

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEWDELHI**

Petition No. 14/RP/2014

in

Petition No. 160/GT/2012

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri M.Deena Dayalan, Member

Shri A.K.Singhal, Member

Date of Hearing: 01.5.2014

Date of Order: 03.6.2014

In the matter of

Review of Commission's order dated 20.2.2014 in Petition No.160/GT/2012 pertaining to determination of tariff of 2X600 MW power plant of Udupi Power Corporation Limited

And in the matter of

Udupi Power Corporation Limited

.....Petitioner

Vs

1. Power Company of Karnataka Ltd,
KPTCL Building, Kaveri Bhavan, K.G.Road,
Bengaluru -560009
2. Bangalore Electricity Supply Company Ltd,
K.R.Circle, Bengaluru -560001
3. Mangalore Electricity Supply Company Ltd,
Paradigm Plaza, AB Shetty Circle, Mangalore-575001
4. Gulbarga Electricity Supply Company Ltd,
Station Main Road, Gulbarga-585102
5. Hubli Electricity Supply Company Ltd,
Corporate Office, Navanagar, PB Road, Hubli-580025
6. Chamundeshwari Electricity Supply Company Ltd,
Corporate Office, No. 927, LJ Avenue,
New Kantaraja Urs Road, Sarawathipuram
Mysore-570009
7. Punjab State Power Corporation Ltd,
Head Office, the Mall, Patiala-147001

.....Respondents



ORDER

The petitioner seeks review of the order dated 20.2.2014 in Petition No. 160/GT/2012 ('the impugned order') whereby the Commission had approved the tariff of Udipi Thermal Power Station (2 x 600 MW) ('the generating station') for the period from 11.11.2010 to 31.3.2014 for Unit-I and from 19.8.2012 to 31.3.2014 for Unit-II in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations'). According to the petitioner, the impugned order suffers from certain errors apparent on the face of record. The aspects on which review of the impugned order has been sought by the petitioner are as under:

- (a) Disallowance of Gross Station Heat Rate of 2400 kCal/kWh by not taking into account the GSHR as observed by the Commission in para 49 of the order dated 25.10.2005 and as per PPA.
- (b) Disallowance of expenditure of ` 27.56 crore towards replacement of return sea water GRP Pipeline (return pipe) with M.S. Pipeline claimed by the petitioner to meet the directions of the State Pollution Control Board.
- (c) Inadvertent calculation of the EPC cost in the order as ` 3526.64 crore instead of ` 3668.85 crore.

2. We have heard the learned counsel for the petitioner, on admission. The review application is admitted on the issue raised in paragraph 1 (b) above. The issue raised at paragraph 1(a) and (c), namely, the 'disallowance of Gross Station Heat Rate' and the 'inadvertent calculation of the EPC cost', is not admitted for the reasons stated in the subsequent paragraphs.

Disallowance of Gross Station Heat Rate

3. The findings of the Commission in order dated 20.2.2014 with regard to Gross Station Heat Rate (GSHR) allowed to the generating station is as under:

"155. The petitioner has contended that a Gross Station Heat Rate (GSHR) of 2400 kCal/kWh for every unit generated should be considered as per the terms of PPA. It has also submitted that the Principal buyers have erroneously contended that 2400 kCal/kWh is not the value of each unit generated but for every unit dispatched. The petitioner has further submitted that the GOK referred the matter to Justice (Retd) Gururajan Committee and in terms of the recommendations of said Committee, the generating station is entitled to a GSHR of 2333.43 kCal/kWh with an Auxiliary Energy Consumption of 6.5% as per 2009 Tariff Regulations. However, the petitioner has submitted that the GSHR of 2333.43 kCal/kWh is inadequate for

the purpose of running the generating station and the Heat Rate of 2400 kCal/kWh as per norms specified under the 2004 Tariff Regulations, be approved.

