

**Before the Karnataka Electricity Regulatory Commission, Bangalore**

Dated this the 20th day of July 2005

Present

- |                         |     |          |
|-------------------------|-----|----------|
| 1. Shri K.P. Pandey     | ... | Chairman |
| 2. Shri H.S. Subramanya | ... | Member   |
| 3. Shri S.D. Ukkali     | ... | Member   |

**Case No.RP.02/2005, 03/2005, 04/2005, 05/2005 and 06/2005**

Review Petition filed by the following in the matter of tariff determined by the Commission in respect of Non-conventional Energy sources :

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| 1. M/s Hassan Biomass Power Co (P) Ltd<br>D1-003, While House Apartments,<br>6 <sup>th</sup> Main, 15 <sup>th</sup> Cross, R.T.nagar,<br>Bangalore 560032 | RP.02/2005 |
| 2. M/s Dev powergen Private Ltd<br>No.2203/D12, New Santhepet<br>Mysore 570021.   | RP.03/2005 |
| 3. The South India Sugar Mills Association (SISMA)<br>1 <sup>st</sup> Floor, Farah Winsford, 133/6,<br>Infantry Road,<br>Bangalore 560 001.               | RP.04/2005 |
| 4. Karnataka Power Transmission Corporation Ltd (KPTCL)<br>Kaveri Bhavan<br>Bangalore 560 009.  | RP.05/2005 |
| 5. Renewable Energy Developers Association of Karnataka (REDAK)<br>48, Lavelle Road,<br>Bangalore 560 001.  | RP.06/2005 |

(Petitioners)

1. The petitioners have sought review of the Commission's order dated 18<sup>th</sup> January 2005 in the matter of tariff determined by the Commission in respect of

Non-conventional Sources of Energy (NCE). The Commission decided to consider all the above review petitions together. Notices were issued to the petitioners and also to KPTCL and Karnataka Renewable Energy Development Ltd (KREDL) who have been named as respondents in RP No 02/2005, 03/2005 and RP No 04/2005 on the admissibility of the petitions. The petitioners as well as KPTCL as respondent were heard. The petitioners have filed written arguments in support of their contentions. KPTCL have also filed statement of objection in RP 02/2005, 03/2005 and 04/2005.

2. A summary of the pleadings of M/s Hassan Biomass Power Co (P) Ltd and M/s Dev Powergen (P) Ltd for biomass projects, which are identical, is given below:

- (i) The project cost, o&m expenses, rate of interest, cost of biomass etc considered by the Commission are on the lower side which has led to lower tariff.
- (ii) The PLF of 75% considered by the Commission is very high. The PLF should have been considered as 75% on 330 working days basis or 68.5% on 365 days.
- (iii) The auxiliary consumption may be considered as not less than 10.5% as against 8% considered by the Commission.
- (iv) Biomass consumption should be adopted as 1.33 kg per unit as suggested by KPTCL as against 1.16 kg per unit considered by the Commission.
- (v) The method adopted by the Commission for arriving at levelled tariff is inappropriate.

The above petitioners have placed reliance on CEA norms for conventional coal based plants in respect of PLF and auxiliary consumption. Regarding fuel consumption, the norm adopted by the Commission in its order dated 18.1.05 is on the basis of APERC order which norm was based on an expert committee report, M/s Hassan Biomass Ltd has brought to the notice of the Commission the interim order dated 20.8.04 passed by the Hon'ble High Court of Andhra Pradesh in WP No 12921 of 2004 on the tariff of biomass project issued by APERC. Further,

the petitioners have produced a report from the Chief Programme Executive- ABETS, IISc on the characteristics of biomass.

3. M/s SISMA have pleaded for co-generation plants. A summary of their pleadings is given below:

- i) The project cost considered by the Commission on the basis of KPTCL's proposal is quite low. The cost of steel, cement and labour have increased substantially in the past one year which have not been factored in the project cost adopted by the Commission.
- ii) The PLF of 60% considered by the Commission is very high considering the operating period of cogeneration plants. Even according to CEA norms for conventional thermal power plants, the annual PLF prescribed is 68.5%.
- iii) The auxiliary consumption of 8% considered by the Commission is low. As per CEA norm, the auxiliary consumption is 10.5% for 100 MW thermal power plant.
- iv) The fuel consumption of 1.61 kg/unit assumed by the Commission is very low considering the moisture, calorific value and other characteristics of bagasse and have requested to adopt fuel consumption between 1.85 to 2 kg per unit.

SISMA have also stated that the fuel consumption norm adopted by the Commission on the basis of APERC order which norm was based on an expert committee report is unrealistic and have further stated that the APERC order has been struck down by the Hon'ble High Court of Andhra Pradesh. SISMA have also produced a report from Chief Programme Executive- ABETS, IISc and also test results from Sriram Institute of Industrial Research on the characteristics of bagasse.

