from the date of tariff order issued by the Commission:

(iv) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure submitted by the generating company, falls short of the actual capital cost incurred on year to year basis by more than 5%, the generating company shall be entitled to recover from the beneficiaries the shortfall in tariff corresponding to reduction in capital cost, as approved by the Commission alongwith interest at 0.80 times of bank rate as prevalent on April 1 of respective year within six months from the date of tariff order issued by the Commission:

#### 8. Methodology for Determination of Tariff and Truing up\_

- 8.1 The Commission shall define Tariff period for the generating company from time to time. The principles for Tariff determination shall be applicable for the duration of the Tariff period. The principles that guide Tariff determination for the next Tariff period shall be valid for a period from 1<sup>st</sup> April, 2016 upto 31<sup>st</sup> March, 2019.
- 8.2 Tariff in respect of a generating company under these Regulations shall be determined Unitwise or for a group of Units. However, when a new generating Unit is added after 1.4.2016, the Commission shall determine separate Tariff for such new Unit(s). The generating company shall submit separate calculations in respect of each generating station giving break- up for Units prior to 1.4.2016 and Units added thereafter.
- 8.3 For the purpose of Tariff, the capital cost of the Project shall be segregated into stages and by distinct Units forming part of the Project. Where the Stage-wise, Unit-wise break-up of the capital cost of the Project is not available and in case of on-going Projects, the common facilities shall be apportioned on the basis of the capacity of the Units. In relation to Multi-purpose Hydroelectric Projects with irrigation, flood control and power components, the capital cost chargeable to power component of the Project only shall be considered for determination of Tariff.

#### Explanation: "Project" includes a generation station.

8.4 A generating company shall file a petition at the beginning of the Tariff period. A review shall be undertaken by the Commission to scrutinize and true up the Tariff on the basis of the capital expenditure and additional capital expenditure actually incurred in the Year for which the true up is being requested. The generating company shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred

- 8.5 The Multi Year Tariff filing for existing generating stations in hard and soft copy shall be in the formats prescribed with these Regulations within 60 days of notification of these Regulations.
- 8.6 A Distribution Licensee owning and operating a generating station shall maintain and submit separate accounts of its generation business, licensed business, and other business.
- 8.7 The generating company shall carry out truing up of tariff of generating station based on the performance of following Controllable parameters:

Controllable Parameters:

- (i) Station Heat Rate;
- (ii) Secondary Fuel Oil Consumption; and
- (iii) Auxiliary Energy Consumption;
- 8.8 The Commission shall carry out truing up of tariff of generating station based on the performance of following Uncontrollable parameters:
  - (i) Force Majeure;
  - (ii) Change in Law; and
  - (iii) Primary Fuel Cost.
- 8.9 The financial gains by a generating company on account of controllable parameters shall be shared between generating company and the beneficiaries on monthly basis with annual reconciliation. The financial gains computed as per following formulae in case of generating station on account of operational parameters as shown in Clause 8.7 (i) to (iii) of this Regulation shall be shared in the ratio of 2:1 between generating company and beneficiaries:

Net Gain = (ECRN-ECRA) x Scheduled Generation

Where,

ECRN – Normative Energy Charge Rate computed on the basis of norms specified for Station Heat Rate, Auxiliary Consumption and Secondary Fuel Oil Consumption.

ECRA – Actual Energy Charge Rate computed on the basis of actual SHR, Auxiliary Consumption and Secondary Fuel Oil Consumption for the month:

Provided that in case of hydro generating station, if the scheduled generation is more than saleable design energy, then the saleable design energy shall be considered in place of scheduled generation.

- 8.10 The financial gains and losses by a generating company on account of uncontrollable parameters shall be passed on to beneficiaries of the generating company.
- 8.11 The generating company shall make an application, in hard and soft copy in the same formats specified under these Regulations for carrying out truing up exercise for each year in respect of the generating station or a unit or block thereof by 15<sup>th</sup> November each year.
- 8.12 The generating company shall submit for the purpose of truing up, details of actual capital expenditure and additional capital expenditure incurred for the period from 1.4.2016 to 31.3.2019, duly audited and certified by the auditor.
- 8.13 Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these Regulations, the generating company shall refund to the beneficiaries the excess amount so recovered as specified in the Clause 8.15 of this Regulation.
- 8.14 Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these Regulations, the generating company shall recover from the beneficiaries the under-recovered amount as specified in the Clause 8.15 of this Regulation.
- 8.15 The amount under-recovered or over-recovered, along with simple interest at the rate equal to the bank rate as on 1<sup>st</sup> April of the respective year, shall be recovered or refunded by the generating company within six months from the date of the tariff order issued by the Commission.

#### 9. Submission of Annual Accounts, Reports etc.

- 9.1 The generating company shall submit annual accounts and such other information in a form as may be specified by the Commission. In addition to the submission of annual accounts, the generating company shall be required to comply with the information requirements of various Regulations and Codes notified by the Commission from time to time.
- 9.2 In the absence of submission of the required information by the generating company, the Commission may initiate Suo-motu proceedings.

#### 10. Periodicity of Tariff determination

- 10.1 No Tariff or part of any Tariff may ordinarily be amended, more frequently than once in any financial Year, except in respect of any changes expressly permitted under the terms of these Regulations. The Commission may, after satisfying itself for reasons to be recorded in writing, allow for other revision of Tariff.
  - 10.2 Subject to the other provisions of these Regulations, the expenses allowed to be recovered for any year, shall be subject to adjustments in any tariff to be determined for the subsequent period if the Commission is satisfied that such adjustment for the excess amount or shortfall in the amount actually realized or expenses incurred is necessary and the same is not on account of any reason attributable and within the control of the generating company.

#### 11. Hearings

The procedure of hearing on the Tariff application shall be as specified in MPERC (Details to be furnished and fees payable by generating company for determination of Tariff and manner of making an application) Regulations 2004, as amended from time to time.

#### 12. Orders of the Commission

- 12.1 The Commission, after the petition has been filed, may require the generating company to furnish any further information, particulars, documents, public records etc as the Commission may consider appropriate to enable the Commission to check and review the petitioner's calculations, assumptions and assertions.
- 12.2 After receipt of information or otherwise, the Commission may make appropriate orders in accordance with the provisions of the Madhya Pradesh Electricity Regulatory Commission (Details to be furnished and fees payable by generating company for determination of Tariff and manner of making an application) Regulations, 2004 as amended from time to time.

#### 13. Charging of Tariff other than approved

Any generating company found to be charging a Tariff different from the one approved by the Commission from the Beneficiaries, shall be deemed to have not complied with the directions of the Commission and shall be liable to be proceeded against under Section 142 of the Act without prejudice to any other liability incurred by the generating company under any other provisions of the Act. In case the amount recovered exceeds the amount allowed by the Commission, the excess amount so recovered shall be refunded to the Beneficiaries who have paid such excess charges, along with simple interest at the rate equal to the bank rate as on 1<sup>st</sup> April of the respective year, besides any other penalty that may be imposed by the Commission.

#### 14. Annual review of the Generating Company

- 14.1 The generating company shall submit periodic returns as may be specified, containing operational and cost data to enable the Commission to monitor the implementation of its order.
- 14.2 The generating company shall submit to the Commission annual statements of its performance and accounts including latest report of audited accounts.

#### CHAPTER - 3

#### COMPUTATION OF CAPITAL COST AND CAPITAL STRUCTURE

#### 15. Capital Cost:

- 15.1 The Capital cost as determined by the Commission after prudence check in accordance with this Regulation shall form the basis of determination of tariff for existing and new projects.
- 15.2 The Capital Cost of a new project shall include the following:
  - (a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period shall form part of the capital cost.

- (c) Increase in cost in contract packages as approved by the Commission;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation **17** of these Regulations;
- (e) capitalised Initial spares subject to the ceiling rates specified in Regulation **19** of these Regulations;
- (f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation **20** of these Regulations; and
- (g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 24 of these Regulations;
- 15.3 The Capital cost of an existing project shall include the following:
  - (a) the capital cost admitted by the Commission prior to 1.4.2016 duly trued up by excluding liability, if any, as on 1.4.2016;
  - (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation **20**; and
  - (c) expenditure on account of renovation and modernization as admitted by the

Commission in accordance with Regulation 21.

15.4 The capital cost in case of existing/new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) project in the affected area.

15.5 The capital cost with respect to thermal generating station, incurred or projected to be incurred on account of the Perform, Achieve and Trade (PAT) scheme of Government of India will be considered by the Commission on case to case basis and shall include:

- a) cost of plan proposed by developer in conformity with norms of PAT Scheme; and
- b) sharing of the benefits accrued on account of PAT Scheme.
- 15.6 The following shall be excluded or removed from the capital cost of the existing and new projects:
  - (a) The assets forming part of the project, but not in use;
  - (b) De-capitalisation of Asset;
  - (c) In case of hydro generating station any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State government by following a two stage transparent process of bidding; and
  - (d) the proportionate cost of land which is being used for generating power from generating station based on renewable energy:

Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;

#### 16. Check of Capital Expenditure:

The following principles shall be adopted check the capital cost of the existing or new projects:

16.1 In case of the thermal generating station, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Central Commission from time to time:

Provided that in cases where benchmark norms have not been specified by the Central Commission, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff:

Provided further that in cases where benchmark norms have been specified by the Central Commission, the generating company shall submit the reasons for exceeding the capital cost from benchmark norms to the satisfaction of the Commission for allowing cost above benchmark norms.

- 16.2 The Commission may issue new guidelines or revise the existing guidelines for vetting of capital cost of hydro-electric projects by an independent agency or an expert and in that event the capital cost as vetted by such agency or expert may be considered by the Commission while determining the tariff for the hydro generating station.
- 16.3 The Commission may adopt the new guidelines or revised guidelines issued by the Central Commission for scrutiny and approval of commissioning schedule of the hydro-electric projects in accordance with the tariff policy issued by the Central Government under section 3 of the Act from time to time which shall be considered for prudence check.
- 16.4 Where the power purchase agreement entered into between the generating company and the beneficiaries provides for ceiling of actual capital expenditure, the Commission shall take into consideration such ceiling for determination of tariff for prudence check of capital cost.

# 17. Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)

#### (A) Interest during Construction (IDC):

17.1 Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.

17.2 In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:

> Provided that if the delay is not attributable to the generating company and is due to uncontrollable factors as specified in Regulation 18 of these Regulations, IDC may be allowed after due prudence check:

> Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company after due prudence and taking into account prudent phasing of funds.

#### **(B)** Incidental Expenditure during Construction (IEDC):

17.3 Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses upto SCOD:

> Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.

17.4 In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period and liquidated damages recovered or recoverable corresponding to the of delay delay:

> Provided that if the delay is not attributable to the generating company and is due to uncontrollable factors as specified in Regulation 18, IEDC may be allowed after due prudence check:

> Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost.

17.5 In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company.

#### 18. Controllable and Uncontrollable factors:

The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project :

- 18.1 The "controllable factors" shall include but shall not be limited to the following:
  - (a) Variations in capital expenditure on account of time and/or cost over- runs on account of land acquisition issues;
  - (b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and
  - (c) Delay in execution of the project on account of contractor, supplier or agency of the generating company.
- 18.2 The "uncontrollable factors" shall include but shall not be limited to the following:
  - (i) Force Majeure events.; and
  - (ii) Change in law.

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC and IEDC or transmission charges if the transmission system is declared under commercial operation in accordance with second proviso of Regulation 4.1 (m) of these Regulations till the generating station is commissioned. Such IDC and IEDC or transmission charges if any, paid by the generating company under aforesaid circumstances shall not be allowed in the capital cost of the generating station

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned.

#### **19. Initial Spares:**

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(a)	Coal-based thermal generating stations	-	4.0%
(b)	Hydro generating stations	-	4.0%

#### Provided that:

- (i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Central Commission, such norms shall apply to the exclusion of the norms specified above:
- (ii) where the generating station has any transmission equipment forming part of the generation project, the ceiling norms for initial spares for such equipments shall be as per the ceiling norms specified for transmission system in Madhya Pradesh Electricity Regulatory Commission Regulations,2015 :
- (iii) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding Interest during Construction, Incidental Expenditure During Construction, Land Cost and cost of civil works.

#### 20. Additional Capitalisation and De-capitalisation:

- 20.1 The capital expenditure in respect of the new project or an existing project 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 prudence check:
  - (i) Un-discharged liabilities recognized to be payable at a future date;
  - (ii) Works deferred for execution;
  - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 19;
  - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
  - (v) Change in law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

- 20.2 The capital expenditure incurred or to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:
  - (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
  - (ii) Change in law or compliance of any existing law:;
  - (iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
  - (iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.
- 20.3 The capital expenditure, in respect of existing generating station incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
  - (a) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
  - (b) Change in law or compliance of any existing law;
  - (c) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
  - (d) Deferred works relating to ash pond or ash handling system in the original scope of work;
  - (e) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
  - (f) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

- (g) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal based stations, the claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;
- (h) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;
- (i) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to nonmaterialisation of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2016:

Provided further that any capital expenditure other than that of the nature specified above in (a) to (d) in case of coal based station shall be met out of Compensation Allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this Regulation.

20.4 In case of de-capitalisation of assets of a generating company the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding Vetting/Dell/D/Salim/M.P. Electricity Regulatory Commission-65

loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.

#### 21. Renovation and Modernisation:

- 21.1 The generating company, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the originally recognised useful life for the purpose of tariff of the generating station or a unit thereof shall make an application before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company.
- 21.2 Where the generating company makes an application for approval of its proposal for renovation and modernisation, the approval shall be granted after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.
- 21.3 Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on the estimates of renovation and modernization expenditure and life extension, and after deducting the accumulated depreciation already recovered from the original project cost, shall form the basis for determination of tariff.

#### 22. Special Allowance for Coal-based Thermal Generating station:

22.1 In case of coal-based thermal generating station, the generating company, instead of availing R&M may opt to avail a "special allowance" in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernisation beyond the useful life of the generating station or a unit thereof, and in such an event, revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost:

Provided that such option shall not be available for a generating station or unit for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these Regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms.

22.2 The Special Allowance shall be @ Rs. 7.5 lakh/MW/year for the year 2016-17 and thereafter escalated @ 6.35% every year during the balance period, unit- wise from the next financial year from the respective date of the completion of useful life with reference to the date of commercial operation of the respective unit of generating station:

Provided that in respect of a unit, which will opt for Special Allowance during the tariff period 2016-17 to 2018-19 and in commercial operation for more than 25 years as on 1.4.2016, this allowance shall be admissible from FY 2016-17:

Provided further that the special allowance for the generating stations, which, in its discretion, has already availed of a "special allowance" in accordance with the norms specified in clause (18.5) of Madhya Electricity Regulatory Commission (Terms and Conditions for Determination Generation Tariff ) Regulations, 2012, shall be allowed Special Allowance by escalating the special allowance allowed for the year 2015-16 @ 6.35% every year during the tariff period 2016-17 to 2018-19.

22.3 In the event of granting special allowance by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish details of such expenditure.

#### 23. Compensation Allowance:

- 23.1 In case of coal-based thermal generating station or a unit thereof, a separate compensation allowance shall be admissible to meet expenses on new assets of capital nature which are not admissible under Regulation 20 of these Regulations, and in such an event, revision of the capital cost shall not be allowed on account of compensation allowance but the compensation allowance shall be allowed to be recovered separately.
- 23.2 The Compensation Allowance shall be allowed in the following manner from the year following the year of completion of 10, 15, or 20 years of useful life:

0 – 10	Nil
11 - 15	0.20
16 - 20	0.50
21 - 25	1.00

#### 24. Sale of Infirm Power:

Supply of infirm power shall be accounted as deviation and shall be paid for from the regional / state deviation settlement fund accounts in accordance with the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related matters) Regulations, 2014, as amended from time to time or any subsequent re-enactment thereof:

Provided that any revenue earned by the generating company from supply of infirm power after accounting for the fuel expenses shall be applied in adjusting the capital cost accordingly.

#### 25. Debt-Equity Ratio:

For a project declared under commercial operation on or after 1.4.2016, the debt-equity ratio would be considered as 70:30 as on COD. 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:

- a. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- b. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- c. any grant obtained for the 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 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, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station.

- 25.2 The generating company shall submit the resolution of the Board of the company regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station.
- 25.3 In case of the generating station declared under commercial operation prior to 1.4.2016, debt- equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2016 shall be considered.
- 25.4 In case of the generating station declared under commercial operation prior to 1.4.2016, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2016, the Commission shall approve the debt : equity ratio based on actual information provided by the generating company.
- 25.5 Any expenditure incurred or projected to be incurred on or after 1.4.2016 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause 25.1 of this Regulation.

## CHAPTER - 4 TARIFF STRUCTURE

#### 26. Components of Tariff:

- 26.1 The tariff for supply of electricity from a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components as specified in Regulation **27** of these Regulations) and energy charge (for recovery of primary and secondary fuel cost).
- 26.2 The tariff for supply of electricity from a hydro generating station shall comprise capacity charge and energy charge to be derived in the manner specified in Regulation **37** of these Regulations, for recovery of annual fixed cost referred to in Regulation **27** through the two charges.

#### 27. Capacity Charges:

The Capacity charges shall be derived on the basis of annual fixed cost. The annual fixed cost (AFC) of a generating station shall consist of the following components:

- (a) Return on equity;
- (b) Interest on loan capital;
- (c) Depreciation;
- (d) Interest on working capital;
- (e) Operation and maintenance expenses:

Provided that special allowance in lieu of R&M where opted in accordance to Regulation 22 or separate compensation allowance in accordance with Regulation 23, wherever applicable shall be recovered separately and shall not be considered for computation of working capital.

#### 28. Energy Charges:

Energy charges shall be derived on the basis of the Landed Fuel Cost (LFC) of a generating station (excluding hydro) and shall consist of the following cost:

- (a) Landed Fuel Cost of primary fuel; and
- (b) Cost of secondary fuel oil consumption:

Provided that any refund of taxes and duties along with any amount received on account of penalties from fuel supplier shall have to be adjusted in fuel cost.

#### 29. Landed Fuel Cost for Tariff Determination:

The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account.

#### **CHAPTER – 5**

#### **COMPUTATION OF ANNUAL FIXED COST**

#### 30. Return on Equity:

- 30.1 Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation **25**.
- 30.2 Return on equity shall be computed at the base rate of 15.50% for thermal generating stations and hydro generating stations:

Provided that:

(a) in case of projects commissioned on or after  $1^{st}$  April, 2016, an additional return of 0.5 % shall be allowed, if such projects are completed within the timeline specified in

## Appendix-I:

(b) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(c) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO):

(d) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective SLDC/RLDC, ROE shall be reduced by 1% for the period for which the deficiency continues:

#### 31. Tax on Return on Equity:

31.1 The base rate of return on equity as allowed by the Commission under Regulation **30** shall be grossed up with the effective tax

rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respective financial year in line with the provisions of the relevant Finance Acts by the concerned generating company. The actual income tax on other income stream including deferred tax i.e., income of non generation business shall not be considered for the calculation of "effective tax rate".

31.2 Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause 31.1 of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation business and the corresponding tax thereon. In case of generating company paying Minimum Alternate Tax (MAT), "t"shall be considered as MAT rate including surcharge and cess. For example :- In case of the generating company paying

(i) Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2096) = 19.610%

- (ii) In case of generating company paying normal corporate tax including surcharge and cess:
  - (a) Estimated Gross Income from generation business for FY2016-17 is Rs 1000 crore.
  - (b) Estimated Advance Tax for the year on above is Rs 240 crore.
  - (c) Effective Tax Rate for the year 2016-17 = Rs 240 Crore/ Rs 1000 Crore =24%
  - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%
- 31.3 The actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2016-17 to 2018-19 on actual gross income of any financial year shall be

trued-up every year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be allowed to be recovered or refunded to beneficiaries on year to year basis.

