PUNJAB STATE ELECTRICTY REGULATORY COMMISSION

Notification

July 01, 2014

No. PSERC/Secy/Regu -94: In exercise of the power conferred on it by section 181 (2) read with section 61 and 62 of the Electricity Act 2003 (36 of 2003) and all other powers enabling the Commission in this behalf, the Punjab State Electricity Regulatory Commission hereby makes the following Regulations, laying down Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff.

PART I - SCOPE, EXTENT AND DEFINITIONS

1. SHORT TITLE, COMMENCEMENT AND EXTENT

1.1. These regulations may be called the "Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014".

1.2. These regulations shall come into force from the date to be notified by the Commission and shall unless otherwise directed by the Commission, remain in force for the duration of the first control period.

1.3. These regulations shall extend to the whole State of Punjab.

2. SCOPE OF APPLICATION

These regulations shall apply where the Commission determines:

a. Tariff for supply of electricity from generating plant owned by the distribution licensee, under section 62 & 64 of the Act;

b. Tariff for supply of electricity by a generating company to a distribution licensee, under section 62 & 64 of the Act;

c. Tariff for intra-state transmission of electricity by a transmission licensee to an open access customer (including distribution licensee), under section 62 & 64 of the Act;

d. SLDC fees and charges under section 32(3) of the Act;

e. Tariff for wheeling and retail supply of electricity by a distribution licensee, under section 62 & 64 of the Act;

f. Surcharge in addition to the charges for wheeling under the first proviso to sub-section (2) of section 42 of the Act, in accordance with the Open Access Regulations;

g. Additional surcharge on the charges for wheeling under sub-section (4) of section 42 of the Act, in accordance with the Open Access Regulations;

3. DEFINITIONS AND INTERPRETATION

3.1. **"Act"** means the Electricity Act, 2003 (36 of 2003) as amended or modified from time to time;

3.2. **"Additional Capitalization"** 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 regulation 18;

3.3. **“Allocation Statement”** means for each year, a statement in respect of each of the businesses (Generation, Transmission, Load Dispatch, Distribution comprising Wheeling and Retail Supply, Other Business) of the licensee, showing the amounts of any revenue, cost, asset, liability, reserve or provision etc., which has been either;

a. Determined by apportionment or allocation between different businesses of the licensee, together with a description of the basis of the apportionment or allocation; or

b. Charged from or to each such Other Business together with a description of the basis of that charge;

3.4. **“Applicant”** means person who has made an application for determination of tariff for generation business or transmission business or distribution business comprising wheeling business and/or retail supply business or recovery of charges for Load Dispatch or an application for Annual Performance Review or an application for Capital Investment Plan and/or Business Plan in accordance with these regulations and the Act;

3.5. **“ARR”** in these regulations means Aggregate Revenue Requirement of the Applicant;

3.6. **“Auditor”** means an auditor appointed by a generating company or a licensee or the State Load Dispatch Centre in accordance with the provisions of sections 224, 233 B and 619 of the Companies Act, 1956 (1 of 1956), or any other law for the time being in force;

3.7. **“Auxiliary Energy Consumption”** or **“AUX”** in relation to a generating plant means the quantum of energy consumed by auxiliary equipment of the generating plant and transformer losses within the generating plant, and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating plant; and in relation to a transmission system means quantum of energy consumed in the AC sub-station or HVDC sub-station for the purpose of air-conditioning, lighting, etc.;

3.8. **“Availability or Availability Factor”** in relation to transmission system for a given period means the time in hours during which the transmission system is capable to transmit electricity at its rated voltage and shall be expressed in percentage of total hours in the given period and calculated as per formula specified by CERC from time to time;

3.9. **“Base Year”** means the year immediately preceding the first year of the control period, and used for the purposes of these regulations;

3.10. **“Beneficiary”** in relation to a

(a) Transmission licensee means the person who has availed of the transmission system on payment of transmission charges. This includes a distribution licensee, a transmission licensee, a person who has set up a captive generating plant or a generating company including merchant power plant or a consumer availing open access, utilising transmission system of a transmission licensee. Medium term and short term open access customers shall not be treated as beneficiaries;

(b) Generating plant means the person purchasing electricity generated at such a generating plant whose tariff is determined under these regulations;

3.11. **“Block”** in relation to a combined cycle thermal generating plant includes combustion turbine – generator, associated waste heat recovery boiler(s), connected steam turbine – generator and auxiliaries;

3.12. **“Captive generating plant”** means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association;

3.13. **“Carrying Cost for Regulatory Asset”** shall mean the interest on Regulatory Asset at the State Bank of India Advance Rate (SBAR) as on April 1 of the relevant year or the actual rate of interest paid on working capital loans by the licensee/generating company, whichever is less;

3.14. **“CERC”** means the Central Electricity Regulatory Commission;

3.15. **“Combined Average Unit Cost of Supply”** shall mean the Total Revenue Requirement for the year plus the revenue gaps of the previous years along with carrying costs on such revenue gaps divided by the total energy sale during the year;

3.16. **“Commission”** means the Punjab State Electricity Regulatory Commission;

3.17. **“Conduct of Business Regulations”** means Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005, as amended from time to time;

3.18. **“Control Period”** for the purpose of these regulations means the period as notified by the Commission, starting from the effective date;

3.19. **“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;

3.20. **“Declared Capacity”** in relation to a generating plant means the capability to deliver ex-bus electricity in MW declared by such generating plant in relation to any period 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;

3.21. **“Design Energy”** means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating plant;

3.22. **“Deviation”** in a time-block for a seller means its total actual injection minus its total scheduled generation and for a buyer means its total actual drawal minus its total scheduled drawal;

3.23. **“Distribution Business”** means the business of operating and maintaining a distribution system for supplying electricity in the area of the supply of the distribution licensee;

3.24. **"Distribution Licensee"** means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

3.25. **“Effective Date”** shall mean such date as may be notified by the Commission for enforcement of these regulations;

3.26. **“Electricity Supply Code and Related Matters Regulations”** means the Punjab State Electricity Regulatory Commission (Electricity Supply Code and Related Matters) Regulations, 2007, as amended from time to time;

3.27. **“Existing Distribution System”** means the distribution system declared under commercial operation from a date prior to the effective date ;

3.28. **“Existing Generating Plant”** means a generating plant declared under commercial operation from a date prior to the effective date;

3.29. **“Existing Transmission System”** means the transmission system declared under commercial operation from a date prior to the effective date;

3.30. **“Force Majeure Event”** means, with respect to any party, any event or circumstance which is not within the reasonable control of, or is not due to an act or omission or commission of, that party and which, by the exercise of reasonable care and diligence, that party is not able to prevent, including, without limiting the generality of the foregoing:

a. acts of God, including but not limited to lightning, storm, earthquakes, floods, drought and other natural disasters;

b. strikes, lockouts;

c. acts of public enemy, wars (declared or undeclared), blockades, insurrections, riots, revolution, sabotage, vandalism and civil disturbance;

d. unavoidable accident, including but not limited to fire, explosion, radioactive contamination and toxic dangerous chemical contamination;

e. any shutdown or interruption of the Grid, which is required or directed by the State or Central Government or by the Commission or the State/Regional Load Despatch Centre; and

f. any shut down or interruption, which is required to avoid serious and immediate risks of a significant plant or equipment failure;

3.31. **“Generation Business”** means the business of production of electricity from a generating station;

3.32. **“Generating Company”** means, any company involved in generation business in the State and/or any company whose tariff is determined by the Commission;

3.33. **“Generation Tariff ”** means the schedule of charges for generation of electricity including the terms and conditions applicable thereof;

3.34. **“Gross Calorific Value”** or “**GCV”** in relation to a thermal power generating plant 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;

3.35. **“Infirm Power”** means electricity injected into the grid prior to commercial operation of a unit or block of the generating plant;

3.36. **“Installed Capacity”** or **“IC”** means the summation of the name plate capacities of all the units of the generating plant or the capacity of the generating plant (reckoned at the generator terminals) approved by the Commission from time to time;

3.37. **“Inter-State Transmission System”** shall have the same meaning as assigned in the Punjab State Electricity Regulatory Commission (Grid Code) Regulations, 2013, as amended from time to time;

3.38. **“Intra-State Transmission System**” means any system for transmission of electricity other than an inter-State transmission system ;

3.39. **“Licensee”** means a person who has been granted a licence under section 14 of the Act and includes a person deemed to be a licensee under section 14 of the Act;

3.40. **“Licensed Business”** means the functions and activities, which the licensee is required to undertake in terms of the licence granted by the Commission or as a deemed licensee under the Act;

3.41. **“Long-term Open Access Customer”** means a person defined as long term open access customer in the Open Access Regulations;

3.42. **“Maximum Continuous Rating”** or **“MCR”** in relation to a unit of the thermal power generating plant means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, and in relation to a unit or block of a combined cycle thermal power generating plant means the maximum continuous output at the generator terminals, guaranteed by the manufacturer with water/steam injection (if applicable) and corrected to 50 Hertz (Hz) grid frequency and specified site conditions;

3.43. **“Medium-term Open Access Customer”** means a person defined as medium-term open access customer in the Open Access Regulations;

3.44. **“New Distribution System”** means distribution system declared under commercial operation on or after the effective date;

3.45. **“New Generating Plant”** means Generating Plant declared under commercial operation on or after the effective date;

3.46. **“New Transmission System”** means transmission system declared under commercial operation on or after the effective date;

3.47. **“Non-Tariff Income”** means income relating to the regulated business other than income from tariff, excluding any income from

Other Business and, in case of the Retail Supply Business of a Distribution Licensee, including receipts on account of cross-subsidy surcharge and additional surcharge on charges of wheeling;

3.48. **"Open Access Regulations"** means the Punjab State Electricity Regulatory Commission (Terms and Conditions for Intra-state Open Access) Regulations, 2011, as amended from time to time**;**

