JAMMU AND KASHMIR – STATE ELECTRICITY REGULATORY COMMISSION

No. : JKSERC/28 of 2013 Dated: 17-05-2013

Sl. No.	Description	Summary
1.	**Short title and commencement**	(1) Jammu and Kashmir State Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2013. (2) Regulations to come into force from the date of their publication in the govt. gazette and unless reviewed earlier or extended by the Commission, shall remain in force for a period of 5 years from the date of commencement. (3) These Regulations shall extend to whole State of Jammu and Kashmir.
2.	**Definitions and Interpretation**	As per Regulations
3.	**Scope and extent of application**	To apply in all cases where tariff, for a generating station or a unit thereof based on renewable sources of energy, is to be determined by the Commission under Section 56 read with Section 71 of the Act. Provided that in cases of wind, Small Hydro projects, Biomass power based on Rankine cycle, non-fossil fuel based cogeneration projects, Solar PV, Solar Thermal power projects, Biomass gasifier and Biogas power project these Regulations shall apply subject to the fulfillment of eligibility criteria specified in regulation 4 of these Regulations.
4.	**Eligibility Criteria**	**(a) Wind power project** – using new wind turbine generators. **(b) Small hydro project** – located at the sites approved by State Nodal Agency/ State Government using new plant and machinery, and installed power plant capacity to be lower than or equal to 25 MW at single location. **(c)** Biomass power project based on Rankine cycle technology Biomass power projects using new plant and machinery based on Rankine cycle technology and using biomass fuel sources, provided use of fossil fuel is restricted only up to 15% of total fuel consumption on annual basis. **(d) Non-fossil fuel based co-generation project** – The project shall qualify to be termed as a non-fossil fuel based co-generation project, if it is using new plant and machinery and is in accordance with the definition and also meets the qualifying requirement outlined below: **Topping cycle mode of co-generation** – Any facility that uses non-fossil fuel input for the power generation and also utilizes the thermal energy generated for useful heat applications in other industrial activities simultaneously. Provided that for the co-generation facility to qualify under topping cycle mode, the sum of useful power output and one half the useful thermal output be greater than 45% of the facility's energy consumption, during season. **(e) Solar PV and Solar Thermal Power Project –** Based on Technologies approved by MNRE. **(f) Biomass Gasifier based Power Project** – The project shall qualify to be termed as a biomass gasifier based power project, if it is using new plant and machinery and having a Grid connected system that uses 100% producer gas engine, coupled with gasifier technologies approved by MNRE. **(g) Biogas based Power Project** – The project shall qualify to be termed as a biogas based power project, if it is using new plant and machinery and having grid connected system that uses 100% Biogas fired engine, coupled with Biogas technology for co-digesting agriculture residues, manure and other bio waste as may be approved by MNRE.
	General Principles	
5.	**Control Period or Review Period**	Five years, of which the first year shall be the financial year 2013-14. Provided that the benchmark capital cost for Solar PV and Solar thermal projects may be reviewed annually by the Commission. Provided further that the biomass price may be reviewed at the end of the third year of the Control Period.

		Provided also that the tariff determined as per these Regulations for the RE projects commissioned during the Control Period, shall continue to be applicable for the entire duration of the Tariff Period as specified in Regulation 6 below. In case Regulations for the next Control Period are not notified until commencement of next Control Period, the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustments as per revised Regulations.
6.	**Tariff Period**	(a) The Tariff Period for Renewable Energy power projects except in case of Small hydro projects below 5 MW, Solar PV, Solar thermal, Biomass Gasifier and Biogas based power projects shall be for a minimum period of thirteen (13) years. (b) Small hydro projects below 5 MW, - 35 years. (c) Solar PV and Solar thermal power projects - 25 years. (d) Biomass Gasifier and Biogas based power projects - 20 years. (e) Tariff period under these Regulations shall be considered from the date of commercial operation of the renewable energy generating stations. (f) Tariff determined as per these Regulations shall be applicable for Renewable Energy power projects, only for the duration of the Tariff Period as stipulated under Regulations 6 (a), (b), (c), (d) and (e).
