

**Jammu & Kashmir  
State Electricity Regulatory Commission**



**Order related to Review Petition**  
on  
Annual Revenue Requirement  
and  
Determination of Generation Tariffs  
for  
Financial Year 2009-10 and Financial Year 2010-11  
for  
J&K State Power Development Corporation

**Jammu & Kashmir State Electricity Regulatory Commission**  
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**Before**

**Jammu & Kashmir State Electricity Regulatory Commission**

**Order related to Review Petition No. 22 of 2010**

**In the Matter of:**

Review petition filed by Jammu & Kashmir State Power Development Corporation Limited seeking review of Tariff Order passed in respect of Hydro Electric Stations, Gas Turbine and Transmission Line of JKSPDC for the financial year 2009-10 and 2010-11.

**ORDER**

**Order No.: JKSERC/25 of 2010**

**(Passed on this 9<sup>th</sup> Day of November, 2010)**

- 1.1 This Order relates to the review petition filed by the Jammu & Kashmir State Power Development Corporation (hereinafter referred to as JKSPDC or the “Petitioner” or the utility) before the Jammu & Kashmir State Electricity Regulatory Commission (hereinafter referred to as J&KSERC or the “Commission”) in respect of Tariff Order dated 30<sup>th</sup> April 2010, passed by the Commission in respect of ARR and tariff petitions filed by the Petitioner vide Petition Number: 20/ 2009-10 for financial years (FY) 2009-10 and 2010-11.
- 1.2 This review petition has been filed under Section 72 of J&K SERC (Conduct of Business) Regulations – 2005 (hereinafter referred to as the “Regulations”) and read with order 47 Rule 1 of the Code of Civil Procedure 1981 of the Code of Civil Procedure 1908.
- 1.3 The Petitioner has requested the Commission to review the Tariff Order on the following grounds:
  - 1) O&M expenses approved in the tariff order are lower than that claimed by the Petitioner.
  - 2) Capacity charges of gas turbines and Mohra HEP stations have not been allowed in the tariff order.
  - 3) Return on Equity for 10 old HEPs has been allowed assuming a debt equity ratio of 70:30
  - 4) Provisional tariff for Baglihar HEP stage I has not been allowed in the tariff order.
  - 5) Recovery of other costs

- 1.4. A copy the Review Petition was given to the Power Development Department, the Respondent to the Review Petition, for its comments. A meeting was also held with the Petitioner and Respondent 24<sup>th</sup> August, 2010.
- 1.5. The Respondent (State Power Development Department) stated that:
- i) The Tariff Order issued by the Commission does not require any review as it is in order.
  - ii) O&M charges in respect of 10 old HEPs claimed by the Petitioner in its review petition are much on the higher side and unjustified whereas the O&M charges approved by the Commission in its tariff order are just and upright.
  - iii) The request of the petitioner to allow equity @ 50% of capital cost is not justified as the Power Houses are since completed on Government funding.
  - iv) Tariff of Baghlihar HEP @ Rs. 3.54 per unit may be allowed to be continued till final tariff for the project is determined by the Commission.
- 1.6 The Commission has given its view on the grounds of review in the following section.

## **A2: COMMISSION'S RESPONSE ON REVIEW SOUGHT BY PETITIONER**

### **O&M Expenses allowed for 10 old HEP stations**

#### **Petitioner's Submission**

- 2.1 In case of 10 old HEPs, the Petitioner has submitted that the approved O&M charges are insufficient to operate and maintain these old HEPs. The O&M expense approved per MW is 5.51.lacs/ MW and 5.74 Lac/MW for the financial year 2009-10 and 2010-11 respectively.
- 2.2 The Petitioner has submitted that the Commission has approved O&M charges in respect of other 8 HEPs at the rate of Rs 8.63 Lac/MW and Rs 8.97 Lac/MW in the tariff order for FY 2009-10 and FY 2010-11 respectively.
- 2.3 The Commission had directed the Petitioner to maintain records of actual O&M expenses being incurred on each of the HEPs and submit the same in its ARR and tariff petition going forward. In this regard, the Petitioner has compiled the data of actual O&M charges incurred during the FY 2009-10. The details of O&M expenditure claimed in the petition, approved by the Commission and actual expenses have been included in the review petition.