#### 32. Interest on Loan Capital:

32.1 The loans arrived at in the manner indicated in Regulation **25** shall be considered as gross normative loan for calculation of interest on loan.

32.2 The normative loan outstanding as on 1.4.2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2016 from the gross normative loan.

32.3 The repayment for each of the year of the tariff period 2016-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de- capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

32.4 Notwithstanding any moratorium period availed by the generating company, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

32.5 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station does not have actual loan, then the weighted average rate of interest of the generating company as a whole shall be considered.

32.6 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

32.7 The generating company shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company in the ratio of 2:1.

32.8 The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

32.9 In case of dispute, any of the parties may make an application in accordance with the Madhya Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, as amended from time to time.

Provided that the beneficiaries shall not withhold any payment on account of the interest claimed by the generating company during the pendency of any dispute arising out of re-financing of loan.

#### 33. Depreciation:

33.1 Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof. In case of the tariff of all the units of a generating station for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station taking into consideration the depreciation of individual units.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station for which single tariff needs to be determined.

33.2 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station, weighted average life for the generating station shall be applied. Depreciation shall be chargeable from the first year at the commercial operation.

33.3 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit shall not be allowed to be recovered at a later stage during the useful life and the extended life.

Provided that the salvage value for IT equipment and softwares shall be considered as NIL and 100% value of the assets shall be considered depreciable.

33.4 Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

33.5 Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these Regulations for the assets of the generating station: Provided that the remaining depreciable value as on 31<sup>st</sup> March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

33.6 In case of the existing projects, the balance depreciable value as on 1.4.2016 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2016 from the gross depreciable value of the assets.

33.7 The rate of Depreciation shall be continued to be charged at the rate specified in **Appendix-II** till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.

33.8 Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro rata basis.

33.9 The generating company shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

33.10 In case of de-capitalization of assets in respect of generating station or unit thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

## 34. Interest on Working Capital :

- 34.1 The working capital shall cover:
  - (1) Coal-based thermal generating stations

(a) Cost of coal towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for Vetting/Dell/D/Salim/M.P. Electricity Regulatory Commission-65 42

generation corresponding to the normative annual plant availability factor or the maximum coal stock storage capacity whichever is lower;

(b) Cost of coal for 30 days for generation corresponding to the normative annual plant availability factor;

(c) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(d) Maintenance spares @ 20% of operation and maintenance expenses specified in Regulation **35**;

(e) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and

(f) Operation and maintenance expenses for one month.

(B) Hydro generating station, the working capital shall include:

- (a) Receivables equivalent to two months of fixed cost;
- (b) Maintenance spares @ 15% of operation and maintenance expenses specified in Regulation **35**; and
- (c) Operation and maintenance expenses for one month.

34.2 The cost of fuel shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during the tariff period.

34.3 Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2016 or as on  $1^{st}$  April of the year during the tariff period 2016-17 to 2018-19 in which the generating station or a unit thereof, is declared under commercial operation, whichever is later.

34.4 Interest on working capital shall be payable on normative basis

notwithstanding that the generating company has not taken loan for working capital from any outside agency.

## 35. Operation and Maintenance Expenses:

35.1 Operation and Maintenance Expenses for thermal and hydro power stations for the Tariff period shall be determined based on normative O&M expenses specified by the Commission in these Regulations. The normative operation and maintenance expenses for the thermal generating stations are specified separately for the thermal power stations commissioned on or before 31.03.2012 and the power stations commissioned on or after 01.04.2012. The normative operation and maintenance expenses are also specified separately for the existing and new projects.

35.2 The cost components for employee expenses, repair & maintenance expenses and administrative and general expenses are considered as per Regulations 35.7 to 35.8 and 35.10 to 35.11 of these Regulations. The Operation and Maintenance expenses including employee expenses, repair and maintenance expenses, and administrative and general expenses, for the power stations commissioned prior to 01.04.2012 are derived by considering the average of these expenditures for past four years (i.e. FY2010-11 to FY2013-14) as per Annual Audited Accounts. The average expenditure of the aforesaid four years is considered as base opening figure for FY 2012-13. Thereafter, the figures of O&M expenditure are derived upto FY 2015-16 by applying the annual escalation rate specified for the relevant year in the applicable Regulations.

35.3 The O&M expenses for the subsequent years shall be determined by escalating the expenses of the base year i.e. FY 2015-16, as determined above with the escalation factor @ 6.30% and @ 6.64% for thermal power stations and hydro power stations respectively as considered by the Central Commission in its Tariff Regulations, 2014 for the respective financial years to arrive at permissible O&M expenses for each year of the Control Period..

Provided that in case, the generating stations which have come in operation on or after 01.04.2012, the O&M expenses shall be as specified at Regulation 35.8 for New generating stations.

35.4 In respect of M.P. Power Generating Company Ltd., the employee expenses considered in the above Operation and Maintenance expenses are excluding the pension and other terminal benefits. The funding of pension and other terminal benefit in respect of personnel including existing pensioner's of the Board and the pensioner's of M.P. Power Generating Company Ltd. shall be allowed in accordance with MPERC (Terms and Conditions for allowing pension and terminal benefits liabilities of personal of the board and successor entities) Regulation's, 2012 (G-38 of 2012).

35.5 Increase in O&M charges on account of war, insurgency or changes in laws, or like eventualities where the Commission is of the opinion that an increase in O&M charges is justified, may be considered by the Commission for a specified period.

35.6 Any saving achieved by a generating company in any Year shall be allowed to be retained by it. The generating company shall bear the loss if it exceeds the targeted O&M expenses for that Year.

# (A) Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:

# 35.7 Operation and Maintenance Expenses of Thermal Power Stations commissioned prior to 01.04.2012:

The Operation and Maintenance expenses admissible to existing thermal power stations commissioned prior to 01.04.2012 comprise of employee cost, Repair & Maintenance (R&M) cost and Administrative and General (A&G) cost. These norms exclude Pension and Terminal Benefits, EL encashment, Incentive, arrears to be paid to employees, taxes payable to the Government, and fees payable to MPERC. The generating company shall claim the rate, rent & taxes payable to the Government, cost of chemicals and consumables, fees to be paid to MPERC , EL encashment and any arrears paid to employees separately as actuals. The claim of pension and Terminal Benefits shall be dealt as per Regulation 35.4 of these Regulations.

Units (MW)	FY2016-17	FY2017-18	FY2018-19
120	27.90	29.65	31.52
200/210/250	24.20	25.72	27.34
500	19.43	20.65	21.95

O&M Norms for Thermal Generating Units: Rs. In lakh/MW

Provided that the above norms shall be multiplied by the following factors for additional Units in respective Unit sizes for the Units whose COD occurs on or after 1.4.2016 in the same station:

200/210/250 MW	Additional 5th & 6th Units Additional 7th & more Units	0.90 0.85
300/330/350	Additional 4th & 5th Units	0.90
MW	Additional 6th & more Units	0.85
500 MW and	Additional 3rd & 4th Units	0.90
above	Additional 5th & above Units	0.85

# 35.8 O&M Norms for the Thermal Generating Units commissioned on or after 01.04.2012 :

Rs. in lakhs/MW				
Units (MW)	FY2016-	FY2017-	FY2018-	
	17	18	19	
45 MW	32.07	34.09	36.24	
200/210/250 MW	27.00	28.70	30.51	
300/330/350 MW	22.54	23.96	25.47	
500 MW	18.08	19.22	20.43	
600 MW and				
above	16.27	17.30	18.38	

Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:

 $\begin{array}{c} Provided \ further \ that \ the \ generating \ station \ shall \ submit \ the \ details \ of \ {}_{46} \end{array} \\ {}_{46} \end{array} \\ \\ {}_{46} \end{array}$ 

year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.

## (B) Normative Operation and Maintenance expenses of hydel generating stations shall be as follows:

35.9 The Operation and Maintenance expenses admissible to existing hydro power stations comprise of employee cost, Repair & Maintenance (R&M) cost and Administrative and General (A&G) cost. These norms exclude Pension and Terminal Benefits,EL encashment, Incentive, arrears to be paid to employees, taxes payable to the Government, and fees payable to MPERC. The generating company shall claim the rate, rent & taxes payable to the Government, cost of chemicals and consumables, fees to be paid to MPERC,EL encashment and any arrears paid to employees separately as actuals. The claim of pension and Terminal Benefits shall be dealt as per Regulation 35.4 of these Regulations.

35.10 Following operations and maintenance expenses norms shall be applicable for the existing hydro generating stations which have been operational prior to 01.04.2016:

Year	O&M Expenses in Rs. in lakh/MW
FY 2016—17	9.64
FY 2017-18	10.28
FY 2018-19	10.96

## **O&M Norms for Hydel Power Stations:**

35.11 In case of the new hydro generating stations declared under commercial operation on or after 1.4.2016, operation and maintenance expenses shall be fixed at 4% and 2.50% of the original project cost (excluding cost of rehabilitation & resettlement works) for first year of commercial operation for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be subject to annual escalation of 6.64% per annum for the subsequent years.

### CHAPTER - 6

#### COMPUTATION OF CAPACITY CHARGES AND ENERGY CHARGES

## **36.** Computation and Payment of Capacity Charge and Energy Charge for Thermal Generating Stations:

- 36.1 The fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under these Regulations, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share / allocation in the capacity of the generating station.
- 36.2 The capacity charge payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

CC1=	(AFC/12)( PAF1 / NAPAF ) subject to ceiling of (AFC/12)
CC2 =	((AFC/6)( PAF2 / NAPAF ) subject to ceiling of (AFC/6)) - CC1
CC3 =	((AFC/4) ( PAF3 / NAPAF ) subject to ceiling of (AFC/4)) – (CC1+CC2)
CC4 =	((AFC/3) ( PAF4 / NAPAF ) subject to ceiling of (AFC/3)) -
	(CC1+CC2+CC3)
CC5 =	((AFC x 5/12) ( PAF5 / NAPAF ) subject to ceiling of (AFC x 5/12)) –
	(CC1+CC2+CC3+CC4)
CC6 =	((AFC/2) ( PAF6 / NAPAF ) subject to ceiling of (AFC/2)) - (CC1+CC2
	+CC3+CC4 + CC5)
CC7=	((AFC x 7/12) ( PAF7 / NAPAF ) subject to ceiling of (AFC x 7/12)) -
	$(CC_1+CC_2+CC_3+CC_4+CC_5+CC_6)$
CC8 =	((AFC x 2/3) ( PAF8 / NAPAF ) subject to ceiling of (AFC x 2/3)) -
	(CC1+CC2+CC3+CC4+CC5+CC6+CC7)
CC9 =	((AFC x 3/4) ( PAF9 / NAPAF ) subject to ceiling of (AFC x 3/4)) -
	(CC1+CC2+CC3+CC4+CC5+CC6+CC7+CC8)
CC10=	((AFC x 5/6) ( PAF10 / NAPAF ) subject to ceiling of (AFC x 5/6)) -
	(CC1+CC2+CC3+CC4+CC5+CC6+CC7+CC8+CC9)
CC11 =	((AFC x 11/12) ( PAF11 / NAPAF ) subject to ceiling of (AFC x 11/12)) –
	(CC1+CC2+CC3+CC4+CC5+CC6+CC7+CC8+CC9+CC10)
CC12 =	((AFC) ( PAFY / NAPAF ) subject to ceiling of (AFC)) - (CC1+CC2 +CC3
	+CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10 + CC11)

Provided that in case of generating station or unit thereof, under shutdown due to Renovation and Modernisation, the generating company shall be allowed to recover part of AFC which shall include O&M expenses and interest on loan only.

Where,

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

NAPAF = Normative annual plant availability factor in percentage.

PAF<sub>N</sub> = Percent Plant availability factor achieved upto the end of the nth month.

PAFY = Percent Plant availability factor achieved during the Year

CC1, CC2, CC3, CC4, CC5, CC6, CC7, CC8, CC9, CC10, CC11 and CC12 are the Capacity Charges of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> months respectively.

36.3 The PAFM upto the end of a particular month and PAFY shall be computed in accordance with the following formula:

PAFM or PAFY = 
$$10000 \text{ x } \Sigma \text{ DCi} / \{ \text{ N x IC x ( 100 - AUX ) } \} \%$$
  
i=1

Where,

AUX=Normative auxiliary energy consumption in percentage.

DCi = Average declared capacity (in ex-bus MW), for the i<sup>th</sup> day of the period i.e. the month or the year as the case may be, as certified by the concerned load dispatch centre after the day is over.

- IC = Installed Capacity (in MW) of the generating station
- N= Number of days during the period.

Note: DC<sub>i</sub> and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.

- 36.4 Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation **39**.
- 36.5 The energy charge shall cover the primary and secondary fuel cost and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel price adjustment). 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.}

- 36.6 Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:
- (a) For coal based stations

ECR = { $(GHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi$ } x 100 / (100 - AUX) Where,

AUX =Normative auxiliary energy consumption in percentage.

CVPF=(a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations

(b) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.

CVSF =Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR =Gross station heat rate, in kCal per kWh.

LPPF =Weighted average landed price of primary fuel, in Rupees per kg, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio)

SFC = Normative Specific fuel oil consumption, in ml per kWh.

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month

36.7 The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, etc., as per the forms prescribed to these Regulations:

Provided that the details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal and the weighted average GCV of the fuels as received shall also be provided separately, along with the bills of the respective month:

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, etc., details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.

36.8 The landed cost of fuel for the month shall include price of fuel corresponding to the grade and quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal shall be arrived at after considering normative transit and handling losses as percentage of the quantity of coal dispatched by the coal supply company during the month as given below:

Pithead generating stations	:	0.2%
Non-pithead generating stations	:	0.8%

Provided that in case of pit head stations if coal is procured from sources other than the pit head mines which is transported to the station through rail, transit loss of 0.8% shall be applicable:

Provided further that in case of imported coal, the transit and handling losses shall be 0.2%.

36.9 In case of part or full use of alternative source of fuel supply by coal based thermal generating stations other than as agreed by the generating company and beneficiaries in their power purchase agreement for supply of contracted power on account of shortage of fuel or optimization of economical operation through blending, the use of alternative source of fuel supply shall be permitted to generating station:

Provided that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement:

Provided further that the weighted average price of use of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (**36.10**) of this Regulation:

Provided also that where the energy charge rate based on weighted average price of use of fuel including alternative source of fuel exceeds 30% of base energy charge rate as approved by the Commission for that year or energy charge rate based on weighted average price of use of fuel including alternative sources of fuel exceeds 20% of energy charge rate based on weighted average fuel price for the previous month, whichever is lower shall be considered and in that event, prior consultation with beneficiary shall be made not later than three days in advance.

36.10 The Commission through the specific tariff orders to be issued for each generating station shall approve the energy charge rate at the start of the tariff period. The energy charge so approved shall be the base energy charge rate at the start of the tariff period. The base energy charge rate for subsequent years shall be the energy charge computed

after escalating the base energy charge rate approved at the start of the tariff period by escalation rates for payment purposes as notified by the Central Commission from time to time for under competitive bidding guidelines.

## **37.** Computation and Payment of Capacity charge and Energy Charge for Hydro Generating Stations:

37.1 The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these Regulations, and shall be recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charges, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, i.e., 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 Charges and Energy Charges payment during such period.

37.2 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 =AFC =Annual fixed cost specified for the year, in RupeesNAPAF =Normative plant availability factor in percentageNDM =Number of days in the monthNDY =PAFM =Plant availability factor achieved during the month, in percentage

37.3 The PAFM shall be computed in accordance with the following formula: N

PAFM = 
$$10000 \text{ x } \Sigma \text{ DCi} / \{ \text{ N x IC x ( } 100 - \text{AUX }) \} \%$$

i = 1

Where

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the i<sup>th</sup> 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
- 37.4 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

37.5 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 (**37.7**):

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

Where,

- DE = Annual design energy specified for the hydro generating station, in MWh, subject to the provision in clause (37.6) below.
- FEHS = Free energy for home State, in per cent, as defined in Regulation 44.
- 37.6 In case the 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 station, the following treatment shall be applied on a rolling basis on an application filed by the generating company:
- (a) 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 (36.5) 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:

Provided that in case actual generation from a hydro generating station is less than the design energy for a continuous period of 4 years on account of hydrology factor, the generating station shall approach Central Electricity Authority (CEA) with relevant hydrology data for revision of design energy of the station.

(b) In case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply.

**Explanation :** Suppose the specified annual design energy for the station is DE MWh, and Vetting/Dell/D/Salim/M.P. Electricity Regulatory Commission-65 53

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 these Regulations 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.

(c) 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).

37.7 In case the energy charge rate (ECR) for a hydro generating station, computed as per clause 37.5 of this Regulation exceeds **ninety 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 **ninety 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 **ninety paise per kWh** after the energy charge shortfall of the previous year has been made up.

37.8 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.

#### **38.** Deviation Charges:

- 38.1 Variations between actual net injection and scheduled net injection for the generating stations, and variations between actual net drawal and scheduled net drawal for the beneficiaries shall be treated as their respective deviations and charges for such deviations shall be governed by the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related matters) Regulations, 2014, as amended from time to time or any subsequent re-enactment thereof.
- 38.2 Actual net deviation of every generating stations and Beneficiaries shall be metered on its periphery through special energy meters (SEMs) installed by the State Transmission Utility (STU), and computed in MWh for each 15-minute time block by the concerned Load Despatch Centre.