7.	**Project Specific tariff**	(a) Project specific tariff, on case to case basis, shall be determined by the Commission for the following types of projects: (i) Municipal Solid Waste Projects; (ii) Solar PV and Solar Thermal Power projects, if a project developer opts for project specific tariff: Provided that the Commission while determining the project specific tariff for Solar PV and Solar Thermal shall be guided by the provisions of Chapters 7 & 8 of these Regulations. (iii) Hybrid Solar Thermal Power plants; (iv) Other hybrid projects include renewable–renewable or renewable conventional sources, for which renewable technology is approved by MNRE; (v) Biomass project other than that based on Rankine Cycle technology application with water cooled condenser; (vi) Any other new renewable energy technologies approved by MNRE.
8.	**Petition and proceedings for determination of tariff**	(1) Notwithstanding anything contained in these regulations, (a) the generic tariff determined for Solar PV projects based on the capital cost and other norms applicable for any year of the control period shall also apply for such projects during the next year; and (b) the generic tariff determined for Solar thermal projects based on the capital cost and other norms for any year of the control period shall also apply for such projects during the next two years, provided that (i) the Power Purchase Agreements in respect of the Solar PV projects and Solar thermal projects as mentioned in this clause are signed on or before last day of the year for which generic tariff is determined and (ii) the entire capacity covered by the Power Purchase Agreements is commissioned on or before 31st March of the next year in respect of Solar PV projects and on or before 31st March of subsequent two years in respect of Solar thermal projects.
9.	**Tariff Structure**	(1) The tariff for renewable energy technologies shall be single part tariff consisting of the following fixed cost components: (a) Return on equity; (b) Interest on loan capital; (c) Depreciation; (d) Interest on working capital; (e) Operation and maintenance expenses; Provided that for renewable energy technologies having fuel cost component, like biomass power projects and non-fossil fuel based cogeneration, single part tariff with two components, fixed cost component and fuel cost component, shall be determined.

10.	**Tariff Design**	(1) The generic tariff shall be determined on levellised basis for the Tariff Period. Provided that for renewable energy technologies having single part tariff with two components, tariff shall be determined on levellised basis considering the year of commissioning of the project for fixed cost component while the fuel cost component shall be specified on year of operation basis. (2) For the purpose of levellised tariff computation, the discount factor equivalent to Post Tax weighted average cost of capital shall be considered. (3) Levellisation shall be carried out for the 'useful life' of the Renewable Energy project while Tariff shall be specified for the period equivalent to 'Tariff Period'.
11.	**Despatch principles for electricity generated from Renewable Energy Sources:**	(1) All renewable energy power plants, except for biomass power plants with installed capacity of 10 MW and above and non-fossil fuel based cogeneration plants, shall be treated as 'MUST RUN' power plants and shall not be subjected to 'merit order despatch' principles. (2) The biomass power generating station with an installed capacity of 10 MW and above and non-fossil fuel based co-generation projects shall be subjected to scheduling and despatch code as specified under Jammu and Kashmir State Electricity Grid Code, 2006. (3) Wind power generation plants where the sum of generation capacity of such plants connected at the connection point to the transmission or distribution system is 10 MW and above and connection point is 33 KV and above shall be subjected to scheduling and despatch. (4) Solar generating plants with capacity of 5 MW and above and connected at the connection point of 33 KV level and above shall be subjected to scheduling and despatch code.
	Financial Principles	
12.	**Capital Cost**	The norms for the Capital cost as specified in the subsequent technology specific chapters shall be inclusive of all capital work including plant and machinery, civil work, erection and commissioning, financing and interest during construction, and evacuation infrastructure up to inter-connection point. Provided that for project specific tariff determination, the generating company shall submit the break-up of capital cost items along with its petition in the manner specified under Regulation 8.
13.	**Debt Equity Ratio**	(1) For generic tariff to be determined based on suo-motu petition, the debt equity ratio shall be 70:30. (2) For Project specific tariff, the following provisions shall apply:- If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan. Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff: Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
14.	**Loan and Finance Charges**	(1) Loan Tenure For the purpose of determination of tariff, loan tenure of 12 years shall be considered. (2) Interest Rate (a) The loans arrived at in the manner indicated in the Regulation 13 shall be considered as gross normative loan for calculation for interest on loan. The normative loan outstanding as on April 1st of every year shall be worked out by deducting the cumulative repayment up to March 31st of previous year from the gross normative loan. (b) For the purpose of computation of tariff, the normative interest rate shall be considered as average Jammu and Kashmir Bank Base rate prevalent during the first six months of the previous year plus 300 basis points. (c) Notwithstanding any moratorium period availed by the generating company, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

15.	**Depreciation**	(1) The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission. The Salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital Cost of the asset. (2) Depreciation per annum shall be based on 'Differential Depreciation Approach' over loan period beyond loan tenure over useful life computed on 'Straight Line Method'. The depreciation rate for the first 12 years of the Tariff Period shall be 5.83% per annum and the remaining depreciation shall be spread over the remaining useful life of the project from 13th year onwards. (3) Depreciation shall be chargeable from the first year of commercial operation. Provided that in case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
16.	**Return on Equity**	(1) The value base for the equity shall be 30% of the capital cost or actual equity (in case of project specific tariff determination) as determined under Regulation 13. (2) The normative Return on Equity shall be: (a) 18% per annum for the first 10 years. (b) 22% per annum 11th years onwards.