156. The respondents 1 to 6 have submitted that in terms of Regulation 37, the parties can agree on improved norms of operation and in that event such norms shall be applicable for determination of tariff. The respondents have submitted that improved norms for GSHR @ 2220 kCal/kWh (corresponding to net station heat rate of 2400 kCal/kWh) as per the 2009 Tariff Regulations should be adopted for determination of tariff. The petitioner has submitted that the PPA provides for the heat rate of 2400 kCal/kWh and the same should be adopted. The respondents have submitted that the PPA provides for heat rate for net generation i.e. the net heat rate at 2400 kCal/kWh which translates into gross station heat rate of 2220 kCal/kWh. The respondents have further submitted that there can be no justification for the petitioner to pay the higher heat rate as provided in the PPA which is also better than the norms provided in the 2009 Tariff Regulations and the commitment given by the petitioner in its letter dated 10.12.2004. The respondent, PSPCL has submitted that the GSHR of 2197.74 kCal/kWh or the norms specified by the Commission, whichever is lower, may be considered.

157. We have considered the submissions of the parties. It is observed that the dispute between the parties relate to the interpretation of Station Heat Rate as defined in the PPA i.e. whether it relates to Gross or the Net Heat Rate. The provisions of the 2009 Tariff Regulations provides for a formula for working out the Heat Rate for new thermal generating stations, on achieving commercial operation, after 1.4.2009. It is also noted that the Justice (Retd) Gururajan Committee appointed by the Government of Karnataka had recommended the GSHR of 2333.43 kCal/kWh and the Auxiliary Energy Consumption of 6.5% after 1.4.2009. Further, the Government of Karnataka considering the report dated 8.4.2011 of Justice (Retd) Gururajan Committee had decided that the issue of determination of GSHR should be left to this Commission."

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160. We notice that the provision for computation of Energy charges as provided in the PPA is not in conformity with the formula for computation of Energy Charges specified under the 2009 Tariff Regulations as noted above. Accordingly, based on the formula specified under the 2009 Tariff Regulations, GSHR has been worked out and allowed for the purpose of determination of tariff.

161. As per the guaranteed turbine cycle heat rate of 1945 kCal/kWh and boiler efficiency of 88.5% along with the deviation of 6.5 % as per the 2009 Tariff Regulations, the Gross Heat Rate works out to 2340.59 kCal/kWh. Without the margin of Auxiliary consumption of 6.5%, the Gross Heat Rate works out as 2197.74 kCal/kWh. In light of this, achieving a GSHR of 2220 kCal/kWh as per submission of the respondents 1 to 6 is not possible. Also, the EPC contract was finalized in 2006 and there was no possibility for the petitioner to specify the Station Heat Rate as per the 2009 Tariff Regulations. In view of above, we consider a GSHR of 2340.59 kCal/kWh based on guaranteed turbine cycle heat rate 1945 kCal/kWh and boiler efficiency of 88.5% with a deviation of 6.5 % from the guaranteed design value."

4. As regards the disallowance of Gross Station Heat Rate, the petitioner in the review petition has mainly submitted as under:

(i) The PPA dated 26.12.2005 executed with Govt. of Karnataka defines the Tariff Heat Rate to mean 'the amount of fuel energy required in kilocalories per kWh of net generation and for the unit shall be equal to 2450 kCal/kWh during stabilization period and 2400 kCal/kWh at all times thereafter'. UPCL has claimed GSHR of 2400 kCal/kWh, as specified under the 2004 Tariff Regulations.

(ii) The Commission in its order has allowed tariff Heat Rate of 2340.59 kCal/kWh after considering guaranteed Cycle Heat Rate of 1945 kCal/kWh, boiler efficiency of 88.5% providing 6.5% margin.

(iii) Though the principle considered by the Commission is acceptable, the effect of use of coal with lower gross calorific value compared to design gross calorific value needs to be looked into.

(iv) The PPA requires the petitioner to procure certain grade of coal (5900 kCal/kg-6500 kCal/kg) with a guaranteed value of 6200 kCal/kg, which is a very high quality coal in international market and expensive

(v) The OEM has guaranteed boiler energy performance considering the design coal of 5900 kCal/kg and hence guaranteed a boiler efficiency of 87%. The coal requirement of the petitioner is 3.7 MTPA out of which contract for 2.2 MTPA have been tied up with three coal supplies under the CSA. UPCL has been unsuccessful in getting any responsive bids for truing up balance coal supplies through competitive bidding process and thus has not been able to finalize procurement of remaining 1.5 MTPA of coal supplies.

