JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI

(DETERMINATION OF TARIFF FOR PROCUREMENT OF POWER FROM SOLAR PV POWER PROJECT AND SOLAR THERMAL POWER PROJECT)

REGULATIONS, 2010

Draft Regulation inviting suggestions / comments
Regulation No._____, dated____- 03 -2010

In exercise of the powers conferred by Section 86 (1) (a), (b) and (c) read with (e), Section 61(a to h), and Section 62 (1) of the Electricity Act 2003 and all other powers enabling it in this behalf, the Jharkhand State Electricity Regulatory Commission hereby makes the following Regulation, namely:

A1: SHORT TITLE, COMMENCEMENT AND INTERPRETATION

1.1 This Regulation may be called the 'Jharkhand State Electricity Regulatory Commission (Determination of tariff for procurement of power from solar PV power project and solar thermal power project) Regulations, 2010'.

1.2 These Regulations shall extend to the whole state of Jharkhand

1.3 These Regulations shall come into force on the date of its publication in the Jharkhand Gazette

A2: DEFINITION

2.1 In this regulation unless the context otherwise requires:

(a) "Act" means the Electricity Act, 2003 and subsequent amendment thereof;

(b) "Capital cost" means the cost inclusive of all capital work including plant and machinery, civil work, erection and commissioning, financing and interest during construction;

(c) "CERC" means The Central Electricity Regulatory Commission referred to in subsection (1) of section 76;

(d) "Control Period" means the period during which the norms for determination of tariff specified in these regulations shall remain valid;

(e) "Day" means a continuous period starting at 00.00 hours and ending at 24.00 hours;

(f) "Distribution Licensee or Discom" means a Licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;

(g) "Extra High Voltage (EHV)" means the voltage, which exceeds 33,000 volts subject, however, to the percentage variation allowed under the Indian Electricity Rules, 1956;

(h) "Grid" means interconnected network of transmission lines, distribution lines and sub-stations at EHV and HV level;

(i) "Grid Code" shall mean the JSERC (State Grid Code), Regulations, 2008 & its amendment from time to time and the Indian Electricity Grid Code;

(j) "High Voltage (HV)" means the voltage higher than 650 volts but which does not exceed 33,000 volts 50 cycles under normal conditions subject, however, to the percentage variation allowed under the Indian Electricity Rules, 1956;

(k) "Infrastructure cost" means the cost of auxiliaries, cost of land, site development charges and other civil works, transportation charges, cost of evacuation upto interconnection point;

(l) "Inter-connection Point" means interface point of renewable energy generating facility with the transmission system or distribution system, as the case may be;

(i). in relation to Solar Photovoltaic Projects, inter-connection point shall be line isolator on outgoing feeder on HV side of the pooling sub-station;

(ii). in relation to Solar Thermal Power Projects the, inter-connection point shall be line isolator on outgoing feeder on HV side of generator transformer;

(m) "JSERC or Commission" means the Jharkhand State Electricity Regulatory Commission;

(n) "Month" means a continuous period of one month commencing from 00.00 hours on the first day of the month and ending at 24.00 hours on last day of the month;

(o) "MNRE" means the Ministry of New and Renewable Energy of the Government of India;

(p) "Non-firm power" means the power generated from renewable sources, the hourly variation of which is dependent upon nature's phenomenon like sun, cloud, wind, etc., that cannot be accurately predicted;

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

(r) "Project" means a generating station or the evacuation system up to interconnection point, as the case may be;

(s) "Schedule" denote the injection schedule in MW (in case of generator) or drawl schedule in MW (in case of consumer) provided by generator/consumer to the SLDC (in case of connected to transmission network) or to the Distribution Licensee (in case of connected to distribution network) in a manner as specified in this code;

(t) "SERCs" means State Electricity Regulatory Commissions;

(u) "State" means the State of Jharkhand;

(v) "State Transmission Utility (STU)" means the Board or the Government Company specified as such by the State Government under sub-section (1) of section 39 of the Act;

(w) "Tariff period" means the period for which tariff is to be determined by the Commission on the basis of norms specified under these Regulations;

(x) "Useful Life" in relation to a unit of a generating station for a solar Photovoltaic and solar thermal power project including evacuation system shall mean 25 years from the date of commercial operation (COD).

