Draft Generation Tariff Regulations

DELHI ELECTRICITY REGULATORY COMMISSION

SEPTEMBER, 2011

A1: SHORT TITLE, COMMENCEMENT AND EXTENT

1.1 These Regulations shall be called "Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011".

1.2 These Regulations shall extend to the whole of National Capital Territory of Delhi.

1.3 These Regulations shall come into force on April 1, 2012 and unless reviewed earlier or extended by the Commission shall remain in force for a period of three year from the date of commencement.

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 Delhi Electricity Regulatory Commission till that date, tariff in respect of such Project or such part thereof, as the case may be, for the period ending 31.3.2012 shall be determined in accordance with the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2007.

A2: DEFINITIONS AND INTERPRETATION

2.1 In these Regulations, unless the context otherwise requires-

(a) "**Act**" means the Electricity Act, 2003 (36 of 2003), including amendments thereto;

(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 prudence check, subject to provisions of clause 6.3, 6.4 of these Regulations ;

(c) "**Applicant**" means a generating company who has made an application for determination of tariff or an application for annual performance review in accordance with the Act and these Regulations and includes a generating company whose tariff is the subject of a review by the Commission either suo motu or on a petition filed by any interested or affected person or as part of an annual performance review;

(d) "**Auxiliary Energy Consumption**" **or "AUX"** in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, and 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;

(e) "**Auditor**" means an auditor appointed by the generating company in accordance with the provisions of sections 224, 233B and 619 of the Companies Act, 1956 (1 of 1956), or any other law for the time being in force;

(f) "**Base Year**" means the Financial Year immediately preceding the first year of the Control Period, and used for the purposes of these Regulations;

(g) "**Beneficiary**" in relation to a generating station means the person purchasing electricity generated at such a generating station whose tariff is determined under these Regulations;

(h) "**Block**" in relation to a combined cycle thermal generating station includes combustion turbine-generator, associated waste heat recovery boiler, connected steam turbine-generator and auxiliaries;

(i) "**CERC**" means the Central Electricity Regulatory Commission;

(j) "**Change in Law**" means occurrence of any of the following events:

(i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law; or

(ii) change in interpretation of any law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation; or

(iii) change by any competent statutory authority, in any consent, approval or licence available or obtained for the project.

(k) "**Commission**" means the Delhi Electricity Regulatory Commission;

(l) "**Conduct of Business Regulations**" means the Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001, as amended from time to time;

(m) "**Control Period**" means a multi-year period fixed by the Commission, from 1st April 2012 and up to 31st March 2015;

(n) "**Cut off Date**" means 31st March of the year closing after two years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation;

(o) "**Date of Commercial Operation**" **or** '**COD**' in relation to a unit or block of the thermal generating station, 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, from 0000 hour of which scheduling process as per the Indian Electricity Grid Code (IEGC) is fully implemented and in relation to the generating station as a whole the Date of Commercial Operation of the last unit or block of the generating station;

(p) "**Day**" means the 24 hour period starting at 0000 hour;

(q) "**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;

(r) "**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;

(s) "**Financial Year**" means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;

(t) "**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;

(u) "**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;

(v) "**Infirm Power**" means electricity injected into the grid prior to the commercial operation of a unit or block of the generating station;

(w) "**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), approved by the Commission from time to time;

(x) "**Maximum Continuous Rating**" **or** '**MCR**' in relation to a 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/steam injection (if applicable) and corrected to 50 Hz grid frequency and specified site conditions;

(y) "**Normative Annual Plant Availability Factor**" **or** '**NAPAF**' in relation to a generating station means the availability factor specified in clause 7.1 and clause 7.3 of these Regulations;

(z) "**Operation and Maintenance Expenses**" **or** '**O&M expenses**' means the expenditure incurred on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, spares, consumables, insurance and overheads;

(aa) "**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;

(bb) "**Plant Availability Factor (PAF)**" in relation to a generating station for any period means the average of the daily declared capacities (DCs) for all the days during that period expressed as a percentage of the installed capacity in MW reduced by the normative auxiliary energy consumption.

(cc) "**Project**" means a generating station;

(dd) "**State Load Dispatch Centre**" **or** '**SLDC**' means the centre established by the State Government for purposes of exercising the powers and discharging the functions under Section 31 of the Act;

(ee) "**Scheduled Energy**" means the quantum of energy scheduled by the State Load Despatch Centre to be injected into the grid by a generating station over a day;

(ff) "**Scheduled Generation**" **or** '**SG**' at any time or for any period or time-block means schedule of generation in MW or MWh ex-bus, given by the State Load Despatch Centre;

Note

For the open cycle gas turbine generating station or a combined cycle generating station if the average frequency for any time-block, is below 49.52 Hz but not below 49.02 Hz and the scheduled generation is more than 98.5% of the declared capacity, the scheduled generation shall be deemed to have been reduced to 98.5% of the declared capacity, and if the average frequency for any time-block is below 49.02 Hz and the scheduled generation is more than 96.5% of the declared capacity, the scheduled generation shall be deemed to have been reduced to 96.5% of the declared capacity.

(gg) "**Small Gas Turbine Generating Station**" means and includes open cycle gas turbine or combined cycle generating stations with gas turbines in the capacity range of 50 MW or below;

(hh) "**State**" means the National Capital Territory of Delhi;

(ii) "**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.