3.49. **"Operation and Maintenance Expenses"** or **"O&M Expenses"** means the expenditure incurred on operation and maintenance of the generating plant or the transmission system or the distribution system, as the case may be, including part thereof, and includes the following expenditure:

a. Repair and Maintenance (R & M) Expenses;

b. Administration and General (A & G) Expenses;

c. Employee Cost (EC);

3.50. **"Plant Availability Factor" or "PAF"** in relation to a generating plant 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 less the normative auxiliary energy consumption;

3.51. **"Plant Load Factor" or "PLF"** 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 of the generating plant in that period and shall be computed in accordance with the following formula:

$$\text{PLF (\%)} = \frac{10000 \times \sum G_i}{N \times IC \times (100 - AUX_n)}$$

Where:

IC	=	Installed Capacity of the generating plant in MW;
G_i	=	means average actual ex-bus generation for the i^{th} time block of the period in MW in respect of plants not covered under ABT; For plants covered under ABT, it means average scheduled ex-bus generation for the i^{th} time block of the period in MW;
N	=	Number of time blocks during the period;
AUX_n	=	Normative Auxiliary Energy Consumption as a percentage of gross generation;
∑	=	Summation from i = 1 to N;

3.52. **"Project"**

(a) In relation to generation business means a generating plant and includes all components of generating facility such as power generating plant and generating units of the scheme, as apportioned to power generation 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;

(b) In relation to transmission business means a transmission system comprising specified transmission lines, sub-stations and associated equipment;

(c) In relation to State Load Despatch Centre means any project associated with integrated operation of power system in the State;

(d) In relation to distribution business means a distribution system comprising specified distribution lines, sub-stations and associated equipment;

3.53. **"Rated Voltage"** means the manufacturer's design voltage at which the transmission/distribution system is designed to operate and includes such lower voltage at which the line is charged or for the time being charged in consultation with supplier and receiver of electricity;

3.54. **"Retail Supply Business"** means the business of sale of electricity by a distribution licensee to the various categories of consumers within the area of supply in accordance with the terms of the licence for distribution and retail supply of electricity;

3.55. **"Retail Supply Tariff"** means the schedule of charges for retail supply business including the terms and conditions applicable thereto;

3.56. **"Scheduled Generation"** at any time or for any given period or time block means the ex-bus quantum of energy scheduled in MW by the State Load Despatch Centre to be injected into the grid by a generating plant;

3.57. **"Short-term Open Access Customer"** means a person defined as short-term open access customer in the Open Access Regulations;

3.58. **"State"** means State of Punjab;

3.59. **"State Bank of India Advance Rate" or "SBAR"** means the prime lending rate of the State Bank of India as specified on April 1 of the relevant year;

3.60. **"Station Heat Rate"** means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals of a thermal generating plant;

3.61. **"State Load Despatch Centre" or "SLDC"** means the centre established under sub-section (1) of section 31 of the Act;

3.62. **"Terminal Liabilities"** means terminal benefits such as Death-cum-Retirement Gratuity, Pension, Commuted Pension, Leave Encashment, LTC, Dearness relief, Interim relief, Medical reimbursement including fixed medical allowance in respect of pensioners;

3.63. **"Transmission Licensee"** means a person granted license for intra-state transmission of electricity in the State and includes any person deemed to be a transmission licensee for intra-state transmission of electricity (including dedicated transmission lines though operating in two States but primarily for the conveyance of power with reference to the State);

3.64. **“Unit”** in relation to a thermal power generating plant means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle thermal power generating plant, means turbine-generator and auxiliaries; and in relation to a hydro generating station means turbine-generator and its auxiliaries;

3.65. **“Wheeling”** means the operation whereby the distribution system and associated facilities of a transmission licensee or distribution licensee, as the case may be, are used by another person for the conveyance of electricity on payment of charges to be determined under section 62 of the Act;

3.66. **“Wheeling Business”** means the business of operating and maintaining a distribution system for conveyance of electricity in the area of supply of a distribution licensee;

3.67. **“Wheeling Charges”** means the schedule of charges for wheeling business including the terms and conditions applicable thereto;

3.68. **“Year”** means the financial year ending on 31st March**;**

(a) **“Current Year”** means a year in which the petition for aggregate revenue requirement or determination of tariff is to be filed;

(b) **“Ensuing Year”** means the year immediately following the current year; and

(c) **“Previous Year”** means the year immediately preceding the current year.

Words or expressions occurring in these regulations and not defined shall bear the same meaning as in the Act, Punjab State Electricity Regulatory Commission (Grid Code) Regulations, 2013 and Punjab State Electricity Regulatory Commission (Electricity Supply Code and Related Matters) Regulations, 2007, as amended from time to time.

PART II - FRAMEWORK AND GUIDING PRINCIPLES

4. GENERAL

4.1. The Commission in specifying these regulations is also guided by the principles contained in the National Electricity Policy and the Tariff Policy notified by the Central Government under Section 3 of the Act.

4.2. The Commission shall adopt Multi Year Tariff framework for determination of tariff for each year of the control period. The Commission shall notify the date for the commencement of Multi Year Tariff framework for determination of tariff in the State.

4.3. The distribution licensee shall prepare separate Annual Accounts for each of its businesses, namely, for generation, wheeling and retail supply, as the case may be:

Provided that till such time the annual accounts are not available, allocation statement as provided in Regulations 5, 6 and 7 shall be applicable.

4.4. The implementation of Multi-Year Tariff framework shall be based on the following:

a. Separate Capital Investment Plan and Business Plan submitted by the Applicant for its generation, transmission, SLDC or distribution business, as the case may be, in accordance with regulation 9 and regulation 10;

b. Forecast for each year of the control period, based on reasonable assumptions, of various financial and operational parameters of ARR to be filed by the Applicant for its generation, transmission, SLDC or distribution business, as the case may be, in accordance with regulation 60;

c. Trajectory for specific variables may be stipulated by the Commission, where the performance of the Applicant is sought to be improved subject to provisions of regulation 30;

d. Annual review of performance vis-à-vis the approved forecast and variations in performance of controllable and uncontrollable items;

e. Mechanism for sharing approved gains or losses on account of controllable items;

f. Mechanism for pass through of approved gains or losses on account of uncontrollable items.

4.5. The Commission shall specify ARR for each year of the control period for each business separately and tariff for the first year of the control period for each business separately. However, the Commission may specify indicative tariff for the remaining years of the control period in the MYT order.

4.6. The actual tariff applicable to each business in each such year will be notified by the Commission through a separate order taking into consideration the following:

a. Annual Performance Review;

b. Specified Performance Targets;

c. True Up of Uncontrollable Items.

4.7. There shall be no true up of controllable items or normative parameters except where the Commission otherwise considers appropriate to allow such true up on justification to be provided by the applicant or for reasons provided in regulation 8.

5. SEGREGATION OF ARR OF GENERATION AND DISTRIBUTION BUSINESSES

5.1. The distribution licensee shall segregate the accounts of the Company into generation business and distribution business. The distribution licensee, based on segregated accounts, shall submit separate ARRs for generation and distribution businesses. The ARR for generation shall be used to determine generation tariff and the ARR for distribution business to determine wheeling charges and retail tariffs.

5.2. For such period until accounts are segregated, distribution licensee shall prepare an Allocation Statement to apportion costs and revenues to respective businesses.

5.3. The Allocation Statement shall be considered by the Commission only if it is approved by the Board of Directors and validated by a certificate of the Statutory Auditors of the distribution licensee, and it shall be accompanied with an explanation of the methodology which shall be consistent over the control period.

6. SEGREGATION OF WHEELING AND RETAIL SUPPLY BUSINESS

6.1. The distribution licensee shall segregate the accounts of the distribution business into wheeling business and retail supply business. The ARR for wheeling business shall be used to determine Wheeling Charges and the ARR for retail supply business to determine Retail Supply Tariffs.

6.2. For such period until accounts are segregated, the distribution licensee shall prepare an Allocation Statement to apportion costs and revenues to respective businesses.

6.3. The Allocation Statement, approved by the Board of Directors and validated by the certificate of the Statutory Auditors of the distribution licensee, shall be accompanied with an explanation of the methodology which shall be consistent over the control period.

7. SEGREGATION OF ARR OF SLDC AND TRANSMISSION BUSINESS

7.1 The STU shall have separate accounts for SLDC and transmission business. The STU, based on segregated accounts, shall submit separate ARRs for SLDC and transmission businesses. The ARR for SLDC shall be used to determine SLDC Charges and the ARR for transmission business to determine transmission charges.

7.2. For such period until accounts are segregated, STU shall prepare an Allocation Statement to apportion costs and revenues to respective businesses.

7.3. The Allocation Statement shall be considered by the Commission only if it is approved by the Board of Directors and validated by the certificate of the Statutory Auditors of the STU, and it shall be accompanied with an explanation of the methodology which shall be consistent over the control period.

8. MYT APPROACH

8.1. **Baseline Values**

(a) The baseline values for the control period shall be determined by the Commission and the projections for the Control Period shall be based on these figures.

(b) The baseline values shall be inter-alia based on figures approved by the Commission in the past, latest audited accounts, estimate of the expected figures for the relevant year, industry benchmarks/norms and other factors considered appropriate by the Commission.

8.2. **Control Period:** The Commission shall specify the duration of the control period along with the date of the start of first year of the control period through a separate order.

