

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. **Shri Bhanu Bhushan, Member**
2. **Shri R. Krishnamoorthy, Member**

**I.A.No. 80/2006 in
Petition No. 154/2005**

In the matter of

In-principle approval of project capital cost and financing plan of Torrent Power Generation Ltd. in respect of SUGEN Combined Cycle Power Project in the State of Gujarat.

And in the matter of

Torrent Power Limited, Ahmedabad

....**Petitioner**

Vs

1. PTC India Ltd., New Delhi
2. M.P. State Electricity Board, Jabalpur

....**Respondents**

Following were present:

1. Shri Sudhir Shah, TPL
2. Shri A.K.Gupta, TPL
3. Shri Vinod Khanna, TPL
4. Shri Vibhuti, TPL
5. Shri D.D.Khandelwal, MPPTCL

**ORDER
(DATE OF HEARING: 24.7.2007)**

Torrent Power Generation Ltd had filed the main petition seeking 'in principle' approval of the project capital cost and financing plan in respect of its proposed 1100 MW SUGEN Combined Cycle Power Project in the State of Gujarat in terms of second proviso to Regulation 17 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended (hereinafter referred to as the tariff regulations, 2004). The original petitioner had claimed the capital cost of the project at US \$ 349.58 million plus Rs.1508.30 crore including IDC and Financing Charges (FC) of Rs.194.40 crore and Working Capital Margin of Rs.49.50 crore. The

Commission by its order dated 22.8.2006 had accorded 'in-principle' approval for the project capital cost of US \$ 339.436 million plus Rs.1448.43 crore including IDC and FC and excluding WCM, subject to certain conditions. The project capital cost as approved included the cost of initial spares of Rs.111.86 crore (comprising US \$ 20.426 million at the exchange rate of Rs.45.42 per US \$ and Rs.19.08 crore) at the permissible rate of 4% of the original project cost (hard cost) as per the provisions of Regulation 17 of the tariff regulations, 2004 against the projected cost of Rs.167.41 crore (comprising US \$ 30.57 million at the exchange rate of Rs. 45.42 per US \$ and Rs.28.56 crore) which was 5.87% of the hard cost of the project.

2. The High Court of Gujarat by its order dated 12.7.2006 in Company Petition No. 69/2006 had approved merger of Torrent Power Generation Limited (the petitioner in the original petition), Torrent Power AEC Limited, and Torrent Power SEC Limited with Torrent Power Limited. The effect of the merger is that Torrent Power Limited itself is the distribution licensee for the cities of Ahmedabad/Gandhinagar and Surat. The present application has been made by Torrent Power Limited who has succeeded Torrent Power Generation Ltd, the original petitioner.

3. The petitioner has filed this interlocutory application for reconsideration of the spares cost earlier considered and to allow cost of spares of Rs.167.41 crore and review of the norms of spares, in terms of the following prayers:

- (i) Reconsider the allowance of spares cost and allow in principle the cost of spares of Rs.167.41 crore and the capital cost of Rs.3043 crore.
- (ii) Modify the order dated 22.8.2006 passed in Petition No. 154/2005 to accept the 'in principle' cost of the project at Rs.3043 crore.

- (iii) Review the norm of spares and allow higher amount of initial spares for new efficient advance class technology to be used by the Petitioner and in future by other developers.

4. The Commission by order dated 5.3.2007 directed the petitioner to furnish the details of initial spares along with recommendations of the OEM supplier and also the copy of agreement with the OEM supplier duly supported by the documentary evidence, where applicable. The petitioner submitted the details vide affidavit dated 28.4.2007. The petitioner further submitted the following documents vide affidavit dated 12.6.2007 in response to the letter dated 23.5.2007:

- (i) Copy of the Agreement with EPC Contractor.
- (ii) Copy of Index to the “ Technical Specification” of the contract wherein ‘Schedule of Spares’ is mentioned at Section “ F6 ”.
- (iii) Copy of ”Schedule F6” to the contract, containing the details of the spares, along with quantity.

5. During the course of hearing, the petitioner submitted that the list of spares included in the EPC contract was endorsed by CEA and MOP for the purpose of exemption from the import duty. The petitioner was directed by order dated 24.7.2007 to furnish the list of spares submitted to CEA while seeking Mega Power status for SUGEN CCPP. The petitioner by affidavit dated 30.7.2007 has submitted that it has already furnished to the Commission the whole list of spares as part of the EPC Contract document along with the summary thereof vide affidavit dated 12.6.2007. It has been further stated that CEA, after examination of the list, endorsed the summary of the spares along with the summary of equipment to be imported and the said list,

after further endorsement by MOP was provided to the Customs Department vide MOP letter No. C-414/2003-IPC dated 27.4.2006 for the purpose of exemption from import duty. The petitioner has also placed on record MOP letter dated 27.4.2006 along with its enclosures.

6. We have perused the documents on record and heard the petitioner and respondents at length. The petitioner has approached the Commission in the interlocutory application for reconsideration of the decision regarding allowance of spare costs on the following grounds:

- (a) The petitioner would use advanced class efficient gas turbines 'SGT5 4000F' supplied by Siemens Power Generation, Germany for the first time in the country. The main features of the machines are high performance linked to operating efficiency (availability around 93%), high reliability at competitive performance, higher thermal efficiency (above 57%) and low environmental emission. In the absence of experience of such machines, the petitioner has pleaded that spares recommended by the OEM supplier should be allowed by the Commission to meet any contingency arising out of forced outage and to reduce the idle time.
- (b) The critical success factor for performance of these machines is dependent on spares being available on a time bound basis. Moreover, the spares proposed to be bought with the plant equipment have been mandated as essential for maintenance of these plants by the EPC Contractor, Siemens.
- (c) More than 85% of the spares pertain only to the gas turbines and more than 75% of the spares are mandatory and/or insurance spares.