(jj) "**Useful life**" in relation to a unit of a Coal / Gas based thermal generating station from the COD shall be 25 years.

2.2 Words and expressions used in these Regulations and not defined herein but defined in the Act shall have meaning assigned to them under the Act.

2.3 All proceedings under these Regulations shall be governed by the Conduct of Business Regulations.

A3: SCOPE OF REGULATIONS AND EXTENT OF APPLICATION

3.1 These Regulations shall apply in all cases of determination of generation tariff under Section 62 of the Act, for supply of electricity to a distribution licensee by existing generating stations, but shall not apply where tariff has been determined through the transparent process of bidding in accordance with the guidelines issued by the Central Government as per the provisions of Section 63 of the Act.

3.2 Subject to the provisions of the Act, Rules and Policies, any new generating station which comes up in future and proposes to supply electricity to a distribution licensee of the State shall be subjected to the norms prescribed under these Regulations by the Commission, unless it proposes to supply electricity through bidding in accordance with the guidelines issued by the Central Government as per provisions of Section 63 of the Act.

A4: DETERMINATION OF GENERATION TARIFF

4.1 Existing Generating Station:

Where the Commission has, at any time prior to the notification of these Regulations, approved a Power Purchase Agreement (PPA) or arrangement between a generating company and a Beneficiary, or has adopted the tariff contained therein for supply of electricity from an existing generating station then the tariff for supply of electricity by the generating company to the Distribution Licensee shall be in accordance with such PPA or arrangement for such period as may be so approved or adopted by the Commission, to the extent of existing Installed Capacity as contained in the PPA.

4.2 New Generating Station:

Where the generating station has been declared under commercial operation from a date after the issue of these Regulations or on or after April 1, 2012, the tariff for supply of electricity by the generating company shall be decided in accordance with these Regulations.

A5: GENERAL APPROACH AND GUIDING PRINCIPLES

5.1 The Commission in specifying these Regulations shall be guided by the principles contained in Sections 61 and 62 of the Act to encourage competition, efficiency, economical use of resources, good performance and optimum investments.

5.2 The Commission shall adopt Multi Year Tariff Framework for determination of tariff for each year of the Control Period.

5.3 The Multi Year Tariff framework shall be based on the following:

(a) Business Plan of the generating company (plant wise separately) for the entire Control Period to be submitted to the Commission for approval, prior to the start of the Control Period;

(b) Applicant’s forecast of expected tariff for sale of power for each year of the Control Period, based on reasonable assumptions of the underlying financial and operational parameters, as submitted in the Business Plan;

(c) Trajectory for specific parameters shall be stipulated by the Commission, where the performance of the Applicant is sought to be improved through incentives and disincentives;

(d) Annual review of performance shall be conducted vis-à-vis the approved forecast.

Baseline

5.4 The baseline values (operating and cost parameters) for the Control Period shall be determined by the Commission and shall be based on the approved values by the Commission, latest accounting statements, estimate of the actuals for the relevant year and other factors considered appropriate by the Commission.

5.5 The Commission shall normally not revisit the performance targets even if the targets are fixed on the basis of un-audited accounts.

Capital Investment

5.6 Subject to the provisions of Act, Rules and Policies, the Commission shall approve capital investment plan of an existing generating company for the Control Period commensurate with generation capacity growth. The investment plan shall also include corresponding capitalisation schedule and financing plan. The Commission shall review the actual capital investment at the end of each year of the Control Period. Adjustment for the actual capital investment vis-à-vis approved capital investment shall be done at the end of Control Period.

Performance Targets

5.7 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be “controllable” and which includes:

(a) Gross Station Heat Rate;

(b) Normative Annual Plant Availability Factor;

(c) Auxiliary Energy Consumption;

(d) Secondary Fuel Oil Consumption;

(e) Operation and Maintenance Expenses;

(f) Financing Cost which includes cost of debt (interest), cost of equity (return); and

(g) Depreciation.

5.8 Any financial loss on account of underperformance on targets for parameters specified in Clause 5.7 (a) to (e) is not recoverable through tariffs. Similarly, any financial gain on account of over-performance with respect to these parameters is to the generating company’s benefit and shall not be adjusted in tariffs.

A6: PRINCIPLES FOR DETERMINATION OF TARIFF

Capital Cost of the Project

6.1 Capital cost for a Project shall include :

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (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, - up to the date of commercial operation of the project, as admitted by the Commission, as admitted by the Commission after prudence check shall form the basis for determination of tariff;

(b) capitalised initial spares subject to the ceiling norms specified as under:

i. Coal-based thermal generating stations – 2.5 % of original project cost

ii. Gas Turbine/Combined Cycle thermal generating stations- 4.0% of original project cost

Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to clause 6.2 of these Regulations, such norms shall apply to the exclusion of the norms specified herein.

(c) additional capital expenditure determined under clause 6.3 and 6.4 of these Regulation

Provided that the assets forming part of the Project, but not in use shall be taken out of the capital cost.

6.2 The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff.

Provided that in case of the thermal generating station prudence check of capital cost may be carried out based on the benchmark norms to be specified by the CERC from time to time;

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

Provided also that where the power purchase agreement entered into between the generating company and the beneficiaries provide for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of tariff;

Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2012 duly trued up excluding un-discharged liability, if any, as on 1.4.2012 and the additional capital expenditure projected to be incurred for the respective year of the Control Period 2012-15, as may be admitted by the Commission, shall form the basis for determination of tariff.