#### CHAPTER - 7

#### NORMS OF OPERATION

#### **39.** Norms of operation for thermal generating stations:

- 39.1 Recovery of capacity charge, energy charge and incentive by the generating company shall be based on the achievement of the operational norms specified in these Regulations.
- 39.2 The norms of operation for thermal power stations as given hereunder shall apply for existing thermal power stations commissioned on or before 31<sup>st</sup> March, 2012:

Name of Generating Station	Units (MW)	Capacity (MW)	FY16-17 to FY18-19
STPS Sarni PH 2	200+210	410.0	75.00%
STPS Sarni PH 3	2 X 210	420.0	75.00%
STPS Complex		830.0	75.00%
ATPS PH 2	2 X 120	240.0	65.00%
ATPS PH-3	1 x 210	210.0	85.00 %
SGTPS PH 1	2 X 210	420.0	80.00%
SGTPS PH 2	2 X 210	420.0	80.00%
SGTPS Complex (PH 1 & PH 2		840.0	80.00%
SGTPS - (500 MW)	1X500	500.0	85.00%

#### (a) Normative Annual Plant Availability Factor (NAPAF)

#### (b) Gross Station Heat Rate (Kcal/kWh)

Name of Generating Station	Units (MW)	Capacity (MW)	FY16-17 to FY18-19
STPS Sarni PH 2	200+210	410.0	2700
STPS Sarni PH 3	2 X 210	420.0	2700
STPS Complex		830.0	2700
ATPS PH 2	2 X 120	240.0	3200
ATPS PH 3	1 x 210	210.0	2450
SGTPS PH 1	2 X 210	420.0	2600
SGTPS PH 2	2 X 210	420.0	2600
SGTPS Complex (PH 1 & PH 2)		840.0	2600
SGTPS - (500 MW)	1X500	500.0	2425

Name of Generating Station	Units (MW)	Capacity (MW)	FY16-17 to FY18-19
STPS Sarni PH 2	200+210	410.0	1.75
STPS Sarni PH 3	2 X 210	420.0	1.75
STPS Complex		830.0	1.75
ATPS PH 2	2 X 120	240.0	2.00
ATPS PH 3	1 x 210	210.0	1.00
SGTPS PH 1	2 X 210	420.0	1.30
SGTPS PH 2	2 X 210	420.0	1.00
SGTPS Complex (PH 1 & PH 2)		840.0	1.15
SGTPS - (500 MW)	1X500	500.0	1.00

(c) Specific Fuel Oil Consumption (ml/kWh)

(d) Auxiliary Energy Consumption (%):

Name of Generating Station	Units (MW)	Capacity (MW)	FY16-17 to FY18-19
STPS Sarni PH 2	200+210	410.0	10.00%
STPS Sarni PH 3	2 X 210	420.0	10.00%
STPS Complex		830.0	10.00%
ATPS PH 2	2 X 120	240.0	10.00%
ATPS PH 3	1 x 210	210.0	9.00%
SGTPS PH 1	2 X 210	420.0	9.00%
SGTPS PH 2	2 X 210	420.0	9.00%
SGTPS Complex (PH 1 & PH 2)		840.0	9.00%
SGTPS - (500 MW)	1 x 500	500.0	6.00%

## (e) Normative Annual Plant Load Factor (NAPLF) for incentive (%):

Name of Generating Station	Units (MW)	Capacity (MW)	FY16-17 to FY18-19
STPS Sarni PH 2	200+210	410.0	75.00%
STPS Sarni PH 3	2 X 210	420.0	75.00%
STPS Complex		830.0	75.00%
ATPS PH 2	2 X 120	240.0	65.00%
ATPS PH-3	1 x 210	210.0	85.00 %
SGTPS PH 1	2 X 210	420.0	80.00%
SGTPS PH 2	2 X 210	420.0	80.00%
SGTPS Complex (PH1& PH 2)		840.0	80.00%
SGTPS - (500 MW)	1X500	500.0	85.00%

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- 39.3 Following norms shall be applicable for all the thermal generating Units/ stations for all capacities which are Commissioned on or after 01/04/2012 :
  - (A) Normative Annual Plant Availability Factor (NAPAF) : 85% Provided that in view of shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.
  - (B) Normative Annual Plant Load Factor (NAPLF) : 85%

#### (C) Gross Station Heat Rate

(a) Existing Coal based thermal generating stations having COD on or after 1.4.2012 till 31.03.2016, (other than those covered under clause 39.2) shall be the heat rate norms approved during FY 2012-13 to FY 2015-16.

#### New thermal generating stations achieving COD on or after 1.4.2016:

(b) Coal-based Thermal Generating Stations = 1.045 X Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a Unit means the Unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure:

Provided that the design heat rate shall not exceed the following maximum design Unit heat rates depending upon the pressure and temperature ratings of the Units:

Pressure Rating (Kg/cm2)	150	170	170	247
SHT/RHT (0C)	535/535	537/537	537/565	565/593
Type of BFP	Electrical	Turbine	Turbine	Turbine
	Driven	driven	driven	driven
Max Turbine Cycle Heat rate	1955	1950	1935	1850
(kCal/kWh)				
Minimum Boiler Efficiency				
Sub-Bituminous Indian Coal	0.86	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89	0.89
Max. Design Unit Heat Rate (k	Cal/kWh)			
Sub-Bituminous Indian Coal	2273	2267	2250	2151
Bituminous Imported Coal	2197	2191	2174	2078

Provided further that in case pressure and temperature parameters of a Unit are different from above ratings, the maximum design Unit heat rate of the nearest class shall be taken:

Provided also that where Unit heat rate has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the Unit design heat rate shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided also that if one or more Units were declared under commercial operation prior to 1.4.2016, the heat rate norms for those Units as well as Units declared under commercial operation on or after 1.4.2016 shall be lower of the heat rate norms arrived at by above methodology.

Note: In respect of Units where the boiler feed pumps are electrically operated, the maximum design Unit heat rate shall be 40 kCal/kWh lower than the maximum design Unit heat rate specified above with turbine driven BFP.

#### (D) Specific Fuel Oil Consumption

Coal-based generating stations : 0.50 ml/kWh

Sr.	Power Station	With Natural Draft Cooling Tower
No.		or without Cooling Tower
(1)	200 / 300 MW series	8.50%
(2)	500 MW & above	
	Steam driven boiler feed pumps	5.25 %
	Electrically driven boiler feed pumps	7.75 %
(3)	45 MW Series	10 %

#### (E) Auxiliary Energy Consumption

Provided further that for thermal generating stations with induced drafts cooling towers, the norms shall be further increased by 0.5%.

Provided also that Additional Auxiliary Energy Consumption as follows may be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct Cooling air cooled condensers	1%
with mechanical draft fans	
Indirect Cooling system employing jet	0.5%
condensers with pressure recovery	
turbine and natural draft tower	

#### 40. Norms of operation for hydro generating stations:

40.1 The norms of operation for Hydro power station shall be as under, namely:

#### (1) Normative Annual Plant Availability Factor (NAPAF):

- (a) Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations shall be determined by the Commission as per the following criteria :
  - (i) Storage and Pondage type plants with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of up to 8%, and where plant availability is not affected by silt : 90%.
  - (ii) Storage and Pondage type plants with head variation between full reservoir level and minimum draw down level of more than 8% and when plant availability is not affected by silt : the month wise peaking capability as provided by the project authorities in the DPR (approved by CEA or the State Government) shall form basis of fixation of NAPAF.
  - (iii) Pondage type plants where plant availability is significantly affected by silt: 85%.
  - (iv) 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.
- 40.2 A further allowance may be made by the Commission in NAPAF determination under special circumstances, e.g. abnormal silt problem or other operating conditions, and known plant limitations.
- 40.3 Based on the above, Normative Annual Plant Availability Factor (NAPAF) of the Hydro stations already in operation shall be as follows for recovery of capacity charges:

Station	Type of Plant	Plant	NAPAF
		Capacity	
		( <b>MW</b> )	
Gandhisagar	Storage	57.5	85%

Pench	Storage	106.7	85%
Rajghat	Storage	22.5	85%
Bargi	Storage	90.0	85%
Banasagar Compelex	Storage	395.0	85%
(excluding Silpara)			
Silpara	Run of river	30.0	90%
	with pondage		
Birsinghpur	Storage	20.0	85%
Madhi Kheda	Storage	60.0	85%

### (2) Auxiliary Energy Consumption:

- (a) Surface Hydro generating stations with rotating exciters mounted on the generator shaft
  0.7 % of energy generated
- (b) Surface Hydro generating stations with static excitation system

- 1 % of energy generated

- (c) Underground Hydro generating stations with rotating exciters mounted on the generator shaft
  0.9 % of energy generated
- (d) Underground Hydro generating stations with static excitation system

- 1.2 % of energy generated

#### **CHAPTER - 8**

#### SCHEDULING, ACCOUNTING AND BILLING

#### 41. Incentive:

- 41.1 In case of thermal generating stations, incentive shall be payable, at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF).
- 41.2 In case of hydro generating stations incentive shall form part of the recovered Capacity (fixed) charges. No Separate incentive shall be provided in hydro power stations.

#### 42. Scheduling:

The methodology for scheduling and dispatch for the generating station shall be as specified in the Grid Code (or any other code or Regulation) approved by the Commission.

#### 43. Metering and Accounting:

Metering arrangements, including installation, testing and operation and maintenance of meters and collection, transportation and processing of data required for accounting of energy exchanges and average frequency on 15 minute Time Block basis shall be organised by the State Transmission Utility and State Load Despatch Centre. All concerned entities (in whose premises the special energy meters are installed), shall fully cooperate with the State Transmission Utility/ State Load Despatch Centre and extend the necessary assistance by taking weekly meter readings and transmitting them to the State Load Despatch Centre. The State Load Despatch Centre shall issue the Accounts for energy on monthly basis as well as deviation charges on weekly basis. Deviation charges accounting procedures shall be governed by the orders of the Commission.

#### 44. Billing and Payment of charges:

44.1 Bills shall be raised for Capacity Charges and Energy Charges on monthly basis by the generating company in accordance with these Regulations, and payments shall be made by the beneficiaries directly to the generating company. 44.2 Payment of the Capacity Charge for a thermal generating station shall be shared by the beneficiaries of the generating station as per their percentage shares for the month (inclusive of any allocation out of the unallocated capacity) in the Installed Capacity of the generating station. Payment of Capacity Charges and Energy Charges for a Hydro generating station shall be shared by the beneficiaries of the generating station in proportion to their shares (inclusive of any allocation out of the unallocated capacity) in the saleable capacity (to be determined after deducting the capacity corresponding to free energy to home State as per Note 3 herein.

## Note 1

Shares / allocations of each beneficiary in the total capacity of State sector generating stations shall be as determined by the State Government, inclusive of any allocation made out of the unallocated capacity. The shares shall be applied in percentages of installed capacity and shall normally remain constant during a month. The total capacity share of any beneficiary would be sum of its capacity share plus allocation out of the unallocated portion. In the absence of any specific allocation of unallocated power by the State Government, the unallocated power shall be added to the allocated shares in the same proportion as the allocated shares.

## Note 2

The beneficiaries may propose surrendering part of their allocated firm share to other Beneficiaries. In such cases, depending upon the technical feasibility of power transfer and specific agreements reached by the generating company with other States within/ outside the region for such transfers, the shares of the beneficiaries may be prospectively re-allocated by the State Government for a specific period (in complete months) from the beginning of a calendar month. When such re-allocations are made, the beneficiaries who surrender the share shall not be liable to pay capacity charges for the surrendered share. The capacity charges for the capacity surrendered and reallocated as above shall be paid by the State(s) to whom the surrendered capacity is allocated. Except for the period of reallocation of capacity as above, the beneficiaries of the generating station shall continue to pay the full capacity charges as per allocated capacity shares. Any such reallocation and its reversion shall be communicated to all concerned by the appropriate authority in advance, at least three days prior to

such reallocation or reversion taking effect.

## Note 3

FEHS = Free energy for home State, in percent and shall be taken as 13% or actual whichever is less (not applicable for generating stations of MPPGCL).

Provided that in cases where the site of a Hydro Power Project is awarded to a developer, (not being a State controlled or owned Company) by the State Government by following a two stage transparent process of bidding, the "Free Energy' shall be taken as 13%, in addition to energy corresponding to 100 Units of electricity to be provided free of cost every month to every project affected family for a period of 10 Years from the Date of Commercial Operation of the generating station:

Provided further that the generating company shall submit detailed quantification of energy corresponding to 100 units of electricity to be provided free of cost every month to every project affected family for a period of 10 years from the Date of Commercial Operation.

#### 45. Rebate.

- 45.1 For payment of bills of the generating company through letter of credit on presentation or through National Electronic Fund Transfer (NEFT)/ Regional Transaction Gross Settlement (RTGS) within a period of 2 days of presentation of bills by the generating company, a rebate of 2% shall be allowed.
- 45.2 Where payments are made on any day after 2 days and within a period of 30 days of presentation of bills by the generating company, a rebate of 1% shall be allowed.

#### 46. Late payment surcharge:

In case the payment of any bill for charges payable under these Regulations is delayed beyond a period of 60 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by the generating company.

## CHAPTER – 9 MISCELLANEOUS PROVISIONS

### 47. Sharing of CDM Benefits:

The proceeds of carbon credit from approved CDM project shall be shared in the following manner, namely-

- (a) 100% of the gross proceeds on account of CDM to be retained by the Project Developer in the first year after the Date of Commercial Operation of the generating station;
- (b) In the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.

#### 48. Deviation from norms:

Tariff for sale of electricity by the generating company may also be determined in deviation of the norms specified in these Regulations subject to the conditions that :

- (a) The levelised tariff over the useful life of the project on the basis of the norms in deviation does not exceed the levelised tariff calculated on the basis of the norms specified in these Regulations and upon submission of complete workings with assumptions to be provided by the generator at the time of filing of the application; and
- (b) Any deviation shall come into effect only after approval by the Commission, for which an application shall be made by the generating company.
- **Explanation**.- For the purpose of calculating the levelised tariff referred above, the discounting factor shall be as notified by the Central Commission from time to time.

#### 49. Tax on Income

Tax on Income streams of the generating company shall not be recovered separately from the Beneficiaries:

#### 50. Foreign Exchange Rate Variation:

- 50.1 The generating company may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the generating station in part or in full in the discretion of the generating company.
- 50.2 As and when the petitioner enters into any hedging based on its approved hedging policy, the petitioner should communicate to the beneficiaries concerned about its hedging decision within thirty days of entering into such hedging transaction(s).
- 50.3 Every generating company shall recover the cost of hedging of foreign exchange rate variation corresponding to the normative foreign debt, in the relevant year on year-to-year basis as expense in the period in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt.
- 50.4 To the extent the generating company is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the generating company or its suppliers or contractors.
- 50.5 Every generating company shall recover the cost of hedging and foreign exchange rate variation on year-to-year basis as income or expense in the period in which it arises.

#### 51. Recovery of cost of hedging or Foreign Exchange Rate Variation:

Recovery of cost of hedging or foreign exchange rate variation shall be made directly by the generating company from the beneficiaries without making any application before the Commission:

Provided that in case of any objections by the beneficiaries to the amounts claimed on account of cost of hedging or foreign exchange rate variation, the generating company may make an appropriate application before the Commission for its decision.

## 52. Application fee, publication expenses and other statutory charges:

The following fees, charges and expenses shall be reimbursed directly by the beneficiary in the manner specified herein:

- 1. The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company directly from the beneficiaries :
- 2. The Commission may, for the reasons to be recorded in writing and after hearing the affected parties, allow reimbursement of any fee or expenses, as may be considered necessary.
- 3. SLDC Charges and Transmission Charges as determined by the Commission shall be considered as expenses, if payable by the generating stations.
- 4. RLDC/NLDC charges as determined by the Central Commission shall also be considered as expenses, if payable by the generating station.
- 5. Electricity duty, cess and water charges if payable by the Generating Company for generation of electricity from the power stations to the State Government, shall be allowed by the Commission separately and shall be trued-up on actuals.

## 53. Non Tariff /Other Income

- 53.1 Any income being incidental to the business of the generating company derived from sources, including but not limited to the disposal of assets, income from investments, rents, income from sale of scrap other than the decapitalized/written off assets, income from advertisements, interest on advances to suppliers/contractors, income from sale of fly ash/rejected coal, and any other miscellaneous receipts other than income from sale of energy shall constitute the non tariff/other income.
- 53.2 The amount of Non-Tariff /Other Income relating to the Generation Business as approved by the Commission shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Charge of the Generation Company:

Provided that the Generation Company shall submit full details of its forecast of Non-Tariff Income to the Commission in such form as may be stipulated by the Commission from time to time. Non tariff income shall also be Trued-up based on audited accounts.

#### 54. Power to Relax.

The Commission, for reasons to be recorded in writing, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

#### 55. Power to Remove Difficulty:

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other Regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these Regulations.

#### 56. Repeal and Savings

- 56.1 The Regulations namely "Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for determination of Generation Tariff), Regulations, 2012 {RG-26(II) of 2012}" notified on 12/12/2012 and read with all amendments thereto, as applicable to the subject matter of these Regulations is hereby superceded.
- 56.2 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent powers of the Commission to make such orders as may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission.
- 56.3 Nothing in these Regulations shall bar the Commission from adopting, in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of this Regulation, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.

56.4 Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no Regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

By order of the Commission

Shailendra Saxena, Commission Secretary

## Appendix-I

### **Timeline for completion of Projects**

(Refer to Regulation 30)

- 1. The completion time schedule shall be reckoned from the date of investment approval by the Board (of the generating company), up to the Date of Commercial Operation of the Units or Block of units.
- 2. The time schedule has been indicated in months in the following paragraphs and tables:

## A. <u>Thermal Power Projects</u> - Coal based Power Plant

# Unit size 200/210/250/300/330 MW and 45MW/125 MW CFBC technology

- (a) 33 months for Green Field Projects. Subsequent Units at an interval of 4 months each.
- (b) 31 months for Extension Projects. Subsequent Units at an interval of 4 months each.

## Unit size 250 MW CFBC technology

- (a) 36 months for Green Field Projects. Subsequent Units at an interval of 4 months each.
- (b) 34 months for Extension Projects. Subsequent Units at an interval of 4 months each.

#### Unit size 500/600 MW

- (a) 44 months for Green Field Projects. Subsequent Units at an interval of 6 months each.
- (b) 42 months for Extension Projects. Subsequent Units at an interval of 6 months each.

## Unit size 660/800 MW

- (a) 52 months for Green Field Projects. Subsequent Units at an interval of 6 months each.
- (b) 50 months for Extension Projects. Subsequent Units at an interval of 6 months each.

## B. <u>Hydro-Electric Projects</u>

3. The qualifying time schedule for Hydro Electric Projects shall be as stated in the original concurrence issued by the Central Electricity Authority under Section 8 of the Act.

## Appendix-II

## **Depreciation Schedule**

Sr. No.	Asset Particulars	Depreciation Rate (Salvage Values = 10%)	
•		Straight Line Method	
A	Land under full ownership	0.00%	
B	Land under lease		
(a)	for investment in the land	3.34%	
(b)	For cost of clearing the site	3.34%	
(c)	Land for Reservoir in case of Hydro generating station	3.34%	
С	Assets purchased new		
(a)	Plant & Machinery in generating stations		
(i)	Hydro electric	5.28%	
(ii)	Steam electric NHRB & waste heat recovery boilers	5.28%	
(iii)	Diesel electric and gas plant	5.28%	
(b)	Cooling towers & circulating water systems	5.28%	
(c)	Hydraulic works forming part of the Hydro		
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumes	5.28%	
	and siphons		
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines,	5.28%	
	sluice gates, steel surge tanks, hydraulic control valves and		
	hydraulic works		
(d)	Building & Civil Engineering works		
(i)	Offices and showrooms	3.34%	
(ii)	Containing thermo-electric generating plant	3.34%	
(iii)	Containing hydro-electric generating plant	3.34%	
(iv)	Temporary erections such as wooden Structures	100%	
(v)	Roads other than Kutcha Roads	3.34%	
(vi)	Others	3.34%	
(e)	Transformers, Kiosk, Sub-Station equipment & other fixed		
	apparatus.		
(i)	Transformers including foundations having rating of 100	5.28%	
	KVA and over		
(ii)	Others	5.28%	
(f)	Switchgear including cable connections	5.28%	
(g)	Lightning Arrestor		
(i)	Station type	5.28%	
(ii)	Pole type	5.28%	
(iii)	Synchronous condenser	5.28%	

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(h)	Batteries	5.28%
(i)	Underground cable including joint boxes and disconnected boxes	5.28%
(ii)	Cable duct system	5.28%
(i)	Overhead lines including cable support	
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV	5.28%
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV	5.28%
(iii)	Lines on steel on reinforced concrete support	5.28%
(iv)	Lines on treated wood support	5.28%
	Lines	
j	Meters	5.28%
k	Self propelled vehicles	9.50%
1	Air Conditioning Plants	
(i)	Static	5.28%
(ii)	Portable	9.50%
m(i)	Office furniture and furnishing	6.33%
(ii)	Office equipment	6.33%
(iii)	Internal wiring including fittings and Apparatus	6.33%
(iv)	Street Light fittings	5.28%
n	Apparatus let on hire	
(i)	Other than motors	9.50%
(ii)	Motors	6.33%
0	Communication equipment	
(i)	Radio and high frequency carrier system	6.33%
(ii)	Telephone lines and telephones	6.33%
(iii)	Fibre Optic	6.33%
p	I. T equipments	15.00%
q	Any other assets not covered above	5.28%

# APPENDIX –III (For Coal based Generating Stations)

It is to certify that the **(Name of the Station)** has fulfilled all the key provisions as prescribed below in accordance with Regulation 4 of MPERC (Terms and Conditions for determination of generation Tariff), Regulations, 2015.

