



## ASSAM ELECTRICITY REGULATORY COMMISSION

FILE NO. AERC. 262/2007/Pt-A

PETITION NO. 09/2014

### ORDER SHEET

07.01.2015

Before the Assam Electricity Regulatory Commission

ASEB Campus, Dwarandhar,  
G. S. Road, Sixth Mile, Guwahati – 781 022

Petition No. 9 /2014 & 18/2014

Assam Power Distribution Co. Ltd. (APDCL)

— Petitioner

Hayen Hydel Power Company Private Limited (HHPCPL)

— Respondent

In the matter of

Review Petition filed by the petitioner against Final Tariff Order dated 12.04.2013 of the AERC on HHPCPL petition No. 7/2012 for 4.05 MW Champamathi Small Hydroelectric Project.

**CORAM**

**Shri Naba Kumar Das, Chairperson**

**Dr. Rajani Kanta Gogoi, Member**

**ORDER**

**1. BACKGROUND**

A review petition dated 04.06.2013 was filed by Assam Power Distribution Company Limited (hereinafter referred to as the “petitioner”) under section 94(1)(f) of Electricity Act, 2003 read with the Regulation 34 of AERC (Conduct of Business) Regulations, 2004 against the final tariff order dated 12.04.2013 of the AERC on HHPCPL petition No. 7/2012 for 4.05 MW Champamathi Small Hydroelectric Project.

A copy of the petition was forwarded to HHPCPL for their parawise comments on the same on 14.06.2013. HHPCPL (hereinafter referred to as the “respondent”) submitted their detailed comments vide petition dated 09.07.2013 wherein it was stated that the submissions made by the petitioner were without merits and hence requested that not to

review the order dated 12.04.2013 as any revision will adversely affect sustainability of the project.

The comments on the review petition as filed by the respondent were forwarded to the petitioner on 22.07.2013 followed by the reminder dated 04.11.2013 for their further comments, if any, on the same.

The Petitioner vide their letter dated 28.01.2014 submitted a rejoinder to the HHCPL's reply dated 09.07.2013 to the Commission and prayed for review and annul the order dated 12.04.2013 as the capacity addition was unilateral and without any additional energy output till date. They stated that HHCPL has not yet demonstrated peaking capacity corresponding to installed capacity of the station.

It may be mentioned here that HHCPL meanwhile filed a Misc. petition dated 20.03.2014 before the Commission on non-implementation of AERC's final tariff order dated 12.04.2013 by APDCL wherein they explained their financial difficulties due to non-payment of energy bills as per tariff fixed by the AERC on the said order. The comments of APDCL on the Misc. petition was received vide their letter dated 21.04.2014. The Misc. petition of HHCPL was admitted by the Commission and registered as petition no.18/2014. Since the subject matter of the petition is also connected with the review petition of APDCL (petition no. 9/2014), the Commission deems it appropriate to merge both the petitions together and issued this review order.

The review petition was admitted by the Commission and registered as petition no. 9 on 04.02.2014. The Commission fixed the hearing on 13.05.2014 on the above petition and issued notices to the parties accordingly.

## **2. Hearing on the Petition:**

The Commission took the hearing on 13.05.2014 at the conference hall of the Commission's premises at Guwahati. Representatives from both the petitioner and respondent attended the hearing.

The Chairperson, AERC initiated the hearing with a brief background of the case and asked the petitioner to make oral submissions, if any.

APDCL stated that the respondent had not demonstrated the full generation capacity of the project as directed by the Commission in Para 8.5 of its Order dated 12.04.2013. APDCL further stated that the respondent enhanced the capacity of the project from its original capacity of 2.025 MW to 4.05MW without ascertaining water availability and this could be corroborated from the fact that since the commissioning of the project in November 2010, HHCPL has been able to generate around 7.52 MU as per the design energy envisaged in its original DPR against the enhanced design energy of 14.06 MU (net). The petitioner further alleged that the respondent unilaterally had gone for preparing a revised DPR and claimed to have installed machines of capacity of 2 x 2.025 MW with projected enhanced design

energy of 14.06 MU (net) without prior intimation to the petitioner. The petitioner alleged that MOU was signed between the parties on the basis of parameters of the original DPR.

The petitioner therefore, contended that the cost of additional investment on the second unit did not result in any corresponding energy increase and requested the Commission that it may not be considered as a part of the project cost for determination of tariff. The petitioner alleged that the other reasons like delay in commissioning of the project by 2 years, frequent grid failures and less rainfall cannot be a reason for review of tariff as was claimed by the respondent.