Additional Capitalisation

6.3 The capital expenditure 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) Undischarged liabilities;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions under clause 6.1,6.2 of these Regulations;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in law.

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

6.4 The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, 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.

(ii) Change in law.

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work.

(iv) In case of gas/liquid fuel based open/combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbine after 15 years of operations from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficienct operation of the stations:

Provided that any expense included in R&M on consumables and cost of components and spares, which is generally covered in the)&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence check from the R&M expenditure to be allowed

(v) Any capital expenditure found justified after prudence check necessitated on account of modification required or done in fuel receipt system arising due to non-materialisation of fuel coal linkage in respect of thermal generating station as result of circumstances not within the control of generating station.

(vi) Any undercharged liability towards final payment/withheld payment due to contractual exigencies for work executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payment etc.

Sale of Infirm Power

6.5 Supply of infirm power shall be accounted as Unscheduled Interchange (UI) and paid for from the regional or State UI pool account at the applicable frequency-linked UI rate.

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

Debt-Equity Ratio

6.6 For generating stations mentioned in the Transfer Scheme, dated July 1, 2002, the amount of loan capital shall be equal to the sum of the outstanding balance of all long term loans taken to finance the generating station, at the commencement of the Financial Year for which tariff is to be determined, as reflected in the tariff orders of the Commission.

6.7 The equity capital for generating stations mentioned in the Transfer Scheme, dated July 1, 2002 shall be taken as specified therein. Any fresh addition in equity after July 1, 2002 as may be approved by the Commission shall also be considered.

6.8 For a project declared under commercial operation on or after 1.4.2012, 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 in case of a generating station where equity employed is more than 30%, the amount of equity for determination of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan;

Provided also that in case of a generating station where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

6.9 In case of the generating station declared under commercial operation prior to 1.4.2012, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2012 shall be considered.

6.10 Any expenditure incurred or projected to be incurred on or after 1.4.2012 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension the normative debt-equity ratio shall be considered to be 70:30 for determination of tariff:

Provided that in case of a generating station where equity employed is more than 30%, the amount of equity for determination of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan;

Provided also that in case of a generating station where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

Renovation and Modernisation

6.11 The generating company, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life 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, record of consultation with beneficiaries and any other information considered to be relevant by the generating company.

6.12 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.

6.13 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.

6.14 The generating company in case of thermal generating station, may, in its discretion, avail of a special allowance either for a Unit or a group of Units as compensation for meeting the requirement of expenses including Renovation and Modernization 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 considered and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost.

Provided also 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.

6.15 A generating company (coal-based thermal generating station) on opting for the alternative in the clause 6.14 of these Regulations, shall be allowed special allowance @ Rs. 5.91 lakh/MW/year in 2012-13 and thereafter escalated @ 5.72% every year during the Control Period 2012-15, 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 in commercial operation for more than 25 years as on 1.4.2012, this allowance shall be admissible from the year 2012-13.

Interest and Finance Charges

6.16 Interest and finance charges on loan capital shall be computed on the outstanding loans, bond or non convertible debentures as on 31.03.2012 approved by the Commission and additional loan approved during each year of the Control Period.

6.17 The loan repayment for each year of the Control Period 2012-15 shall be deemed to be equal to the depreciation allowed for that year.

6.18 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

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, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company as a whole shall be considered;

6.19 The interest on loan shall be calculated on the normative average loan of the respective years by applying the weighted average rate of interest.

6.20 The interest rate on the amount of equity in excess of 30% treated as notional loan shall be the weighted average rate of the loans of the respective years and shall be further limited to the prescribed rate of return on equity in the Regulation;

Provided that all loans considered for this purpose shall be identified with the assets created;

Provided that interest and finance charges of re-negotiated loan agreements shall not be considered, if they result in higher charges;

Provided further that interest and finance charges on capital works in progress shall be excluded and shall be considered as part of the capital cost;

Provided further that neither penal interest nor overdue interest shall be allowed for computation of Tariff.

6.21 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 annual depreciation allowed.

6.22 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, as the case may be, in the ratio of 2:1.

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

6.24 In case of dispute, any of the parties may make an application in accordance with the Conduct of Business Regulations, 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

Working Capital

6.25 The Commission shall calculate the Working Capital requirement for coal-based generating stations as follows:

(a) Cost of coal for 1.5 months for pithead generating stations and 2 months for non-pithead generating stations for generation corresponding to the Normative Annual Plant Availability Factor;

(b) 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;

(c) Maintenance spares @ 20% of operation and maintenance expenses specified in clause 6.41- 6.46 of these Regulations;

(d) O&M expenses for 1 month; and

(e) Receivables equivalent to 2 months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor.

6.26 For Open-cycle Gas Turbine/Combined Cycle thermal generating stations, the working capital requirements shall be calculated using the following components:

(a) Fuel expenses for 1 month corresponding to the Normative Annual Plant Availability Factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

(b) Liquid fuel stock for ½ month corresponding to the Normative Annual Plant Availability Factor duly taking into account mode of operation of the generating station of gas fuel and liquid fuel, and in case of use of more than one liquid fuel, cost of main liquid fuel;

(c) Maintenance spares @ 30% of operation and maintenance expenses specified in clause 6.41- 6.46 of these Regulations;

(d) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on Normative Annual Plant Availability factor, duly taking ; and

(e) O&M expenses for 1 month.