- 1. All documents as prescribed in Regulation 3(8) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations - 2010 have been retained at site and are available at site.
- All requirements as per Regulation 5 of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations – 2010 have been complied.
- The unit operating capability shall be in conformity to Regulation 7(1), 7(2), 7(3) and 7(4) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations – 2010.
- 4. All requirements as per Regulation 8 of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations 2010 have been complied for the Steam Generator.
- 5. All requirements as per Regulation 9(2), 9(4), 9(9), 9(15), 9(16), 9(18) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations 2010 have been complied for the Steam Turbine Generator.

Name: (CMD/CEO/MD)

# (For Hydro based Generating Stations)

It is to certify that the (Name of the Station) has fulfilled all the key provisions as prescribed below in accordance with Regulation 4 of MPERC (Terms and Conditions for determination of generation Tariff), Regulations, 2015.

- All documents as prescribed in Regulation 3(8) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations - 2010 have been retained at site and are available at site.
- 2. All requirements as per Regulation 30(1), 30(2) and 30(5) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations -2010 have been complied.
- The unit operating capability shall be in conformity to Regulation 32 (1), 32(3), 32(4), 32(6) and 32(8) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations 2010.
- 4. All requirements as per Regulation 33(6), 33(7), 33(8) of the CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations 2010 have been complied for the hydraulic Turbine.

Name: (CMD/CEO/MD)

PART - I FORM-TPS-1

#### SUMMARY SHEET

#### NAME OF THE PETITIONER

#### NAME OF THE GENERATING STATION:

#### PLACE (REGION/DISTRICT/STATE):

Particulars	Unit	Existing	2016-17	2017-18	2018-19
		2015-16			
(2)		(3)	(4)	(5)	(6)
Depreciation	Rs. Lakh				
Interest on Loan	Rs. Lakh				
Return on Equity <sup>1</sup>	Rs. Lakh				
Interest on Working Capital	Rs. Lakh				
O & M Expenses	Rs. Lakh				
Compensation Allowance (If applicable)	Rs. Lakh				
Special Allowance (If Applicable)	Rs. Lakh				
Total	Rs. Lakh				
Landed Fuel Cost (Domestic Coal)	Rs/Tone				
(%) of Fuel Quantity	(%)				
Landed Fuel Cost (Imported Coal)	Rs/Tone				
(%) of Fuel Quantity	(%)				
Secondary Fuel Oil Cost	Rs/Unit				
Energy Charge Rate ex-bus (Paise/kWh) <sup>2A,2B,2C</sup>	Rs/Unit				
	(2) Depreciation Interest on Loan Return on Equity <sup>1</sup> Interest on Working Capital O & M Expenses Compensation Allowance (If applicable) Special Allowance (If Applicable) Special Allowance (If Applicable) Total Landed Fuel Cost (Domestic Coal) (%) of Fuel Quantity Landed Fuel Cost (Imported Coal) (%) of Fuel Quantity Secondary Fuel Oil Cost	(2)DepreciationRs. LakhInterest on LoanRs. LakhReturn on Equity1Rs. LakhInterest on Working CapitalRs. LakhO & M ExpensesRs. LakhCompensation Allowance (If applicable)Rs. LakhSpecial Allowance (If Applicable)Rs. LakhLanded Fuel Cost (Domestic Coal)Rs/Tone(%) of Fuel Quantity(%)Landed Fuel Cost (Imported Coal)Rs/Tone(%) of Fuel Quantity(%)Secondary Fuel Oil CostRs/Unit	(2)2015-16(2)(3)DepreciationRs. LakhInterest on LoanRs. LakhReturn on Equity1Rs. LakhInterest on Working CapitalRs. LakhO & M ExpensesRs. LakhCompensation Allowance (If applicable)Rs. LakhSpecial Allowance (If Applicable)Rs. LakhLanded Fuel Cost (Domestic Coal)Rs/Tone(%) of Fuel Quantity(%)Landed Fuel Cost (Imported Coal)Rs/Tone(%) of Fuel Quantity(%)Secondary Fuel Oil CostRs/Unit	(2)2015-16(2)(3)(4)DepreciationRs. LakhInterest on LoanRs. LakhReturn on Equity1Rs. LakhInterest on Working CapitalRs. LakhO & M ExpensesRs. LakhCompensation Allowance (If applicable)Rs. LakhSpecial Allowance (If Applicable)Rs. LakhTotalRs. LakhLanded Fuel Cost (Domestic Coal)Rs/Tone(%) of Fuel Quantity(%)Landed Fuel Cost (Imported Coal)Rs/Tone(%) of Fuel Quantity(%)Secondary Fuel Oil CostRs/Unit	(2)(3)(4)(5)DepreciationRs. LakhInterest on LoanRs. LakhInterest on LoanRs. LakhInterest on LoanReturn on Equity1Rs. LakhInterest on Working CapitalRs. LakhInterest on Working CapitalInterest on Working CapitalRs. LakhInterest on Working CapitalInterest on Working CapitalRs. LakhInterest on Working CapitalInterest on Working

Note

1. Details of calculations, considering equity as per regulation, to be furnished

2A. If multifuel is used simultaneously, give 2 in respect of every fuel individually.

2B. The total energy charges shall be worked out based on ex-bus energy scheduled to be sent out.

2C. The Energy Charge Rate for the month shall be based on fuel cost (s) and GCV(s) for the month as per Regulation

Form	1(I) - Statement showing claimed capital cost:			
Sr. No.	Particulars	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)
	Opening Capital Cost			
	Add: Addition during the year/ period			
	Less: Decapitalisation during the year/period			
	Less: Reversal during the year/period			
	Add: Discharges during the year/period			
	Closing Capital Cost			
	Average Capital Cost			

Form	1(II) - Statement showing Return on Equity:			
Sr. No.	Particulars	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)
	Opening Equity			
	Add: Increase due to addition during the year/period			
	Less: Decrease due to de-capitalisation during the year/period			
	Less: Decrease due to reversal during the year/period			
	Add: Increase due to discharges during the year/period			
	Closing Equity			
	Average Equity			
	Rate of ROE			
	Return on Equity			

PART - I FORM TPS-2

# PLANT CHARACTERISTICS

## Name of the Petitioner

# Name of the Generating Station

Unit(s)/ Block(s)/Parameters	Unit-I	Unit-II	Unit-III		
Installed Capacity (MW)	Unit-i	Offic-fi	Unit-in		
Schedule COD as per Investment Approval					
Actual COD/Date of Taken Over (as applicable)					
Pit Head or Non Pit Head					
Name of the Boiler Manufacture					
Name of Turbine Generator Manufacture					
Main Steams Pressure at Turbine inlet (kg/Cm <sup>2</sup> ) abs <sup>1</sup>					
Main Steam Temperature at Turbine inlet(°C) <sup>1</sup>					
Reheat Steam Pressure at Turbine inlet (kg/Cm <sup>2</sup> ) <sup>1</sup>					
Reheat Steam Temperature at Turbine inlet (°C) <sup>1</sup>					
Main Steam flow at Turbine inlet under MCR condition (tons/hr) <sup>2</sup>					
Main Steam flow at Turbine inlet under VWO condition (tons/hr) <sup>2</sup>					
Unit Gross electrical output under MCR/Rated condition (MW) <sup>2</sup>					
Unit Gross electrical output under VWO condition (MW) <sup>2</sup>					
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) <sup>3</sup>					
Conditions on which design turbine cycle heat rate guaranteed					
% MCR					
% Makeup Water Consumption					
Design Capacity of Make up Water System					
Design Capacity of Inlet Cooling System					
Design Cooling Water Temperature (°C)					
Back Pressure					
Steam flow at super heater outlet under BMCR condition (tonns/hr)					
Steam Pressure at super heater outlet under BMCR condition (kg/Cm <sup>2</sup> )					
Steam Temperature at super heater outlet under BMCR condition (°C)					

condition (°C)						
Design/Guaranteed Boiler Efficiency (%) <sup>4</sup>						
Design Fuel with and without Blending of domestic/imported coal						
Type of Cooling Tower						
Type of Cooling System <sup>5</sup>						
Type of Boiler Feed Pump <sup>6</sup>						
Fuel Details						
-Primary Fuel						
-Secondary Fuel						
-Alternate Fuel						
Special Features/Site Specific Features <sup>7</sup>						
Special Technological Features						
Environmental Regulation related features <sup>8</sup>						
Any other special features						
1: At Turbine MCR condition						
2: Work 0% (Nil) make up and design Cooling Water tempe	erature					
3: At TMCR output based on gross generation, 0% (Nil) ma	keup and c	lesign Coc	ling water	temperat	ture	
4: With Performance coal based on Higher Heating Value (						
5: Closed circuit cooling, once through cooling, sea cooling	, natural d	raft coolin	g, induced	draft coo	ling etc.	
6: Motor driven, Steam turbine driven etc.						
7: Any site specified feature such as Merry-Go-Round, Vici	nity to sea,	, Intake/m	akeup wat	er system	etc. scrubb	ers etc.
Specify all such features						
8: Environmental Regulation related features like FGD, ESF	-			<b>.</b> .		
Note 1: In case of deviation from specified conditions in Re submitted	egulation, o	correction	curve of m	anutactu	rer may also	be
Submitted						
Note 2: Heat Balance Diagram has to be submitted along w	ith ahove i	nformatio	n in case o	f new cta	tions	

Electric Plants and Electric Lines Regulations - 2010 notified by the Central Electricity Authority

## PART - I FORM TPS-3

# NORMATIVE PARAMETERS CONSIDERED FOR TARIFF COMPUTATION

## NAME OF THE PETITIONER

## NAME OF THE GENERATING STATION:

				Year Endi	ng March
Particulars	Unit	Existing 2015-16	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)	(6)
Base Rate of Return on Equity	(%)				
Effective Tax Rate <sup>1</sup>	(%)				
Target Availability	(%)				
Auxiliary Energy Consumption	(%)				
Gross Station Heat Rate	kCal/kWh				
Specific Fuel Oil Consumption	ml/kWh				
Cost of Coal for WC	in Months				
Cost of Main Secondary Fuel Oil for WC	in Months				
O & M Expenses	Rs. lakh/MW				
Maintenance Spares for WC	% of O&M				
Receivables for WC	in Months				
Storage capacity of Primary Fuel	MT				
SBI Base Rate + 350 basis points as on <sup>2</sup>	%				
Blending ratio of domestic coal/imported coal					

1. Effective tax rate is to be computed in accordance with Regulation i.e. actual tax (or advance tax)/gross income, where gross income refers the profit before tax.

2. Mention relevant date

## PART-I FORM TPS-4

## DETAILS OF FOREIGN LOANS

## (Details only in respect of loans applicable to the project under petition)

## Name of the Petitioner

## Name of the Generating Station

Exchange Rate at COD or 31.03.2016 whichever is later

## Exchange Rate at COD or 31.03.2016

S.No.	Financial Year (Starting from COD)		Y	ear 1			Y	ear 2		Year 3 and		and so on	
	1	2	3	4	5	6	7	8	9	10	11	12	13
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs. Lakh)
	Currency 1 <sup>1</sup>												
A.1	At the date of Drawl or at the beginning to the year of the period <sup>2</sup>												
2	Scheduled repayment date of principal												
3	Scheduled repayment date of interest												
4	At the end of Financial year												
В	In case of Hedging <sup>3</sup>												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												

	Currency 2 <sup>1</sup>												
A.1	At the date of Drawl <sup>2</sup>												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
В	In case of Hedging <sup>3</sup>												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												
	Currency 3 <sup>1</sup> & so on												<u> </u>
A.1	At the date of Drawl <sup>2</sup>												
2	Scheduled repayment date of principal												
3	Scheduled payment date of interest												
4	At the end of Financial year												
В	In case of Hedging <sup>3</sup>												
1	At the date of hedging												
2	Period of hedging												
3	Cost of hedging												
1. Na	me of the currency to be me	entioned	e.g. US\$ <i>,</i> [	DM, etc.		·							
2. In	case of more than one draw	l during t	he year, E	xchange ra	te at the da	te of eac	h drawl to b	e given					
3. Fu	rnish details of hedging, in ca	ase of mo	ore than or	ne hedging	during the	year or p	oart hedging,	, details of e	ach hedgin	g are to	be given		
4. Ta	x (such as withholding tax) d	etails as a	applicable	including c	hange in ra	tes, date	e from which	change effe	ctive etc. n	nust be	clearly indica	ated	

FORM TPS-4A

## DETAILS OF FOREIGN EQUITY

## (Details only in respect of Equity infusion if any applicable to the project under petition)

Name of the Petitioner

## Name of the Generating Station

Exchange Rate on date/s of infusion

S.No.	Financial Year		Ye	ar 1			Y	ear 2			Year 3	and so on	
	1	2	3	4	5	6	7	8	9	10	11	12	13
		Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs. Lakh)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs. Lakh)
	Currency 1 <sup>1</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
	Currency 2 <sup>1</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
		-	-										
	Currency 3 <sup>1</sup>												
A.1	At the date of infusion <sup>2</sup>												
2													
3													
	-	1	T	1	T		1	ſ	T		T	ſ	T
	Currency 4 <sup>1</sup> & so on												

A.1	At the date of infusion <sup>2</sup>										
2											
3											
1. Na	1. Name of the currency to be mentioned e.g. US\$, DM, etc.										
2. In c	2. In case of equity infusion more than once during the year, Exchange rate at the date of each infusion to be given										

# PART-I FORM TPS-5

# ABSTRACT OF ADMITTED CAPITAL COST FOR THE EXISTING PROJECTS

# Name of the Company Name of the Power Station

Last date of order of Commission for the project	Date (DD-MM-YYYY)	
Reference of petition no. in which the above order was passed	Petition No.	
Following details (whether admitted and/or considered) as on the la the above order by the Commission:	ist date of the period for which t	ariff is approved, in
Capital cost		
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)		
Amount of un-discharged liabilities corresponding to above admitted capital cost(but not forming part of admitted capital cost being allowed on cash basis)	(Da ::: Jala)*	
Gross Normative Debt	(Rs. in lakh)*	
Cumulative Repayment		
Net Normative Debt		
Normative Equity		
Cumulative Depreciation		
Freehold land		

# ABSTRACT OF CAPITAL COST ESTIMATES AND SCHEDULE OF COMMISSIONING FOR THE NEW PROJECTS Name of the Petitioner

# Name of the Generating Station

New Projects		
Capital Cost Estimates		
Board of Director/ Agency approving the Capital Cost		
estimates:		1
Date of approval of the Capital cost estimates:		
	Present Day Cost	Completed Cost
Price level of approved estimates	As on End of Qtr. Of the	As on Scheduled
	year	COD of the Station
Foreign Exchange rate considered for the Capital cost		
estimates		
Capital Cost excluding II	DC, IEDC & FC	1
Foreign Component, if any (In Million US\$ or the relevant		
Currency)		
Domestic Component (Rs. Lakh)		
Capital cost excluding IDC, IEDC, FC, FERV & Hedging Cost		
(Rs. Cr.)		
IDC, IEDC, FC, FERV & H	ledging Cost	
Foreign Component, if any (In Million US\$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)		
Rate of taxes & duties considered		
Capital cost including IDC, IEDC, F	C, FERV & Hedging Cost	
Foreign Component, if any (In Million US\$ or the relevant		
Currency)		
Domestic Component (Rs. Lakh)		
Capital Cost including IDC, IEDC & FC (Rs. Lakh)		
Schedule of Commissioning		
Scheduled COD of Unit-I/ Block-I as per Investment Approval		
Scheduled COD of Unit-II/ Block-II as per Investment Approval		
Scheduled COD of last Unit/Block		

## Note:

- 1. Copy of Investment approval letter should be enclosed
- 2. Details of Capital Cost are to be furnished as per Form-5B
- 3. Details of IDC & Financing Charges are to be formed as per FORM-14

PART-I FORM TPS-5B

#### BREAK-UP OF CAPITAL COST FOR NEW COAL BASED PROJECT

Name of the Petitioner

Name of the Generating Station

(Amount in Rs. Lakh)

SI. No.	Break Down	As per Original Estimates as per Investment Approval	Actual Capital Expenditure as on COD/anticipated COD Actual Amount	Liabilities/ Provisions	Variation (3-4-5)	Specific Reasons for Variation	Estimated Capital expenditure upto cut-off date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Cost of Land & Site Development						
1.1	Land*						
1.2	Rehabilitation & Resettlement (R&R)						
1.3	Preliminary Investigation & Site Development						
-	Total Land & Site Development						
2	Plant & Equipment						
2.1	Steam Generator Island						
2.2	Turbine Generator Island						
2.3	BOP Mechanical						
2.3.1	External water supply system						
2.3.2	CW system						
2.3.3	DM water plant						
2.3.4	Clarification plant						
2.3.5	Chlorination plant						

2.3.6	Fuel Handling & Storage System			
2.3.7	Ash Handling System			
2.3.8	Coal Handling Plant			
2.3.9	Rolling Stock and Locomotives			
2.3.10	MGR			
2.3.11	Air Compressor System			
2.3.12	Air Condition & Ventilation System			
2.3.13	Fire fighting System			
2.3.14	HP/LP Piping			
2.3.15	De-salination plant for sea-water intake			
2.3.16	External coal handling in Jetty, if any			
	Total BOP Mechanical			
2.4	BOP Electrical			
2.4.1	Switch Yard Package			
2.4.2	Transformers Package			
2.4.3	Switch gear Package			
2.4.4	Cables, Cable facilities & grounding			
2.4.5	Lighting			
2.4.6	Emergency D.G. Set			
	Total BOP Electrical			
2.5	Control & Instrumentation (C&I) Package			
	Total Plant & Equipment excluding taxes & duties			
2.6	Taxes & Duties			
3	Initial Spares			

4	Civil Works			
4.1	Main Plant/ Adm. Building			
4.2	CW System			
4.3	Cooling Towers			
4.4	DM water plant			
4.5	Clarification plant			
4.6	Chlorination plant			
4.7	Fuel handling & Storage system			
4.8	Coal Handling Plant			
4.9	MGR & Marshalling Yard			
4.10	Ash Handling System			
4.11	Ash disposal area development			
4.12	Fire fighting system			
4.13	Township & Colony			
4.14	Temporary construction & enabling works			
4.15	Road & Drainage			
	Total Civil Works			
5	Construction & Pre-Commissioning Expenses			
5.1	Erection Testing and Commissioning			
5.2	Site Supervision			
5.3	Operator's Training			
5.4	Construction Insurance			
5.5	Tools & Plant			
5.6	Start up Fuel			
	Total Construction & Pre- Commissioning Expenses			

6	Overheads			
6.1	Establishment			
6.2	Design & Engineering			
6.3	Audit & Accounts			
6.4	Contingency			
	Total Overheads			
7	Total Capital Cost Excluding IDC & FC			
8	IDC, FC, FERV & Hedging Cost			
8.1	Interest During Construction (IDC)			
8.2	Financing Charges (FC)			
8.3	Foreign Exchange Rate Variation (FERV)			
8.4	Hedging Cost			
	Total IDC, FC, FERV & Hedging Cost			
9	Capital cost including IDC, FC, FERV & Hedging Cost			

\* Provide details of Freehold land and Lease hold land separately

#### Note:

1. In case of cost variation, a detailed note giving reasons of such variation should be submitted clearly indicating whether such cost over-run was beyond the control of the generating company.