The petitioner stated that the CUF approved by the Commission for the project is 42% despite the fact that CERC adopted CUF at 45% for the NER in its Regulations for SHP. APDCL further stated that the order of the Commission is silent as to whether the respondent has availed CDM benefits or not and also expressed dissatisfaction alleging that the order of the Commission has not made adequate provisions for sharing of CDM benefit, if such benefit was availed by the respondent.

The petitioner, therefore, requested that the Commission may review its order dated 12.04.2013 based on the above grounds.

The Commission heard the petitioner and noted their contentions. However, the Commission took strong objections to the language used by the petitioner in their petition dated 4.06.2013 to refute the observations of the Commission in its order dated 12.04.2013. The Commission stated that the SERCs have been mandated by the Electricity Act 2003 to encourage generation through renewable resources and the Commission accordingly issues orders with an objective that both the investor and consumer are benefited from renewable projects in the state. The Order dated 12.04.2013 was issued in good faith with an intention to fulfill the objectives stated in the Act and National Tariff Policy 2005, and as such, use of deprecating remarks against the decisions of the Commission is inappropriate and uncalled for. The Commission cautioned the petitioner not to use such offensive language in their petitions in future.

The Commission then asked the respondent to make their oral submissions.

HHPCL stated that APDCL was not making payment against the energy supplied from the project @ Rs 4.11 /unit as per the order of the Commission dated 12.04.2013. The respondent alleged that the petitioner was instead paying Rs 3.19 /unit as per the earlier order of the Commission dated 12.07.2007. The respondent further stated that as the project was unable to produce to its enhanced design capacity, they were being badly hit with monetary losses and non clearance of loan from the bank. HHPCL contended that as per the order of the Commission, demonstration of full capacity generation is not a pre-condition for payment by APDCL and that they were having a difficult time operating and maintaining the project in the remote BTAD area at the earlier fixed tariff of Rs 3.19 /unit. The respondent stated that the

Commission while calculating the enhanced tariff considered capital cost of Rs 29.09 Cr only, although actual cost incurred by the developer was Rs 35.41 Cr. The respondent further contended that the capacity of the project was enhanced based on the hydrological studies of the Champamati river available from 1965-66 to 1997-98. HHPCPL further clarified that they had neither received nor planned to claim any CDM benefit from the project. The respondent agreed to give the demonstration of the full generation capacity of the station as per the Order of the Commission at the earliest provided conditions required for such testing are available at the appropriate time. HHPCPL requested the Commission not to review the Order dated 12.04.2013 as claimed by APDCL as this might adversely affect the sustainability of the project.

The Commission heard both the parties. The Commission expressed serious concern that none of the parties had complied with the directives in its Order dated 12.04.2013. APDCL was not paying the enhanced charges to the respondent as notified on the pretext that it had submitted a review petition with the Commission and HHPCPL was also not carrying out the demonstration of its full capacity generation, as required, stating that conditions for the test were not conducive. The Commission observed that both the parties needed to fulfill their obligations as stated in the order dated 12.04.2013.

3. The major issues raised by the petitioner for review of the tariff order dated 12.04.2013 against which comments were received from both the parties are briefly dealt with in the following paragraphs along with the observations of the Commission.

### **3.1 Increase of installed capacity from 2.25 MW to 4.05 MW:**

#### **(a) Submissions of APDCL:**

(i) The petitioner submitted that the detailed hydrological studies were made by the IIT, Roorkee itself and on that basis IIT, Roorkee estimated annual design energy at 7.52 MU. Without prior intimation to the Petitioner (APDCL), the Respondent unilaterally had gone for revised DPR and claimed to have installed machines of capacity of 2 x 2.025 MW with projected enhanced design energy of 14.06 MU (net) as intimated at the time of signing of PPA.

They stated that, from the commissioning of the project in November, 2010 the plant could generate so far up to the original design energy of 7.52 MU against the enhanced design energy of 14.06 MU (net) at the time of PPA. The year wise energy generation (2011-12 = 6.79 MU, 2012-13 = 8.34 MU) has established this fact.

Their argument is that on the basis of water availability the HHPCPL has the energy potential under normal condition around 7.52 MU and hence the cost of additional investment on second unit gives no end result and therefore it cannot be part of project cost for determination of tariff.