- 2.4 As per the actual expenditure, O&M charges per MW are worked out as Rs 15.15 Lac/MW in respect of 10 old HEPs. The Petitioner has requested the Commission to allow these expenses for FY 2009-10 and the same with annual escalation for FY 2010-11.
- 2.5 Further, the Petitioner has submitted that the old HEPs require more maintenance especially since maintenance work in the past has been partly ignored due to paucity of funds. With sufficient O&M charges allowed, the plants will be maintained properly and this will result in efficient management of the plant and increased generation of power thereby resulting in lower cost of energy to the end consumers.

### **Commission's View**

- 2.6 The Commission, in its Order dated 30<sup>th</sup> April 2010, had stated that since these plants are old and have been in operation for more than 5 years, the Petitioner should have claimed O&M expenses based on actual expenses incurred, in accordance with Regulation 26(1) of the J&K SERC (Terms & Conditions for determining of Hydro Generation Tariff) Regulations, 2005. The regulation provides that in case of plants older than 5 years, an average of the actual O&M expenses for the period 1999-00 to 2003-04 shall be considered as the expense for the year 2001-02 and escalated by 4% per annum to derive at O&M expenses for FY 2004-05, which would be further escalated to arrive at the permissible operation and maintenance expenses for the relevant year of the tariff period.
- 2.7 However, the Petitioner failed to submit actual expenditure with the ARR & Tariff Petition and the Commission accordingly decided to determine the O&M expenses on the basis of the Regulation 26(2) of the J&K SERC (Terms & Conditions for determining of Hydro Generation Tariff) Regulations, 2005, according to which the O&M expenses shall be determined on the basis of 1.5% of the capital cost for capacity above 25 MW and 3% of the capital cost for capacity less than or equal to 25 MW
- 2.8 In its review petition the Petitioner, has submitted only one year actual O&M data. The Commission views that one year actual O&M expenses details submitted by the Petitioner cannot be applied to determine the O&M expenses for the old stations as per the Regulation 26(1) of the J&KSERC (Terms and Conditions of Determination of Hydro Generation Tariff) Regulations, 2005.
- 2.9 As mentioned earlier, O&M expenses as per Regulation 26(1) shall be allowable where information regarding actual O&M expenses incurred in the relevant periods as mentioned in the regulation is available.
- 2.10 In the absence of the relevant information for determination of O&M expenses under Regulations 26(1), O&M expenses have been allowed as per Regulation 26(2) wherein the Commission has taken into consideration the project cost for the 10 HEPs as given in the Physical Verification and Revaluation of Fixed Assets report issued by the consultants of the JKSPDC. The O&M cost for the 10 HEPs for FY 2009-10 and

FY 2010-11 has been determined by taking into account the project costs detailed in the aforementioned report which was submitted by the JKSPDC. Therefore, in the absence of availability of 5 year data on actual O&M expenses incurred by the JKSPDC on each of the 10 old HEPs, the O&M expenses as approved by the Commission in the detailed tariff order for the year 2009-10 and 2010-11 shall apply.

- 2.11 However, the Commission reiterates that, on receipt of information of actual expenditure for the past five years with the next tariff petition i.e. for FY2011-12, the O&M expenses of these old plants shall be considered and trued up from FY 2009-10 onwards, in accordance with the provisions of Regulations 26 (1) of the (Terms and Conditions of Determination of Hydro Generation Tariff) Regulations, 2005.

### **Capacity charges of Mohara HEP substation and gas turbines**

#### **Petitioner's Submission**

- 2.12 The Petitioner has submitted that the capacity charges for Mohra substation HEP and Gas Turbines have not been allowed in the tariff order. The actual expenditure incurred towards O&M for FY 2009-10 has been provided by the Petitioner in the Annexures appended with the review petition. The Petitioner has requested the Commission to allow capacity charges for these power stations also in the ARR.