(y) "Year" means a financial year;

2.2 All other expressions used herein although not specifically defined herein, but defined in the Act, shall have the meaning assigned to them in the Act. The other expressions used herein but not specifically defined in this regulation or in the Act but defined under any law passed by the parliament applicable to electricity industry in the State shall have the meaning assigned to them in such law. Subject to the above the expression used herein but not specifically defined in this regulation or in the Act or any law passed by the parliament shall have the meaning as is generally assigned in the electricity industry.

A3: APPLICABILITY OF THE ORDER

3.1 These regulations shall be applicable to grid connected :

(a) Solar Photovoltaic (PV) power projects that directly convert solar energy into electricity and are based on the technologies such as crystalline silicon or thin film etc. as may be approved by MNRE.

(b) Solar thermal power projects based on Concentrated solar power (CSP) technologies such as line focusing or point focusing, as may be approved by MNRE, and uses direct sunlight, concentrating it several times to reach higher energy densities and thus higher temperatures whereby the heat generated is used to operate a conventional power cycle to generate electricity.

3.2 These regulations shall be applicable to solar PV power projects and solar thermal power projects in the state commissioned on or after the date of issue of this order and intended for sale of electricity to the Distribution Licensees within the state.

3.3 The control period will start from the date of publication of these regulations in the Jharkhand Gazette and will extend upto 31.03.2013. The tariff decided in a particular control period shall apply to all projects which come up within that control period.

Provided the Commission may revise the capital cost considered in these regulations after one year from the date of publication of these regulations in the Jharkhand Gazette.

A4: DETERMINANTS OF TARIFF

4.1 Under Section 14 of the Act, no license is required for generation and distribution of power in notified rural areas. Hence, stand alone solar PV power project and solar thermal power project supplying to rural areas will not have their tariffs determined by the regulator.

4.2 Solar PV and solar thermal power project feeding to the grid would require tariff at which Distribution Licensees would procure power from these plants. Determination of tariff by the Commission would also facilitate signing of power purchase agreement between developers and Distribution Licensee.

4.3 To accelerate investment in solar power generation projects for supply to the grid in Jharkhand, an appropriate tariff mechanism is the key requirement. In this regard, the Commission views that:

(a) The tariff mechanism must meet the needs of investors as well as distribution licensees

(b) Renewable power may become unviable at market determined prices. On the other hand, cost-plus tariffs would provide greater surety to investors without affecting retail tariffs significantly (as renewable energy would only be a small fraction of the energy sold by the licensee).

4.4 Solar PV power projects and Solar thermal power projects are eligible to receive benefits under the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC). In order to encourage investment in the solar power projects, the Commission has not considered CDM as one of the parameters for tariff determination.

Tariff Principle

4.5 While deciding the tariff for power purchase by Distribution Licensee from renewable sources, the Commission has considered the principles and methodologies specified by:

(a) Central Electricity Regulatory Commission

(b) National Electricity Policy

(c) National Tariff Policy

(d) Forum of Regulators (FOR)

(e) Central and State Governments

4.6 Taking into consideration the capital cost involved in the solar power generation projects it is expected that the project size would be small and the number of projects might be large with different technology options. Therefore, determination of project specific tariff for each solar generation project would involve significant cost and time to understand the technical details of the proposed projects. Further it is pertinent to note that the development of grid connected solar power project is still at a nascent stage in the country. Hence, the Commission is of the view that differentiation in terms of technology for the purpose of tariff determination is not desirable and the selection of appropriate technology should be left to the discretion of the project developers. Therefore, the Commission has considered a Generalised Tariff determination approach in these regulations.

4.7 Energy generation from solar plant utilizes sunshine as a resource. It does not utilize any fuel for generation of electricity in case of solar PV generation whereas in case of solar thermal power plant salt is used. Hence, the tariff for solar power generation does not have a variable fuel cost component but has a significant fixed cost component. Hence the Commission has considered a single-part tariff for solar PV and solar thermal power projects.

4.8 Solar energy generation depends upon natural factor such as availability of solar density in the region where the plant is located and is inherently Non-firm power. It is pertinent to ensure that the project should be viable for the project developer and at the same time the interests of utility and consumers are protected by avoiding huge cost burden on them. Though there are several approaches for tariff determination, such as front loaded, back loaded, and average tariff etc but each of these approaches has its advantages and disadvantages. It is important to capture the time value of money in the tariff structure which is incorporated in the levellised tariff approach. The Commission has, therefore, considered a levellised tariff approach in these regulations.