2. In case of both time & cost over-run, a detailed note giving reasons of such time and cost over-run should be submitted clearly bringing out the agency responsible and whether such time and cost over-rum was beyond the control of the generating company.

3. The implication on cost due to time over-run, if any shall be submitted separately giving details of increase in prices in different packages from scheduled COD to Actual COD/ anticipated COD, increase in IEDC from scheduled COD to actual COD/ anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD and increase of IDC from scheduled COD to actual anticipated COD to actual actua

4. Impact on account of each reason for Time over-run on Cost of project should be quantified and substantiated with necessary documents and supporting workings

5. A list of balance work assets/ work wise including initial spare on original scope of works along with estimate shall be furnished positively.

## BREAK-UP OF CONSTRUCTION/SUPPLY/SERVICE PACKAGES

#### Name of the Petitioner

## Name of the Generating Station

1	Name/ No. of Construction/ Supply/ Service Package	Package A	Package B	Package C	 Total Cost of all packages
2	Scope of works <sup>1</sup> (in line with head of cost break-ups as applicable)				
3	Whether awarded through ICB/DCB/Departmentally/ Deposit Work				
4	No. of bids received				
5	Date of Award				
6	Date of Start of work				
7	Date of Completion of Work/ Expected date of completion of work				
8	Value of Award <sup>2</sup> in (Rs. Lakh)				
9	Firm or with Escalation in prices				
10	Actual capital expenditure till the completion or up to COD whichever is earlier (Rs. Lakh)				
11	Taxes & Duties and IEDC (Rs. Lakh)				
12	IDC, FC, FERV & Hedging Cost (Rs. Lakh)				
13	Sub-total (10+11+12) (Rs. Lakh)				

#### Note:

1. The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal based plants in FORM-5B to the extent possible.

2. If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separately along with the currency, the exchange rate and the date e.g. Rs. 80 Cr. + IS\$ 50m=Rs. 390 Cr. at US\$=Rs. 62 as on say 01.04.16

#### PART-I

FORM TPS-5D

## DETAILS OF VARIABLES, PARAMETERS, OPTIONAL PACKAGE etc. FOR NEW PROJECT

## Name of the Petitioner

## Name of the Generating Station

Unit S	Size	
Num	per of Units	
Greer	nfield/ Extension	
S. No.	Variables	(Design Operating Range) Values
1	Coal Quality - Calorific Value	
2	Ash Content	
3	Moisture Content	
4	Boiler Efficiency	
5	Suspended Particulate Matter	
6	Ash Utilization	
7	Boiler Configuration	
8	Turbine Heat Rate	
9	CW Temperature	
10	Water Source	
11	Distance of Water Source	
12	Clarifier	
13	Mode of Unloading Oil	
14	Coal Unholding Mechanism	
15	Type of Fly Ash Disposal and Distance	
16	Type of Bottom Ash Disposal and Distance	
17	Type of Soil	
18	Foundation Type (Chimney)	
19	Water Table	
20	Seismic and Wind Zone	
21	Condensate Cooling Method	
22	Desalination/ RO Plant	
23	Evacuation Voltage Level	
24	Type of Coal (Domestic / Imported)	
	Parameter/ Variables	Values
Comp	letion Schedule	
	s of Payment	
	rmance Guarantee Liability	
Basis	of Price (Firm/ Escalation-Linked)	
Equip	ment Supplier (Country of Origin)	
	Optional Packages	Yes/ No
Desal	ianation Plant/ RO Plant	

MGR	
Railway Siding	
Unloading Equipment at Jetty	
Rolling Stock/ Locomotive	
Length of Transmission Line till Tie Point (in km)	

## IN CASE THERE IS COST OVER RUN

# Name of the Petitioner Name of the Generating Station

S. No.	Break Down	Original Cost (Rs. Lakh) as approved by the Board of Members Total Cost	Actual/ Estimated Cost as incurred/ to be incurred (Rs. Lakh) Total Cost	Difference Total Cost	Reasons for Variation (Please submit supporting computation and documents wherever applicable	Increase in soft cost due to increase in hard cost
1	Cost of Land & Site Development					
1.1	Land*					
1.2	Rehabilitation & Resettlement (R&R)					
1.3	Preliminary Investigation & Site Development					
2	Plant & Equipment					
2.1	Steam Generator Island					
2.2	Turbine Generator Island					
2.3	BOP Mechanical					
2.3.1	Fuel Handling & Storage System					
2.3.2	External water supply system					
2.3.3	DM water plant					
2.3.4	Clarification plant					
2.3.5	Chlorination plant					
2.3.6	Fuel Handling & Storage System					
2.3.7	Ash Handling System					
2.3.8	Coal Handling Plant					
2.3.9	Rolling Stock and Locomotives					
2.3.10	MGR					
2.3.11	Air Compressor System					
2.3.12	Air Condition & Ventilation System					
2.3.13	Fire fighting System					
2.3.14	HP/LP Piping					
	Total BOP Mechanical					
2.4	BOP Electrical					
2.4.1	Switch Yard Package					

2.4.2	Transformers Package			
2.4.3	Switch gear Package			
2.4.4	Cables, Cable facilities & grounding			
2.4.5	Lighting			
2.4.6	Emergency D.G. Set			
	Total BOP Electrical			
2.5	Control & Instrumentation (C&I)			
2.5	Package			
	Total Plant & Equipment excluding			
	taxes & duties			
3	Initial Spares			
	-		I	
4	Civil Works			
4.1	Main Plant/ Adm. Building			
4.2	CW System			
4.3	Cooling Towers			
4.4	DM water plant			
4.5	Clarification plant			
4.6	Chlorination plant			
4.7	Fuel handling & Storage system			
4.8	Coal Handling Plant			
4.9	MGR & Marshalling Yard			
4.10	Ash Handling System			
4.11	Ash disposal area development			
4.12	Fire fighting system			
4.13	Township & Colony			
4.14	Temporary construction & enabling			
	works			
4.15	Road & Drainage			
	Total Civil Works			
5	Construction & Pre-Commissioning			
	Expenses			
5.1	Erection Testing and Commissioning			
5.2	Site Supervision			
5.3	Operator's Training			
5.4	Construction Insurance			
5.5	Tools & Plant			
5.6	Start up Fuel			
	Total Construction & Pre-			
	Commissioning Expenses			
			[	1
6	Overheads			
6.1	Establishment			
6.2	Design & Engineering			

6.3	Audit & Accounts				
6.4	Contingency				
	Total Overheads				
				·	
7	Capital Cost Excluding IDC & FC				
8	IDC, FC, FERV & Hedging Cost				
8.1	Interest During Construction (IDC)				
8.2	Financing Charges (FC)				
8.3	Foreign Exchange Rate Variation (FERV)				
8.4	Hedging Cost				
	Total IDC, FC, FERV & Hedging Cost				
		•	•		
9	Capital cost including IDC, FC, FERV & Hedging Cost				
I		 1	1	l	1

\* Submit details of Freehold and Lease hold land

Note: Impact on account of each reason for Cost overrun should be quantified and substantiated with necessary documents and supporting workings.

# PART-I FORM TPS-5D ii

#### IN CASE THERE IS TIME OVER RUN

# Name of the Petitioner

# Name of the Generating Station

Sr. No.	Description of Activity/ Works/ Service	-	al Schedule r Planning)	• •		Time Over- Run	Reasons for delay	Other Activity affected (Mention Sr.
		Start Date	Completion Date	Actual Start Date	Actual Completion Date	Days		No. of activity affected)
1								
2								
3								
4								
5								
6								
7								
8								
9								

- 1 Delay on account of each reason in case of time overrun should be quantified and substantiated with necessary documents and supporting workings
- 2 Indicate the activities on critical path

# PART-I FORM TPS -5E

# IN CASE THERE IS CLAIM OF ADDITIONAL ROE

			IN CASE I H									
Name of	f the Pet	itioner										
Name of	f the Gei	nerating Stati	ion									
Project	approval (Months)				Actual completion time				Qualifying time schedule (as per regulation)			
	Start Date	Scheduled COD (Date)	Completion time in months	Installed capacity	Start Date	Actual COD (Date)	Actual completion time in months	Tested capacity	Months			
Unit 1												
Unit 2												
Unit 3												
Unit 4												

#### FINANCIAL PACKAGE UPTO COD

Name of the Petitioner Name of the Generating Station Project cost as on COD<sup>1</sup>

Date of Commerical Operation of the Station<sup>2</sup>

	Financial Package as Approved			Package as COD	As Admitted on COD		
		y and Amount <sup>3</sup>			Currency an	d Amount <sup>3</sup>	
1	2	3	4	5	6	7	
Loan-I	US\$	200m					
Loan-II							
Loan-III							
and so on							
Equity							
Foreign							
Domestic							
Total Equity							
Debt : Equity Ratio							

#### Note:

- 1. Say Rs. 80 Cr. + US\$ 200 m or Rs. 1320 Cr. including US\$ 200 m at exchange rate of US\$-Rs. 62
- 2. Provide details on commercial operation as on COD of each Unit
- 3. For example US\$ 200 m, etc.

#### DETAILS OF PROJECT SPECIFIC LOANS

#### Name of the Petitioner

## Name of the Generating Station

Particulars	Package-	Package-	Package-	Package-	Package-5	Package-6
	1	2	3	4		
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2016/ COD <sup>3,4,5,13,15</sup>						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>						
Are there any Caps/ Floor <sup>9</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
If above is yes, specify caps/ floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>16</sup>						
Are foreign currency loan hedged?						
If above is yes, specify details <sup>17</sup>						

#### Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

- 2. Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.
- 3. Details are to be submitted as on 31.03.2016 for existing assets and as on COD for the remaining assets.

4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

6. Interest type means whether the interest is fixed or floating.

7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

8. Margin means the points over and above the floating rate.

9. At time caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

10. Moratorium period refers to the period during which loan servicing liability is not required.

11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

13. Where there is more than one drawal/ repayment for a loan, the date & amount of each drawal/ repayment may also be given separately

14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

15. In case of Foreign loan, date of each drawal & repayment along with exchange rate at that date may be given

- 16. Base exchange rate means the exchange rate prevailing as on 31.03.2006 or COD, whichever is later
- 17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately

20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing, etc.

# PART-I FORM TPS -8

#### DETAILS OF ALLOCATION OF CORPORATE LOANS TO VARIOUS PROJECTS

#### Name of the Petitioner

## Name of the Generating Station

Particulars	Package-	Package-	Package-	Package-4	Package-5	Remarks	
	1	2	3				
1	2	3	4	5	6	7	
Source of Loan <sup>1</sup>							
Currency <sup>2</sup>							
Amount of Loan sanctioned							
Amount of Gross Loan drawn upto 31.03.2016/ COD <sup>3,4,5,13,15</sup>							
Interest Type <sup>6</sup>							
Fixed Interest Rate, if applicable							
Base Rate, if Floating Interest <sup>7</sup>							
Margin, if Floating Interest <sup>8</sup>							
Are there any Caps/ Floor <sup>9</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No		
If above is yes, specify caps/ floor							
Moratorium Period <sup>10</sup>							
Moratorium effective from							
Repayment Period <sup>11</sup>							
Repayment effective from							
Repayment Frequency <sup>12</sup>							
Repayment Instalment <sup>13,14</sup>							
Base Exchange Rate <sup>16</sup>							
Are foreign currency loan hedged?							
If above is yes, specify details <sup>17</sup>							
	Distributio	n of loan pa	ckages to va	rious projects	5	•	
Name of the Projects						Total	
Project 1			1				
Project 2							
Project 3 and so on							

#### Note:

1. Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

2. Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc

3. Details are to be submitted as on 31.03.2016 for existing assets and as on COD for the remaining assets.

4. Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

5. If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

6. Interest type means whether the interest is fixed or floating.

7. Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

8. Margin means the points over and above the floating rate.

9. At time caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

10. Moratorium period refers to the period during which loan servicing liability is not required.

11. Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

12. Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

13. Where there is more than one drawal/ repayment for a loan, the date & amount of each drawal/ repayment may also be given separately

14. If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

15. In case of Foreign loan, date of each drawal & repayment along with exchange rate at that date may be given

16. Base exchange rate means the exchange rate prevailing as on 31.03.2016 or COD, whichever is later

17. In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

18. In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

19. At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately

20. At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing, etc.

#### YEAR WISE STATEMENT OF ADDITIONAL CAPITALISATION AFTER COD

Name of the Petitioner Name of the Generating Station COD

For Financial Year

SI. No.	Head of Work/	ļ	ACE Claimed (Actu	ual/ Projec	ted)	Regulations under which	Justification	Admitted Cost by the	
	Equipment	Accrual basis	Un-discharged Liability included in Col.3	Cash basis	IDC included in Col. 3	claimed		Commission, if any	
(1)	(2)	(3)	(4)	(5 = 3 - 4)	(6)	(7)	(8)	(9)	

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 10 giving the cost as admitted for the purpose of tariff notification already issued by (name of the authority) (Enclose copy of the tariff order)

2. The above information needs to be furnished separately for each year/ period of tariff period 2016-19.

3. In case of de-capitalisation of assets separate details to be furnished at Column 1,2,3 and 4. Further, the original book value and year of capitalisation of such asset to be furnished at Column 8. Where de-caps are on estimated basis the same to be shown separately.

4. Where any asset is rendered unserviceable the same shall be treated as de-capitalised during the year and original value of such asset to be shown at Col. 3. And impaired value if any, year of its capitalisation to be mentioned at Column 8.

5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.

#### Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries.

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately e.g. Rotor-50 Crs. Initial spares-5 Crs.

PART-I FORM TPS -9B

#### STATEMENT OF ADDITIONAL CAPITALISATION DURING FAG END OF USEFUL LIFE OF THE PROJECT

Name of the Petitioner

Name of the Generating Station

COD

## For Financial Year

SI. No. Year	Work/	ACE Claimed (Actual/ Projected)				Regulations under	Justification	Impact on	
	last five years useful life of each	added during last five years of useful life of	Accrual basis	Un- discharged Liability included in Col.4	Cash basis	IDC included in Col. 4	which claimed		life extension
(1)	(2)	(3)	(4)	(5)	(6=4-5)	(7)	(8)	(9)	

Note:

1. Cost Benefit analysis for capital additions done should be submitted along with petition for approval of such schemes

2. Justification for additional capital expenditure claim for each asset should be relevant to regulations under which claim has been made and the necessity of capitalization of the asset.

## DETAILS OF ASSETS DE-CAPITALIZED DURING THE PERIOD

Name of the Petitioner Name of the Generating Station

SI. No.	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure	Original value of the Asset Capitalised	Year put to use	Depreciation recovered till date of de-capitalization
1	2	3	4	5	6
1					
2					
3					
4					
5					

Note: Year wise details need to be submitted

## PART-I

## STATEMENT SHOWING RECONCILIATION OF ADDITIONAL CAPITAL EXPENDITURE (ACE) CLAIMED WITH THE CAPITAL ADDITIONS AS PER BOOKS

#### Name of the Petitioner

# Name of the Generating Station

COD

SI.	Particulars	2016-17	2017-18	2018-19
No.				
(1)	(2)	(3)	(4)	(5)
	Closing Gross Block			
	Less: Opening Gross Block			
	Total Additions as per books			
	Less: Additions pertaining to other Stages (give			
	Stage wise breakup)			
	Net Additions pertaining to instant project/ Unit/			
	Stage			
	Less: Exclusions (items not allowable/ not claimed)			
	Net Additional Capital Expenditure Claimed			

Note: Reason for exclusion of any expenditure shall be given in Clear terms

### PART-I FORM TPS -9D

#### STATEMENT SHOWING ITEMS/ASSETS/WORKS CLAIMED UNDER EXCLUSIONS

Name of the Petitioner

# Name of the Generating Station

COD

SI. No.	Head of		Justification			
	Work/ Equipment	Accrual basis	Un-discharged Liability included in Col.3	Cash basis	IDC included in Col.3	
(1)	(2)	(3)	(4)	(5=3-4)	(6)	(7)

#### Note:

1. Exclusions claimed on assets not allowed in Tariff should be supported by the specific reference of Commission Order date, Petition No., amount disallowed, etc.

2. For inter unit transfer, nature of transfer i.e. temporary or permanent should be mentioned. It is to be certified that exclusion sought in receiving station only and not in sending station or in both the station.

PART-I FORM TPS -9E

#### STATEMENT OF CAPITAL COST

#### (To be given for relevant dates and year wise)

# Name of the Petitioner

# Name of the Generating Station

(Amount in Rs. Lakh)

SI.	Particulars	As on relevant date
No.		
A	a) Opening Gross Block Amount as per books	
	b) Amount of capital liabilities in A(a) above	
	c) Amount of IDC in A(a) above	
	d) Amount of FC in A(a) above	
-	e) Amount of FERV in A(a) above	
-	f) Amount of Hedging Cost in A(a) above	
	g) Amount of IEDC in A(a) above	
В	a) Addition in Gross Block Amount during the period (Direct purchases)	
	b) Amount of capital liabilities in B(a) above	
	c) Amount of IDC in B(a) above	
	d) Amount of FC in B(a) above	
	e) Amount of FERV in B(a) above	
	f) Amount of Hedging Cost in B(a) above	
	g) Amount of IEDC in B(a) above	
С	a) Addition in Gross Block Amount during the period	
	(Transferred from CWIP)	
	b) Amount of capital liabilities in C(a) above	
	c) Amount of IDC in C(a) above	
	d) Amount of FC in C(a) above	
	e) Amount of FERV in C(a) above	
	<li>f) Amount of Hedging Cost in C(a) above</li>	
	g) Amount of IEDC in C(a) above	
D	a) Deletion in Gross Block Amount during the period	
	b) Amount of capital liabilities in D(a) above	
	c) Amount of IDC in D(a) above	
	d) Amount of FC in D(a) above	
	e) Amount of FERV in D(a) above	
	f) Amount of Hedging Cost in D(a) above	
	g) Amount of IEDC in D(a) above	

E	a) Closing Gross Block Amount as per books
	b) Amount of capital liabilities in E(a) above
	c) Amount of IDC in E(a) above
	d) Amount of FC in E(a) above
	e) Amount of FERV in E(a) above
	f) Amount of Hedging Cost in E(a) above
	g) Amount of IEDC in E(a) above

Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date

PART-I FORM TPS -9F

# STATEMENT OF CAPITAL WORKS IN PROGRESS (To be given for relevant dates and year wise)

# Name of the Petitioner

# Name of the Generating Station

(Amount in Rs. Lakh)

SI.		Particulars	As on relevant date
No.			
A	a)	Opening CWIP as per books	
	b)	Amount of capital liabilities in A(a) above	
	c)	Amount of IDC in A(a) above	
	d)	Amount of FC in A(a) above	
	e)	Amount of FERV in A(a) above	
	f)	Amount of Hedging Cost in A(a) above	
	g)	Amount of IEDC in A(a) above	
В	a)	Addition in CWIP during the period	
	b)	Amount of capital liabilities in B(a) above	
	c)	Amount of IDC in B(a) above	
	d)	Amount of FC in B(a) above	
	e)	Amount of FERV in B(a) above	
	f)	Amount of Hedging Cost in B(a) above	
	g)	Amount of IEDC in B(a) above	
С	a)	Transferred to Gross Block Amount during the period	
	b)	Amount of capital liabilities in C(a) above	
	c)	Amount of IDC in C(a) above	
	d)	Amount of FC in C(a) above	
	e)	Amount of FERV in C(a) above	
	f)	Amount of Hedging Cost in C(a) above	
	g)	Amount of IEDC in C(a) above	
D	a)	Deletion in CWIP during the period	
	b)	Amount of capital liabilities in D(a) above	
	c)	Amount of IDC in D(a) above	
	d)	Amount of FC in D(a) above	
	e)	Amount of FERV in D(a) above	
	f)	Amount of Hedging Cost in D(a) above	
	g)	Amount of IEDC in D(a) above	
E	a)	Closing CWIP as per books	
	b)	Amount of capital liabilities in E(a) above	

c)	Amount of IDC in E(a) above	
d)	Amount of FC in E(a) above	
e)	Amount of FERV in E(a) above	
f)	Amount of Hedging Cost in E(a) above	
g)	Amount of IEDC in E(a) above	

#### Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date

#### FINANCING OF ADDITIONAL CAPITALISATION

Name of the Petitioner

Name of the Generating Station

**Date of Commercial Operation** 

					(Amou	nt in Rs. Lakh)
		Actua	al		ed	
Financial Year (Starting from COD) <sup>1</sup>	Year 1	Year 2	Year 3 & so on	Year 1	Year 2	Year 3 & so on
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Amount capitalized in Work/Equipment						
Financing Details						
Loan-1						
Loan-2						
Loan-3 and so on						
Total Loan <sup>2</sup>						
Equity						
Internal Resources						
Others(Pl. specify)						
Total						

#### Note:

1. Year 1 refers to Financial Year of COD and Year-2, Year-3 etc. are the subsequent financial years respectively

2. Loan details for meeting the additional capitalisation requirement should be given as per FORM-7 or 8 whichever is relevant

### PART-I FORM TPS -11

#### **CALCULATION OF DEPRECIATION**

# Name of the Petitioner Name of the Generating Station

	of the Generating Station			(Amount in Rs. Lakh)
SI. No.	Name of the Assets <sup>1</sup>	Gross Block as on 31.03.2016 or as on COD, whichever is later and subsequently for each year thereafter upto 31.03.2019	Depreciation Rates as per MPERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2019
	1	2	3	4=Col.2 x Col.3
1	Land*			
2	Building			
3	and so on			
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

31			
32			
	TOTAL		
	Weighted Average Rate of		
	Depreciation %		

\* Provide details of Freehold land and Lease hold land separately

1. Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule appended to the Notification.