8.3. **Controllable, Normative and Uncontrollable items of ARR**

(a) For the purpose of this Regulation, the items of ARR shall be identified as 'controllable', 'normative' and 'uncontrollable'. The variation on account of uncontrollable items shall be treated as a pass through subject to validation and approval by the Commission;

(b) The Commission may also permit pass-through of variations in controllable and normative items;

(c) The carrying cost for such variations shall also be permitted and the applicable interest rate shall be in accordance with regulation 25.1;

(d) The items in the ARR shall be treated as 'controllable', 'normative' and 'uncontrollable' as under:

ARR Element	**'Controllable'/ 'Normative'/'Uncontrollable'**
Interest Rate	Normative
Quantum of Long-Term Loans	Normative
Return on Equity	Normative
Depreciation	Controllable
Tax Rate	Controllable *(Any change made in the tax rate by the Finance Act passed by the Parliament shall be adjusted during annual performance review/true up)*
Working Capital Requirement	Normative
Interest on Working Capital	Normative
O&M Expenses (excluding terminal	Normative*

	liabilities that is part of employee cost, expenses made on account of extraordinary situation and exceptional changes in pay scale of employees on account of pay revision etc.)	
	Availability	Normative
	Plant Load Factor	Normative
	Heat Rate	Normative
	Auxiliary Consumption	Normative
	Secondary Fuel Oil Consumption (SFC)	Normative
	Transit Loss of Coal	Normative
	Fuel Price	Uncontrollable
	GCV of Fuel	Uncontrollable
	Distribution Loss	Controllable
	Transmission Loss	Controllable
	Energy Sales	Uncontrollable *(Since this is dependent on the load growth in the State across various consumer categories)*
	Long-term power purchase quantum	Controllable *(Long-term power purchase quantum is governed by the expected base load requirement of the State over the control period. Hence, the distribution licensee is expected to make arrangements to serve such loads, in advance. Normally, poor planning leads to excessive reliance on short-term high cost power purchase leading to increase in power purchase cost. The Commission seeks to induce the licensee to develop long-term purchase plan and be responsible for the same)*
	Medium-term power purchase quantum	Controllable
	Short-term power purchase quantum	Un-Controllable *(Short-term power purchase decisions are governed by close to real time events, changes in weather etc. which can be forecast within an error margin governed by the forecasting technique used. The Commission intends to induce the licensee to use such forecasting techniques. However, recognizing the fact that short-term requirements are not precisely predictable, this item has been considered as Un-*

		controllable. However short-term purchase quantum will be governed by the Punjab State Electricity Regulatory Commission (Power Purchase and Procurement Process of Licensee) Regulation, 2012, as amended from time to time)
	Power Purchase Price	Uncontrollable
	Non-Tariff income	Uncontrollable

**O&M expenses are considered normative as per the formula specified in regulation 26. The changes on account of Inflation Index shall be adjusted during the annual performance review/true up. However, if the actual expenditure is less than the normative, then the allowable expenditure shall be limited to actual expenditure incurred by the applicant.*

8.4. **Norms:** Norms shall be set by the Commission for the items as mentioned in these regulations. Besides, trajectory for specific variables may be stipulated by the Commission where the performance of the applicant is sought to be improved subject to provisions of regulation 30.

8.5. **Forecast of expected Revenue from Tariff:** The applicant shall develop the forecast of expected revenue from tariff and charges separately for each business. The applicant shall provide full details supporting the forecast, including but not limited to details of past performance, proposed initiatives for achieving efficiency or productivity gains, technical studies/or secondary research and contractual arrangements, to enable the Commission to assess the reasonableness of the forecast.

9. CAPITAL INVESTMENT PLAN

9.1. The Applicant shall file capital investment plan for approval by the Commission on or before 1st April of the year preceding the first year of the control period for a duration covering the control period. The capital investment plan shall include:

a. Purpose of investment;

b. Broad Technical Specifications of the proposed investment and supporting details;

c. Capital Structure;

d. Capitalization Schedule;

e. Financing Plan, including identified sources of investment;

f. Physical targets;

g. Cost-benefit analysis;

h. Prioritization of proposed Investments;

i. In case of generating company, the capital investment plan shall be commensurate with the capacity addition during the control period;

j. In case of transmission licensee, the purpose of investment shall include the following:

i. Nature of investment (evacuation project, system augmentation, system strengthening, IT related projects etc.)

ii. Details of physical parameters of the project such as circuit-kms, capacity in MVA, location of the project etc.

iii. Break-up of investment in capacitor banks, reduction in reactive power drawal and transmission losses.

k. Capital Investment in network expansion shall be based on Load Flow studies and in accordance with the requirements of the State Grid Code;

l. In addition to examination of above parameters, in case of transmission licensee and distribution licensee, the capital investment plan shall be linked to the improvement in quality of service, reliability, metering and reduction in transmission losses and distribution losses.

9.2. The distribution licensee also carrying out generation business shall file separate Capital Investment Plans for its generation and distribution businesses.

9.3. In case, the Commission approves lesser amount of capital expenditure than filed by the Applicant for approval, the Commission may allow the respective Applicant to determine the priority of schemes to be considered within the approved amount.

9.4. In case of generation and transmission business, the capital investment for Renovation and Modernization shall be made through an application with a Detailed Project Report elaborating the following elements: (i) Complete scope and justification; (ii) Estimated life extension of the generation or transmission asset; (iii) Improvement in performance parameters; (iv) Cost-benefit analysis; (v) Phasing of expenditure; (vi) Schedule of completion; (vii) Reference price level; (viii) Estimated completion cost; (ix) Other aspects.

9.5. In case of distribution business, purpose of investment shall include: (i) Replacement of existing assets; (ii) Meeting load growth; (iii) Technical loss reduction; (iv) Non-technical loss reduction; (v) Meeting reactive energy requirements; (vi) Customer service improvement; (vii) Improvement in quality and reliability of supply etc.; (viii) Cost-benefit analysis; (ix) Phasing of expenditure; (x) Schedule of completion; (xi) Reference price level; (xii) Estimated completion cost; (xiii) Other aspects.

9.6. The capital expenditure plan in case of generating station shall include cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package.

9.7. The Applicant shall submit all information/data as required by the Commission for necessary approval of the capital investment plan.

9.8. In the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the Annual Performance Review, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the Applicant vis-à-vis the approved capital expenditure.

In case, during the Annual Performance Review, the actual cumulative (up to the current year starting from first year of the control period) capital expenditure incurred is less by 15% of the approved cumulative capital expenditure, the Commission shall true-up the costs incidental to the actual capital expenditure in the current year and remaining years of the control period:

Provided that the actual capital expenditure incurred shall be only for the schemes as per the approved capital investment plan.

9.9. In case the capital expenditure is required for emergency work which has not been approved in the capital investment plan, the respective Applicant shall submit an application (containing all relevant information along with reasons justifying emergency nature of the proposed work) seeking approval by the Commission. The Applicant shall take up the work prior to the approval of the Commission provided that the emergency nature of the scheme has been approved by its Board of Directors:

Provided that the Applicant shall submit the pending details required as per Regulation 9.1 within 10 days of the submission of the application for emergency work;

Provided that for the purpose of Regulation 9.9, such approved capital expenditure shall be treated as a part of actual capital expenditure incurred by the Applicant as well as the approved capital expenditure by the Commission.

9.10. In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the balance amount and the incidental cost shall be trued up by the Commission after prudence check at the end of control period:

Provided that any additional capital expenditure incurred on account of time over run and/or unapproved changes in scope of approved schemes except for reasons beyond the control of licensee and duly submitted in writing may not be allowed by the Commission;

Provided that capital expenditure incurred on unapproved schemes and not covered under regulation 9.9 shall not be allowed by the Commission.

9.11. Applicant shall provide a copy of the capital investment plan for generation and distribution business, as the case may be, to the State Transmission Utility (STU) for carrying out planning for network augmentation/ strengthening at the time of filing of this plan with the Commission. The copy of approved capital investment plan shall also be sent to the STU by the Applicant, immediately after approval by the Commission.

9.12. Applicant shall extend all cooperation to the STU for providing data/information required for carrying out the planning activity effectively.

9.13. The STU shall also provide a copy of the capital investment plan to the Applicant for carrying out planning activity, at the time of filing of this plan with the Commission. The copy of approved capital investment plan shall also be sent to the Applicant by the STU, immediately after approval by the Commission.

9.14. The Commission shall approve the capital investment plan within 90 days from the date of its filing or submission of complete information, whichever is earlier, after considering all suggestions and objections of all stakeholders.

9.15. For the purpose of first control period, the timeline for submission of the capital investment plan by the Applicant shall be as specified in regulation 63.

10. BUSINESS PLAN

10.1. The Applicant shall file for approval of the Commission a business plan for its generation, transmission or distribution businesses, as the case may be, on or before 1st April of the year preceeding the first year of the control period for a duration covering at least the entire control period. The business plan shall cover details for each year of the control period.

10.2. The distribution licensee also carrying out the generation business shall file separate business plans for its generation and distribution businesses.

10.3. The business plan for generation business shall contain among other things the following; (i) Generation forecasts; (ii) Future performance targets; (iii) Proposed efficiency improvement measures; (iv) Saving in operating costs; (v) Financial statements (which includes balance sheet, profit and loss statement and cash flow statement)- current and projected (at least for the control period duration) along with basis of projections; (vi) Any other new measures to be initiated for the generation business, e.g. automation, IT initiatives etc.

10.4. The business plan for transmission business shall be based on proposed generation capacity addition and future load forecasts of the State and shall contain among other things the following: (i) Future plans of the company including efficiency improvement measures proposed to be introduced and technical requirement such as meeting reactive power requirements; (ii) Plan for reduction in transmission losses; (iii) Plan for improvement in quality of transmission service and reliability; (iv) Metering arrangements; (v) Financial statements (which includes balance sheet, profit and loss statement and cash flow statement)- current and projected (at least for the control period duration) along with basis of projections; (vi) Any other new measure to be initiated by the licensee, e.g. automation, IT initiatives etc.