17.	**Interest on Working Capital**	(1) The Working Capital requirement in respect of wind energy projects, Small Hydro Power, Solar PV and Solar thermal power projects shall be computed in accordance with the following: Wind Energy / Small Hydro Power /Solar PV / Solar thermal (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 Capacity Utilization Factor (CUF); (c) Maintenance spare @ 15% of operation and maintenance expenses (2) The Working Capital requirement in respect of biomass power projects and non-fossil fuel based co-generation projects shall be computed in accordance with the following clause : **Biomass, Biogas Power and Non-fossil fuel Co-generation** (a) Fuel costs for four months equivalent to normative PLF; (b) Operation & Maintenance expense for one month; (c) Receivables equivalent to 2 (Two) months of fixed and variable charges for sale of electricity calculated on the target PLF; (d) Maintenance spare @ 15% of operation and maintenance expenses (3) Interest on Working Capital shall be at interest rate equivalent to the average Jammu and Kashmir Bank Base Rate prevalent during the first six months of the previous year plus 350 basis points.
18.	**Operation and Maintenance Expenses**	(1) 'Operation and Maintenance or O&M expenses' shall comprise repair and maintenance (R&M), establishment including employee expenses and administrative & general expenses. (2) Operation and maintenance expenses shall be determined for the Tariff Period based on normative O&M expenses specified by the Commission subsequently in these Regulations for the first Year of Control Period. (3) Normative O&M expenses allowed during first year of the Control Period (i.e. FY 2013-14) under these Regulations shall be escalated at the rate of 5.72% per annum over the Tariff Period.
19.	**Rebate**	(1) For payment of bills of the generating company through letter of credit, a rebate of 2% shall be allowed. (2) Where payments are made other than through letter of credit within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed.
20.	**Late payment surcharge**	In case the payment of any bill for charges payable under these regulations is delayed beyond a period of 60 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by the generating company.

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<tr><td>21.</td><td>Sharing of CDM Benefits</td><td>(a) 100% of the gross proceeds on account of CDM benefit to be retained by the project developer in the first year after the date of commercial operation of the generating station;
(b) In the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.
The sharing would however, be done on actual receipt of such revenue in the proportion specified for the year to which this revenue relates.</td></tr>
<tr><td>22.</td><td>Subsidy or incentive by the Central / State Government</td><td>The Commission shall take into consideration any incentive or subsidy offered by the Central or State Government, including accelerated depreciation benefit if availed by the generating company, for the renewable energy power plants while determining the tariff under these Regulations.</td></tr>
<tr><td>23.</td><td>Taxes and Duties</td><td>Tariff determined under these regulations shall be exclusive of taxes and duties as may be levied by the appropriate Government:
Provided that the taxes and duties levied by the appropriate Government shall be allowed as pass through on actual incurred basis.</td></tr>
<tr><td colspan="3">Technology specific parameters for Wind Energy</td></tr>
<tr><td>24.</td><td>Capital Cost</td><td>(1) The capital cost for wind energy project shall include Wind turbine generator including its auxiliaries, land cost, site development charges and other civil works, transportation charges, evacuation cost up to inter-connection point, financing charges and IDC.