Components of tariff

4.9 Tariff determination using a cost-plus approach requires assumptions on the following operational and financial parameters:

(a) Capital cost

(b) Capacity utilization factor

(c) Auxiliary consumption

(d) Debt-equity ratio

(e) Term of loan and Interest on long term debt

(f) Depreciation

(g) Operation and Maintenance expenditure

(h) Working capital and interest on working capital

(i) Return on equity

4.10 The subsequent sections detail the terms and conditions of various components set by the Commission for determination of tariff from the solar PV and solar thermal power projects.

Solar PV power projects

Capital cost

4.11 The capital cost of a solar PV power project primarily consists of the cost of Photo Voltaic modules, balance of plant equipments, power conditioning equipments, taxes and duties, cost of inter-connection, civil works and erection & commissioning.

4.12 The capital cost for solar PV projects as considered in other states are:

(a) Rajasthan Electricity Regulatory Commission has estimated capital cost for solar PV power generation in the range of Rs.17 Crores/MW to Rs.21 Crores/MW.

(b) Karnataka Renewable Energy Development Agency has considered a capital cost ranging from Rs.18 Crores/MW to Rs.25 Crores/MW.

(c) Gujarat Electricity Regulatory Commission has considered a capital cost of Rs 17 Crores/MW ,

(d) In Chhattisgarh capital cost considered for solar PV projects is Rs 22 Crores/MW

4.13 It is important to note that with the advancement in the technology of the solar PV based installations and associated economies of scale the capital cost for Solar PV installations would also decrease in the near future. The Commission has, after taking into consideration the above aspects, proposed a normative capital cost of Rs.17 Crores/MW in accordance with the capital cost considered in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009.

Capacity utilization factor

4.1 Capacity utilization factor (CUF) of a solar PV project is defined as the ratio of actual energy generated by the project to the equivalent energy output at its rated capacity over the year. The energy generation for a solar PV project is dependent on solar radiation, and number of clear sunny days. Thus the capacity utilization factor depends upon site specific parameters like insolation, ambient conditions and conversion efficiencies of PV cell.

4.2 CERC in its Statement of Objects and Reason for Terms and Conditions for Tariff determination from Renewable Energy Sources Regulations, 2009 has mentioned under Tariff Norms for solar PV projects that clear sunny days of around 290 days to 320 days are available in most of the parts of the country. It has also been stated that mean monthly global solar radiation incident over the country is found to be of the order of 5.5 to 6 kWh/sqm/day.

4.3 Taking into consideration the above facts the Commission has proposed CUF at 19% for tariff determination in line with the CUF considered in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009.

Life of plant

4.4 The Commission has considered the plant life as 25 years in accordance with the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 and as considered by other SERCs.

Debt equity ratio

4.5 Clause 5.3(b) of the National Tariff Policy stipulates a debt-equity ratio of 70:30 for financing of power projects. JSERC (Terms and Conditions for determination of Thermal generation tariff), Regulations 2004 notified by the Commission also provide a normative debt-equity ratio of 70:30 for Generating Company. Moreover, when the equity employed is more than 30%, the amount of equity for the purpose for determining the tariff will be limited to 30% only. However, in case the equity employed is less than 30%, the actual equity employed is to be considered.

4.6 Accordingly, the Commission has considered a debt-equity ratio of 70:30 in line with the provisions provided by most of the SERCs and CERC in the various Tariff regulations.

Term of loan and Interest on long term debt

4.7 The Commission has considered the term of loan for determination of tariff as 10 years.

4.8 Notwithstanding any moratorium period availed for the solar power project, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

4.9 The Commission has considered the normative interest rate on long term loan as average long term prime lending rate (LTPLR) of State Bank of India (SBI) prevalent during the previous year plus 150 basis points. The repayment of the loan has been has been considered from the first year of commercial operation of the project.

Depreciation

4.10 In order to facilitate the loan repayment by the developers within a period of 10 years the Commission has provided depreciation rate of 7% for the first 10 years and 1.33% for the remaining 15 years of the total plant life considered as 25 years.

Operation and Maintenance expenses

4.11 Operation and Maintenance expenses consist of employee expenses, administrative and general expenses, repairs and maintenance expenses, cost of spares and insurance expenses. With respect to solar PV project there is limited operating experience of MW scale grid connected power plant in the country. In the Statement of Objects and Reason for CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources Regulations), 2009 it has been stated that in case of solar PV power projects, repairs and maintenance expenses are not significant due to limited wear and tear mainly pertaining to replacement of parts for control system or power conditioning systems and significant part of manpower expense would pertain to inspection/testing/cleaning array systems.