Procurement of such spares requires long lead time and as technology changes rapidly, off-shelf availability of these spares may be critical in the long run. In the absence of these spares, the highly capital intensive plant, in the event of a breakdown, will remain idle for long time, depriving the whole grid of Western Region of much needed power particularly, when there is continuous deficit of power in the region.

- (d) The petitioner would supply power to the distributing areas of Surat, Ahmedabad and Gandhinagar. As the demand patterns in these areas as well as in the Western Region vary significantly during different times of the day as well as the different periods in the year, it is envisaged that the plant will be required to operate at a varying load conditions which may result into higher wear and tear necessitating more spares.
- (e) The Commission has allowed initial spares at the rate higher than the ceiling of 4% to some of the gas based power plants of NTPC and hence, the case of the petitioner may also be considered on similar lines.
- (f) The petitioner had followed the International Competitive Bidding (ICB) process for selection of EPC Contractor. The EPC Contractor was selected on the basis of overall lowest cost and the spares included in the EPC contract were part of the specifications. Having selected the EPC Contractor on the basis of the lowest bid, the petitioner is not required to pay any additional amount for the spares. Moreover, even with inclusion of spares amounting to Rs.167.41 crore at 5.87% of the original project cost, the per MW project cost works out to Rs. 2.74 crore which compares favourably with similar projects.

7. We note that the following facts now brought to our notice by the petitioner warrants reconsideration of the decision regarding spares while according 'in principle' approval for project cost:
- (a) The EPC Contractor was selected on the basis of overall lowest cost and the spares included in the EPC Contract were part of the specifications which were finalized after prolonged discussions.
 - (b) The EPC Contractor provided the break-up of overall price into various components subsequently after the contract was signed; as a result, the petitioner had no opportunity to renegotiate the cost of spares.
 - (c) The project capital cost of Rs.3046.45 crore excluding working capital margin claimed by the petitioner including initial spares of Rs.167.41 crore (US\$ 30.57 Million (at the exchange rate of Rs.45.42 per US\$) + Rs.28.56 crore works out as Rs.2.74 crore per MW, which is very competitive on the basis of overall cost and compares favorably with the projects of similar type.
 - (d) The lead time for procurement of spares for the gas turbine ranges between 3 to 9 months.
 - (e) That the requirement of initial spares recommended by the EPC Contractor has also been vetted by the OEM Supplier and Technical Consultants viz. Tata Consulting Engineering Limited (TCE) and CRISIL during negotiation and award of the EPC contract. The list of spares included in the EPC contract has also been endorsed by the CEA and Ministry of Power while recommending the case of petitioner for exemption from import duty for grant of the Mega Power status to the project.

8. We observe that the list of spares furnished by the petitioner contains spare parts for Gas Turbine, Steam Turbine, HRSGs, Generators, Transformers, Switchgears, Switchyard equipment, Compressors and Drives, Valves, I&C, Heat exchangers and other miscellaneous equipment. The summary of spares is as under:

Sl. No.	Description	Price (Million US\$)	Local/ Ex-works Supplies (Rs. in Crore)
1	Recommended	4.56	21.43
2	Mandatory	23.95	0.00
3	Insurance	2.05	7.14
4	Consumables	0.01	0.00
	TOTAL:	30.57	28.57

9. The data submitted by the petitioner shows that the gas turbine and its auxiliaries constitute the heart of a CCGT power plant and an amount of US \$ 26.49 million of the total foreign component of US \$ 30.57 million has been earmarked for spares for gas turbine and its auxiliaries in the category of 'mandatory and recommended' spares.

10. On perusal of the materials furnished, we are satisfied that sufficient justification has been made out by the petitioner for allowing full amount of initial spares in the instant case. By invoking our power under regulation 13 of the tariff regulations, 2004 we allow the full cost of initial spares of Rs.167.41 crore (comprising US \$ 30.57 Million at the exchange rate of Rs.45.42 per US \$ +Rs.28.56 crore) as part of the project capital cost. As a result, the project capital cost now approved in-principle shall be US \$ 349.58 Million+ Rs.1458.80 crore including IDC and FC and excluding WCM.

11. Shri D.D. Khandelwal, ED, MPPTCL, appearing for Madhya Pradesh State Electricity Board had opposed the interlocutory application on various grounds. He had submitted that in view of the provisions of Regulation 17 of the tariff regulations, 2004, the cost of initial spares has to be maintained at 4% of the original project cost. He had further submitted that any increase in the capital cost would hurt the interest of the consumers. According to Shri Khandelwal, the relief prayed for in the interlocutory application could not be granted after disposal of the main petition.

12. We do not find any merit in the objections raised by Shri Khandelwal. We have satisfied ourselves of the claim of the petitioner on merits. We do not feel that the petitioner's justified claim should be defeated merely on technicalities or procedure. We believe in even-handed justice for all. We are accordingly granting the relief by invoking powers of relaxation under Regulation 13 of the tariff regulations, 2004.

13. In the light of our above decision, para 11 of our order dated 22.8.2006 shall stand modified accordingly.

14. On the question of review of norms for initial spares for the gas-based generating stations to be applied for future projects, we do not feel any necessity for such an exercise at this stage.

15. I.A. No. 80/2006 stands disposed of in terms of the above order.

Sd/-
(R. KRISHNAMOORTHY)
MEMBER
New Delhi dated the 26th September, 2007

Sd/-
(BHANU BHUSHAN)
MEMBER