PART-I FORM TPS -12

#### STATEMENT OF DEPRECIATION

# Name of the Petitioner Name of the Generating Station

(Amount in Rs. Lakh)

SI.	Particulars	2015-16	2016-17	2017-18	2018-19
No.					
(1)	(2)	(3)	(4)	(5)	(6)
	Opening Capital Cost				
	Closing Capital Cost				
	Average Capital Cost				
	Freehold land				
	Rate of depreciation				
	Depreciable value				
	Balance useful life at the beginning of the period				
	Remaining depreciable value				
	Depreciation (for the period)				
	Depreciation (annualized)				
	Cumulative depreciation at the end of the period				
	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009/ Station COD				
	Less: Cumulative depreciation adjustment on account of de-capitalization				
	Net Cumulative depreciation at the end of the period				

1. In case of details of FERV and AAD, give information for the applicable period

#### PART-I

FORM TPS -13

### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS<sup>1</sup>

Name of the Petitioner

# Name of the Generating Station

(Amount in Rs. Lakh)

Particulars	Existing	2016-17	2017-18	2018-19
	2015-16			
Loan-1				
Gross Ioan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening				
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year				
Net loan - Closing				
Average Net Loan				
Rate of Interest on Loan on annual basis				
Interest on loan				
Loan-2				
Gross Ioan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening				
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year				
Net loan - Closing				
Average Net Loan				
Rate of Interest on Loan on annual basis				
Interest on loan				
Loan-3 and so on				
Gross Ioan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening				
Add: Drawal(s) during the Year				
Less: Repayment (s) of Loans during the year				
Net loan - Closing				
Average Net Loan				
Rate of Interest on Loan on annual basis				
Interest on loan				
Total Loan				
Gross Ioan - Opening				

Cumulative repayments of Loans upto previous year		
Net Ioan - Opening		
Add: Drawal(s) during the Year		
Less: Repayment (s) of Loans during the year		
Net loan - Closing		
Average Net Loan		
Rate of Interest on Loan on annual basis		
Interest on loan		
Weighted average Rate of Interest on Loans		

#### Note:

1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form

### PART-I FORM TPS -13A

#### CALCULATION OF INTEREST ON NORMATIVE LOAN

Name of the Petitioner

### Name of the Generating Station

(Amount in Rs. Lakh)

SI. No.	Particulars	Existing 2015-16	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)	(6)
	Gross Ioan - Opening				
	Cumulative repayment of Normative Loan upto previous year				
	Net Normative loan - Opening				
	Add: Increase due to addition during the year/period				
	Less: Decrease due to de-capitalization during the year/ period				
	Less: Decrease due to reversal during the year/ period				
	Add: Increase due to discharges during the year/ period				
	Net Normative loan - Closing				
	Average Normative Loan				
	Weighted average rate of interest				
	Interest on loan				

PART-I

#### FORM TPS -13B

#### CALCULATION OF INTEREST ON WORKING CAPITAL

Name of the Petitioner

#### Name of the Generating Station

(Amount in Rs. Lakh)

SI. No.	Particulars	Existing 2015-16	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Coal				
2	Cost of Main Secondary Fuel Oil <sup>1</sup>				
3	O & M Expenses				
4	Maintenance Spares				
5	Receivables				
6	Total Working Capital				
7	Rate of Interest				
8	Interest on Working Capital				

#### Note:

1. For Coal based/ Lignite based generating stations

PART-I FORM TPS -13C

#### OTHER INCOME AS ON COD

# Name of the Petitioner Name of the Generating Station

(Amount in Rs. Lakh)

SI. No.	Parameters	Existing 2015-16	2016-17	2017-18	2018-19
(1)	(2)	(3)	(4)	(5)	(6)
1	Interest on Loans and advance				
2	Interest received on deposits				
3	Income from Investment				
4	Income from sale of scrap				
5	Rebate for timely payment				
6	Surcharge on late payment from beneficiaries				
7	Rent from residential building				
8	Misc. receipts (Please Specify Details)				
	(add)				

### PART-I FORM TPS-13D INCIDENTAL EXPENDITURE DURING CONSTRUCTION UP TO SCHEDULED COD AND UP TO ACTUAL/ ANTICIPATED COD

#### Name of the Petitioner

# Name of the Generating Station

			(Amount in Rs. Lakh)
SI. No.	Parameters	As on Scheduled COD	As on actual COD/ Anticipated COD
Α	Head of Expenses:		
1	Employees <sup>1</sup> Benefits Expenses		
2	Finance Costs		
3	Water Charges		
4	Communication Expenses		
5	Power Charges		
6	Other Office and Administrative Expenses		
7	Others (Please Specify Details)		
8	Other Pre-Operating Expenses		
В	Total Expenses		
	Less: Income from sale of tenders		
	Less: Income from guest house rent		
	Less: Income recovered from Contractors		
	Less: Interest on Deposits		

### PART-I FORM TPS -13E EXPENDITURE UNDER DIFFERENT PACKAGES UP TO SCHEDULED COD AND UP TO ACTUAL/ ANTICIPATED COD

#### Name of the Petitioner

#### Name of the Generating Station

(Amount in Rs. Lakh)

SI. No.	Parameters	As on Scheduled COD	As on actual COD/ Anticipated COD
1	Package 1		
2	Package 2		
3	Package 3		
4			
5			
6			

PART-I FORM TPS -14

#### DRAW DOWN SCHEDULE FOR CALCULATION OF IDC & FINANCING CHARGES

Name of the Petitioner Name of the Generating Station

SI.	Particulars		Quarter 1			Quarter 2		Q	uarter n (CC	)D)
No.		Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)
1	Loans									
1.1	Foreign Loans									
1.1.1	Foreign Loan <sup>1</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.2	Foreign Loan <sup>2</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation Hedging Cost									

	Hedging Cost					
1.1.3	Foreign Loan <sup>3</sup>					
	Draw down Amount					
	IDC					
	Financing charges					
	Foreign Exchange Rate Variation Hedging Cost					
	Hedging Cost					
1.1.4						
1.1	Total Foreign Loans					
	Draw down Amount					
	IDC					
	Financing charges					
	Foreign Exchange Rate Variation					
	Hedging Cost					
1.2	Indian Loans					
1 2 4						
1.2.1	Indian Loan <sup>1</sup>					
	Draw down Amount	 			 	
	IDC	 			 	
	Financing charges	 			 	

1.2.2	Indian Loan <sup>2</sup>						
	Draw down Amount	 					
	IDC	 					
	Financing charges	 					
1.2.3	Indian Loan <sup>3</sup>						
	Draw down Amount	 					
	IDC	 					
	Financing charges	 					
1.2.4		 					
1.2	Total Indian						
	Draw down Amount	 					
	IDC	 					
	Financing charges	 					
1	Total of Loans drawn						
	IDC	 					
	Financing charges						
	Foreign Exchange Rate Variation						
	Hedging Cost						
2	Equity						

2.1	Foreign Equity Drawn					
2.2	Indian Equity Drawn	 			 	
	Total Equity Deployed					

Note:

1. Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.

2. Applicable interest rates including reset dates used for above computation may be furnished separately

3. In case of multi unit project details of capitalization ratio used to be furnished

#### ACTUAL CASH EXPENDITURE

# Name of the Petitioner Name of the Generating Station

			(Amou	nt in Rs. Lakh)
Particulars	Quarter-I	Quarter-II	Quarter-III	Quarter-n (COD)
Expenditure towards Gross Block				
Add: Expenditure towards CWIP				
Add: Capital Advances, if any				
Less: Un-discharged liabilities (included above)				
Add/Less: Others				
Payment to contractors/ suppliers towards capital assets				
Cumulative payments				

Note: If there is variation between payment and fund deployment justification need to be furnished

#### PART-I

# DETAILS/INFORMATION TO BE SUBMITTED IN RESPECT OF FUEL FOR COMPUTATION OF ENERGY CHARGES<sup>1</sup> Name of the Petitioner

### Name of the Generating Station

S.	Month	Unit	For Preceding							
No.			3rd Month (from COD or from 1.4.2016 as the case may be)		COD o 1.4.2016 a	nth (from r from is the case r be)	COD o 1.4.2016 a	th (from r from is the case v be)		
			Domestic	Imported	Domestic	Imported	Domestic	Imported		
1	Quantity of Coal supplied by Coal Company	(MMT)								
2	Adjustment (+/-) in quantity supplied made by Coal Company	(MMT)								
3	Coal supplied by Coal Company (1+2)	(MMT)								
4	Normative Transit & Handling Losses (For coal based Projects)	(MMT)								
5	Net Coal Supplied (3-4)	(MMT)								
6	Amount charged by the Coal Company	(Rs.)								
7	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)								
8	Total amount charged (6+7)	(Rs.)								
9	Transportation charges by rail/ ship/ road transport	(Rs.)								
10	Adjustment (+/-) in amount charged made by Railways/ Transport Company	(Rs.)								
11	Demurrage Charges, if any	(Rs.)								
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)								
13	Total Transportation Charges (9+/ -10-11+12)	(Rs.)								
14	Total amount charged for coal supplied including transportation (8+13)	(Rs.)								
15	Landed cost of coal	Rs./MT								
16	Blending Ratio (Domestic/ Imported)									

17	Weighted average cost of coal for preceding three months	Rs./MT			
18	GCV of Domestic Coal as per bill of Coal Company				
19	GCV of Imported Coal as per bill Coal Company				
20	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)			
21	GCV if Domestic Coal as received at Station				
22	GCV if Imported Coal as received at Station				
23	Weighted average GCV of coal as Received				

#### Note:

1. Similar details to be furnished for natural gas/ liquid fuel for CCGT station and secondary fuel oil for coal/ lignite based thermal plants with appropriate units

2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.

# PART-I

# FORM TPS - 16

# DETAILS/INFORMATION TO BE SUBMITTED IN RESPECT OF CAPITAL SPARES

Name of the Petitioner

Name of the Generating Station

SI. No.		apital Spares penses	Claimed as a part of	Funded through	Funded through Special	Claimed as a part of stores
	Name of spare	Amount	additional capitalisation	compensatory allowance	Allowance (if applicable)	and spares
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

### PART-I FORM TPS - 17

#### LIABILITY FLOW STATEMENT

# Name of the Petitioner

# Name of the Generating Station

Party	Asset/Work	Year of actual capitalisation	Original Liability	Liability as on 31.03.2016	Discharges (Yearwise)	Reversal (Yearwise)

# **APPENDIX IV**

### PART-II

# Checklist of Forms and other information/ documents for tariff filing for Hydro Stations

Form No.	Title of Tariff Filing Forms (Hydro)	Tick
FORM HPS-1	Summary Sheet	
FORM HPS-2	Details of COD, Type of hydro station, Normative Annual Plant Availability Factor(NAPAF) & Other normative parameters considered for tariff calculation	
FORM HPS-3	Salient Features of Hydroelectric Project	
FORM HPS-4	Details of Foreign loans	
FORM HPS-4A	Details of Foreign Equity	
FORM HPS-5	Abstract of Admitted Capital Cost for the existing Projects	
FORM HPS-5A	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	
FORM HPS-5B	Break-up of Capital Cost for New Hydro Power Generating Station	
FORM- HPS5C	Break-up of Capital Cost for Plant and Equipment	
FORM HPS-5D	Break-up of Construction/Supply/Service packages	
FORM HPS-5Ei	In case there is cost over run	
FORM HPS-5Eii	In case there is time over run	
FORM HPS-5F	In case there is claim of additional RoE	
FORM HPS-6	Financial Package upto COD	
FORM HPS-7	Details of Project Specific Loans	
FORM HPS- 8	Details of Allocation of corporate loans to various projects	
FORM HPS-9A	Statement of Additional Capitalisation after COD	
FORM HPS-9B	Statement of Additional Capitalisation during fag end of the Project	
FORM HPS-9Bi	Details of Asset De-capitalised during the period	
FORM HPS-9C	Statement showing reconciliation of ACE claimed with the capital additions as per books	
FORM HPS-9D	Statement showing items/ assets/ works claimed under Exclusions	
FORM HPS-9E	Statement of Capital Cost	
FORM HPS-9F	Statement of capital works in progress	
FORM HPS-10	Financing of Additional Capitalisation	
FORM HPS-11	Calculation of Depreciation	
FORM HPS-12	Statement of Depreciation	
FORM HPS-13	Calculation of weighted average rate of interest on actual loans	
FORM HPS-13A	Calculation of interest on Normative loan	
FORM HPS-13B	Calculation of Interest on Working Capital	
FORM HPS-13C	Other Income as on COD	
FORM HPS-13D	Incidental Expenditure during Construction	

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FORM HPS-14	Draw Down Schedule for Calculation of IDC & Financing Charges		
FORM HPS-14A	Actual cash expenditure		
FORM HPS-15A	Deign energy and peaking capability (month wise)- ROR with Pondage/Storage type new stations		
FORM HPS-15B	Deign energy and MW Continuous (month wise)- ROR type new stations		
FORM HPS-16	Liability Flow Statement		

# **Summary Sheet**

# Name of the Generating Company : Name of the Power Station : Place (Region/ District/ State):

				(Rs. in	
				lacs)	
S.	Particulars	Existing	2016-17	2017-18	2018-
No.		2015-16			19
1	2	3	4	5	6
1	Depreciation				
2	Interest on Loan				
3	Return on Equity <sup>1</sup>				
4	Interest on Working Capital				
5	O & M Expenses				
	Total				

Note

1 : Details of calculations, considering equity as per regulation, to be furnished.

#### Form-1(I) - Statement showing claimed capital cost:

				(Rs. In lacs)
S. No.	Particulars	2016-17	2017-18	2018-19
1	2	3	4	5
	Opening Capital Cost			
	Add: Addition during the year/ period			
	Less: Decapitalisation during the year/ period			
	Less: Reversal during the year/ period			
	Add: Discharges during the year/ period			
	Closing Capital Cost			
	Average Capital Cost			

Form-1(II) - Statement showing Return on Equity:

(Rs. In lacs)

S. No.	Particulars	2016-17	2017-18	2018-19
1	2	3	4	5

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Opening Equity		
Add: Increase due to addition during		
the year/ period		
Less: Decrease due to decapitalisation		
during the year/ period		
Less: Decrease due to reversal during		
the year/ period		
Add: Increase due to discharges during		
the year/ period		
Closing Equity		
Average Equity		
Rate of ROE		
Rate on Equity		

# Details of COD, Type of hydro station, Normative Annual Plant Availability Factor(NAPAF) & Other normative parameters considered for tariff calculation

# NAME OF THE PETITIONER: NAME OF THE GENERATING STATION :

Year Ending March

					Year Endu	ng March
Sl. No.	Description	Unit	As Existing 2015-16	2016-17	2017-18	2018-19
	(1)	(2)	(3)	(4)	(5)	(6)
1	Installed Capacity	MW				
2	Free power to home state	%				
3	Date of commercial operation (actual/ anticipated)					
	Unit-1					
	Unit-2					
	Unit-3					
4	Type of Station					
	a) Surface/underground					
	b) Purely ROR/ Pondage/Storage					
	c) Peaking/non-peaking					
	d) No. of hours of peaking					
	e) Overload capacity(MW) & period					
5	Type of excitation					
	a) Rotating exciters on generator					
	b) Static excitation					
6	Design Energy (Annual) <sup>1</sup>	Gwh				
7	Auxiliary Consumption including Transformation losses	%				
8	Normative Plant Availability Factor (NAPAF)					
9.1	Maintenance Spares for WC	% of O&M				
9.2	Receivables for WC	in Months				
9.3	Base Rate of Return on Equity	%				

9.4	Tax Rate	%		
9.5	Effective Tax Rate3			
9.5	SBI Base Rate + 350 basis points as on2	%		

<sup>1</sup> Month wise Design energy figures to be given separately with the petition.

# 2 Mention relevant date

 $^{3}$  Effective tax rate is to be computed in accordance with Regulation 25 i.e. actual tax (or advance tax)/ gross income, where gross income refers the profit before tax.

# Salient Features of Hydroelectric Project

# NAME OF THE PETITIONER:

# NAME OF THE GENERATING STATION:

1. Location	
State/Distt.	
River	
2. Diversion Tunnel	
Size, shape	
Length (M)	
3. Dam	
Туре	
Maximum dam height (M)	
4. Spillway	
Туре	
Crest level of spillway (M)	
5. Reservoir	
Full Reservoir Level (FRL) (M)	
Minimum Draw Down Level (MDDL) (M)	
Live storage (MCM)	
6. De-silting Chamber	
Туре	
Number and Size	
Particle size to be removed(mm)	
7. Head Race Tunnel	
Size and type	
Length (M)	
Design discharge(Cumecs)	
8. Surge Shaft	
Туре	
Diameter (M)	
Height (M)	
9. Penstock/Pressure shafts	
Туре	
Diameter & Length (M)	
10. Power House	
Installed capacity (No of units x MW)	
Type of turbine	
Rated Head(M)	
Rated Discharge(Cumecs)	

Head at Full Reservoir Level (M)	
Head at Minimum Draw down Level (M)	
MW Capability at FRL	
MW Capability at MDDL	
11. Tail Race Tunnel/Channel	
Diameter (M), shape	
Length (M)	
Minimum tail water level (M)	
12. Switchyard	
Type of Switch gear	
No. of generator bays	
No. of Bus coupler bays	
No. of line bays	

Note: Specify limitation on generation during specific time period(s) on account of restrictions on water use due to irrigation, drinking water, industrial, environmental considerations etc.