10.5. The business plan for distribution business shall be based on sales forecasts and shall contain among other things the following: (i) Future plans of the company including efficiency improvement measures proposed to be introduced; (ii) Plan for reduction in distribution losses; (iii) Plan for improvement in quality of supply and reliability; (iv) Metering arrangements; (v) Collection efficiency; (vi) New consumer services; (vii) IT initiatives; (viii) MIS ; (ix) New scheme for carrying energy audit; (x) Improvement in metering and billing; (xi) Financial statements (which includes balance sheet, profit and loss statement, cash flow statement, etc.) – current and projected (at least for the control period) along with basis of projections; (xii) Any other new measures to be initiated by the licensee; (xiii) Periodical business satisfaction surveys etc.

10.6. The Commission shall scrutinize and approve the business plan taking into consideration the additional information provided by the applicant, if any, and the objections/ suggestions of the key stakeholders.

10.7. The Applicant shall submit all information/data as required by the Commission for necessary approval of the business plan.

10.8. The business plan shall be approved within a period of 90 days from the date of its filing or submission of complete information, whichever is later.

10.9. For the purpose of first control period, the timeline for submission of the business plan by the Applicant shall be as specified in regulation 63.

11. ANNUAL REVIEW OF PERFORMANCE

11.1. The Applicant shall make an application for Annual Performance Review and tariff resetting not less than 120 days before the close of each year of the control period.

11.2. The distribution licensee also carrying out the generation business shall ensure that the application contains segregated accounts and records of performance of generation and distribution businesses.

11.3. The Applicant shall publish its application filed for Annual Performance Review as required by Conduct of Business Regulations. The Applicant shall also display the application on its official website.

11.4. The Annual Performance Review shall include the details of actual capital expenditure, details of income tax paid and actual operational and cost data to enable the Commission to monitor the implementation of its order including comparison of actual performance with the approved forecasts (and reasons for deviations). In addition, the Applicant shall also submit Annual Statement of its performance of generation business (indicating the cost data - plant-wise, and performance parameters - unit-wise), transmission business or distribution business, as the case may be, including a copy of its latest audited accounts.

11.5. The Applicant shall provide any other information, as may be asked for by the Commission with a view to assess the reasons and extent of any variation in the performance from the approved forecast and the need for tariff resetting.

11.6. In the application, Applicant shall submit information for the purpose of calculating expected tariff and expenditure along with information on financial and operational performance for the previous year(s). The information for the previous year(s) shall be based on audited accounts and in case audited accounts for the previous year(s) are not available, audited accounts for the latest previous year shall be filed along with unaudited accounts (provisional accounts) for all the succeeding years.

11.7. The scope of the Annual Performance Review shall be a comparison of the performance of the Applicant with the approved forecast of ARR along with the performance targets specified by the Commission.

11.8. The Commission shall review the application made under the preceding clauses based on the same principles as approved in the MYT Order on original application for determination of ARR and Tariff and upon completion of such review, either approve the proposed modification(s) with such changes as it deems appropriate, or reject the application for reasons to be recorded in writing.

12. TRUE UP

12.1. Truing up of the ARR of the previous year shall be carried out along with the Annual Performance Review and will be adjusted in the ARR of the next year of the control period.

12.2. Truing up of uncontrollable items and normative items shall be carried out at the end of each year of the control period.

12.3. Truing up of controllable items would be done in accordance with regulation 8.

12.4. Truing-up exercise will be undertaken only when audited accounts for the year(s) under consideration have been made available. The approved aggregate gain or loss for each business on account of controllable items will be subject to provisions of regulation 30.

12.5. In case of any change in the approved amounts (positive or negative) during the True-up exercise, the Commission shall adjust the approved carrying cost by the interest allowed on the working capital requirement of the current year.

12.6. The Commission may allow/recover the carrying cost for the trued up amount at the interest rate mentioned in regulation 25.1:

Provided that no carrying cost shall be permitted for the period of delay in filing of true up on account of non submission of audited accounts due to the fault of the utility:

Provided that if the Commission determines an over recovery by the licensee during the True-up, carrying cost for such trued up amount shall be recovered from the Applicant.

13. REVIEW AT THE END OF THE CONTROL PERIOD

13.1. At the end of the control period, the Commission shall review the achievement of objectives and implementation of the principles of MYT laid down in these regulations.

13.2. To meet the objectives of the Act, the National Electricity Policy and Tariff Policy, the Commission may revise the principles of MYT for the subsequent control period.

13.3. The end of the first control period shall be the beginning of the second control period. The Applicant shall follow the same procedure for the next control period unless required otherwise by the Commission. The Commission shall analyse the performance with respect to the norms set out at the beginning of the control period in the MYT order and shall determine the base values for the next control period, based on actual performance achieved, expected improvement and other relevant factors.

PART III – COMPONENTS OF ARR AND TARIFF FOR GENERATION, TRANSMISSION, SLDC AND DISTRIBUTION BUSINESSES

14. COMPONENTS OF TARIFF FOR GENERATION BUSINESS

14.1. The tariff for sale of electricity from a generating plant shall comprise of two parts, namely,

a. Annual Fixed Charges (Capacity Charges);

b. Variable Charges (Energy Charges).

14.2. Both the components shall be worked out in the manner provided in these regulations.

14.3. The Fixed Cost of a generating plant (thermal or hydro) shall include the following elements:

a. Return on Equity;

b. Interest and Finance Charges on Loan Capital;

c. Interest Charges on Working Capital;

d. Depreciation;

e. Operation and Maintenance Expenses;

f. All statutory levies and taxes, if any.

14.4. The Energy Charges (or Variable Charges) of a thermal generating station shall consist of primary fuel cost and secondary fuel cost.

14.5. The tariff for supply of electricity from a thermal and hydro generating station shall be derived in the manner specified in regulations 38 and 39.

14.6. Tariff Determination for IPPs - In case of IPP filing application for tariff determination, the Commission shall specify norms and determine tariff on case to case basis.

14.7. Approval of provisional tariff for a generating station - A Generating Company may also file a petition, not more than six months prior to the anticipated Date of Commercial Operation (COD), for determination of provisional tariff of the Unit or Stage or Generating Station as a whole, as the case may be, based on the capital expenditure actually incurred up to the date of making the petition or a date prior to making of the petition, duly audited and certified by the statutory auditors and the provisional tariff shall be charged from the date of commercial operation of such Unit or Stage or Generating Station, as the case may be:

Provided that the Generating Company shall file a fresh petition in accordance with these regulations, for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts:

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

15. COMPONENTS OF CHARGES FOR TRANSMISSION AND SLDC BUSINESS

15.1. The ARR of the Transmission business and SLDC business shall comprise of the following components:

a. Return on Equity;
b. Interest and Finance Charges on Loan Capital;
c. Interest Charges on Working Capital;
d. Depreciation;
e. Operation and Maintenance Expenses;
f. ULDC Charges;
g. Statutory levies and taxes, if any.

15.2. **The Intra-state Transmission Charge shall include the following components:**

a. **Transmission Charges or Network Usage Charges** to reflect the cost of owning (Capital Investment), servicing and maintaining the transmission assets in order to transfer bulk power to and from different locations. The Network Usage Charges or Transmission Tariff, payable by the beneficiaries of the Transmission System shall be designed to recover the Aggregate Revenue Requirement approved by the Commission for each year of the Control Period;

b. **Reactive Power Charges** to reflect the voltage related drawl of reactive power. Reactive power charges shall be levied as per the relevant provisions of Punjab State Electricity Regulatory Commission (Grid Code) Regulations, 2013, as amended from time to time.

15.3. **The SLDC Charges or System Operation Charge** shall contain the cost of operating the State Load Dispatch Centre (SLDC) including the cost of owning & maintaining it. These shall be levied as SLDC charges upon the beneficiaries/users of the services of SLDC in accordance with the provisions of these regulations.

16. COMPONENTS OF TARIFF FOR DISTRIBUTION BUSINESS

16.1 The tariff for sale of electricity by distribution licensee for its distribution business shall comprise of two parts, namely,

a. Wheeling Charges;
b. Retail Supply Charges.

16.2 The ARR of the wheeling and retail supply shall comprise the following components:

For Wheeling Charges	For Retail Supply Charges
A	**A**
a) Interest and finance charges	a) Interest and finance charges
b) Depreciation	b) Depreciation
c) Operation and Maintenance Expenses	c) Operation and Maintenance Expenses
d) Return on Equity	d) Return on Equity
e) Interest on Working Capital	e) Interest on Working Capital
f) Statutory levies and taxes, if any	f) Cost of Power Purchase
	g) Transmission charges
	h) Wheeling Charges
	i) Bad and doubtful debts
	j) Statutory levies and taxes, if any
Total (A)	Total (A)
Less	**Less**
B	**B**
a) Non-Tariff income	a)Non-Tariff income
b) Income from other business, to the extent specified for wheeling tariff	b)Income from other business
	c)Any grant/subvention, other subsidy provided by the Government
Total (B)	Total (B)
ARR = (A)-(B)	ARR = (A)-(B)

PART IV – GENERAL PRINCIPLES FOR DETERMINATION OF COMMON ELEMENTS OF ARR AND TARIFF OF GENERATION, TRANSMISSION, SLDC AND DISTRIBUTION BUSINESSES

17. CAPITAL COST

Capital cost of the projects shall include the following:

17.1. Expenditure incurred or projected to be incurred during the construction of project including the interest during construction and finance 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, after prudence check shall form the basis for determination of Tariff.