6.27 The cost of fuel in cases covered under sub-clauses (a) and (b) of clause 6.25 and 6.26 of these Regulations 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 Control Period.

Interest on Working Capital

6.28 Rate of interest on working capital shall be on normative basis and shall be equal to Base Rate of State Bank of India plus 350 basis points as on 1.4.2012 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later.

6.29 Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

Depreciation

6.30 Depreciation shall be calculated for each year of the Control Period, on the amount of Capital Cost of the Fixed Assets as admitted by the Commission;

Provided that depreciation shall not be allowed on assets funded by any capital subsidy / grant.

6.31 Depreciation for each year of the Control Period shall be determined based on the methodology as specified in these Regulations along with the rates and other terms specified in Appendix-I of these Regulations.

6.32 Depreciation shall be calculated annually, based on the straight line method, over the useful life of the asset. The base value for the purpose of depreciation shall be capital cost of the asset as admitted by the Commission.

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the assets.

6.33 In case of the existing Projects, the balance depreciable value as on 1.4.2012 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation as admitted by the Commission upto 31.3.2012 from the gross depreciable value of the assets. The rate of depreciation shall be continued to be charged at the rate specified in Appendix-I 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%.

6.34 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed upto a maximum of 90% of the capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset. In the event of Renovation and Modernization expenditure affecting the life of the asset, the depreciation shall be allowed upto a maximum of 90% of the cost of the asset within the enhanced life span of the asset.

6.35 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 a *pro rata* basis.

Return on Equity

6.36 Return on equity shall be computed on the equity determined in accordance with clauses 6.6 - 6.10 of these Regulations. Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause 6.37 of these Regulations.

Provided that in case of Projects commissioned on or after 1st April, 2012, an additional return of 0.5% shall be allowed if such Projects are completed within the timeline specified in Appendix-II.

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever.

6.37 The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax rate for the year 2011-12, as per Income Tax Act, 1961 (as amended from time to time) as applicable to the generating company.

6.38 Control PeriodRate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

Where't' is the applicable tax rate in accordance with clause 6.37 of this regulation.

6.39 The generating company shall recover the shortfall or refund the excess Annual Fixed Charges on account of Return on Equity due to change is applicable Minimum Alternate / Corporate Income Tax rate as per Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Commission:

Provided further that Annual Fixed Charge with respect to tax rate applicable to the generating company in line with the provisions of the relevant Finance Acts of the respective year during the Control Period shall be trued up separately for each year of the Control Period along with the tariff petition filed for the next Control Period.

Tax on Income

6.40 Tax on the income streams of the generating company shall not be recovered from the beneficiaries.

Provided that the deferred tax liability, excluding Fringe Benefit Tax, for the period up to 31st March, 2012 whenever it materializes, shall be recoverable directly from the beneficiaries and the long-term customers;

Provided further that any tax liability on incentives and savings due to improved performance on any parameter, if any, shall be considered for passing onto the beneficiaries in the ratio of the sharing of the gains as prescribed under these Regulations.

Operation and Maintenance Expenses

6.41 Normative Operation and Maintenance (O&M) expenses shall comprise the following:

(a) Salaries, wages, pension contribution and other employee costs;

(b) Administrative and General costs;

(c) Repairs and maintenance; and

(d) Other miscellaneous expenses.

6.42 *Existing Generating Stations*: The Applicant shall submit details of O&M expenses as required by the Commission. The O&M expenses for the Base Year shall be determined based on latest accounting statements, estimates of the generating company for relevant years and other factors considered relevant.

6.43 The O&M expenses for permissible towards determination of tariff for each year of the Control Period shall be arrived by escalated O&M expenses determined for the base year at the rate of 5.72% per annum.

6.44 *New Generating Stations:*

6.45 Normative O&M expenses (in Rs lakhs/ MW) permissible towards determination of tariff for each year of the Control Period shall be as follows:

(a) Coal based Thermal Power Stations:

Year	200/ 210/ 250 MW sets	300/330/350 MW sets	500 MW sets	500 MW and above sets
2012-13	21.51	18.91	15.36	13.82
2013-14	22.74	19.99	16.24	14.62
2014-15	24.04	21.13	17.17	15.45

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 1.4.2012 in the same station:

200/210/250 MW	Additional 5th & 6th units Additional 7th & more units	0.9 0.85
300/330/350 MW	Additional 4th & 5th units Additional 6th & more units	0.9 0.85
500 MW and above	Additional 3rd & 4th units Additional 5th & above units	0.9 0.85

(b) Open Cycle Gas Turbine / Combined Cycle generating Stations (Rs in lakh/MW):

Year	Gas Turbine/ Combined Cycle generating stations other than small gas turbine power generating stations	Small gas turbine power generating stations
2012-13	17.49	27.06
2013-14	18.49	28.61
2014-15	19.55	30.24

6.46 In case of coal-based thermal generating station a separate compensation allowance unit-wise shall be admissible to meet expenses on new assets of capital nature including in the nature of minor assets, in the following manner from the year following the year of completion of 10, 15, or 20 years of useful life:

Years of operation	Compensation Allowance (Rs Lakh/MW/year)
0-10	Nil
11-15	0.15
16-20	0.35
21-25	0.65

Expenses on secondary fuel oil consumption

6.47 Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause 7.3 of these Regulations, in accordance with the following formula:

$$= SFC \times LPSF_i \times NAPAF \times 24 \times NDY \times IC \times 10$$

Where,

SFC – Normative Specific Fuel Oil consumption in ml/kWh

$LPSF_i$ – Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

NAPAF – Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW

6.48 Initially, the landed cost incurred by the generating company on secondary fuel oil shall be taken based on actuals of the weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the year.