# PART-II FORM HPS-4

# **Details of Foreign** loans

(Details only in respect of loans applicable to the project under petition)

Name of the Petitioner	
Name of the Generating	
Company	
Exchange Rate at COD	
Exchange Rate as on	
31.03.2016	

(Amount in lacs)

SI.	Financial Year (Starting from COD)	Year 1				Year 2					Year 3			
	1	2	3	4	5	6	7	8	9	10	11	12	13	
		Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Relevant Exchange Rate	Amount (Rs.)	
	Currency1 <sup>1</sup>													
A.1	At the date of Drawl <sup>2</sup>													
2	Scheduled repayment date of principal													
3	Scheduled payment date of interest													
4	At the end of Financial year													
В	In case of Hedging3													
1	At the date of hedging													
2	Period of hedging													
3	Cost of hedging													

	Currency2 <sup>1</sup> & so on						
A.1	At the date of Drawl <sup>2</sup>						
2	Scheduled repayment date of principal						
3	Scheduled payment date of interest						
4	At the end of Financial year						
В	In case of Hedging3						
1	At the date of hedging						
2	Period of hedging						
3	Cost of hedging						

<sup>1</sup> Name of the currency to be mentioned e.g. US \$, DM, etc.

etc.

<sup>2</sup> In case of more than one drawl during the year, Exchange rate at the date of each drawl to be given.

<sup>3</sup> Furnish details of hedging, in case of more than one hedging during the year or part hedging, details of each hedging are to be given.

Tax (such as withholding tax) details as applicable including change in rates, date from which change effective etc. must be clearly indicated.

# PART-II FORM HPS-4A

# **Details of Foreign Equity**

(Details only in respect of Equity infusion if any applicable to the project under petition)

### Name of the Petitioner

# Name of the Generating Station

### Exchange Rate on date/s of infusion

SI.	Financial Year		Ye	ar 1			Ye	ar 2		Year 3				
	1	2	3	4	5	6	7	8	9	10	11	12	13	
		Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	
	Currency1 <sup>1</sup>													
A.1	At the date of infusion <sup>2</sup>													
2														
3														
4														
В	Currency2 <sup>1</sup>													
1														
2														
3														
	Currency3 <sup>1</sup>													
A.1	At the date of infusion <sup>2</sup>													
2														
3														

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4							
В	Currency4 <sup>1</sup> & so on						
	so on						
1	At the date of infusion <sup>2</sup>						
2							
3							

<sup>1</sup> Name of the currency to be mentioned e.g. US \$, DM, etc. etc.

<sup>2</sup> In case of equity infusion more than once during the year, Exchange rate at the date of each infusion to be given.

# PART-II FORM HPS-5

# Abstract of Admitted Capital Cost for the existing Projects

\_\_\_\_\_

. . . . . . <u>. . .</u>

Name of the Petitioner :

### Name of the Generating Station :

	Capital Cost as admitted by MPERC	
a)	Capital cost admitted as on	
	(Give reference of the relevant MPERC Order with Petition No. & Date)	
b)	Foreign Component, if any (In Million US \$ or the relevant Currency)	
c)	Foreign Exchange rate considered for the admitted Capital cost (Rs. Lakh)	
d)	Total Foreign Component (Rs. Lakh)	
e)	Domestic Component (Rs. Lakh)	
5	Ladeing each if any considered for the admitted Constal	
f)	Hedging cost, if any, considered for the admitted Capital cost (Rs. Lakh)	
	Total Capital cost admitted (Rs. Lakh) (d+e+f)	

# PART-II

**FORM HPS-5A** 

# Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Generating Company :

Name of the Power Station :

# <u>New Projects</u> <u>Capital Cost Estimates</u>

Board of Director/ Agency approving the Capital cost estimates:		
Date of approval of the Capital cost estimates:		
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End ofQtr. Of the year	As on Scheduled COD of the Station
Foreign Exchange rate considered for the Capital cost estimates		
Canital Cost e	xcluding IDC & FC	
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Capital cost excluding IDC, IEDC, FC, FERV & Hedging Cost (Rs. Lakh)		
IDC, IEDC, FC, F	ERV & Hedging Cost	
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Total IDC, IEDC, FC, FERV & Hedging Cost (Rs.Lakh)		
Rate of taxes & duties considered		
Capital cost Including IDC,	IEDC, FC, FERV & Hedgir	ng Cost

Foreign Component, if any (In Million US \$ or the relevant Currency)	
Domestic Component (Rs. Lakh)	
Capital cost Including IDC, IEDC & FC (Rs. Lakh)	
Schedule of Commissioning as per investment approval	
Scheduled COD of Unit-I	
Scheduled COD of Unit-II	
Scheduled COD of last Unit/Station	
Scheduled COD of last Unit/Station	

Note:

1. Copy of approval letter should be enclosed.

2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.

3. Details of IDC & Financing Charges are to be furnished as per FORM-14.

### PART-II FORM HPS-5B

### Break up of Capital Cost for New Hydro Power Generating Station

### NAME OF THE PETITIONER: NAME OF THE GENERATING STATION:

**Original cost as** SI. Break Down Actual capital Liabilities/ Variation **Reasons for** approved by No. expenditure as Provisions (6=3-4-5)) Variation Authority/ on actual/ Investment anticipated COD Approval 7 1 2 3 4 5 6 1.0 **Infrastructure Works** Preliminary including Development 1.1 1.2 Land\* R & R Expenditure 1.3 1.4 Buildings 1.5 Township 1.6 Maintenance Tools & Plants 1.7 1.8 Communication Environment & Ecology 1.9 Losses on stock 1.10 1.11 Receipt & Recoveries Total (Infrastructure works) 1.12

(Rs. in Lakh)

2.0	Major Civil Works			
2.1	Dam, Intake & Desilting Chambers			
2.2	HRT, TRT, Surge Shaft & Pressure shafts			
2.3	Power Plant civil works			
2.4	Other civil works (to be specified)			
2.5	Total (Major Civil Works)			
3.0	Hydro Mechanical equipments			
5.0				
4.0	Plant & Equipment			
4.1	Initial spares of Plant & Equipment			
4.2	Total (Plant & Equipment)			
5.0	Taxes and Duties			
5.1	Custom Duty			
5.2	Other taxes & Duties			
5.3	Total Taxes & Duties			
6.0	Construction & Pre-commissioning			
0.0	expenses			
6.1	Erection, testing & commissioning			
6.2	Construction Insurance			
6.3	Site supervision			
6.4	Total (Const. & Pre-commissioning)			
7.0	Overheads			
7.1	Establishment			

7.2	Design & Engineering		
7.3	Audit & Accounts		
7.4	Contingency		
7.5	Rehabilitation & Resettlement		
7.6	Total (Overheads)		
8.0	Capital Cost without IDC, FC, FERV & Hedging Cost		
9.0	IDC, FC, FERV & Hedging Cost		
9.1	Interest During Construction (IDC)		
9.2	Financing Charges (FC)		
9.3	Foreign Exchange Rate Variation (FERV)		
9.4	Hedging Cost		
9.5	Total of IDC, FC, FERV & Hedging Cost		
10.0	Capital cost including IDC, FC, FERV & Hedging Cost		

\* Provide details of Freehold Land, Leasehold Land and Land under reservoir separately

#### Note:

1. In case of cost variation, a detailed note giving reasons of such variation should be submitted clearly indicating whether such cost over-run was beyond the control of the generating company.

2. In case of both time & cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bringing out the agency responsible and whether such time & cost over run was beyond the control of the generating company.

3. The implication on cost due to time over run, if any shall be submitted separately giving details of increase in prices in different packages from scheduled COD to Actual COD/ anticipated COD, increase in IEDC from scheduled COD to actual COD/ anticipated COD and increase of IDC from scheduled COD to actual anticipated COD.

4. Impact on account of each reason for Time over run on Cost of project should be quantified and substantiated with necessary documents and supporting workings.

5. A list of balance work assets/ work wise including initial spare on original scope of works along with estimate shall be furnished positively.

# PART-II FORM HPS-5C

# Break up of Capital Cost for Plant & Equipment (New Project)

### NAME OF THE PETITIONER: NAME OF GENERATING STATION:

ĺ

(Rs. in lakhs)

(Rs. In l									
SI. No.	Break Down	Original Cost as approved by Authority/Invest ment Approval	Cost on Actual/Antic ipated COD	Variation	Reasons for Variation*				
1	2	3	4	5	6				
1.0	Generator, turbine & Accessories								
1.1	Generator package								
1.2	Turbine package								
1.3	Unit control Board								
1.4	C & I package								
1.5	Bus Duct of GT connection								
1.6	Total (Generator, turbine & Accessories)								
2.0	Auxiliary Electrical Equipment								
2.1	Step up transformer								
2.2	Unit Auxiliary Transformer								
2.3	Local supply transformer								
2.4	Station transformer								
2.5	SCADA								
2.6	Switchgear, Batteries, DC dist. Board								
2.7	Telecommunication equipment								
2.8	Illumination of Dam, PH and Switchyard								
2.9	Cables & cable facilities, grounding								
2.10	Diesel generating sets								
2.11	Total (Auxiliary Elect. Equipment)								
3.0	Auxiliary equipment & services for power station								

3.1	EOT crane		
3.2	Other cranes		
3.3	Electric lifts & elevators		
3.4	Cooling water system		
3.5			
	system		
3.6	Fire fighting equipment		
3.7	Air conditioning,		
	ventilation and heating		
-	Water supply system		
3.9	<b>U</b>		
3.10	•		
	equipment		
3.11			
	equipt. & services for		
4.0	PS) Switchyard package		
4.0	Switchyaru package		
5.0	Initial spares for all		
	above equipments		
6.0	•		
	Equipment) excluding IDC, FC, FERV &		
	Hedging Cost		
7.0	IDC, FC, FERV &		
	Hedging Cost		
7.1	Interest During		
	Construction (IDC)		
7.2	Financing Charges (FC)		
7.3	Foreign Exchange Rate		
	Variation (FERV)		
7.4	Hedging Cost		
7.5	Total of IDC, FC, FERV		
	& Hedging Cost		
8.0	Total Cost (Plant &		
	Equipment) including		
	IDC, FC, FERV &		
	Hedging Cost		

### Note:

1. In case of cost variation, a detailed note giving reasons for such variation should be submitted clearly indicating whether such cost over run was beyond the control of the generating company

# PART-II

# FORM HPS-5D

# Break-up of Construction/Supply/Service packages

# Name of the Petitioner

# Name of the Generating Station :

1	Name/No. of Construction / Supply / Service Package	Package A	Package B	Package C	 Total Cost of all packages
2	Scope of works <sup>1</sup> (in line with head of cost break-ups as applicable)				
3	Whether awarded through ICB/DCB/Departmentally/ Deposit Work				
4	No. of bids received				
5	Date of Award				
6	Date of Start of work				
7	Date of Completion of Work/ Expected date of completion of work				
8	Value of Award <sup>2</sup> in (Rs. Lakh)				
9	Firm or With Escalation in prices				
10	Actual capital expenditure till the completion or up to COD whichever is earlier (Rs. Lakh)				
11	Taxes & Duties and IEDC (Rs. Lakh)				
12	IDC, FC, FERV & Hedging cost (Rs. Lakh)				
13	Sub-total (10+11+12) (Rs. Lakh)				

# Note:

<sup>1</sup> If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separately along with the currency, the exchange rate and the date

### PART-II FORM HPS-5Ei

#### In case there is cost over run

#### Name of the Petitioner

### Name of the Generating Station

S.No.	Break Down	Original Cost (Rs. Lakh) as approved by the Board of Members Total Cost	Actual/ Estimated Cost and incurred/ to be incurred (Rs. Lakh) Total Cost	Difference Total Cost	Reasons for Variation (Please submit supporting computations and documents wherever applicable)	Increase in soft cost due to increase in hard cost
1	Cost of Land & Site Development					
1.1	Land*					
1.2	Rehabilitation & Resettlement (R&R)					
1.3	Preliminary Investigation & Site Development					
2	Plant & Equipment					
2.1	Steam Generator Island					
2.2	Turbine Generator Island					
2.3	BOP Mechanical					
2.3.1	Fuel Handling & Storage System					
2.3.2	External Water Supply System					
2.3.3	DM Water Plant					
2.3.4	Clarification Plant					
2.3.5	Chlorination Plant					
2.3.6	Fuel Handling & Storage System					
2.3.7	Ash Handling System					
2.3.8	Coal Handling Plant					
2.3.9	Rolling Stock and Locomotives					
2.3.10	MGR					
2.3.11	Air Compressor System					

2.3.12	Air Condition & Ventilation System			
	Fire Fighting System			
2.3.14	HP/LP Piping			
	Total BOP Mechanical			
2.4	BOP Electrical			
2.4.1	Switch Yard Package			
2.4.2	Transformers Package			
2.4.3	Switch Gear Package			
2.4.4	Cables, Cable facilities & grounding			
2.4.5	Lighting			
2.4.6	Emergency D.G. Set			
	Total BOP Electrical			
2.5	Control & Instrumentation (C&I) Package			
	Total Plant & Equipment excluding taxes &			
	Duties			
3	Initial Spares			
4	Civil Works			
4.1	Main Plant/ Adm. Building			
4.2	CW System			
4.3	Cooling Towers			
4.4	DM Water Plant			
4.5	Clarification Plant			
4.6	Chlorination Plant			
4.7	Fuel Handling & Storage System			
4.8	Coal Handling Plant			
4.9	MGR & Marshalling Yard			
4.10	Ash Handling System			
4.11	Ash Disposal Area Development			
4.12	Fire Fighting System			
4.13	Township & Colony			
4.14	Temp. Construction & Enabling Works			
4.15	Road & Drainage			

Total Civil Works		
Construction & Pre-Commissioning Expenses		
Erection Testing and Commissioning		
Construction Insurance		
Tools & Plant		
Start up Fuel		
Total Construction & Pre-Commissioning		
Expenses		
Overheads		
Establishment		
Design & Engineering		
Audit & Accounts		
Contingency		
Total Overheads		
Capital cost excluding IDC & FC		
IDC, FC, FERV & Hedging Cost		
Interest During Construction (IDC)		
Financing Charges (FC)		
Foreign Exchange Rate Variation (FERV)		
Hedging Cost		
Total of IDC, FC, FERV & Hedging Cost		
Capital Cost including IDC, FC, FERV & Hedging Cost		
	Construction & Pre-Commissioning ExpensesErection Testing and CommissioningSite SupervisionOperator's TrainingConstruction InsuranceTools & PlantStart up FuelTotal Construction & Pre-CommissioningExpensesOverheadsEstablishmentDesign & EngineeringAudit & AccountsContingencyTotal OverheadsCapital cost excluding IDC & FCIDC, FC, FERV & Hedging CostInterest During Construction (IDC)Financing Charges (FC)Foreign Exchange Rate Variation (FERV)Hedging CostTotal of IDC, FC, FERV & Hedging CostCapital Cost including IDC, FC, FERV & Hedging Cost	Construction & Pre-Commissioning Expenses

\*Submit details of Freehold and Lease hold land

Note: Impact on account of each reason for cost overrun should be quantified and substantiated with necessary documents and supporting workings

#### In case there is time over run

### Name of the Petitioner Name of the Generating Station

S.	Description of Activity/ Works/ Service	Original Schedule (As per Planning)		Actual Schedule (As per Actual)		Time Over- run	Reasons for delay	Other Activity effect
S. No.		Start Date	Completion Date	Actual Start Date	Actual Completion Date	Days		(Mention Sr. No. of activity affected)
1								
2								
3								
4								
5								
6								
7								
8								
9								

1. Delay on account of each reason in case of time over run should be quantified and substantiated with necessary documents and supporting workings.

2. Indicates the activities on critical path

### PART-II FORM HPS-5F

#### In case there is claim of additional RoE

Name of the Petitioner Name of the Generating Station

Project	Comp	letion Time as per	r Investment ap	oproval	Actual Completion time				Qualifying time schedule (As per regulation)
	Start Date	Scheduled COD (Date)	Months	Installed Capacity	Start Date	Actual COD (Date)	Actual Completion time in Months	Tested Capacity	Months
Unit 1									
Unit 2									
Unit 3									
Unit 4									

Note: Necessary documentary evidence in support of actual completion time to be submitted in accordance with Regulations

### Financial Package upto COD

### Name of the Petitioner

Name of the Generating Station

# Project Cost as on COD<sup>1</sup>

# Date of Commercial Operation of the Station<sup>2</sup>

		Financial Package as ApprovedFinancial Package as on CODAs Admitted on CO			on COD	
	Currenc	cy and Amount <sup>3</sup>	Currency and Amount <sup>3</sup>		Currency and	Amount <sup>3</sup>
1	2	3	4	5	6	7
Loan-I	US \$	200m				
Loan-II						
Loan-III						
and so on						
Equity-						
Foreign						
Domestic						
Total Equity						
Debt : Equity Ratio						

<sup>1</sup> Say Rs. 80 Cr. + US \$ 200m or Rs.1320 Cr including US \$200m at an exchange rate of US \$=Rs.62/-

<sup>2</sup> Date of Commercial Operation means Commercial Operation of the last unit

<sup>3</sup> For example : US \$ 200m etc.

# PART-II FORM HPS-7

### **Details of Project Specific Loans**

### Name of the Petitioner

### Name of the Generating Station

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan drawn						
upto 31.03.2016/COD 3,4,5,13,15						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if						
applicable Base Rate, if Floating						
Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>						
Are there any Caps/Floor <sup>9</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
If above is yes, specify caps/floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>16</sup>						
Are foreign currency loan hedged?						
If above is yes, specify details <sup>17</sup>						

<sup>1</sup> Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

<sup>2</sup> Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

<sup>3</sup> Details are to be submitted as on 31.03.2016 for existing assets and as on COD for the remaining assets.

<sup>4</sup> Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

<sup>5</sup> If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

<sup>6</sup> Interest type means whether the interest is fixed or floating.

<sup>7</sup> Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Documentary evidence for applicable base rate on different dates from the date of drawl may also be enclosed.

<sup>8</sup> Margin means the points over and above the floating rate.

<sup>9</sup> At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

<sup>10</sup> Moratorium period refers to the period during which loan servicing liability is not required.

<sup>11</sup> Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

<sup>12</sup> Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

<sup>13</sup> Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately

<sup>14</sup> If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

<sup>15</sup> In case of Foreign loan, date of each drawal & repayment along with exchange rate at that date may be given with documentary evidence.

<sup>16</sup> Base exchange rate means the exchange rate prevailing as on 31.03.2016 for existing assets and as on COD for the remaining assets.

<sup>17</sup> In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

<sup>18</sup> In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

<sup>19.</sup> At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

<sup>20.</sup> At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

<sup>21.</sup> Call or put option, if any exercised by the generating company for refinancing of loan.

<sup>22.</sup> Copy of loan agreement

# PART-II FORM HPS-8

# Details of Allocation of corporate loans to various projects

# Name of the Petitioner Name of the Generating Station

					(Amount in lacs)	
Particulars	Package1	Package2	Package3	Package4	Package5	Remarks
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan						
drawn upto 31.03.2016/COD <sup>3,4,5,13,15</sup>						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>						
Are there any Caps/Floor <sup>9</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
If above is yes, specify caps/floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>16</sup>						
Are foreign currency loan hedged?						
If above is yes, specify details <sup>17</sup>						

	Distribution of loan packages to various projects			
Name of the Projects				Total
Project 1				
Project 2				
Project 3 and so on				

<sup>1</sup> Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

<sup>2</sup> Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

<sup>3</sup> Details are to be submitted as on 31.03.2016 for existing assets and as on COD for the remaining assets.