17.2. The capital cost shall include capitalised initial spares subject to the following ceiling norms:

a. In case of generating plant, capitalised initial spares subject to following ceiling norms as a percentage of the original project cost as on the cut-off date:

Coal-based generating plants:	2.5%
Gas turbine/combined cycle generating plants:	4.0%
Hydro generating plants:	1.5%

b. In case of transmission business, the capitalised initial spares subject to following ceiling norms as a percentage of the original project cost as on the cut-off date:

Transmission Line:	0.75%
Transmission Substation:	2.50%
Series compensation device and HVDC Station:	3.50%

c. In case of distribution business projects, capitalised initial spares subject to ceiling norm of 1.5% of the original project cost:

Provided that where the power purchase agreement entered into between the distribution licensee and the generating company provides a ceiling of actual expenditure, the capital expenditure shall not exceed such ceiling for determination of tariff;

Provided further that distribution licensee or a generating company including Independent Power Producers (IPPs) who intend to establish, operate and maintain a new generating plant may make an application before the Commission for ‘in principle’ acceptance of the project capital cost and financing plan before taking up a project. The petition shall contain information regarding salient features of the project including the capacity, location, site specific features, fuel, beneficiaries, break-up of the capital cost estimates, financial package, schedule of commissioning, reference price level, estimated completion cost including foreign exchange components, if any, consent of beneficiary licensees to whom the electricity is proposed to be sold etc.;

Provided also that where the Commission has given ‘in principle’ acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying prudence check on the actual capital expenditure;

Provided also that in case of the existing generating plants, the capital cost admitted by the Commission prior to the effective date and additional capital expenditure projected to be incurred for respective years of the control period as may be admitted by the Commission, shall form the basis for determination of capital cost;

Provided also that in case of the existing transmission projects, the capital cost admitted by the Commission prior to the effective date and the additional capital expenditure projected to be incurred for respective years of the control period as may be admitted by the Commission, shall form the basis for determination of capital cost;

Provided also that in case of the existing projects for distribution business, the capital cost admitted by the Commission prior to the effective date and the additional capital expenditure projected to be incurred for respective years of the control period as may be admitted by the Commission, shall form the basis for determination of capital cost.

17.3. In relation to multi-purpose hydro schemes, 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.

17.4. The Commission may issue guidelines for vetting of capital cost of hydro-electric projects by independent agency or 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.

17.5. Capital Cost to be allowed for the purpose of determination of tariff will be based on the Capital Investment Plan approved by the Commission.

17.6. The amount of any capital contribution made by consumers, open access customers, Govt. subsidy/grants/aid towards work for release of connections/providing of power system, including connectivity to the distribution system or to the transmission system, as the case may be, shall be deducted from the original cost of the project of the respective Applicant, for the purpose of calculating the amount under debt and equity under these regulations.

18. ADDITIONAL CAPITALIZATION

18.1. 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:

a. Un-discharged/Deferred liabilities;

b. Works deferred for execution;

c. Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

d. On account of change of law; and

e. Procurement of initial capital spares in the original scope of work, subject to ceiling mentioned in regulation 17.2:

Provided that the details of work included in the original scope of work along with estimates of expenditure, un-discharged liabilities and works deferred for execution shall be submitted along with the application for determination of tariff after the date of commercial operation of the project.

18.2. The Capital Expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission subject to prudence check:

a. Un-discharged/Deferred liabilities relating to works/services within the original scope of work;

b. Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

c. On account of change of law;

d. Any additional works/services which have become necessary for efficient and successful operation of the project, but not included in the original project cost; and

e. 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) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation:

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

18.3. Impact of additional capitalization in tariff revision within the approved project cost shall be considered by the Commission once during a particular year.

18.4. In case of transmission business, any additional expenditure on items such as relays, control and instrumentation, computer system, communication system, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system may be admitted by the Commission:

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

18.5 (a) Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in this regulation.

(b) Any expenditure on replacement of old assets or renovation and modernization or life extension shall be considered on normative debt-equity ratio specified in this regulation after writing off the entire value of the original assets from the original capital cost of the asset replaced.

(c) Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in this regulation.

19. DEBT EQUITY RATIO

19.1. **Existing Projects** - In case of the capital expenditure projects having Commercial Operation Date prior to the effective date, the debt-equity ratio shall be as allowed by the Commission for determination of tariff for the period prior to the effective date:

Provided that the Commission shall not consider the increase in equity as a result of revaluation of assets (including land) for the purpose of computing return on equity.

19.2. **New Projects –** For capital expenditure projects declared under commercial operation on or after the effective date:

a. A Normative debt-equity ratio of 70:30 shall be considered for the purpose of determination of Tariff;

b. In case the actual equity employed is in excess of 30%, the amount of equity for the purpose of tariff determination shall be limited to 30%, and the balance amount shall be considered as normative loan;

c. In case, the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered;

d. The premium, if any raised by the Applicant while issuing share capital and investment of internal accruals created out of free reserve, shall also be reckoned as paid up capital for the purpose of computing return on equity subject to the normative debt-equity ratio of 70:30, provided such premium amount and internal accruals are actually utilized for meeting capital expenditure of the Applicant’s business.

19.3. **Renovation and Modernization**: Any approved capital expenditure incurred on Renovation and Modernization including the approval in the Capital Investment plan shall be considered to be financed at normative debt-equity ratio of 70:30. If the actual equity employed is less than 30% then the actual debt equity ratio shall be considered.

20. RETURN ON EQUITY

Return on Equity shall be computed at the rate of 15.5% on the paid up equity capital determined in accordance with regulation 19:

Provided that assets funded by consumer contributions, capital subsidies/Govt. grants shall not form part of the capital base for the purpose of calculation of Return on Equity.

21. DEPRECIATION

For the purpose of tariff determination, depreciation shall be calculated in the following manner:

21.1. The value base for the purpose of depreciation shall be historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission:

Provided that the land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation;

Provided that the depreciation has been calculated after deduction of consumer contributions, capital subsidies/Government grants as per methods prescribed in Accounting Standards issued by The Institute of Chartered Accountants of India.

21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

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

21.3. The depreciation for generation, transmission and distribution assets shall be calculated annually based on straight line method over the useful life of the asset at the rates specified in CERC Regulations, as amended from time to time. The depreciation for distribution assets not covered in CERC Regulations shall be as per the rates notified in the Companies Act, as may be revised from time to time:

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

21.4. 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.

21.5. 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.

22. FOREIGN EXCHANGE RATE VARIATION

22.1. The Applicant may hedge foreign exchange exposure in respect of the interest on foreign currency loans and repayment of foreign loans acquired for the generating station, transmission system or distribution system, as the case may be, in part or full at the discretion of the Applicant.

22.2. The Applicant 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.

22.3. To the extent the Applicant 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 Applicant or its contractors.

22.4. The Applicant 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.

23. INCOME TAX

23.1 Obligatory taxes, if any, on the income of the generating company or the licensee or the SLDC from its core/licensed business shall be computed as an expense and shall be recovered from the customers/consumers:

Provided that tax on any income other than the core/licensed business shall not constitute a pass through component in tariff and tax on such other income shall be payable by the generating company or the licensee or the SLDC.

23.2 Tax on income, if actually liable to be paid, shall be limited to tax on return on equity allowed, excluding incentives.

23.3 Tax on income shall be considered at income tax rate including surcharge, cess etc. as applicable during the relevant year in accordance with the provisions of Income Tax Act, 1961 duly amended from time to time.

23.4 The benefits of tax holiday and the credit for carrying forward losses applicable as per the provisions of the Income Tax Act, 1961 shall be fully passed on to the customers/consumers.

23.5 The penalty, if any, arising on account of delay in deposit of tax or short deposit of tax amount shall not be claimed by the generating company or the licensee or the SLDC, as the case may be.

24. INTEREST ON LOAN CAPITAL

24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the licensee or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less.

24.2. Interest and finance charges on the actual loan capital for new investments shall be computed on the loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the licensee or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less.

24.3. The repayment for each year of the tariff period shall be deemed to be equal to the depreciation allowed for the corresponding year. In case of de-capitalisation of assets, the repayment shall be adjusted by taking into account cumulative depreciation made to the extent of de-capitalisation.

24.4. The Commission shall allow obligatory taxes on interest, finance charges (including guarantee fee payable to the Government) and any exchange rate difference arising from foreign currency borrowings, as finance cost.

24.5. The interest on excess equity treated as loan shall be serviced at the weighted average interest rate of actual loan taken from the lenders.

25. RATE OF INTEREST ON WORKING CAPITAL & SECURITY DEPOSIT

25.1 The rate of interest on working capital shall be equal to the actual rate of interest paid on working capital loans by the licensee/generating company/SLDC or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less. The interest on working capital shall be payable on normative basis notwithstanding that the licensee/generating company/SLDC has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures. In case, the licensee/generating company/SLDC has not availed any working capital loan during the year, the rate of interest shall be weighted average of the interest rates on working capital loan of the previous three years.

25.2 Interest on security deposits made by the consumers with a licensee, if any, shall be considered at the rate specified by the Commission from time to time.

26. OPERATION AND MAINTENANCE (O&M) EXPENSES

26.1. The O&M expenses for the n^{th} year of the Control Period shall be approved based on the formula shown below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1-X_n)$$

Where,

- $R\&M_n$ – Repair and Maintenance Costs of the Applicant for the n^{th} year;
- EMP_n – Employee Cost of the Applicant for the n^{th} year;
- $A\&G_n$ – Administrative and General Costs of the Applicant for the n^{th} year;

The above components shall be computed in the manner specified below:

(i) $R\&M_n = K*GFA*WPI_n/WPI_{n-1}$

Where,

- 'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the n^{th} year. The value of 'K' will be specified by the Commission in the MYT order.
- ***'GFA'*** is the average value of the gross fixed assets of the n^{th} year.
- $\mathbf{WPI_n}$ means the average rate (on monthly basis) of Wholesale Price

Index (all commodities) over the year for the n^{th} year.

(ii) $\boldsymbol{EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (WPI_n / WPI_{n-1})}$

Note 1: The O&M expenses of BBMB for the entire Control Period shall be projected separately based on the latest actual payout. The Commission shall true-up the O&M expenses of BBMB during the Annual Performance Review based on the actual payout. The O&M expense of BBMB shall be treated as uncontrollable cost item. However, when CERC determines the tariff in respect of generating plants/units of BBMB, the Commission shall consider the same.