#### **Commission's View**

- 2.13 JKSPDC had submitted in the tariff petition that it owns 20 hydro electric power stations (HEPs) having a total installed capacity of 763.70 MW. Out of these HEPs, 18 hydro power stations were commercially in operation at the beginning of the year and one new HEP, namely Baglihar was commissioned on April 1, 2009. Another HEP, namely Mohra, has not been operating since the floods of September, 1992. Thus, 19 HEPs having a total installed capacity of 754.70 MW owned by the Corporation are functioning at present.
- 2.14 The Petitioner had been directed by the Commission in the tariff order for FY 2008-09 to obtain a report on determination of capital cost of the 10 old HEPs. The Petitioner has submitted that 1 HEP namely Mohara, is not functional since the floods of September 1992. Consequently, this HEP has not been included in the valuation report submitted by the Petitioner.
- 2.15 The Mohra HEP is not under operational condition since September, 1992. Initially it was commissioned in the year 1905 for 4MW capacity and thereafter it was Commissioned for 9 MW capacity in the year 1962. The Commission is of the view that the plant has already outlived its useful life. Under the present regulations, there is no provision for allowance of costs against defunct/ retired assets. Any associated transmission/ distribution system which was constructed earlier and is now being solely used for transmission/ distribution function only may be transferred to the JKPDD at appropriate consideration.

- 2.16 Regarding allowance of costs against operation and maintenance of gas based plants, the Commission has already clarified in the Tariff Order that the same shall be approved under a separate/ subsequent petition to be filed by the JKSPDC after the regulations for the same are framed by the Commission. So long as it is not made operational on commercial pattern, the operational costs on emergent or disaster management basis are to be borne by the State government.

## **Return on equity for 10 old HEPs**

### **Petitioner's Submission**

- 2.17 The Petitioner has sought that this decision should be reviewed and the RoE should be allowed on the capital cost assuming an equity base of 50% as claimed by the Petitioner in the original tariff petition filed before the Commission.
- 2.18 The Petitioner has requested that equity should be calculated at the rate of 50% of capital cost in respect of the 10 old HEPs commissioned before the regulatory regime was introduced in the state. Return on equity (RoE) has been allowed on the basis of 50% equity by Central Electricity Regulatory Commission (CERC) in case of old power stations of NTPC, NHPC and also transmission system of Power Grid Corporation India Limited.
- 2.19 The Petitioner has further submitted that prior to establishment of any norms or regulations to determine tariff, the Government of India appointed a committee headed by Shri K.P. Rao. This committee opined that for the purpose of determination of tariff, equity shall be considered at the rate of 50% in respect of all central sector projects irrespective of the actual equity employed. This report was accepted by the Ministry of Power, Government of India and was subsequently adopted by the CERC.
- 2.20 The Petitioner has requested that the same guideline be applied in determining RoE for the 10 old HEPs, where the actual equity deployed is almost 100% of the total capital.

### **Commission's View**

- 2.21 The Commission in the detailed tariff order of the Petitioner dated 30<sup>th</sup> April 2010 has clarified the reasoning behind the RoE approved for the 10 old projects.
- 2.22 The Commission is of the view that elaborate reasoning given in the detailed tariff order in this regard is self explanatory. The recommendations of the K.P. Rao Committee cannot be applied in the present case. The K.P. Rao Committee report on which the Petitioner has based its argument was applied for projects where actual capital cost and proportion of actual debt and equity amount for projects was available whereas, in the present case the same have been assessed by a valuation methodology and not as per factual information. Also, as per K.P.Rao Committee report, the equity component is to be reduced in the same ratio as the depreciation after repayment of the debt.

- 2.23 In view of the above, the Commission has allowed RoE on 30% of the capital cost determined for the 11 HEPs as per the provisions under Regulation 18 of the J&K SERC (Terms & Conditions for determining of Hydro Generation Tariff) Regulations, 2005. The return on equity has been allowed to the Petitioner at the rate of 14% per annum as per Regulation 25.