<sup>4</sup> Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

<sup>5</sup> If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

<sup>6</sup> Interest type means whether the interest is fixed or floating.

<sup>7</sup> Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Documentary evidence for applicable base rate on different dates from the date of drawal may also be enclosed.

<sup>8</sup> Margin means the points over and above the floating rate.

<sup>9</sup> At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

<sup>10</sup> Moratorium period refers to the period during which loan servicing liability is not required.

<sup>11</sup> Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

<sup>12</sup> Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

<sup>13</sup> Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately

<sup>14</sup> If the repayment installment amount and repayment date cannot be worked out from the data furnished above, the repayment schedule to be furnished separately.

<sup>15</sup> In case of Foreign loan, date of each drawal & repayment along with exchange rate at that date may be given with documentary evidence.

<sup>16</sup> Base exchange rate means the exchange rate prevailing as on 31.03.2016 for existing assets and as on COD for the remaining assets.

<sup>17</sup> In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

<sup>18</sup> In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

<sup>19.</sup> At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

<sup>20.</sup> At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

<sup>21.</sup> Call or put option, if any exercised by the generating company for refinancing of loan.

<sup>22.</sup> Copy of loan agreement

#### PART-II FORM HPS-9A

#### Year wise Statement of Additional Capitalization after COD

### Name of the Petitioner Name of the Generating Station

#### **COD for Financial Year**

S.	Head of	ACE	E Claimed (Actu	ual/ Proje	ected	Regulations	Justification	Admitted
No	Work/Equipment	Accrual basis	Un- discharged Liability included in Col. 3	Cash basis	IDC included in Col. 3	under which claimed		Cost by the Commission, if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

1. In case the project has been completed and cost has already been admitted under any tariff notification(s) in the past, fill column 10 giving the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the tariff order)

2. The above information needs to be furnished separately for each year/ period of tariff period 2016-19

3. In case of de-capitalization of assets separate details to be furnished at Column 1, 2, 3 and 4. Further, the original book value and year of capitalization of such asset to be furnished at Column 8. Where de-caps are on estimated basis the same to be shown separately.

4. Where any asset is rendered unserviceable the same shall be treated as de-capitalized during that year and original value of such asset to be shown at Col. 3. And impaired value if any, year of its capitalization to be mentioned at Column 8.

5. Justification against each asset of capitalization should be specific to regulations under which claim has been made and the necessity of capitalization of that particular asset.

#### Note:

1. Fill the form in chronological order year wise along with detailed justification clearly bringing out the necessity and the benefits accruing to the beneficiaries

2. In case initial spares are purchased along with any equipment, then the cost of such spares should be indicated separately. Eg. Rotor - 50 Crs. Initial Spares - 5 Crs.

#### PART-II FORM HPS-9B

#### Statement of Additional Capitalization during fag end of the Project

#### Name of the Petitioner Name of the Generating Station COD

Sr. No.	Year	Work/Equipment added during last five years of useful life of each Unit/Station	Amount capitalized/ Proposed to be capitalized (Rs. Lakh)	Justification for capitalization proposed	Impact of life extension
1	2	3	4	5	6
1					
2					
3					
4					
5					

#### Note:

1. Cost Benefit analysis for capital additions done should be submitted along with petition for approval of such schemes

2. Justification for additional capital expenditure claim for each asset should be relevant to regulation under which claim and the necessity of capitalization of the asset.

#### PART-II FORM HPS-9Bi

### Details of Assets De-Capitalized during the period

Name of the Petitioner Name of the Generating Station Region State

District

Sr. No.	Name of the Asset	Nature of de- capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalized	Year put to use	Depreciation recovered till date of de- capitalization
1	2	3	4	5	6
1					
2					
3					
4					
5					

Note: Year wise detail need to be submitted.

### PART-II

#### FORM HPS-9C

### Statement showing reconciliation of ACE claimed with the capital additions as per

<u>books</u>

Name of the Petitioner Name of the Generating Station COD

Sr. No.	Particulars	2016-17	2017-18	2018-19
1	2	3	4	5
	Closing Gross Block			
	Less: Opening Gross Block			
	Total Additions as per books			
	Less: Additions pertaining to other Stages (Give Stage wise breakup)			
	Net Additions pertaining to instant project/ Unit/ Stage			
	Less: Exclusions (items not allowable/ not claimed)			
	Net Additional Capital Expenditure Claimed			

**Note:** Reason for exclusion of any expenditure shall be given in Clear terms

#### PART-II FORM HPS-9D

#### Statement showing items/ assets/ works claimed under Exclusions

Name of the Petitioner Name of the Generating Station COD

Sr.	Head of Work/		Justification			
No.	Equipment	Accrual basis	Un-discharged Liability included in Col. 3	Cash basis	IDC included in Col. 3	
1	2	3	4	5	6	7

#### Note:

1. Exclusion claimed on assets not allowed in Tariff should be supported by the specific reference of Commission Order date, Petition No., amount disallowed etc.

2. For inter unit transfer, nature of transfer i.e. temporary or permanent should be motioned. It is to be certified that exclusion sought in receiving station only and not in sending station in both the station.

#### **Statement of Capital Cost**

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

#### Name of the Petitioner Name of the Generating Station

S. No		Particulars	As on relevant date
A	a)	Open Gross Block Amount as per books	
	b)	Amount of capital liabilities in A(a) above	
	C)	Amount of IDC in A(a) above	
	d)	Amount of FC in A(a) above	
	e)	Amount of FERV in A(a) above	
	f)	Amount of Hedging Cost in A(a) above	
	g)	Amount of IEDC in A(a) above	
В	a)	Addition in Gross Block Amount during the period (Direct purchase)	
	b)	Amount of capital liabilities in B(a) above	
	C)	Amount of IDC in B(a) above	
	d)	Amount of FC in B(a) above	
	e)	Amount of FERV in B(a) above	
	f)	Amount of Hedging Cost in B(a) above	
	g)	Amount of IEDC in B(a) above	
С	a)	Addition in Gross Block Amount during the period (Transferred from CWIP)	
	b)	Amount of capital liabilities in C(a) above	
	c)	Amount of IDC in C(a) above	
	d)	Amount of FC in C(a) above	
	e)	Amount of FERV in C(a) above	
	f)	Amount of Hedging Cost in C(a) above	
	g)	Amount of IEDC in C(a) above	
D	a)	Deletion in Gross Block Amount during the period	
	b)	Amount of capital liabilities in D(a) above	
	c)	Amount of IDC in D(a) above	
	d)	Amount of FC in D(a) above	
	e)	Amount of FERV in D(a) above	
	f)	Amount of Hedging Cost in D(a) above	
	g)	Amount of IEDC in D(a) above	
E	a)	Closing Gross Block Amount as per books	
<u> </u>	b)	Amount of capital liabilities in E(a) above	
	c)	Amount of IDC in E(a) above	
	d)	Amount of FC in E(a) above	
	e)	Amount of FERV in E(a) above	
	f)	Amount of Hedging Cost in E(a) above	
	) g)	Amount of IEDC in E(a) above	

#### Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date

PART-II FORM HPS-9F

#### Statement of Capital Works in Progress

(To be given for relevant dates and year wise)

(Amount in Rs. Lakh)

#### Name of the Petitioner Name of the Generating Station

S. No		Particulars	As on relevant date
Α	a)	Opening CWIP as per books	
	b)	Amount of capital liabilities in A(a) above	
	C)	Amount of IDC in A(a) above	
	d)	Amount of FC in A(a) above	
	e)	Amount of FERV in A(a) above	
	f)	Amount of Hedging Cost in A(a) above	
	g)	Amount of IEDC in A(a) above	
В	a)	Addition in CWIP during the period	
	b)	Amount of capital liabilities in B(a) above	
	c)	Amount of IDC in B(a) above	
	(d)	Amount of FC in B(a) above	
	e)	Amount of FERV in B(a) above	
	f)	Amount of Hedging Cost in B(a) above	
	g)	Amount of IEDC in B(a) above	
	5/		
С	a)	Transferred to Gross Block Amount during the period	
	b)	Amount of capital liabilities in C(a) above	
	C)	Amount of IDC in C(a) above	
	d)	Amount of FC in C(a) above	
	e)	Amount of FERV in C(a) above	
	f)	Amount of Hedging Cost in C(a) above	
	g)	Amount of IEDC in C(a) above	
D	a)	Deletion in CWIP during the period	
	b)	Amount of capital liabilities in D(a) above	
	c)	Amount of IDC in D(a) above	
	d)	Amount of FC in D(a) above	
	e)	Amount of FERV in D(a) above	
	f)	Amount of Hedging Cost in D(a) above	
	ý)	Amount of IEDC in D(a) above	
Е	a)	Closing CWIP as per books	
	b)	Amount of capital liabilities in E(a) above	
	C)	Amount of IDC in E(a) above	
	d)	Amount of FC in E(a) above	
	e)	Amount of FERV in E(a) above	
	f)	Amount of Hedging Cost in E(a) above	
	g)	Amount of IEDC in E(a) above	

Note:

1. Relevant date/s means date of COD of unit/s/station and financial year start date and end date

### Financing of Additional Capitalization

#### Name of the Petitioner Name of the Generating Station Date of Commercial Operation

(Amount in Rs. lakhs)

		Actua	I	Admitted			
Financial Year (Starting from COD) <sup>1</sup>	Year1	Year2	Year 3 & so on	Year1	Year2	Year 3 & so on	
1	2	3	4	5	6	7	
Amount capitalized in Work/Equipment							
Financing Details							
Loan-1							
Loan-2							
Loan-3 and so on							
Total Loan <sup>2</sup>							
Equity							
Internal Resources							
Others (PI. Specify)							
- / 1							
Total							

#### Note:

<sup>1</sup> Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.

<sup>2</sup> Loan details for meeting the additional capitalization requirement should be given as per FORM-7 or 8 whichever is relevant.

PART-II FORM HPS-11

(Amount in Rs. Lakh)

# **Calculation of Depreciation**

# Name of the Petitioner Name of the Generating Station

SI. Gross Block as on Depreciation Depreciation Name of the Assets<sup>1</sup> 31.03.2016 or as on Amount for no. Rates as per COD, whichever is later MPERC's each year up to 31.03.19 and subsequently for Depreciation each year thereafter up **Rate Schedule** to 31.3.19 4= Col.2 X 1 2 3 Col.3 Land 1 Building 2 3 and so on 4 5 6 7 8 9 10 11 12 13 TOTAL Weighted Average **Rate of Depreciation** (%)

\* Provide details of Freehold Land, Leasehold Land and Land under reservoir separately

<sup>1</sup> Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule appended to the Notification.

# **Statement of Depreciation**

### Name of the Petitioner Name of the Generating Station

SI. No	Particulars	Existing 2015- 16	2016- 17	2017- 18	2018- 19
1	2	3	4	5	6
	Opening Capital Cost				
	Closing Capital Cost				
	Average Capital Cost				
	Freehold land*				
	Rate of depreciation				
	Depreciable value				
	Balance useful life at the beginning of the period				
	Remaining depreciable value				
	Depreciation (for the period)				
	Depreciation (annualized)				
	Cumulative depreciation at the end of the period				
	Less: Cumulative depreciation adjustment on				
	account of un-discharged liabilities deducted as on				
	01.04.2009/ Station COD, whichever is later				
	Less: Cumulative depreciation adjustment on				
	account of de-capitalization				
	Net Cumulative depreciation at the end of the				
	period				

1. In case of details of FERV and AAD, give information for the applicable period

### PART-II

FORM HPS-13

Calculation of Weighted Average Rate of Interest on Actual Loans<sup>1</sup>

# Name of the Petitioner Name of the Generating Station

	T	(Amount in Rs.						
Particulars	Existing 2015-16	2016-17	2017-18	2018-19				
2	3	4	5	6				
Loan-1								
Gross Ioan - Opening								
Cumulative repayments of Loans upto previous year								
Net Ioan - Opening								
Add: Drawal(s) during the Year								
Less: Repayment (s) of Loans during the year								
Net Ioan - Closing								
Average Net Loan								
Rate of Interest on Loan on annual basis								
Interest on loan								
Loan-2								
Gross loan - Opening								
Cumulative repayments of Loans upto								
previous year								
Net Ioan - Opening								
Add: Drawal(s) during the Year								
Less: Repayment (s) of Loans during the year								
Net Ioan - Closing								
Average Net Loan								
Rate of Interest on Loan on annual basis								
Interest on loan								
Loan-3 and so on								
Gross loan - Opening								
Cumulative repayments of Loans upto								
previous year								
Net Ioan - Opening								
Add: Drawal(s) during the Year								
Less: Repayment (s) of Loans during the								

year	1		
Net Ioan - Closing			
Average Net Loan			
Rate of Interest on Loan on annual basis			
Interest on loan			
Total Loan			
Gross loan - Opening			
Cumulative repayments of Loans upto			
previous year			
Net Ioan - Opening			
Add: Drawal(s) during the Year			
Less: Repayment (s) of Loans during the			
year			
Net Ioan - Closing			
Average Net Loan			
Interest on loan			
Weighted average Rate of Interest			
on Loans			
Noto			

#### Note:

1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished.

However, the calculation in Original currency is also to be furnished separately in the same form.

# PART - II FORM HPS - 13A

# **Calculation of Interest on Normative Loan**

### Name of the Petitioner Name of the Generation Station

(Amount in Rs. lakhs)

SI. No.	Particulars	Existing 2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6
	Gross Normative Ioan - Opening				
	Cumulative repayment of Normative Loan up to previous year				
	Net Normative loan - Opening				
	Add: Increase due to addition during the year/period				
	Less: Decrease due to de- capitalization during the year/period				
	Less: Decrease due to reversal during the year/period				
	Add: Increase due to discharge during the year/ period				
	Net Normative loan - Closing				
	Average Normative Loan				
	Weighted average Rate of Interest				
	Interest on loan				

# PART-II FORM HPS-13B

# **Calculation of Interest on Working Capital**

### Name of the Petitioner

# Name of the Generating Station

				(Amo	ount in Rs. lacs)
SI. No.	Particulars	Existing 2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6
1	O&M Expenses				
2	Maintenance Spares				
3	Receivables				
4	Total Working Capital				
5	Rate of Interest				
6	Interest on Working Capital				

### PART-II FORM HPS-13C

# Other Income as on actual/ anticipated COD

### Name of the Petitioner Name of the Generating Station

(Amount in Rs. lacs) 2016-17 2017-18 2018-19 SI. Existing **Parameters** 2015-16 No. Interest on Loans and advance 1 2 Interest received on deposits 3 Income from Investment 4 Income from sale of scrap Rebate for timely payment 5 6 Surcharge on late payment from beneficiaries 7 Rent from residential building Misc. receipts (Please specify details) 8 ... . . . ... (add) ...

### PART-II FORM HPS-13D

# Incidental Expenditure during Construction

# Name of the Petitioner Name of the Generating Station

(Amount in Rs. lacs)

SI. No	Parameters	Upto Scheduled COD	Up to actual/ anticipated COD
Α	Expenses:		
1	Employees' Benefits Expenses		
2	Finance Costs		
3	Water Charges		
4	Communication Expenses		
5	Power Charges		
6	Other Office and Administrative		
	Expenses		
7	Others (Please Specify Details)		
8	Other pre-Operating Expenses		
В	Total Expenses		
	Less: Income from sale of tenders		
	Less: Income from guest house		
	Less: Income recovered from		
	Contractors		
	Less: Interest on Deposits		

PART-II FORM HPS-14

# Draw Down Schedule for Calculation of IDC & Financing Charges

### Name of the Petitioner Name of the Power Station

SI.	Draw Down	Quarter 1			Quarter 2			Quarter n (COD)		
No.	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee (Rs. Lakh)
1	Loans									
1.1	Foreign Loans									
1.1.1	Foreign Loan <sup>1</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.2	Foreign Loan <sup>2</sup>									
	Draw down Amount									
	IDC									
	Financing charges									
	Foreign Exchange Rate Variation									
	Hedging Cost									
1.1.3	Foreign Loan <sup>3</sup>									
	Draw down Amount									
	IDC									

	Financing charges					
	Foreign Exchange Rate					
	Variation					
	Hedging Cost					
1.1.4						
1.1	Total Foreign Loans					
1.1	Draw down Amount					
	IDC					
	Financing charges					
	Foreign Exchange Rate					
	Variation					
	Hedging Cost					
1.2	Indian Loans					
1.2.1	Indian Loan <sup>1</sup>					
1.2.1	Draw down Amount	 			 	
	IDC	 				
	Financing charges	 			 	
1.2.2	Indian Loan <sup>2</sup>					
	Draw down Amount	 			 	
	IDC	 			 	
	Financing charges	 			 	
1.2.3	Indian Loan <sup>3</sup>				 	
	Draw down Amount	 			 	
	IDC	 			 	

	Financing charges			 		 
1.2.4				 		
1.2	Total Indian Loans					
	Draw down Amount			 		
	IDC			 		
	Financing charges			 		
1	Total of Loans drawn					
	IDC					
	Financing charges					
	Foreign Exchange Rate Variation					
	Hedging Cost					
2	Equity					
2.1	Foreign equity drawn					
2.2	Indian equity drawn			 		
2.2						
	Total equity deployed					

#### Note:

1. Drawal of debt and equity shall be on paripassu basis quarter wise to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.

2. Applicable interest rates including reset dates used for above computation may be furnished separately

3. In case of multi unit project details of capitalization ratio used to be furnished.

4. Detailed calculation of IDC (Actual drawal and repayment dates and amount, rates of interest, etc.) should be furnished.

### **Actual Cash Expenditure**

### Name of the Petitioner Name of the Power Station

(Amount in Rs. Lakh)

	Quarter-I	Quarter-II	Quarter-III	Quarter-n (COD)
Payment to contractors/ suppliers				
% of fund deployment				

Note: If there is variation between payment and fund deployment justification need to be furnished.

PART-II

Design energy an	d pea	king capability (month wise)-	ROR with Pondage/Storage type new stations
Name of the Petitio			
Name of the Gener	ating	Station	
Generating Compa	ny		
Name of the Hydro-	electr	ic Generating Station	
Installed Capacity :	No of	units X .MW=	
Month		Design Energy* (MUs)	Designed Peaking Capability (MW)*
April	I		
	II		
Мау			
June			
hub c			
July			
August			
August			
September			
October	I		
	11		
November	Ι		
	III		
December	I		
	II		
January	Ι		
L			
February			
	Ш		

	Ш			
March	I			
	II			
Total				
*As per DPR/TEC of CEA dated				
Note :				
Specify the number of peaking hours for which station has been designed.				
				(Petitioner)

PART-II FORM HPS -15B

	C	Design energy and MW Continuous (n	nonth wise) - ROR type stations		
Name of the					
Name of the					
Generating C	Compa	Inv			
Name of the	Hydro	-electric Generating Station			
		No of units X .MW=			
Month	nth Design Energy* (MUs) MW continuous*				
April					
Мау	1				
June					
July	Ι				
August	Ι				
September					
October	Ι				
November					
December					
	II				
January					
	II				
February					
March					

Vetting/Dell/D/Salim/M.P. Electricity Regulatory Commission-65

	н			
Total				
*As per DPR/TEC of CEA dated				

### **PART-II** FORM HPS-16

### Liability Flow Statement

	Liability Flow Statement					
Name o	f the Petitioner					
Name o	f the Generating	g Station				
Party	Asset/Work	Year of actual capitalization	Original Liability	Liability as on 31.03.2016	Discharges (Year wise)	Reversal (Year wise)