4.12 Taking into consideration the above facts the Commission has proposed O&M expenses at Rs 9 Lakhs/MW for the 1st year of operation with an annual escalation of 5.72% which shall be reviewed at the end of the control period.

Working capital requirement and interest on working capital

4.13 The following norms for working capital are considered by the Commission as per the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009:

(a) Operation & Maintenance expenses for one month;

(b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative CUF;

(c) Maintenance spares @ 15% of operation and maintenance expenses

4.14 An interest rate which is 100 basis points above the average short-term prime lending rate (STPLR) of State Bank of India during the previous year is considered for calculation of interest on working capital.

Return on equity

4.15 The National Tariff Policy envisages that the appropriate Commission may determine preferential tariff for procurement of power by Distribution Licensee from non-conventional energy sources.

4.16 The return on equity considered by the Commission in these regulations shall be:

(a) Pre-tax 19% per annum for the first 10 years.

(b) Pre-tax 24% per annum 11th years onwards.

Solar thermal power projects

Capital cost

4.17 The capital cost of a solar thermal power project will vary from technology to technology. The capital cost of a solar thermal power plant primarily consists of plant and machinery, civil works, commissioning work, land acquisition and evacuation facilities upto inter-connection point etc.

4.18 CERC in its Statement of Objects and Reason for Terms and Conditions for Tariff determination from Renewable Energy Sources Regulations, 2009 has mentioned that ACME have submitted a petition before CERC seeking approval for their proposed Solar Thermal Project in Rajasthan wherein they have quoted capital cost of Rs.13.03 Crores/MW and it is further stated by ACME that through local manufacturing for critical components or sourcing from Indian vendors to the extent possible, cost of the Solar Block of the plant can be brought down to Rs. 6-7 Crores/MW and the overall cost of the plant can be retained at around Rs.10 crore per MW.

4.19 Taking into consideration the above facts the Commission has proposed a capital cost of Rs13.0 Crores/MW in line with the capital cost considered by CERC.

Capacity utilization factor

4.20 Various SERCs have considered the capacity utilization factor (CUF) in the range of 22% to 24% while determining the tariff for solar thermal plants. CERC has considered a normative capacity utilization factor of 23%. Taking into consideration the above facts, the Commission has proposed the capacity utilization factor at 23% for tariff determination.

Auxiliary consumption

4.21 The auxiliary consumption of a solar thermal power plant is dependent on the configuration and mode of operation of the power plant. The auxiliary system includes the use of auxiliary heater to ensure that the salt used to store heat is maintained in a molten state during non-sunny days.

4.22 In the absence of specific details on this aspect, the Commission has considered auxiliary consumption as 10% for the determination of the tariff as per CERC norms.

Operation & Maintenance expenses

4.23 There is no operating experience of MW scale solar thermal power plant in the country further none of the SERCs have specified break up of operating expenses for solar thermal power projects. The Commission, after considering the above aspects, has proposed the normative O&M expenses at Rs 13 Lakhs/MW for 1st year of operation with an escalation of 5.72% per annum for the determination of the tariff in accordance with the CERC norms.

4.24 The value of parameters mentioned as under for determination of tariff for Solar Thermal Power project shall be as specified for the solar PV project:

(i).Life of plant;

(ii).Debt equity Ratio;

(iii).Term of loan and interest on long term debt;

(iv).Depreciation;

(v).Working capital requirement and Interest on working capital;

(vi).Return on equity;

4.25 The cost parameters considered by the Commission to determine tariff for power generated from solar PV power projects and solar thermal power projects are summarized in the table below:

Table 1: Cost parameters considered by Commission for tariff determination

Parameters	Solar PV project	Solar Thermal project
Capital cost (Rs Crores/MW)	17	13
Capacity Utilization Factor	19%	23%
Auxiliary consumption	-	10%
Useful life /Life of the machine	25 yrs	25 yrs

Parameters	Solar PV project	Solar Thermal project
Debt: equity ratio	70:30	70:30
Loan repayment period	10 yrs	10 yrs
Interest on loan	SBI LTPLR + 1.50%	SBI LTPLR + 1.50%
Interest on Working Capital	SBI STPLR + 1%	SBI STPLR + 1%
O&M expenses	Rs 9 lakhs per MW with annual escalation of 5.72 %	Rs 13 lakhs per MW with annual escalation of 5.72 %
Depreciation	1 to 10 yrs – 7% 11 to 25 yrs – 1.33%	1 to 10 yrs – 7% 11 to 25 yrs – 1.33%
Residual value	10% of capital cost	10% of capital cost
Return on equity (pre-tax)	19% - for first 10 yrs, 24% - from11th yr to 25 yr	19% - for first 10 yrs, 24% - from11th yr to 25 yr

A5: OTHER TERMS AND CONDITIONS

Wheeling

5.1 To promote investment in solar PV and solar thermal power projects and encourage third party sale and Captive Power Plants, a 50% discount on wheeling charges and other surcharge on wheeling charges applicable to conventional form of generation shall be applicable for solar PV and solar thermal power projects in Jharkhand.