Note 2: For the purpose of estimation, the same WPI_n value shall be used for all years of the Control Period. However, the Commission will consider the actual values of the WPI_n at the end of each year during the Annual Performance Review exercise and true up the Employee Cost and A&G Expenses on account of this variation.

Note 3: O&M expense shall be allowed on normative basis and shall not be trued-up:

Provided, if actual O&M expenses are less than 90% of the normative expenses, the Commission shall true-up the O&M expenses during the Annual Performance Review for that year.

Note 4: Terminal Liabilities such as death-cum-retirement gratuity, pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of pensioners will be approved as per the actuals paid by the Applicant.

Note 5: O&M expenses made on account of extraordinary situations (if any) shall be submitted to Commission for its approval. Such expenses shall be filed separately and will not be subjected to provisions of Regulation 30. The approved amount by the Commission shall be trued up in the Annual Performance Review.

Note 6: Exceptional increase in employee cost on account of pay revision etc. will be considered separately by the Commission.

Note 7: Any expenditure on account of license fee, initial or renewal, fee for determination of tariff and audit fee shall be allowed on actual basis, over and above the A&G expenses approved by the Commission.

Note 8: O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating company or the licensee has the responsibility for its operation and maintenance and bears O&M expenses.

Note 9: With regard to unfunded past liabilities of pension and gratuity, the Commission will follow the principle of 'pay as you go'. The Commission shall not allow any other amount towards creating fund for meeting unfunded past liability of pension and gratuity.

Note 10: O&M expenses for gross fixed assets added during the year, if not accounted already, shall be considered from the date of commissioning on pro-rata basis.

(iii) X_n is an efficiency factor for n^{th} year

The Value of X_n shall be determined by the Commission in it first MYT order for the Control Period.

27. PRIOR PERIOD EXPENSES

27.1. The Applicant shall submit to the Commission the prior period expenses as a part of the filing for Annual Performance Review;

27.2. The Commission shall allow prior period expenses for uncontrollable cost items only as per the audited accounts, during the Annual Performance Review.

28. NON TARIFF INCOME

28.1. Following components of income shall be treated as non tariff income for the generation, transmission and distribution business, as applicable:

a. Meter/metering equipment/service line rentals;

b. Service charges;

c. Customer charges;

d. Revenue from late payment surcharge;

e. Miscellaneous charges (except PLEC charges);

f. Incentives from CGSs;

g. Miscellaneous receipts;

h. Interest on advances to suppliers/contractors;

i. Interest on staff loans and advances;

j. Income from trading;

k. Income from staff welfare activities;

l. Excess found on physical verification;

m. Interest on investments, fixed and call deposits and bank balances;

n. Net recovery from penalty on coal liaison agents;

o. Prior period income;

p. Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc.;

q. Any other income not included above.

28.2. The Applicant shall submit full details of its forecast of non-tariff income to the Commission as a part of ARR filing.

28.3. The amount received by the Applicant on account of non-tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of Applicant's business.

29. INCOME OF OTHER BUSINESS

The Applicant may engage in any other business, with prior intimation to the Commission for optimum utilization of its generation, transmission or distribution assets, as the case may be. Such instances and transaction shall be governed in accordance with the Punjab State Electricity Regulatory Commission (Income of Other Businesses) Regulations, 2005, as amended from time to time.

30. EXCESS OR UNDER RECOVERY WITH RESPECT TO NORMS AND TARGETS

30.1. The generating company or the licensee, as the case may be, shall retain the entire gain arising from over achievement of the norms laid down by the Commission in these regulations or targets set by the Commission from time to time.

30.2. The generating company or the licensee, as the case may be, shall bear the entire losses on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission, from time to time.

30.3. The gain and loss shall be considered separately for generation, transmission, SLDC and distribution businesses. The computations will be based on the data submitted by the Applicant in the Annual Performance Review and Audited Annual Accounts, at the time of True up.

31. BILLING AND PAYMENT OF CHARGES AND LATE PAYMENT SURCHARGE

31.1. All bills for capacity charges, energy charges, transmission charges and other charges shall be raised on monthly basis and payments shall be made by the beneficiaries on monthly basis.

31.2. In case, the payment of any bill for charges payable under these regulations is delayed by a beneficiary beyond a period of 30 days from the date of billing, a late payment surcharge at the rate of 1.25% per month or part thereof on the unpaid amount shall be levied by the generating company or transmission licensee, as the case may be.

32. SEGREGATION OF COMMON ARR ELEMENT INTO ARR OF GENERATION AND DISTRIBUTION BUSINESSES

The distribution licensee also carrying out the generation business shall submit ARR for generation business and distribution business separately, using the principles mentioned in regulations 17 to 31. However, until the accounts are segregated into generation business and distribution business, the distribution licensee shall allocate each element of common costs into ARR of generation business and distribution business as per the allocation statement mentioned in regulation 5.

33. REGULATORY ASSET

In extraordinary circumstances, the Commission may allow creation of Regulatory Asset in case the Revenue Gap is very substantial and is on account of factors beyond control of the generating company or the licensee and its full recovery in a single year will result in tariff shock for the consumers. The Regulatory Asset so created along with carrying cost shall be liquidated in maximum 3 year period immediately following the year in which it is created.

PART V – PRINCIPLES FOR DETERMINATION OF TARIFF AND NORMS FOR OPERATION FOR GENERATION BUSINESS

34. INTEREST ON WORKING CAPITAL

34.1. Components of Working Capital

a. Coal-based Thermal Generating Plants: The Working Capital shall cover the following:

   i. Fuel Cost for 2 months corresponding to the normative annual plant availability factor;

   ii. Operation and maintenance (O&M) Expenses for 1 month;

   iii. Maintenance spares @ 15% of the O&M expenses;

   iv. Receivables equivalent to two (2) months of fixed and variable charges for sale of electricity calculated on the normative annual plant availability factor.

b. Open-cycle Gas Turbine/Combined Cycle Thermal Generating Plants: The Working Capital shall cover the following:

   i. Fuel Cost for one 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;

   ii. Liquid fuel stock for ½ month corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel;

   iii. Maintenance spares @ 30% of operation and maintenance expenses;

   iv. Operation & maintenance expenses for one month;

   v. Receivables equivalent to 2 months of capacity charges and energy charges for sale of electricity, calculated on normative plant availability factor, duly taking into account mode of operation of the generating plant on gas fuel and liquid fuel.

c. Hydro based generating stations: The Working Capital shall cover the following:

   i. Maintenance spares @ 15% of operation and maintenance expenses;

ii. Operation & maintenance expenses for 1 month;

iii. Receivables equivalent to 2 months of fixed cost.

34.2. **Rate of Interest**

The rate of interest on working capital shall be as per regulation 25.1.

35. SALE OF INFIRM POWER

35.1. Supply of infirm power by generating plants of a generating company/distribution licensee shall be accounted for as per the actual audited variable cost of generation.

35.2. Supply of infirm power by a generating company shall be treated as Deviation and paid at the applicable frequency linked Charges for Deviation as per CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014, as amended from time to time or any subsequent re-enactment thereof.

35.3. Any revenue earned by the distribution licensee or generating company from sale of infirm power after accounting for the fuel expenses shall be applied for reduction in capital cost.

36. NORMS FOR PERFORMANCE PARAMETERS

The norms for performance parameters for a generating company i.e. availability, load factor, station heat rate, specific oil consumption, auxiliary consumption etc. shall be as per the CERC norms or as determined by the Commission:

Provided that a generating unit which undergoes Renovation and Modernization, the Commission shall specify a separate set of norms to be adopted during the renovation and modernization period and for the subsequent period. These norms shall be specified by the Commission on case to case basis as part of the Renovation and Modernization Capital Investment approval. Consequently, the generation tariff shall be determined accordingly by the Commission.

37. Energy Charges

37.1 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 cost of primary fuel; and
(b) Landed cost of secondary fuel.

Provided that taxes, duties and amount received on account of penalties received from fuel supplier shall have to be adjusted in landed fuel cost.

37.2 Initially, the LFC of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel for the preceding three months, and in the absence of landed costs for the preceding three months, LFC shall be based on the latest procurement price of primary fuel and secondary fuel for the generating station.

38. RECOVERY OF ANNUAL FIXED (CAPACITY) CHARGES

38.1 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 the beneficiaries as per their respective percentage share/allocation in the capacity of the generating station.

38.2 The Capacity Charge payable to a thermal generating plant 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)) – (CC1+CC2 +CC3 +CC4 + CC5 + CC6)

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)

Where,

AFC = Annual fixed cost specified for the year (in Rupees)

NAPAF = Normative annual plant availability factor (in percent)

PAFM (M =1, 2, 3.......) = Plant availability factor (in percent)

PAFY = Plant availability factor achieved during the year (in percent)

CC_1, CC_2, CC_3, CC_4, CC_5, CC_6, CC_7, CC_8, CC_9, CC_{10}, CC_{11} and CC_{12} are the Capacity Charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively.

38.3 The PAFM up to the end of a particular month and PAFY shall be computed in accordance with the following formula:

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

DCi = Average declared capacity (in ex-bus MW) for the ith day of the period i.e. the month or the year as the case may be, as certified by the SLDC 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: DCi 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.

38.4 Incentive: Incentive to a generating station or unit thereof shall be payable at a flat rate of 25 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).

38.5 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 SLDC may then specify a pragmatic day-ahead schedule for the generating station to optimally utilize its MW and energy capability, in consultation with the distribution licensee and other long-term open access customers. DCi in such an event shall be taken to be equal to the maximum peak-hour ex-power plant MW schedule specified by the SLDC, for that day.