6.49 The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of the each year of Control Period as per following formula:

$$SFC \times NAPAF \times 24 \times NDY \times IC \times 10 \times (LPSF_y - LPSF_i)$$

Where,

$LPSF_y$ = The weighted average landed price of secondary fuel oil for the year in Rs. /ml

6.50 The savings on account of secondary fuel oil consumption in relation to norms specified in clause 7.3 of these Regulations, shall be shared with beneficiaries in the ratio of 50:50, in accordance with the following formula at the end of the year:

$(SFC \times NAPAF \times 24 \times NDY \times IC \times 10 - AC_{sfoy}) \times LPSF_{y} \times 0.5$

Where,

AC_{sfoy} = Actual consumption of secondary fuel oil during the year in ml

A7: THERMAL POWER GENERATING STATIONS

Operational Norms

7.1 The values for different operational norms for the existing generating plants have been decided, considering the vintage and current operations of these plants as under:

Indraprastha Power Generation Co. Ltd

1) Rajghat Thermal Power House (RPH)

Parameters	2012-13	2013-14	2014-15
Normative Annual Plant Availability Factor (%)	75%	75%	75%
Gross Station Heat Rate (kCal/kWh))	3200	3200	3200
Auxiliary Consumption (%)	11.28%	11.28%	11.28%
Secondary Fuel Oil (LDO) Consumption (ml/kWh)	1.50	1.50	1.50
Secondary Fuel Oil (LSHS) Consumption (gm/kWh)	3.75	3.75	3.75

2) Indraprastha Gas Turbine Power Station (IP GTPS)

Parameters	2012-13	2013-14	2014-15
Normative Annual Plant Availability Factor (%)	80%	80%	80%
Combined cycle Gross Station Heat Rate (kCal/kWh)	2450	2450	2450
Open Cycle Gross Station Heat Rate (kCal/kWh)	3125	3125	3125
Combined Cycle Auxiliary Consumption (%)	3.0%	3.0%	3.0%
Open Cycle Auxiliary Consumption (%)	1.0%	1.0%	1.0%

Pragati Power Corporation Limited (PPCL)

Pragati Power Station

Parameters	2012-13	2013-14	2014-15
Normative Annual Plant Availability Factor (%)	85%	85%	85%
Combined Cycle Gross Station Heat Rate (kCal/kWh)	2000	2000	2000
Open Cycle Gross Station Heat Rate (kCal/kWh)	2900	2900	2900
Combined Cycle Auxiliary Consumption (%)	3.0%	3.0%	3.0%

Parameters	2012-13	2013-14	2014-15
Open Cycle Auxiliary Consumption (%)	1.0%	1.0%	1.0%

7.2 The Commission may modify these norms of operations after considering the capital investments approved for any Renovation and Modernisation activities in these plants.

7.3 The norms of operation for generating stations other than existing stations shall be as under:

Normative Annual Plant Availability Factor (NAPAF): All thermal generating stations, NAPAF shall be 85%.

Gross Station Heat Rate:

(a) Coal-based Thermal Generating Stations = 1.065 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	247
SHT/RHT (0C)	535/535	537/537	537/565	537/565	565/593
Type of BFP	Electrical Driven	Turbine driven	Turbine driven	Turbine driven	Turbine driven
Max Turbine Cycle Heat rate (kCal/kWh)	1955	1950	1935	1900	1850
Min. Boiler Efficiency					
Sub-Bituminous Indian Coal	0.85	0.85	0.85	0.85	0.85
Bituminous Imported Coal	0.89	0.89	0.89	0.89	0.89
Max Design Unit Heat rate (kCal/kWh)					
Sub-Bituminous Indian Coal	2300	2294	2276	2235	2176
Bituminous Imported Coal	2197	2191	2174	2135	2079

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 1.4.2012, the heat rate norms for those units as well as units declared under commercial operation on or after 1.4.2012 shall be lower of the heat rate norms arrived at by above methodology and the norms as per clause 7.1 of these Regulations;

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.

(b) Gas-based / Liquid-based thermal generating unit(s)/ block(s)

= 1.05 X Design Heat Rate of the unit/block for Natural Gas and RLNG (kCal/kWh)

= 1.071 X Design Heat Rate of the unit/block for Liquid Fuel (kCal/kWh)

Where the Design Heat Rate of a unit shall mean the guaranteed heat rate for a unit at 100% MCR and at site ambient conditions; and the Design Heat Rate of a block shall mean the guaranteed heat rate for a block at 100% MCR, site ambient conditions, zero percent make up, design cooling water temperature/back pressure.

<u>Secondary Fuel Oil Consumption for Coal based generating stations</u> 1.0 ml/kWh.