Scheduling

5.2 The solar PV and solar thermal power projects shall be out of the purview of 'scheduling' and 'merit order dispatch principles' as the generated power is Non-firm power.

Reactive power supply

5.3 The charges applicable for reactive power supply to solar PV and solar thermal power project shall be as per JSERC (Open Access in Intra-State Transmission and Distribution) Regulations, 2005 and subsequent amendments thereof.

Metering and billing

5.4 The metering and communication arrangements shall be provided in accordance with the JSERC (Open Access in Intra-State Transmission and Distribution) Regulations, 2005 and subsequent amendments thereof, JSERC (State Grid Code), Regulations 2008 and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 in consultation with Distribution Licensee/State Transmission Utility. The periodicity of testing, checking, calibration etc., will be governed by the the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 / regulations issued by the Commission in this regard.

5.5 Main and Check Meters shall have facility to communicate its reading to State Load Dispatch Centre on real time basis or otherwise as may be specified by the Commission.

5.6 Meter reading shall be taken as per the procedure devised by the Distribution Licensee/State Load Despatch Centre. The term 'Meter' shall include Current transformers, voltage/potential transformers, wiring between them and meter box/panel etc.

5.7 Billing of the metered energy shall be carried out on a monthly basis.

Payment mechanism

5.8 The Commission prescribes a settlement period of 30 days from the date of presentation of the bill for the net energy sold after deducting the charges for start up power and reactive power to the concerned Distribution Licensee where the power is injected, in order to ensure that the generating company has an assurance of cash inflow for the energy delivered to the grid.

5.9 In case of delay beyond the 30 days payment period, the Distribution Licensee shall pay a late payment surcharge at the rate of 1.25% per month to the generating company.

5.10 In case the Distribution Licensee makes the payment within 15 days from the date of presentation of bills by the generating company, a rebate of 1% billed amount shall be allowed by the generating company.

5.11 In case where payments of bills of the generating company are made through letter of credit, a rebate of 2% shall be allowed to the Distribution Licensee.

Third party sale

5.12 In case of default in payment for more than three months continuously by the Distribution Licensee, the generating company can sell power to the third party.

5.13 In those cases where the developer has an existing arrangement for third party supply or for captive consumption and in case the generating company desires to terminate the agreement with third party and to supply to the Distribution Licensee, the Distribution Licensee with the prior permission of the Commission, shall purchase the power at the rate as determined by the Commission in these regulations.

Start up power

5.14 The solar PV and solar thermal power generator shall be entitled to draw start up power from the Distribution Licensee's network. The drawal of energy by the generator during the start up from the Distribution Licensee shall be adjusted against the generated energy.

Drawing of power during shut down

5.15 The solar PV and solar thermal power generator shall be entitled to draw power from the Distribution Licensee's network during shutdown period of its plant or other emergencies. The energy consumed shall be billed at the temporary rate applicable to HT Industrial category. The drawal by the solar PV and solar thermal power generator shall not normally exceed 11.5 % of the MW capacity it delivers to the Distribution Licensee.

Banking

5.16 Jharkhand does not have a Renewable Policy as yet to deal with this issue. But it is recommended that facility for 100% banking of generated power is allowed on the condition that banked power will not be returned by more than a fixed quantity at one time.

5.17 Utilities should facilitate banking though proper arrangement so that power banked during off-peak period is not drawn during peak season.

Minimum purchase requirement

5.18 Under the provisions of the National Tariff Policy, the Commission is required to fix a minimum percentage for purchase of energy from renewable sources. The target set under the Renewable Energy Obligation (REO) helps boost the confidence of investors as it offers an assured market for renewable energy.

5.19 Ideally, there should be technology wise procurement target so that all renewable energy technologies get an equal opportunity to grow. As in the present circumstances renewable energy technologies cannot compete with other technologies, due to higher cost of generation. It is important in the given context that all renewable energy technologies are assigned with some procurement target offering a level playing field.