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

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

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

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

Where,

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

NAPAF= Normative plant availability factor in percentage.

NDM = Number of days in the month.

NDY = Number of days in the year.

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

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

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

Where,

AUX	=	Normative auxiliary energy consumption in percentage
DC_i	=	Declared capacity (in ex-bus MW) for the i^{th} day of the month which the station can deliver for at least three (3) hours, as certified by the SLDC, after the day is over
IC	=	Installed capacity (in MW) of the complete generating station
N	=	Number of days in the month

39. RECOVERY OF ENERGY CHARGES (VARIABLE CHARGES)

39.1 The Energy (Variable) Charges for a thermal generating plant shall cover the primary fuel cost 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).

39.2 The Energy Charge for generating plants of the distribution licensee/generating companies for the month shall be worked out on the basis of scheduled ex-bus energy to be sent out from the generating plant in accordance with the following formula:

Energy (Variable) Charge (Rs.)

= Energy Charge Rate (Rs. /kWh) x Scheduled Energy (ex-bus) for the month (kWh)

39.3 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 such deviations shall be governed by the Indian Electricity Grid Code & ABT, as implemented by the Central Electricity Regulatory Commission, 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.

39.4 Energy Charge Rate (ECR) in Rupees per kWh on ex-power plant basis for coal based thermal power plant shall be determined to three decimal places in accordance with the following formulae:

ECR = {(SHR – SFC x CVSF) x (LPPF / CVPF) + SFC x LPSF} x 100 **/** (100 – AUX)

Where,

AUX	=	Normative auxiliary energy consumption in percentage;
CVPF	=	Weighted Average Gross calorific value of primary fuel as received, in kCal per kg or per litre or per cubic meter as applicable;
CVSF	=	Weighted Average Calorific value of secondary fuel, in kCal per ml;
ECR	=	Energy charge rate, in Rupees per kWh sent out;
SHR	=	Station Heat rate, in kCal per kWh;
SFC	=	Specific fuel oil consumption, in ml per kWh;
LPPF	=	Weighted average landed price of primary fuel, in Rupees per kg or per litre or per cubic meter as applicable;
LPSF	=	Weighted Average Landed Price of Secondary Fuel in Rs./ml.

39.5 Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis for gas and liquid fuel based thermal power plant shall be determined to three decimal places in accordance with the following formulae:

ECR = SHR x LPPF x 100 / {CVPF x (100 – AUX)}

39.6 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 39.8:

ECR = AFC x 0.5x10/{DEx(100-Aux)x(100-FEHS) }

Where,

DE = Annual design energy specified for the hydro generating station, in MWh, subject to provisions of clause 39.7.

FEHS = Free Share for home State, if any, in percent (as defined in CERC Regulations)

39.7 In case actual total energy generated by a hydro generating station during a year is less than the design energy for reasons beyond the control of the generating company, the following treatment shall be applied on a rolling basis:

i. In case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified above with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the energy charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

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

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

iii. Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by 100 / (100 – AUX).

39.8 In case the energy charge rate (ECR) for a hydro generating station, as computed in Regulation 39.6 above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds {DE x (100 – AUX) x (100-FEHS)/10000} MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

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

39.9 The SLDC shall finalise the schedules for the hydro generating stations 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.

40. LANDED COST OF FUEL

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 indigenous coal dispatched by the coal supplying company as 1.0% (one) percent or actual, whichever is less:

Provided that no transit and handling losses shall be permissible in case of coal which is priced on FOR destination basis.

41. SCHEDULING

The methodology for scheduling and dispatch for the generating plant shall be as specified in the Punjab State Regulatory Commission (Grid Code) Regulations, 2013, as amended from time to time.

42. SLDC AND TRANSMISSION CHARGES

42.1 SLDC and transmission charges as determined by the Commission shall be considered as a part of expenditure, if payable by the generating plant.

42.2 SLDC and transmission charges paid for energy sold outside the State, if any shall not be considered as expenses for determining generation tariff.

43. METERING AND ACCOUNTING

For all purposes, the Standards for Metering and Accounting specified in the Punjab State Electricity Regulatory Commission (Grid Code) Regulations, 2013 and the Central Electricity Authority (Installation and Operation of Meters) Regulations 2006 (notified by the CEA), as amended from time to time, shall be adopted and followed.

PART VI –PRINCIPLES FOR DETERMINATION OF TARIFF AND NORMS FOR OPERATION FOR DISTRIBUTION BUSINESS

44. INTEREST ON WORKING CAPITAL

44.1 Components of Working Capital for Wheeling of electricity shall cover the following:

a. O&M Expenses for wire business for 1 month;

b. Maintenance spares @ 15% of the O&M expenses;

44.2 Components of Working Capital for Retail Supply business shall cover the following:

a. O&M Expenses for retail supply business for 1 month;

b. Maintenance spares @ 15% of the O&M expenses; and

c. Receivables equivalent to 2 months of average of total revenue from sale of energy, approved by the Commission in the ARR;

Less

Consumer Security Deposit.

44.3 Working capital for a company performing generation, distribution and trading functions shall be the sum of the following:

(a) Fuel Cost for two months;
(b) Operation and Maintenance expenses for 1 month;
(c) Maintenance spares @15% of O&M expenses; and
(d) Receivables equivalent to 2 months of average of total revenue from sale of energy, approved by the Commission in the ARR;

Less

Consumer Security Deposit.

44.4 **Rate of Interest**

The rate of interest on working capital shall be as per regulation 25.1.

45. DISTRIBUTION LOSS

45.1. The distribution loss shall be equal to the difference between the energy injected into the distribution system (X) and the sum of energy sold to all its consumers (Y).

45.2. Energy sold shall be the sum of metered sales and assessed unmetered sales, if any, based on approved methodology/norms. The percentage distribution loss shall be as follows:

Percentage distribution loss = ((X- Y)/X) x 100

45.3. The distribution licensee shall file the distribution loss trajectory in the business plan commensurate with the Capital Investment Plan for distribution business. The Commission after verification and evaluation of the same shall approve the loss trajectory for each year of the Control Period.

45.4. The distribution loss level will be linked to a normative load factor for unmetered consumers. The distribution licensee shall establish consumption of unmetered consumers through a representative and reliable energy audit/ sample surveys/sample distribution transformer metering (DTR)/11 kV feeder metering/Sub-station metering:

Provided that before undertaking such survey, the distribution licensee shall submit to the Commission for its approval, a plan highlighting the sample size, survey methodology, analysis techniques and such other factors that are crucial to the reliability of such survey.

45.5. The normative load/consumption factor once established will be reviewed only when better estimates are made available by the distribution licensee.

45.6. In the absence of such energy audit/sample surveys/sample DTR metering/feeding substation end metering, the Commission shall not accept the claim of the distribution licensee and may proceed to fix the loss levels and the load/consumption factor for unmetered consumption on the basis of the information available with it.

45.7. The distribution licensee shall furnish within a period as specified by the Commission, computation of voltage-wise technical and commercial distribution losses.

45.8. Any over-achievement and under-achievement of the loss trajectory specified by the Commission shall be subject to provisions of regulation 30. The distribution licensee shall provide a statement of this in the Annual Performance Review/True-up.

45.9. Notwithstanding above, the Commission may also monitor the Aggregate Technical & Commercial (AT&C) losses.

46. POWER PURCHASE, PROCUREMENT PROCESS AND COST

46.1. Long-term demand and energy forecasts, short term demand and energy forecasts, long-term power procurement plans, short-term procurement plans and requirement of additional power shall be approved by the Commission in accordance with the PSERC (Power Purchase and Procurement Process of Licensee), Regulations 2012, as amended from time to time.

46.2. The Commission shall also approve criteria for power purchase in long-term and short-term, power purchase arrangements or agreements, and cost incurred in power purchase in accordance with the PSERC (Power Purchase and Procurement Process of Licensee), Regulations 2012, as amended from time to time.

46.3. The distribution licensee shall furnish a firm proposal with regard to source-wise purchase of electricity from various renewable sources of energy including own generation from renewable sources, for complying with its 'Renewable Purchase Obligation' specified by the Commission in PSERC (Renewable Purchase Obligation and its compliance) Regulations, 2011, as amended from time to time.

47. TRANSMISSION AND SLDC CHARGES

47.1 The transmission charges, wheeling charges and other charges payable by the distribution licensee for intra state transmission or wheeling of power purchased by it shall be considered as determined by the Commission.

47.2 The inter-state transmission charges shall be considered as per the orders of the Central Electricity Regulatory Commission.

47.3 The capital investment plan to be prepared by the distribution licensee shall also include capital investment towards meeting the reactive energy requirement.

47.4 SLDC charges, as determined by the Commission, shall be considered as allowable expenses.

48. WHEELING CHARGES

The customers availing 'open access' and hence wheeling services, shall be required to pay wheeling charges as determined by the Commission under the Open Access Regulations.

49. BAD AND DOUBTFUL DEBTS AND OTHER DEBITS

49.1 Bad and doubtful debts shall be allowed to the extent the distribution licensee has identified/actually written off bad debts, subject to a maximum of 1% of annual sales revenue, and according to a transparent policy approved by the Commission. In case, there is any recovery of bad debts already written off, the recovered bad debts will be treated as Other Income.

49.2 Other debits including miscellaneous losses and write offs, sundry debts, material cost variance, losses on account of flood, cyclone, fire etc. shall be considered by the Commission.

50. FUEL SURCHARGE ADJUSTMENT (FSA)

Any change in fuel cost from the level approved by the Commission shall be determined by the distribution licensee in accordance with the fuel cost adjustment (FCA) formula specified by the Commission in the Conduct of Business Regulations, and recovered from the consumers after following the procedure detailed in the Conduct of Business Regulations.