### **Provisional tariff for Baglihar HEP stage I**

#### **Petitioner's Submission**

- 2.24 The Petitioner had made a submission for determination of tariff and approval of ARR for Baglihar HEP stage-I for FY 2009-10 and FY2010-11 along with the ARR& Tariff Petition of FY 2010-11.
- 2.25 However, the Commission directed the Petitioner to file a separate tariff petition for Baglihar HEP stage-I without approval of provisional tariff in the tariff order for the FY 2009-10 and FY 2010-11.
- 2.26 The Petitioner has further submitted that tariff at the rate of Rs 3.54 per kWh in respect of the cost of purchase of power from Baglihar HEP stage-I for both FY 2009-10 and FY 2010-11 has been allowed in the retail tariff order passed by the Commission for determination of tariff chargeable by JKPDD.
- 2.27 This is the rate indicated in the power purchase agreement (PPA) between JKSPDC and JKPDD for the first year of tariff after the date of commissioning. The same PPA provides a tariff of Rs 3.71 per kWh for the second year after the date of commissioning of the HEP station, that is, FY 2010-11.
- 2.28 Accordingly, the Petitioner has requested the Commission to approve the provisional tariff for Baglihar HEP stage I at the rate of Rs 3.71 per kWh for the year 2010-11 till such time as the final tariff is determined.

#### **Commission's View**

- 2.29 The Commission had directed the Petitioner to file a separate tariff petition for the Baglihar HEP and a detailed prudence check of the capital cost for the Baglihar HEP shall be carried out before allowing the same in the tariff.
- 2.30 The Commission had directed the Petitioner to submit its petition for approval of ARR and determination of tariff for Baglihar HEP within 10 days from the date of issue of the order. However, the Petitioner has not filed the requisite petition for determination of Tariff. The Commission again directs the petitioner to file the petition for determination of Tariff for Baglihar HEP Stage-I.

- 2.31 The Commission allows provisional charging of tariff in accordance with the PPA for FY 2010-11 till such as time the tariff order for the Baglihar HEP Stage I is approved by the Commission. The provisional tariff shall be revised on approval of tariff by the Commission with retrospective effect from the date of commissioning of the plan.

## **Recovery of other costs**

### **Petitioner's Submission**

- 2.32 The Petitioner has submitted that the Commission has not passed any order regarding recovery of charges mentioned under Sl.No.11 of the original tariff petition number 20/2009-10 filed for determination of tariff.
- 2.33 These charges are towards reimbursement of the fee and other expenses incurred. The details of such charges are given as under:
- 1) Rs 2 Lacs towards fee for filing of tariff petition.
  - 2) Rs 26 Lacs for engaging independent consultants as directed by the Commission for carrying out:-
    - a) Evaluation of design energy
    - b) Evaluation of assets of 10 old HEPs
    - c) Evaluation of completion cost of 8 HEPs
  - 3) Rs 60 Lacs towards fee paid to consultant engaged for restructuring of the Corporation.
  - 4) Rs 25 Lacs for consultants engaged for filing tariff petition for FY 2009-10 and FY 2010-2011.
- 2.34 The Petitioner has submitted that these charges should be approved by the Commission and an order should be passed for recovery of the sum of Rs.113 Lac incurred as detailed above.

### **Commission's View**

- 2.35 The Commission approves the following other charges incurred by the JKSPDC to be recovered from the JKPDD:

**Table 1: Approved other charges for FY 2009-10**

Description	Approved (Rs. Lakhs)
Towards filing fee for ARR & Tariff Petition	2
Appointment of independent consultants for under taking the following activities in compliance with the directives issued by the Commission: a) Evaluation of design energy b) Evaluation of assets of 10 old HEPs c) Evaluation of completion cost of 8 HEPs	26
Fee for appointment of consultants for restructuring of organization and conducting manpower study in compliance with the directives issued by the Commission	60
<b>Total</b>	<b>88</b>

- 2.36 The Commission is of the view that expenses incurred on engagement of consultants for assistance in filing of ARR and tariff petition is a routine business activity of the JKSPDC and forms part of the O&M expenses approved by the Commission. There is no provision for allowing this expense separately while approving the ARR. The other charges of Rs 88 Lacs, approved by the Commission shall be true up and recovered from the tariff to be determined for FY2011-12.
- 2.37 The Petitioner, while furnishing information on the actual O&M expenses incurred on power plants during the last five years, can include expenses incurred on engagement of consultants for assistance in filing of ARR and tariff petition as part of the submission. The information shall be considered by the Commission during the trueing up of the O&M expenses for old plants which shall be undertaken along with processing of tariff petition for FY2011-12.

**Order signed and issued accordingly.**

**(G. M. Khan)**  
**Member (Finance)**

**(D.S.Pawar)**  
**Member (Technical)**

**(S.M.Desalphine)**  
**Chairman**