(vi) The average GCV of coal fired from the date of COD of Unit-I till 31.1.2014 is 5407 kCal/kg as against the GCV of 5900 kCal/kg guaranteed by OEM. The low GCV of coal has resulted in drop in boiler efficiency.

(vii) Considering the turbine heat rate of 1942 kCal/kWh as given by OEM and the reduction in guaranteed boiler efficiency from 87% to 86.3% due to use of low GCV coal (5407 kCal/kg) and considering the margin of 6.5% as per CERC norms, the GSHR works out to 2396.56 kCal/kWh.

(viii) Commission may consider the serious difficulties faced by the petitioner in procuring high GCV coal which is beyond the control of the petitioner, Considering the fact that lower GCV coal is presently being used is affecting the boiler efficiency and *inter alia* the GSHR adversely, the Commission may approve the GSHR of 2396.56 kCal/kWh.

(ix) The Commission in its order dated 21.2.2014 as regards compensatory tariff to M/s Adani Power Ltd had applied the principle of boiler efficiency being affected due to low GCV of coal being use and had considered an increase in SHR from 2230 kCal/kWh to 2354 kCal/kWh using blended coal with GCV of 4556 kCal/kg as against the guaranteed GCV of 5200 kCal/kg.

5. During the hearing, the learned counsel for the petitioner reiterated the above submissions and prayed that the error apparent on the face of record may be corrected and the GSHR of 2400 kCal/kWh as prayed for by the petitioner may be allowed.

6. We have examined the matter. it is noticed that the petitioner in its tariff petition had contended that the GSHR of 2333.43 kCal/kWh as considered by Justice (*Retd*) Gururajan Committee was inadequate and had prayed that the GSHR of 2400 kCal/kWh for every unit generated should be considered as per the 2004 Tariff Regulations. The respondents 1 to 6 had submitted that in terms of Regulation 37, the parties can agree on improved norms of operation and in that event such norms shall be applicable for determination of tariff. They

had further submitted that improved norms for GSHR @ 2220 kCal/kWh (corresponding to net station heat rate of 2400 kCal/kWh) as per the 2009 Tariff Regulations should be adopted for determination of tariff. After considering the submissions of the parties and keeping in view that the provision for computation of Energy Charges as provided in the PPA were not in conformity with the formula for computation of Energy charges as specified under the 2009 Tariff Regulations, the Commission allowed the GSHR of 2340.59 kCal/kWh based on guaranteed turbine cycle heat rate of 1945 kCal/kWh (as provided by M/s LITL) and boiler efficiency of 88.5% with a deviation of 6.5% from guaranteed design value but without applying ceiling GSHR of 2333.3 kCal/kWh as per the 2009 Tariff Regulations as the EPC contract was finalized during 2006. The petitioner has now submitted that though the principle considered by the Commission in the impugned order is acceptable, the effect of use of coal with lower gross calorific value compared to design gross calorific value needs to be looked into. It has also submitted that the plant has operated on low GCV of coal than the boiler design coal which has impacted the efficiency of the boiler substantially. Accordingly, it has requested the Commission to consider the serious difficulties faced in procuring high value of coal and has prayed for approval of the GSHR of 2396.56 kCal/kWh. The submissions of the petitioner are not acceptable. In our view, the petitioner has sought to reopen the case on merits, which had already been considered and disposed of by the Commission by order dated 20.2.2014. The review is by no means an appeal in disguise whereby an erroneous decision is reheard and corrected, but lies only for patent error. The petitioner has neither demonstrated the existence of any error apparent in the face of the order nor the existence of any new or important matter which was not within the knowledge of the petitioner and which after due diligence could not be produced by the petitioner at the time of passing the impugned order. Even otherwise, there is no merit in the contention of the petitioner because the deviation margin of 6.5% from generated design value provided is to account for any variation in fuel quality and operational parameters from design. Hence, we are of the view that the grounds raised by the petitioner do not fall within the scope of review under Rule 1 Order 47 of the CPC. Therefore, the prayer of the petitioner is rejected and review on this ground fails.