They further submitted that the originally estimated DE of 7.52 MU by IIT, Roorkee is more accurate considering the water availability. Perhaps the petitioner might have considered the probable increase in water availability during high hydro period while considered the capacity of machines. But water availability during high hydro period never increases in double fold. It may increase maximum by around 10% - 15% more than the normal flow when flash flood comes but that also sustain for about 1-2 hours. Nethertheless, it was a unilateral decision of the petitioner and never informed to the respondent beforehand.

Because of this fact, the Commission itself directed to the petitioner in its impugned order to demonstrate the capability to generate to the extent of full capacity for three hours during peak hours within 24 hours during high water availability season. Regarding the line interruption, the petitioner stated that after change over from 11KV to 33 KV network the line failure is minimized to the extent possible. They claimed that average monthly interruption level would be 6% based on the actual figures which is within limit.

**(b) Submission of HNPCPL:**

The respondent submitted that based on hydrological studies of the Champamati river discharge data available for a period from 1965-66 to 1997-98, the power studies were carried out and installed capacity of 2x2.025 MW at 5M rated Heed with design discharge of 100 cumecs was determined on the basis of revised DPR prepared by the Consultant. They referred to the generation log sheet for the period 13.06.2012 to 12.10.2012 as submitted and stated that the station generated maximum peak of 3.3 MW when the discharges were higher at times. They also stated that the generation from the stations has been restricted on account of frequent grid failure and line interruptions. Monthly grid failure records for the period Nov., 2010 to June, 2013 were furnished to support their claim. They further submitted that as per provision for demonstration of full generation capacity in the tariff order, it will be their endeavor to carry out the demonstration test on availability of sufficient water during high hydro season.

**(c) Observation of the Commission:**

From the available materials and information on records, the Commission observed that consequent to the issuance of the provisional tariff order dated 12.07.2007, the respondent informed APDCL that capacity of the project was enhanced from 2.25 MW to 4.05 MW (2x2.025) with the approval of BTC. The revised DPR of May, 2007 was also forwarded to APDCL based on updated hydrological data prepared by the consultant. Consequent to this, PPA was signed for sale of power to APDCL @ Rs. 3.19/kWh **which is however subject to reconciliation after final tariff approved by AERC based on installed capacity of 4.05 MW as per clause 2.1 of**

**the PPA.** The Commission therefore considered an installed capacity of 4.05 MW for determination of tariff. However, considering the actual generation for FY 2011-12 as 6.79 MU which is almost half of targeted generation, the Commission directed HHPCPL to demonstrate full capacity generation during high water availability season even though the respondent stated the reasons for low generation as rainfall deficit, law and order problem, frequent grid failure etc.

### **3.2 Implementation of the tariff order with retrospective effect:**

#### **a) Submission of APDCL:**

The petitioner submitted that the tariff order normally implemented with prospective effect and not with retrospective effect as in subject case.

#### **b) Submission of HHPCPL:**

No comment.

#### **c) Observation of the Commission:**

Under regulation 37.3 of the AERC (Tariff) Regulations, 2006, the Commission has determined the final tariff based on actual capital expenditure incurred upto the date of commercial operation based on audited accounts certified by statutory auditor.

The petitioner has agreed for reconciliation of final tariff approved by AERC based on installed capacity of 4.05 MW as per clause 2.1 of the PPA mentioned earlier in the order.

Further under regulation 37.4 of the said regulations, any difference between the provisional and final tariff determined by the Commission may be adjusted in the tariff for the following year.

Further, there are instances of issuing tariff order with retrospective effect by CERC for determination of tariff of Central generating station.

### **3.3 Delay in commissioning of the project:**

#### **a) Submission of APDCL:**

The petitioner submitted that the delay in commissioning of the project by 2 years owing to law and order problem, less rainfall, frequent grid failure etc. as stated by the respondent can't be the reasons for review/redetermination of tariff by the Commission.

#### **b) Submission of HHPCPL:**

The respondent vide their submission stated the commissioning of the project was delayed by 2 years on account of law and order problem, less rainfall during 2011, frequent grid failures etc. which were beyond their control and means.