(2) The capital cost for wind energy projects shall be Rs.575 Lakh/MW (FY 2013-14 during first year of Control Period) and shall be linked to indexation formula as outlined under Regulation 25.</td></tr>
<tr><td>25.</td><td>Capital Cost Indexation Mechanism</td><td>(1) The indexation mechanism shall be applicable in case of wind energy projects for adjustments in capital cost over the Control Period with the changes in Wholesale Price Index for Steel and Electrical Machinery.</td></tr>
<tr><td>26.</td><td>Capacity Utilisation Factor (CUF)</td><td>(1) CUF norms for this control period shall be as follows:
Annual Mean Wind Power Density (W/m^2) CUF
<table>
<tr><th>Annual Mean Wind Power Density (W/m2)</th><th>CUF</th></tr>
<tr><td>Upto 200</td><td>20%</td></tr>
<tr><td>201-250</td><td>22%</td></tr>
<tr><td>251-300</td><td>25%</td></tr>
<tr><td>301-400</td><td>30%</td></tr>
<tr><td>>400</td><td>32%</td></tr>
</table>
(2) The annual mean wind power density specified in sub-regulation (1) above shall be measured at 80 meter hub-height.</td></tr>
<tr><td>27.</td><td>Operation and Maintenance (O & M) Expenses</td><td>(1) Normative O&M expenses for the first year of the Control Period (i.e. FY 2013-14) shall be Rs.9 Lakh per MW and shall be escalated at the rate of 5.72% per annum over the tariff period to compute the levellised tariff.</td></tr>
<tr><td colspan="3">Technology specific parameters for Small Hydro Project</td></tr>
<tr><td>28.</td><td>Capital Cost</td><td>(1) The normative capital cost for small hydro projects during first year of Control Period (FY 2013-14) shall be as follows:
<table>
<tr><th>Project Size</th><th>Capital Cost (Rs. in Lac/ MW)</th></tr>
<tr><td>Below 5 MW</td><td>770</td></tr>
<tr><td>5 MW to 25 MW</td><td>700</td></tr>
</table>
(2) The capital cost for subsequent years shall be determined on the basis of indexation formula as outlined under Regulation 29.</td></tr>
<tr><td>29.</td><td>Capital Cost Indexation Mechanism</td><td>As per Regulations</td></tr>
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<tr><td>30.</td><td>Capacity Utilisation Factor</td><td>Capacity Utilisation factor for the small hydro projects located in the State shall be 45%.</td></tr>
<tr><td>31.</td><td>Auxiliary Consumption</td><td>Normative Auxiliary Consumption for the small hydro projects shall be 1.0%.</td></tr>
<tr><td>32.</td><td>Operation and Maintenance Expenses</td><td>(1) Normative Operation and Maintenance (O&M) expenses for the first year of the Control period (i.e. FY 2012-13 shall be as follows.
<table>
<tr><th>Project Size</th><th>O&M Expenses (Rs. in Lac/ MW)</th></tr>
<tr><td>Below 5 MW</td><td>25</td></tr>
<tr><td>5 MW to 25 MW</td><td>18</td></tr>
</table>
(2) Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 5.72% per annum for the Tariff Period for the purpose of determination of levellised tariff.</td></tr>
<tr><td colspan="3">Technology specific parameters for Biomass</td></tr>
<tr><td>33.</td><td>Technology Aspect</td><td>Power Projects based on Rankine Cycle Technology
The norms for tariff determination specified hereunder are for biomass power projects based on Rankine cycle technology application using water cooled condenser.</td></tr>
<tr><td>34.</td><td>Capital Cost</td><td>The normative capital cost for the biomass power projects based on Rankine cycle shall be Rs.445 Lakh/MW (FY 2013-14 during first year of Control Period) and shall be linked to indexation formula as outlined under Regulation.</td></tr>
<tr><td>35.</td><td>Capital Cost Indexation Mechanism</td><td>As per Regulations</td></tr>
<tr><td>36.</td><td>Plant Load Factor</td><td>(1) Threshold Plant Load Factor for determining fixed charge component of Tariff shall be:
(a) During Stabilisation: 60%
(b) During the remaining period of the first year (after stabilization): 70%
(c) From 2nd Year onwards: 80%
(2) The stabilisation period shall not be more than 6 months from the date of commissioning of the project.</td></tr>
<tr><td>37.</td><td>Auxiliary Consumption</td><td>10%</td></tr>
<tr><td>38.</td><td>Station Heat Rate</td><td>4000 kCal/ kWh.</td></tr>