7. The petitioner has also contended that the Commission in the impugned order has not taken into account the GSHR as observed in para 49 of the order dated 25.10.2005 in Petition No. 40/2005. The observations of the Commission in the said order is as under:

"49. In the application, the Gross Station Heat rate has been considered as 2400 kCal/kWh (after stabilization period) and Auxiliary Consumption has been taken as 7.5%. KPTCL has submitted that they have negotiated a net station heat rate of 2400 kCal/kWh inclusive of auxiliary energy consumption. However, this has been contested by the petitioner. They have submitted that a net heat rate of 2400 kCal/kWh is not possible. The gross station heat rate norm of 2400 kCal/kWh is better than heat rate norm of 2450 kCal/kWh specified under the 2004 regulations, Auxiliary Energy Consumption of 7.5% is also in line with these regulations. Besides these two factors, other operational and performance norms, such as Target Availability, Transit Losses for Coal and Secondary Fuel Oil Consumption etc. have to conform to the 2004 regulations as amended from time to time. As such, the application is in conformity with the 2004 regulations. The parties are free to negotiate and agree to better norms through mutual consent and the same can be adopted at the time of final determination of tariff. However, any additional capital expenditure during the rated life of the generating station shall not be admissible for maintaining operational parameters in conformity with above referred norms during the rated life of the generating station."

8. The contention of the petitioner above is not acceptable since the tariff petition filed by the petitioner is governed by the provisions of the 2009 Tariff Regulations. Even otherwise, the claim of the petitioner for a GSHR of 2400 kCal/kWh as per 2004 Tariff Regulations was taken note of by the Commission in para 155 of the impugned order and only after detailed deliberations, the GSHR of 2340.59 kCal/kWh had been worked out and allowed. In view of this, the submissions of the petitioner are rejected and no review lies on this ground. Accordingly, prayer of the petitioner for review of order on this count is not maintainable.

Inadvertent calculation of EPC cost

9. The Commission in the impugned order has considered the EPC cost of Rs 3526.64 crore for 1015 MW capacity to evaluate the project capital cost for 1200 MW capacity. The petitioner has submitted that it had claimed `3668.55 crore towards total EPC cost (including supervision and insurance). It has also submitted that the EPC cost of `3668.55 crore includes, apart from the cost of four contracts for supply, civil, services and infrastructure amounting to `3526.64 crore, additional items which are excluded from the scope of EPC contract, namely, two contracts, one for `106 crore and another for `35.91 crore. The petitioner has submitted that when it went for re-bidding some scope of work such as (i) site clearance, (ii) soil investigation, (iii) site survey, (iv)

leveling, (v) site fencing and (vi) plant roads were excluded from the scope of civil contract, to be carried out by the petitioner. It has also submitted that later after seeing the site conditions and local resistance, it was thought prudent to entrust these works to the EPC contractor for expeditious completion of the excluded works for timely completion. Accordingly, the petitioner has contended that while the Commission in its impugned order has considered the EPC cost for the project as ` 3526.64 crore representing the sum total for EPC contracts for supply, civil, supply and infrastructure, the value of civil miscellaneous contracts has not been considered. It has therefore been prayed for the consideration of the EPC cost of ` 3668.55 crore and for rectification of the final capital cost, including IDC and FC.

10. We have examined the matter. The EPC contract for 1050 MW capacity with M/s BHEL for ` 3673.00 crore was terminated by the petitioner due to refusal of M/s BHEL to hold the price lines and validity of its offer beyond 24.12.2006. Subsequently, on re-bidding, M/s LITL was the lowest bidder with the EPC cost of ` 3526.64 crore and the same was accepted by the petitioner. The EPC contract awarded to LITL cover the supply contract for ` 2323.64 crore, Civil contract for ` 808.00 crore, Service contract for ` 253.00 crore and infrastructure contract for ` 142.00 crore. After augmentation of the capacity of the project, the EPC cost was revised to ` 4318.12 crore, thereby resulting in a variation of an expenditure of ` 791.48 crore towards capacity augmentation in the scope of contract. The Commission after examining the details, allowed an increase in expenditure of ` 500.29 crore on account of augmentation of capacity and approved the total capital cost of ` 4026.93 crore for 1200 MW capacity. Accordingly, the Commission, while undertaking the prudence check of the capital cost has considered the EPC cost of ` 3526.64 crore based on the evaluated price of the lowest bidder, namely LITL, which was accepted by the petitioner. The submissions of the petitioner that Civil Miscellaneous contracts were not considered by the Commission in the impugned order cannot be accepted since amalgamation of any cost to the base price of the lowest bidder, would in our view, dilute the status of the lowest bid. Considering these factors in totality, we are not inclined to accept the plea of the petitioner to consider the EPC cost of ` 3668.55 crore and to revise the final

capital cost of the project. We are of the considered view that there is no error apparent on the face of the order and the review on this count is rejected as not maintainable.