**c) Observation of the Commission:**

The Commission would like to state that the final tariff of the project was determined in accordance with the AERC (Tariff) Regulations, 2006 and CERC (Renewable Energy) tariff order dated 26.04.2010. However, the Commission examined carefully the reasons for delay in commissioning of the project and observed there was no cost overrun of the project as the total capital expenditure approved by the Commission is in fact less than the estimated cost as per the revised DPR (Rs. 2881 lakh against Rs. 3150 lakh respectively excluding additional capital cost).

**3.4 Approval of CUF of 42%:**

**a) Submission of APDCL:**

The petitioner submitted that the Commission has approved CUF @ 42% as per claim of the respondent against CUF of 45% as per norms of CERC (tariff) Regulations. For the interest of justice, the Commission should adopt CUF @ 45% as fixed by CERC.

**b) Submission of HHCPL:**

The respondent has only submitted the reasons of low generation from Nov., 2010 to June, 2013 i.e. on account of grid failure and shut down of the plant for 53 days (7<sup>th</sup> Nov., 2012 to 26<sup>th</sup> Dec., 2012) due to opening of barrage gates by irrigation department.

**c) Observation of the Commission:**

The Commission in its tariff order dated 12.04.2013 dealt with in details about considering CUF of 42% against 45% CUF norms as per CERC (Tariff) Regulations.

It may be noted that the CUF depends on several factors including water availability, rainfall etc. The Commission observed that the plant could generate approx. half of the targeted generation @ 42% upto June, 2013.

Under the circumstances, the Commission deems it appropriate to adopt CUF @ 42% as per the revised DPR and making the respondent responsible for achieving the targeted CUF.

**3.5 Additional capitalization:**

**a) Submission of APDCL:**

The petitioner submitted that any expenditure of O&M in nature can't be a part of capital expenditure. All the claims made by the respondent under the head of additional capitalization is of O&M nature like expenditure on dewatering pump or erection of transformer etc.

**b) Submission of HHPCL:**

The respondent submitted that the Hon'ble Commission considered capital cost of Rs. 2909 lakh against Rs. 3541 lakh being capital expenditure upto the date of commercial operation i.e. 12.01.2011 certified by the chartered account. They further stated that the Commission allowed only Rs. 28 lakh being the cost of 5 MVA transformer although additional capital cost of Rs. 632 lakh was incurred by them. They therefore requested the Commission to consider the total additional capital expenditure as mentioned above.

**c) Observation of the Commission:**

The Commission dealt with in details regarding the approval of capital cost including additional capital cost under clause 6.2.1 of the tariff order dated 12.04.2013. The Commission after prudence check, considered the total capital expenditure of Rs. 2881 lakh upto date of commercial operation i.e. 12.01.2011 as certified by the chartered account in the annual audit report for FY 2010-11 in accordance with regulation 37.3 of the AERC (Tariff) Regulations, 2006.

In regards to additional capital expenditure after date of commissioning, the respondent claimed Rs. 400 lakh (approx.) as additional capital cost towards deployment of dewatering pump, purchase of new transformer, cost of construction of 11 KV evacuation line etc. However, the Commission allowed only the cost of Rs. 28 lakh for one 5MVA transformer which was purchased and installed after the COD to facilitate smooth evacuation of power as additional capital cost in accordance with the provisions of prevailing tariff regulations.

**3.6 Treatment of CDM and other subsidy benefits:**

**a) Submission of APDCL:**

The petitioner submitted that as per methodology of sharing mechanism of CDM benefit, the benefit is to be passed on to the ultimate consumers through tariff mechanism for consecutive five years. But the Commission has not considered the CDM benefit in tariff calculation, nor it gives any indication when it be translated in terms of tariff and who would take the lead role on that matter.

In the matter of subsidy, the petitioner referred to the CERC regulations for consideration of subsidy benefit if availed for determination of tariff. However, the Commission did not consider subsidy element based on the submission of the respondent that it would not avail any subsidy from MNRE without any further enquiry for ascertaining the facts of the matter.

**b) Submission of HHPCL:**

The respondent vide their submission clarified that they have neither availed nor applied for any CDM benefit or MNRE subsidy. However, they

stated that they will abide by the any order issued by the Commission in case of availing CDM benefit in future.