<tr><td>39.</td><td>Operation and Maintenance Expenses</td><td>(1) Normative O&M expenses for the first year of the Control period (i.e. FY 2013-14 shall be Rs. 24 Lakh per MW and shall be escalated at the rate of 5.72% per annum.</td></tr>
<tr><td>40.</td><td>Fuel Mix</td><td>As per Regulations</td></tr>
<tr><td>41.</td><td>Use of Fossil Fuel</td><td>The use of fossil fuels shall be limited to the extent of 15% of total fuel consumption on annual basis.</td></tr>
<tr><td>42.</td><td>Monitoring Mechanism for the use of fossil fuel</td><td>As per Regulations</td></tr>
<tr><td>43.</td><td>Calorific Value</td><td>3300 kCal/kg.</td></tr>
<tr><td>44.</td><td>Fuel Cost</td><td>Biomass fuel price during first year of the Control Period (i.e. FY 2013-14) shall Rs.2500 per Tonne and shall be linked to index formulae as specified under Regulation 45. Alternatively, for each subsequent year of the Tariff Period, the normative escalation factor of 5% per annum shall be applicable at the option of the biomass project developer.</td></tr>
<tr><td>45.</td><td>Fuel Price Indexation Mechanism</td><td>As per Regulations</td></tr>
<tr><td colspan="3">Technology specific parameters for Non-fossil fuel based Cogeneration Projects</td></tr>
<tr><td>46.</td><td>Technology Aspect</td><td>A project shall qualify as a non-fossil fuel based Co-generation project, if it is in accordance with the eligibility criteria as specified under Regulation 4(d).</td></tr>
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<tr><td>47.</td><td>Capital Cost</td><td>The normative capital cost for the non-fossil fuel based cogeneration projects shall be Rs.420 Lakh/MW for the first year of Control Period (i.e. FY 2013-14), and shall be linked to indexation formula as outlined under Regulation 48.</td></tr>
<tr><td>48.</td><td>Capital Cost Indexation Mechanism</td><td>As per Regulations</td></tr>
<tr><td>49.</td><td>Plant Load Factor</td><td>(1) For the purpose of determining fixed charge, the plant load factor for nonfossil fuel based cogeneration projects shall be computed on the basis of plant availability for number of operating days considering operations during crushing season and off-season as specified under clause (2) below and load factor of 92%.
(2) The number of operating days shall be as follows:
<table>
<tr><th>Operating Days</th><th>Plant Load Factor (%)</th></tr>
<tr><td>150 days (crushing) + 60 days (off-season) = 210 days operating days</td><td>53%</td></tr>
</table>
</td></tr>
<tr><td>50.</td><td>Auxiliary Consumption</td><td>8.5%</td></tr>
<tr><td>51.</td><td>Station Heat Rate</td><td>3600 kCal/kWh</td></tr>
<tr><td>52.</td><td>Calorific Value</td><td>2250 kCal/kg. For the use of biomass fuels other than bagasse, calorific value as specified under Regulation 43 shall be applicable.</td></tr>
<tr><td>53.</td><td>Fuel Cost</td><td>(1) The price of Bagasse shall be as Rs.1600 per Tonne and shall be linked to indexation formula as outlined under Regulation 54. Alternatively, for each subsequent year of the Control Period, the normative escalation factor of 5% per annum shall be applicable at the option of the project developer.
(2) For use of biomass other than bagasse in co-generation projects, the biomass prices as specified under Regulation 44 shall be applicable.</td></tr>
<tr><td>54.</td><td>Fuel Price Indexation Mechanism</td><td>As per Regulations</td></tr>
<tr><td>55.</td><td>Operation and Maintenance Expenses</td><td>(1) Normative O&M expenses during first year of the Control period (i.e. FY 2013-14) shall be Rs.16 Lakh per MW and shall be escalated at the rate of 5.72% per annum.</td></tr>
<tr><td colspan="3">Technology specific parameters for Solar PV Power Project</td></tr>
<tr><td>56.</td><td>Technology Aspects</td><td>(1) Norms for Solar Photovoltaic (PV) power under these Regulations shall be applicable for grid connected PV systems 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.</td></tr>
<tr><td>57.</td><td>Capital Cost</td><td>(1) The normative capital cost for setting up Solar Photovoltaic Power Project shall be Rs.1000 Lakh/MW for FY 2013-14.
Provided that the Commission may deviate from above norms in case of project specific tariff determination in pursuance of Regulation 7 and Regulation 8.</td></tr>
<tr><td>58.</td><td>Capacity Utilisation Factor</td><td>(1) 19%.