<u>Auxiliary Energy Consumption:</u>

(a) <u>Coal-based generating stations</u>

200 MW series	With Natural Draft cooling Tower or without cooling towers	8.5 %
300/330/350/500 MW and above – Steam driven Boiler Feed Pumps	With Natural Draft cooling Tower or without cooling towers	6.0%
300/330/350/500 MW and above – Electrically driven Boiler Feed Pumps	With Natural Draft cooling Tower or without cooling towers	8.5%

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

(b) <u>Gas-based and Naphtha-based generating stations</u>

Combined cycle	3.0%
Open cycle	1.0%

7.4 Wherever the station is designed for combined cycle operation, the approval of SLDC shall be required for operation of the station in the open cycle mode.

7.5 The Commission may prescribe relaxed operational norms including the norms of Normative Annual Plant Availability Factor contained in these Regulations for a generating station, and these relaxed norms shall be applicable for determination of tariff for such generating station during the Control Period.

7.6 The norms of operation specified under 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 improved norms are agreed to, such improved norms shall be applicable for determination of tariff.

Provided if PPA stipulates better norms of operation then such norms provided in the PPA shall be considered for determination of tariff.

7.7 In case of renovation and modernisation, derating and rerating of the generating station, norms of operation shall be reviewed and modified accordingly.

Components of Tariff

7.8 The tariff for sale of electricity from a thermal or gas based generating station shall comprise of two parts, namely, the recovery of annual capacity (fixed) charge and energy (variable) charge.

7.9 The fixed cost of a generating station eligible for recovery through capacity charge shall include the following elements:

(a) Operation and Maintenance Expenses;

(b) Depreciation;

(c) Interest on loans;

(d) Cost of secondary fuel oil (for coal based stations only)

(e) Interest on working capital;

(f) Return on Equity ; and

(g) Special allowance in lieu of R&M or separate compensation allowance, wherever applicable.

7.10 The energy (variable) charge shall cover fuel costs.

Recovery of Capacity Charge

7.11 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.

7.12 Full Capacity Charges shall be recoverable at Normative Annual Plant Availability Factor (NAPAF) specified in clause 7.1,7.3 of these Regulations. Recovery of Capacity Charges below the level of Normative Annual Plant Availability Factor (NAPAF) shall be on a pro-rata basis. At zero availability, no Capacity Charges shall be payable.

7.13 The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae :

(a) Generating stations in commercial operation for less than ten (10) years on 1st April of the financial year :

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

Provided that in case the plant availability factor achieved during a financial year (PAFY) is less than 70%, the total capacity charge for the year shall be restricted to:

AFC x (0.5 + 35 / NAPAF) x (PAFY / 70) (in Rupees)

(b) For generating stations in commercial operation for ten (10) years or more on 1st April of the year:

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

Where,

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

NAPAF = Normative annual plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percent:

PAFY = Plant availability factor achieved during the year, in percent

7.14 The PAFM and PAFY shall be computed in accordance with the following formula:

$$\text{PAFM or PAFY} = 10000 \times \sum_{i=1}^{N} DC_i / \{N \times IC \times (100 - AUX)\} \%$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

DC_i = Average declared capacity (in ex-bus MW), subject to clause 7.15 of these Regulations , for the i_{th} 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 i.e. the month or the year as the case may be.

Note: DC_i 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.

7.15 In case of fuel shortage in a thermal generating station, the generating company may propose to deliver a higher MW during peak-load hours by saving fuel during off-peak hours. The State Load Despatch Centre may then specify a pragmatic day-ahead schedule for the generating station to optimally utilize its MW and energy capability, in consultation with the beneficiaries. DC_i in such an event shall be taken to be equal to the maximum peak-hour ex-power plant MW schedule specified by the State Load Despatch Centre for that day.

Energy Charge

7.16 The energy (variable) charge shall cover main fuel costs 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 specified energy charge rate of the month (with fuel price adjustment).

7.17 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.}

7.18 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

$$ECR = (GHR - SFC \times CVSF) \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

(b) For gas and liquid fuel based stations

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.

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, per litre or per standard cubic metre, as applicable, during the month.

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

7.19 The landed cost of coal shall include:

(a) Base cost of coal;

(b) Royalty;

(c) Taxes and duties;

(d) Transport cost by rail / ocean / road / pipeline or any other means;

For the purpose of computing energy charges, landed cost of coal shall be arrived at after considering normative transit and handling loss of 0.8% on the quantity of coal dispatched by the coal supplier in case of non-pit-head stations and 0.2% on the quantity of coal dispatched by the fuel supplier in case of pit-head stations.

Incentive

7.20 In case of thermal generating stations incentive shall form part of the recovered Capacity (fixed) charges. No separate incentive shall be provided.

Unscheduled Interchange (UI) Charges

7.21 The generating station may be entitled to receive or shall be required to bear, as the case may be, the charges for deviations between energy sent-out corresponding to Scheduled Generation and actual energy sent-out, as per the rate approved by the Commission.

Deemed Generation

7.22 In the event of bottleneck in evacuation of power due to any constraint, outage, failure or limitation in the transmission system, associated switchyard and sub-stations owned by the Transmission Licensee, (certified by the State Load Despatch Centre) necessitating reduction in generation, the State Load Despatch Centre shall revise the schedule of generation.

Billing and payment of charges

7.23 Bills shall be raised for capacity charge and energy charge 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.

7.24 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.