11. In addition to the above, it is noticed that the petitioner has prayed for further reliefs as under:

- (i) Direction to the respondents to pay applicable interest as per Regulation 5(3) of the 2009 Tariff Regulations on the difference between the provisional tariff paid by the respondents and the tariff determined by impugned order;
- (ii) Direction to the respondents to ensure that KPTCL enters into BPTA with PGCIL and also to direct respondents 7(PSPCL) to enter BPTA with KPTCL and PGCIL; Also to direct Respondents 2 to 6 to ensure that KPTCL enters into agreement for wheeling of power with PSPCL. Direct Respondent No.7 to enter into agreement with KPTCL for wheeling of power.
- (iii) Direct Respondents 2 to 6 to provide to the petitioner Letter of Credit and Escrow facilities as payment security mechanism under the PPA based on tariff computed;
- (iv) Direct Respondents to obtain appropriate clearance from the GOK to make necessary changes in the PPA as specified in the GOK guarantee

12. During the hearing, the learned counsel for the petitioner contended that the Commission has not given its findings on the said issues raised by the petitioner as above in the tariff petition and prayed that the same may be considered in the review petition. We have examined the matter. As regards the payment of applicable interest, the same is guided by the proviso to Regulation 5(3) of the 2009 Tariff Regulations, amended on 21.6.2011. As stated, the generating station of the petitioner was granted provisional tariff for Unit-I of the generating station from 11.11.2010 (COD) till 31.3.2014 by order dated 24.12.2012 which was partially modified by the interim order of the Tribunal in I.A. No. 38/2013 in Appeal No.18/2013. Since the tariff for Units I & II of the generating station has been finally determined by the Commission by order dated 20.2.2014, the difference between the tariff provisionally billed and tariff finally determined is required to be adjusted in terms of the said proviso to Regulation 5(3) of the 2009 Tariff Regulations. Absence of a direction in this regard cannot be considered as error apparent on the face of record.

13. The reliefs prayed for by the petitioner from clauses (ii) to (iv) in para 11 above do not fall within the scope and ambit of determination of tariff and has accordingly not been considered in the impugned order. We now

examine as to whether the non-consideration of the prayer by the Commission can be a subject matter of review. For this purpose, we refer to Explanation V given below Section 11 of Civil Procedure Code (the Code) according to which, any relief claimed in the plaint, which is not expressly granted by the decree, shall, for the purposes of that Section, be deemed to have been refused. When we extend the principle laid down in the above statutory provisions to the proceedings before the Commission, the reliefs sought by the petitioner and not expressly granted by the Commission should be deemed to have been refused. Therefore, this cannot be the subject matter of review in the proceedings under Section 114 read with Order XLVII of the Code. Notwithstanding this, we notice that the petitioner's prayer for directions to the respondents to enter into agreement for wheeling of power, to obtain appropriate clearance from the GOK to make necessary changes in the PPA, not providing LOC and Escrow facilities as payment security mechanism in the agreement are contractual issues to be mutually settled by the petitioner and the respondents and the Commission did not consider it necessary to issue any direction in this regard. In view of the above, the additional reliefs raised in the review petition are rejected as not maintainable.

14. As stated in para 2 above, the review petition is admitted on the issue of '*Disallowance of expenditure of `27.56 crore towards replacement of return sea water GRP Pipeline (return pipe) with M.S. Pipeline*'. The petitioner is directed to serve copy of the review petition along with a copy of this order, on the respondents, including the objector, M/s Janajagrithi Samithi on or before 12.6.2014 and the respondents/objector shall file their reply, with advance copy to the petitioner, by 19.6.2014. Rejoinder, if any, by petitioner by 26.6.2014.

15. Matter shall be listed for final hearing on 15.7.2014.

Sd/-
[A.K.Singhal]
Member

Sd/-
[M. Deena Dayalan]
Member

Sd/-
[Gireesh B.Pradhan]
Chairperson