4. KPTCL have stated in their review petition that KYOTO protocol has been given effect to from 16.2.05 and therefore the carbon credit has become a reality and will accrue in favour of NCE projects and hence, the additional amount that is

realized beyond the tariff has to be passed on to the consumers. KPTCL has urged that 50% of the credit (net of expenses) may be given to the power purchaser.

5. REDAK has pleaded for the mini hydel projects. They have stated that while the Commission has accepted assumptions proposed by REDAK in respect of Project capital cost, annual rate of escalation of o&m, PLF, rate of interest on term loan, rate of depreciation, auxiliary consumption, Return on Equity, MAT and working capital and loan repayment, there are some variations under o&m expenses, auxiliary consumption, ROE and working capital loan repayment. A summary of their pleadings is given below:

- i) The project cost has substantially increased due to steep increase in the cost of steel and cement which needs to be factored in the project cost.
- ii) O&M expenses provided by the Commission at 1.5% of capital cost is inadequate. 1.5% norm is applicable to major hydro stations and smaller hydro stations need 2.5 to 3%.
- iii) Total auxiliary consumption required including transformation losses would be 1.65% as against 0.5% provided by the Commission.
- iv) Since payments are being received from KPTCL only after 90 days, providing for interest on working capital for one month is inadequate. Interest on working capital has to be provided for an average of 90 days.
- v) Energy generation should be considered at 90% of 30% PLF in order to cover hydrology risk instead of 30% PLF considered by the Commission. Govt of India permits 90% of the average energy for major hydro projects.
- vi) A higher ROE of 26% needs to be provided in order to cover hydrology risk as against 16% provided by the Commission.
- vii) Any new levies and taxes including royalty will have to be borne by the purchaser/consumer.

6. KPTCL in their statement of objections in RP NO 02/2005, 03/2005 and 04/2005, while providing detailed objections on the various points raised by the concerned petitioners, have stated that there is no error apparent on the face of the record which warrant review of the impugned order by the Commission and have pleaded that the said review petitions may be dismissed by the Commission.
  
7. The Commission has carefully considered all the above points. At the outset, the Commission has to decide on whether the various points urged by the review petitioners constitute adequate grounds for the exercise by the Commission of its power of review. The various arguments advanced by the petitioners for review of the order have already been discussed in detail in the impugned order dated 18.1.2005. The Commission notes that the review petitions do not contain any new and important matter or evidence which was not within the knowledge of the petitioners or could not be placed earlier before the Commission when the order that has now been sought to be reviewed was made. The basis for the various parameters considered for tariff determination by the Commission have been discussed in detail in the impugned order. Developments which are stated to have taken place subsequent to the date of issue of the order, such as stated increase in the project cost on account of increase in cost of inputs or implementation of KYOTO protocol in Feb 05 and also production of new reports on the characteristics of fuel in the case of biomass and bagasse or expected future increase in levies and taxes etc do not constitute grounds for review of the said order. As regards CEA norms for thermal power plants on which a few petitioners have relied upon in the matter of PLF, auxiliary consumption etc, the Commission wishes to point out that with the enactment of Electricity Act 2003, the CERC has issued CERC(Terms and Conditions of Tariff) Regulations 2004 on 26.3.04 prescribing the norms for thermal and hydro power plants. Infact, the availability prescribed by CERC is 80% for thermal power plants

instead of PLF of 68.5% fixed by CEA earlier. The said regulations are applicable to coal based thermal power plants and are not relevant for the NCE sources apart from the fact that these regulations are only one of the guidelines for the State Commission under section 61 of the Electricity Act 2003 for determining the tariff. Regarding the fuel consumption norm adopted by the Commission in respect of Biomass and co-generation project on the basis of APERC order, the concerned petitioners have stated that the APERC order has been set aside by the Hon'ble High Court of Andhra Pradesh. The Commission notes from the copy of the Court order produced by the Petitioners that the Hon'ble High Court of Andhra Pradesh has issued an interim order on the tariff of biomass projects and that there is no mention in the said order with regard to consumption norm of fuel. Therefore it would not be appropriate to come to any conclusion at this stage on the fuel consumption norm adopted by APERC which norm has since been adopted by this Commission.

8. Thus, as there is no mistake/error apparent from the record or any fresh evidence or any other sufficient reason warranting review of the impugned order, the petitions filed by the petitioners are held as inadmissible.

The petitions are accordingly dismissed.

(K.P. PANDEY)  
Chairman

(H.S. SUBRAMANYA)  
Member

(S.D. UKKALI)  
Member