Note 1

Shares / allocations of each beneficiary in the total capacity of State 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 a 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 beneficiaies. In such cases, the shares of the beneficiaries may be prospectively reallocated 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 beneficiary 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 and notified by the SLDC in advance, at least three (3) days prior to such reallocation or reversion taking effect

Late Payment Surcharge

7.25 In case the payment of any bill for charges payable under these Regulations is delayed by a beneficiary 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

Rebate

7.26 For payment of bills of the generating company through a letter of credit on presentation, a rebate of 2% shall be allowed. If the payment is made by any other mode but within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed.

Safety Standards

7.27 The generating company shall develop a Safety Manual and follow procedures to maintain minimum safety standards during construction, operation, etc. in line with the provisions of Section 53 of the Act.

A8: MULTI YEAR TARIFF FILING PROCEDURE

8.1 The Multi Year Tariff filing shall be in such form and in such manner as may be decided by the Commission and as per the provisions of Conduct of Business Regulations.

8.2 The Applicant shall also submit the Multi Year Tariff filing in electronic format to the Commission.

Business Plan Filings

8.3 The generating company shall file for the Commission's approval, on 1st April of the year preceding the first year of the Control Period or any other date as may be directed by the Commission, a Business Plan approved by the Board of Directors. The Business Plan shall be for the entire Control Period and shall, interalia, contain

(a) Capital Investment Plan: This shall include details of the investments planned by the generating company, along with the corresponding capitalisation schedule and financing plan. This plan shall be commensurate with capacity enhancement and proposed efficiency improvements for various plants of the company and shall include cost benefit analysis;

(b) Capital Structure: The generating company shall submit plant-wise details of the capital structure and cost of financing (interest on debt) and return on equity, after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;

(c) Operation and Maintenance (O&M) expenses: This shall include the costs estimated for the Base Year, the actual expenses incurred in the previous two years and the projected values for each year of the Control Period based on the proposed norms for O&M cost, including indexation and other appropriate mechanisms;

(d) Depreciation: This shall include details of depreciation based on the fair life of the asset and capitalisation schedules for each year of the Control Period;

(e) Performance Targets: A set of targets proposed for other controllable items such as NAPAF, Station Heat Rate, Secondary Fuel Oil Consumption, and Auxiliary Power Consumption. The targets shall be consistent with the Capital Investment Plan proposed by the generating company;

(f) Other Information: This shall include any other details considered appropriate by the generating company for consideration during determination of tariff.

Tariff Filing

8.4 For existing stations, the generating company shall make an application consistent with the Business Plan, not less than 120 days before the commencement of the first year of the Control Period or such other date as may be directed by the Commission 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 during the Control Period of the generating station. For the new stations, the generating company shall make an application consistent with the Business Plan 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 during the Control Period of the generating station projected to be completed within six months from the date of 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 31.3.2012 and estimated additional capital expenditure for the respective years of the Control Period 2012-15:

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

8.5 In case of the existing projects, the generating company shall continue to provisionally bill beneficiaries with the tariff approved by the Commission and applicable as on 31.3.2012 for the period starting from 1.4.2012 till approval of tariff by the Commission in accordance these regulations:

Provided that where the tariff provisionally billed exceeds or falls short of the final tariff approved by the Commission under these regulations, the generating company shall refund to or recover from the beneficiaries within six months along with simple interest at the rate equal to Base Rate of State Bank of India plus 150 basis points on the 1st April of the concerned/respective year.

8.6 The Applicant shall file the application for approval of Generation Tariff for each year of the Control Period consistent with the Business Plan, not less than 120 days before the commencement of the first year of the Control Period or such other date as may be directed by the Commission.

Review at the end of the Control Period

8.7 Towards the end of the Control Period, the Commission shall seek to review if the implementation of the principles laid down in these Regulations has achieved their intended objectives. While doing this, the Commission shall take into account, among other things, the industry structure, sector requirements, consumer and other stakeholder expectations and Applicant's requirements at that point in time. Depending on the requirements of the sector to meet the objects of the Act, the Commission may revise the principles for the second Control Period.

8.8 The end of the second Control Period shall be the beginning of the third Control Period and the generating company shall follow the same procedure unless required otherwise by the Commission. The Commission shall analyse the performance of the generating company with respect to the targets set out at the beginning of the second Control Period and based on the actual performance, expected efficiency improvements and other factors prevalent, determine the initial values for the next Control Period.

8.9 The Commission shall carry out truing up exercise along with the tariff petition filed for the next Control Period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2015, as admitted by the Commission after prudence check at the time of truing up.

8.10 The generating company shall make an application in accordance with these regulations for carrying out truing up exercise in respect of the generating station, a unit or block thereof by 31.10.2015;

8.11 The generating company shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2012 to 31.3.2015, duly audited and certified by the auditors;

8.12 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 excess amount so recovered along with simple interest at the rate equal to Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year.

8.13 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 under-recovered amount along with simple interest at the rate equal to the Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year.

8.14 The amount under-recovered or over-recovered, along with simple interest at the rate equal to the Base Rate of State Bank of India plus 150 basis points as on 1st April of the respective year, shall be recovered or refunded by the generating company in six equal monthly installments starting within three months from the date of the tariff order issued by the Commission after the truing up exercise.

A9: DISPOSAL OF APPLICATION

9.1 The Commission shall process the filings made by the generating company in accordance with these Regulations and the Conduct of Business Regulations.