5.20 The Commission has accordingly specified the procurement target for solar PV and solar thermal power in this control period as under:

Table 2: REO for Jharkhand from FY 2011 to FY 2015

Technology	2010-11	2011-12	2012-13	2013-14	2014-15
Solar PV & Solar Thermal	1.0%	1.50%	2.0%	2.50%	2.50%

5.21 CERC is contemplating the introduction of Renewable Energy Certificates (RECs) in India to decrease the market risk of renewable energy and encourage investment in renewable energy sector. Introduction of RECs may witness, 'enforcement surcharge' being charged from utilities for non-compliance of REO specified by the respective SERC. Hence REO is a pre-requisite for the introduction of RECs in India.

Evacuation Infrastructure

5.22 The State Transmission Utility (STU) shall bear 100% of the cost of evacuation infrastructure.

Sharing of CDM benefits

5.23 The proceeds of carbon credit from the wind generation projects shall be shared between the developer and the energy off-taker in the following manner:

(a) 100% of the CDM benefits to be retained by the project developer in the first year after date of commercial operation of the generating station

(b) In the second year, the share of energy off-taker shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the CDM benefits shall be shared in equal proportion by the project developer and energy off-taker.

Incentive by Central government

5.24 MNRE has implemented Generation Based Incentives (GBI) scheme for Grid Interactive Solar Power Plants of a minimum 1 MW installed capacity. The incentive that is sanctioned by the Union Government to enhance the availability of power to the grid shall be taken into account for those projects that qualify under the GBI scheme, at the time of fixing tariff from such projects by the Commission..

Financial benefits

5.25 The Department of Industries, Government of Jharkhand notified the Industrial Policy in the year 2001. The policy delineates enabling policies and incentives promoting industrial investment in the state. The policy states that exploitation and development of non-conventional sources of power, such as geothermal energy, biomass based power, solar power, wind power etc. to generate power locally and provide it in the remote areas will be encouraged. The Government shall accord "Industrial Status" to such non-conventional sources of power generating units, which also would be allowed to wheel energy.

5.26 According to the policy:

(a) All renewable energy based power generation projects in Jharkhand are entitled for exemption of electricity duty for 10 years from the date of commissioning of the project.

(b) Renewable energy based power generation projects in Jharkhand are exempted from open access charges.

(c) If government land is available, land use permission will be given to the power producer for duration of 30 years or project life whichever is less for a token land premium per year. If the power producer purchases private land for the project, then they will be eligible to get exemption of 50% on stamp duty.

(d) Non-conventional energy equipment and other items related to the equipment will be exempted from commercial tax.

(e) All renewable energy based power plants in Jharkhand will be given the status of industry and will be entitled to get all benefits available for industrial units.

Single Window Clearance

5.27 The Industrial Policy, 2001 also suggests for an effective Single Window system to be established at the district level, the Industrial Area Development Authority Level and at the Directorate level to ensure timely disposal of various pending matters at such levels.

5.28 The Commission observes that renewable energy developers loose significant amount of time in getting approvals and clearances from various departments and authorities. The Commission also observes that there is requirement of a practical and implementable single window clearance arrangement within the state and suggests the State Government to facilitate such provision in Jharkhand.

Tariff period

5.29 The Commission has considered the useful life of a Solar PV power plant as 25 years and it is proposed that the tariff determined by this order be applicable for 25 years for the projects having Commercial Operation Date (COD) upto 31st March, 2013.

5.30 The Commission has considered the useful life of a Solar Thermal power plant as 25 years and it is proposed that the tariff determined by this order be applicable for 25 years for the projects having Commercial Operation Date (COD) upto 31st March, 2013.

A6: POWER TO REMOVE DIFFICULTIES

6.1 In case of any difficulty in giving effect to any of the provisions of this Regulation, the Commission may by general or special order, issue appropriate directions to Generators, Transmission Licensee(s), Distribution Licensee(s) etc., to take suitable action, not being inconsistent with the provisions of the Act, which appear to the Commission to be necessary or expedient for the purpose of removing the difficulty.

6.2 The generators, Licensees may make an application to the Commission and seek suitable orders to remove any difficulties that may arise in implementation of these regulations.

A7: POWER TO AMEND

7.1 The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of this Regulation.

A8: SAVINGS

8.1 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuses of the process of the Commission.

8.2 Nothing in this Regulations shall bar the Commission from adopting in conformity with the provisions of the Act a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.

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

(By order of the Commission)
(A.K. Mehta)

Secretary

Jharkhand State Electricity Regulatory Commission