Provided that the Commission may deviate from above norm in case of project specific tariff determination in pursuance of Regulation 7 and Regulation 8.</td></tr>
<tr><td>59.</td><td>Operation and Maintenance Expenses</td><td>(1) The O&M Expenses shall be Rs.11 Lakh/MW for the 1st year of operation and shall be escalated at the rate of 5.72% per annum.</td></tr>
<tr><td colspan="3">Technology specific parameters for Solar Thermal Power Project</td></tr>
<tr><td>60.</td><td>Technology Aspects</td><td>(1) Norms for Solar thermal power under these Regulations shall be applicable for Concentrated solar power (CSP) technologies viz. 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.</td></tr>
<tr><td>61.</td><td>Capital Cost</td><td>(1) The normative capital cost for setting up Solar Thermal Power Project shall be Rs.1300 Lakh/MW for FY 2013-14.
Provided that the Commission may deviate from the above norm in case of project specific tariff determination in pursuance of Regulation 7 and Regulation 8.</td></tr>
</table>

62.	**Capacity Utilisation Factor (CUF)**	(1) 23%. Provided that the Commission may deviate from the above norm in case of project specific tariff determination in pursuance of Regulation 7 and Regulation 8.
63.	**Operation and Maintenance Expenses**	(1) The O&M Expenses shall be Rs.15 Lakh/MW for 1st year of operation and shall be escalated at the rate of 5.72% per annum.
64.	**Auxiliary Consumption**	(1) 10% Provided that the Commission may deviate from the above norm in case of project specific tariff determination in pursuance of Regulation 7 and Regulation 8.
Technology specific parameters for Biomass Gasifier Power Projects		
65.	**Technology Aspect**	The norms for tariff determination specified hereunder are for biomass gasifier based power projects.
66.	**Capital Cost**	The normative capital cost for the biomass gasifier power projects based on Rankine cycle shall be Rs.550 Lakh/MW (FY 2013-14 during first year of Control Period) and shall be linked to indexation formula as outlined under Regulation 67. After taking into account of capital subsidy net project cost shall be Rs. 400 Lakh/MW for FY 2013-14.
67.	**Capital Cost Indexation Mechanism**	As per Regulations
68.	**Plant Load Factor**	Threshold Plant Load Factor for determining fixed charge component of Tariff shall be 85%.
69.	**Auxiliary Consumption**	10%
70.	**Specific fuel consumption**	Normative specific fuel consumption shall be 1.25 kg per kWh.
71.	**Operation and Maintenance Expenses**	(1) Normative O&M expenses for the first year of the Control period (i.e. FY 2013-14 shall be Rs.40 Lakh per MW and shall be escalated at the rate of 5.72% per annum.
72.	**Fuel Mix**	As per Regulations
73.	**Fuel Cost**	Biomass fuel price during first year of the Control Period (i.e. FY 2013-14) shall be as per Regulation 44 and shall be linked to indexation formula as specified under Regulation 74. Alternatively, for each subsequent year of the Tariff Period, the normative escalation factor of 5% per annum shall be applicable at the option of the Biomass Gasifier project developer.
74.	**Fuel Price Indexation Mechanism**	As per Regulations
Technology specific parameters for Biogas based Power Projects		
75.	**Technology Aspect**	The norms for tariff determination specified hereunder are for grid connected biogas based power projects that uses 100% Biogas fired engine, coupled with Biogas technology for co-digesting agriculture residues, manure and other bio waste as may be approved by MNRE.
76.	**Capital Cost**	The normative capital cost for the biogas based power shall be Rs.1100 Lakh/MW (FY 2013-14 during first year of Control Period) and shall be linked to indexation formula as outlined under Regulation 77. After taking into account of capital subsidy net project cost shall be Rs.800Lakh/MW for FY 2013-14.
77.	**Capital Cost Indexation Mechanism**	As per Regulations
78.	**Plant Load Factor**	Threshold Plant Load Factor for determining fixed charge component of Tariff shall be 90%.
79.	**Auxiliary Consumption**	12%

80.	**Operation and Maintenance Expenses**	(1) Normative O&M expenses for the first year of the Control period (i.e. FY 2013-14 shall be Rs.40 Lakh per MW and shall be escalated at the rate of 5.72% per annum.
81.	**Specific Fuel Consumption**	Normative specific fuel consumption shall be 3 kg of substrate mix per kWh.
82.	**Fuel Cost (Feed stock Price)**	Feed stock price during first year of the Control Period (i.e. FY 2013-14) shall be Rs.990/ MT (net of any cost recovery from digester effluent).
83.	**Fuel Price Indexation Mechanism**	As per Regulations
Miscellaneous		
84.	**Deviation from norms**	Vested with the Commission
85.	**Power to Relax**	Vested with the Commission