9.2 Based on the generating company's filings, objections/ suggestions from public and other stakeholders, the Commission may accept the application with such modifications and/or such conditions as may be deemed just and appropriate and issue, within 120 days of the receipt of the application and after considering all suggestions and objections from public and other stakeholders, an Order containing inter alia targets for controllable items and the generation tariffs for each year of the Control Period.

A10: PERIODIC REVIEWS

10.1 To ensure smooth implementation of the Multi Year Tariff (MYT) framework, the Commission may undertake periodic reviews of generating company's performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise.

10.2 The generating company shall submit information as part of annual performance review on actual performance for assessment the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available audited accounts as well as the regulatory accounts in the prescribed formats, norms achieved and the tariff worked out in accordance with these Regulations.

10.3 The Commission may also direct any modifications to the forecast of the generating company for the remainder of the Control Period, with detailed reasons for the same.

A11: MISCELLANEOUS

Issue of Orders and Practice Directions

11.1 Subject to the provision of the Act and these Regulations, the Commission may, from time to time, issue Orders and Practice directions in regard to the implementation of these Regulations and procedure to be followed on various matters, which the Commission has been empowered by these Regulations to direct, and matters incidental or ancillary thereto.

11.2 Notwithstanding anything contained in these Regulations, the Commission shall have the authority, either suo motu or on a petition filed by any interested or affected party, to determine the tariff of any Applicant.

Powers to remove difficulties

11.3 If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these Regulations or the Act, do or undertake to do things or direct the generating company to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

Power of Relaxation

11.4 The Commission may in public interest and for reasons to be recorded in writing, relax any of the provision of these Regulations.

Interpretation

11.5 If a question arises relating to the interpretation of any provision of these Regulations, the decision of the Commission shall be final.

Saving of Inherent Powers of the Commission

11.6 Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission from adopting a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these Regulations.

Enquiry and Investigation

11.7 All enquiries, investigations and adjudications under these Regulations shall be done by the Commission through the proceedings in accordance with the provisions of the Conduct of Business Regulations.

Power to Amend

11.8 The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provision of these Regulations by amendment.

Appendix-I: Depreciation Schedule

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
		SLM
A	Land owned under full ownership	0.00%
B	Land under lease	
(a)	For investment in land	3.34%
(b)	For cost of clearing site	3.34%
C	Assets Purchased New	
a.	PI & machinery in generating stations	
(i)	Hydro-electric	5.28%
(ii)	Steam-electric NHRB & Waste Heat Recovery Boilers	5.28%
(iii)	Diesel electric & gas plant	5.28%
b.	Cooling towers and circulating water systems	5.28%
c.	Hydraulic works forming part of hydro-electric system including:	
(i)	Dams, spillways weirs, canals, reinforced concrete flumes & syphons	5.28%
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge (tanks) hydraulic control valves and hydraulic works	5.28%
d.	Building & civil engineering works of a permanent character, not mentioned above:	
(i)	Offices & showrooms	3.34%
(ii)	Containing thermo-electric generating plant	3.34%
(iii)	Containing hydro-electric generating plant	3.34%
(iv)	Temporary erection such as wooden structures	100.00%
(v)	Roads other than kutcha roads	3.34%
(vi)	Others	3.34%
e.	Transformers, kiosk sub-station equipment & other fixed apparatus (including plant foundations)	
(i)	Transformers (including foundations) having a rating of 100 kilo volt amperes and over	5.28%
(ii)	Others	5.28%
f.	Switchgear, including cable connections	5.28%

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
g.	Lightning arrestors:	
(i)	Station type	5.28%
(ii)	Pole type	5.28%
(iii)	Synchronous condenser	5.28%
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 terminals 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 or reinforced concrete supports	5.28%
(iv)	Lines on treated wood supports	5.28%
j.	Meters	5.28%
k.	Self propelled vehicles	9.50%
l.	Air conditioning plants:	
(i)	Static	5.28%
(ii)	Portable	9.50%
m.		
(i)	Office furniture and furnishings	6.33%
(ii)	Office equipments	6.33%
(iii)	Internal wirings 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%
o.	Communication equipment	
(i)	Radio and higher frequency carrier systems	6.33%

S. No	Asset Particulars	Depreciation Rate (Salvage value=10%)
(ii)	Telephone lines and telephones	6.33%
p.	IT Equipments	15.00%
q.	Any other assets not covered above	5.28%

Appendix-II: Timeline for completion of Projects

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:

(i) **Thermal Power Projects - Coalbased Power Plant**

<u>Unit size 200/210/250/300/330 MW and 125 MW CFBC technology</u>

(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

<u>Unit size 250 MW CFBC technology</u>

(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

<u>Unit size 500/600 MW</u>

(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

<u>Unit size 660/800 MW</u>

(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

(ii) **Combined Cycle Power Plant**

<u>Gas Turbine size upto 100 MW (ISO rating)</u>

(a) 26 months for first Block of Green Field Projects. Subsequent Blocks at an interval of 2 months each
(b) 24 months for first Block of Extension Projects. Subsequent Blocks at an interval of 2 months each.

<u>Gas Turbine size above 100 MW (ISO rating)</u>

(a) 30 months for first Block of Green Field Projects. Subsequent Blocks at an interval of 4 months each

(b) 28 months for first Block of Extension Projects. Subsequent Blocks at an interval of 4 months each