51. SUBSIDY

If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission under section 62 of the Act, the State Government shall, notwithstanding any direction which may be given under section 108 of the Act, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this regulation and the tariff fixed by the Commission shall be applicable from the date specified in the order of the Commission.

52. INTER CLASS CROSS–SUBSIDY

52.1 Cross-subsidy for a consumer category means the difference between the average realization per unit from that category and the combined average cost of supply per unit expressed in percentage terms as a proportion of the combined average cost of supply.

52.2 The Commission shall determine the tariff so that it progressively reflects the combined average unit cost of supply and the cross subsidy as defined above is reduced to ± 20% of the average cost of supply.

53. ROYALTY CHARGES PAYABLE TO STATE GOVERNMENT

The Commission shall allow the Royalty Charges Payable to State Government on account of maintenance as well as charges for remaining capital works of RSD.

PART VII –PRINCIPLES FOR DETERMINATION OF TARIFF AND NORMS FOR OPERATION FOR TRANSMISSION BUSINESS AND SLDC BUSINESS

54. INTEREST ON WORKING CAPITAL

54.1 **Components of Working Capital**

The Working Capital shall cover the following:

i. O&M Expenses for 1 month;

ii. Maintenance spares @ 15% of the O&M expenses;

iii. Receivables equivalent to two (2) months of fixed cost calculated on normative target availability.

54.2 **Rate of Interest**

The rate of interest on working capital shall be as per regulation 25.1.

55. NORMS OF OPERATION

55.1 **Normative Annual Transmission System Availability Factor (NATAF)** for the Control Period shall be 99% for incentive consideration (as per provisions of regulation 58):

Provided that for recovery of Annual Fixed Charges, NATAF in case of AC system shall be considered as 98%.

55.2 **Auxiliary Energy Consumption**

The charges for auxiliary energy consumption in the sub-stations for the purpose of air-conditioning, lighting and consumption in other equipment shall be borne by the transmission licensee and will be included as part of the normative Administrative and General expenses.

56. INCOME FROM OPEN ACCESS CUSTOMERS

The charges payable by the medium-term and short-term open access customers shall be as specified in Open Access Regulations.

57. TRANSMISSION LOSS

The energy losses in the transmission system of the Transmission Licensee, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the Transmission System Users in proportion to their usage of the intra-State transmission system:

Provided that the Commission may stipulate a trajectory for Transmission Loss in accordance with regulation 4.4 (c) as part of the Multi-Year Tariff framework applicable to the Transmission Licensee;

Provided that any variation between the actual level of Transmission Loss, as determined by the State Load Despatch Centre and the approved level, shall be dealt with, as part of the Annual Performance Review.

58. RECOVERY OF ANNUAL FIXED CHARGES

58.1 Transmission licensee shall recover full transmission charges at the Normative Annual Transmission System Availability Factor specified for it by the Commission.

58.2 **Computation and Payment of Transmission Charges**

Annual transmission charges shall be fully recoverable at the specified level of target availability from the long term customers. Payment of transmission charges below the specified target availability shall be on pro-rata basis. The charges for network usage shall be worked out on the basis of available transmission capacity and would reflect cost of capital investment and operation and maintenance expenses of the transmission system to transfer bulk power. The revenue from this component of transmission tariff will meet the annual revenue requirement of transmission entity in respect of owning the transmission asset.

Transmission charges (inclusive of incentive) for a calendar month shall be calculated in accordance with the following formula:

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

Where:

AFC means Annual Fixed Cost determined by the Commission for a transmission licensee (in Rupees);

NATAF means Normative Annual Transmission Availability Factor for availing incentive (in percent) (99%);

NDM means number of days in the month;

NDY means number of days in the year;

TAFM means Transmission System availability factor for the month (in percent), computed in accordance with CERC Regulations.

Note 1: Incentive mechanism for availability shall be applicable only when the transmission licensee submits detailed computation of the availability figures to the Commission duly certified by the SLDC and the Commission approves the same. The detailed computation will include all details of the input data, methods of recording the data (manual or through electronic modes), formulae used for computation and all other details required to establish the current level of availability:

Provided that the Commission may get the annual Transmission system availability factor verified from an independent third party agency, till SLDC becomes an independent entity.

Note 2: For all purposes, the Normative Target Availability Factor (98%) will be considered for recovery of full fixed charges. Any fall in the actual availability from the Normative Target Availability will result in pro-rating of the fixed charges.

58.3 **Recovery of SLDC Charges**

i. The SLDC charges from the generating companies and sellers (which excludes short term open access customers) shall be collected in proportion to their installed capacity or contracted capacity, as the case may be, as on the last day of the month prior to billing of the month.

ii. The SLDC charges from the distribution licensees and buyers (which excludes short term open access customers) shall be collected in proportion to the sum of their allocations and contracted capacities, as the case may be, as on the last day of the month prior to billing of the month.

PART VIII - FILING OF AGGREGATE REVENUE REQUIREMENT

59. CAPITAL INVESTMENT PLAN AND BUSINESS PLAN FILING

The Applicant shall file for the Commission's approval on or before 1st April of the year preceding the first year of the control period or any other date as may be fixed by the Commission, an application containing the following elements:

i. Filing of Capital Investment Plan as per the details specified in regulation 9.

ii. Filing of Business Plan as per the details specified in regulation 10.

60. TARIFF FILING

60.1 The Applicant shall file a petition for approval of ARR & Tariff, for each year of the control period consistent with the business plan and the capital investment plan approved by the Commission. The ARR & tariff filing shall be filed on or before 30th November of the year preceding the year of start of the control period. The application shall contain all the components of the ARR and tariff as specified in these regulations. The performae in which the generating company or the licensee or SLDC, as the case may be, has to file the ARR and Tariff Petition will be separately specified by the Commission:

Provided where the last day for ARR & tariff filing falls on a day on which the office of the Commission is closed and by reason thereof, the act cannot be done on that day, it may be done on the next following day on which the office is open.

60.2 The Applicant shall publish the application as mentioned in the Conduct of Business Regulations.

60.3 The application shall also contain the revenue gap for various years of the control period and a tariff proposal for meeting the revenue gap for each year. In the absence of the tariff proposal, the petition shall be considered as incomplete and shall be liable for rejection.

60.4 The distribution licensee shall also provide a copy of tariff filing to the transmission licensee and vice-versa.

60.5 Notwithstanding anything contained in these regulations, 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 distribution licensee, transmission licensee or generating company:

Provided that such determination of tariff may be pursuant to an agreement or arrangement or otherwise, whether or not previously approved by the Commission and entered into at any time before or after the commencement of the Act.

61. ANNUAL PERFORMANCE REVIEW FILING

The Applicant shall file the Annual Performance Review on or before 30th November in each year of the control period as per the details mentioned in regulation 11 for the Commission's review and approval.

62. DISPOSAL OF APPLICATION

62.1 The Commission shall, within one hundred and twenty (120) days from the receipt of a complete application and after considering all suggestions and objections received from the public:

(a) Issue a Tariff Order accepting the petition with such modifications or such conditions as may be contained in such Order; or

(b) Reject the petition for reasons to be recorded in writing if such petition is not in accordance with the provisions of the Act and the rules and regulations made there under or the provisions of any other law for the time being in force.

62.2 The Applicant shall publish the tariff approved by the Commission in English and local languages in daily newspapers having circulation in the area of licensee. The Applicant shall also host the approved tariff/tariff schedule on its website and make available for sale, a booklet containing such tariff/tariff schedule/general conditions of tariff as the case may be, to any person upon payment of reasonable reproduction charges.

62.3 The tariff so published shall be in force from the date specified in the said order and shall, unless amended or revoked, continue to be in force for such period as may be stipulated therein.

63. SUMMARY OF TIMELINES

S. No	Description	Filing of the Document (on or before)	Obtaining additional information and acceptance by the Commission	Approval of the Document
1	Capital Investment Plan (to be filed only at the beginning of Control Period)	1st April of the year preceding the first year of control period	Within 30 days of filing of document	Within 90 days of acceptance of the filing
2	Business Plan	1st April of the year preceding the first year of control period	Within 30 days of filing of document	Within 90 days of acceptance of the filing
3	Filing of MYT Petition (ARR and Tariff Proposal for the Control Period)	30th November of the year preceding the first year of control period	Within 30 days of filing of document	Within 120 days of acceptance of the filing
4	Annual	30th November	Within 30 days of	Within 120 days

	Performance Review	of each year of the control period	filing of document	of acceptance of the filing

PART IX - MISCELLANEOUS

64. SHARING OF CDM BENFITS

The proceeds of carbon credit from approved CDM for the proposed projects registered after the date of notification of these regulations 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 or the transmission system or the distribution system/project, as the case may be.

(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 or the transmission licensee or the distribution licensee, as the case may be, and the beneficiaries.

65. ISSUE OF ORDERS AND PRACTICE DIRECTIONS

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.

66. POWERS TO REMOVE DIFFICULTIES

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 Applicant to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

67. POWER OF RELAXATION

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

68. POWER TO WAIVE

During the period, the licensee remains an integrated utility performing the functions of Generation & Distribution, the Commission may waive and/or relax any of the provisions of these regulations in any manner if in the opinion of the Commission, it is impracticable or inexpedient to proceed as per these Regulations. In such a situation, after recording its reasons, the Commission may adopt any other approach which is reasonable and is consistent with the overall approach of these regulations.

69. INTERPRETATION

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

70. SAVING OF INHERENT POWERS OF THE COMMISSION

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.

71. ENQUIRY AND INVESTIGATION

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.

72. POWER TO AMEND

The Commission, for reasons to be recorded in writing, may at any time, vary, alter or modify any of the provision of these regulations through specific order.

73. REPEAL

The Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulation, 2005, along with amendments issued from time to time, shall stand repealed from the date of coming into force of these regulations.

By order of the Commission

Sd/-
SECRETARY