**c) Observation of the Commission:**

The Commission clearly dealt with the subject of CDM and subsidy benefit for determination of tariff in clause 8.1 and 8.3 of the tariff order dated 12.03.2014 respectively in line with CERC (Renewable Energy) Tariff Regulations, 2009. In case of CDM benefit, the regulation 21 of the said regulations shall be followed. Regarding subsidy benefit, the regulation 22 of the said regulations specified that any subsidy offered by central or state Govt. including accelerated depreciation benefit **if availed** by the generating company may be taken into consideration for tariff calculation. It may be mentioned that in generic (renewable energy) tariff order of CERC, subsidy element is not considered for calculation of tariff for various renewable energy technologies barring for bio-mass gasification/ bio-gas technologies.

The Commission therefore deems it appropriate to calculate the tariff without considering any subsidy as the respondent confirmed of not availing subsidy through submission in affidavit.

**3.7 Determination of full capacity generation:**

**a) Submission of APDCL:**

The petitioner submitted that the Commission vide para 8.5 of the tariff order dated 12.04.2013 directed the respondent to demonstrate the full capacity generation of the station during high water availability period. Hence, it transpires that till the full capacity generation of the station is not demonstrated by the respondent, the order is not liable to put in operation.

**b) Submission of HHPCL:**

The respondent submitted that the full capacity demonstration is not applicable in single part tariff wherein whatever units generated, the bills are paid accordingly by the beneficiary. However, the respondent agreed to comply with the directive of full capacity generation provided conditions required for such testings are available at appropriate time.

**c) Observation of the Commission:**

The Commission has noted with concern that the respondent has not yet complied with the directive of the Commission vide clause 8.5 of the order dated 12.04.2014 for carrying out the full capacity generation test. In this context, the Commission would like to reiterate that the actual generation of the station since commissioning is almost half of the targeted generation. The reasons for low generation was attributed to the rainfall deficit, frequent grid failure, law and order problems etc. as submitted by the respondent. In view of this, the Commission once again directed the respondent to demonstrate the full capacity generation during high hydro period in next

available opportunity capacity in order to allay the apprehension of under capacity generation.

Further, the Commission would like to point out that the demonstration of full capacity generation as mentioned in the order is not a pre-condition for implementation of the tariff order as stated by the petitioner.

After deliberating on the above, the Commission makes further observations and issues orders as under:

- i) The Commission noted with concern that HHPCPL has not followed the directives of the Commission vide clause 8.5 of the tariff order dated 12.04.2013 till date regarding demonstration of full capacity generation during high hydro period. The Commission would like to reiterate that HHPCPL could generate only half of the targeted generation upto 2013-14 even after the line interruption, law and order problem, rainfall issues are settled to the extent possible. Hence, the Commission once again directs HHPCPL to ensure full capacity generation during the current high hydro seasons in presence of APDCL as specified in the clause 8.5 of the tariff order dated 12.04.2013.
- ii) The Commission would like to state that the position taken by the APDCL that the order is not liable to put in operation unless full capacity generation is demonstrated by the generator, is not maintainable. The Commission in the said order nowhere stated about such view.

The Commission would like to reiterate that the Commission's final tariff order dated 12.04.2013 is still in force. There is no doubt that APDCL filed a review petition before the Commission against the said order, but the Commission had not passed any interim stay of its order while admitting the review petition. The petitioner had also not prayed for any stay of the tariff order till disposal of the review petition.

- iii) The Commission has noted about the submission of the petitioner that the tariff has increased (from Rs. 3.19/kWh to Rs. 4.11/kWh) due to increased in capital cost for enhancement of the installed capacity (from 2.25 MW to 4.05 MW).

In this context, the Commission would like to state that the final tariff as determined is higher than the provisional tariff mainly due to adoption of higher financial norms including ROE set in the CERC Renewable Energy (tariff) Regulations, 2009 in accordance with the provision of tariff policy which has specified for determining preferential tariff to encourage development of renewable energy projects. It may be noted that the Commission approved the capital cost of Rs. 7.11 Cr./MW in the final tariff order which is less than the approved capital cost of Rs. 7.66 Cr./MW as per provision tariff order issued in July, 2007.

With the above analysis and observation on the major issues raised by the petitioner for review of the final tariff order dated 12.04.2013, the Commission finds neither any error apparent on the face of the records nor any new evidences that were brought to light by the petitioner for review of the tariff order as specified under section 34 of the AERC (Conduct of Business) Regulations, 2004.

With the above observations and decisions, the review petition (No. 9/2014) stands disposed of.

Sd/-  
(Dr. R.K. Gogoi)  
Member,  
AERC

Sd/-  
(N.K. Das)  
Chairperson,  
AERC