CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No.160/GT/2012

Coram:
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member

Date of hearing: 10.9.2013
Date of Order: 20.2.2014

IN THE MATTER OF

Determination of tariff of Udupi Thermal Power Station (2x600 MW) 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.

AND

IN THE MATTER OF

Udupi Power Corporation Ltd,
IInd Floor, Le-Parc Richmonde,
51, Richmond Road,
Bengaluru-560025 …**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**

8. M/s Janajagrithi Samithi (Regd),
C/o Sri Rohit Rao, Advocate & Consultants
Verits Legis, 127, Lawyers Chamber,
Supreme Court, New Delhi-110001 **...Objector**

For petitioner : Shri J.J. Bhatt, Senior Advocate
Shri L. Vishwanathan, Advocate
Shri R.Parthasarathy, UPCL
Shri Soumyanarayanan, UPCL
Shri R.A.Mulla, UPCL

For Respondent : Shri M.G.Ramachandran, Advocate, Discoms of Karnataka
Shri Anand Ganesan, Advocate, Discoms of Karnataka
Shri V.G.Manjunath, PCKL
Shri Padamjit Singh, PSPCL

For Objector : Shri Rohit Rao, Advocate for Objector

ORDER

This petition has been filed by the petitioner, Udupi Power Corporation Ltd for determination of tariff of both units of Udupi Thermal Power Station (2x600 MW) (hereinafter referred to as "the generating station") from their respective dates of commercial operation till 31.3.2014 in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The petitioner, formerly known as 'Nagarjuna Power Corporation Ltd' is a Public Ltd Company incorporated under the Companies Act, 1956 and was renamed as 'Udupi Power Corporation Ltd' (UPCL) on 8.2.2008. UPCL is a generating company as defined under Section 2(28) of the Electricity Act, 2003 (the Act). The project has been developed as a Mega Power project in line with the policy guidelines issued by the Ministry of Power, Government of India and is one of the first thermal power plant designed for 100% imported coal.

Background

3. The Commission by its order dated 25.10.2005 in Petition No.40/2005 had accorded 'in-principle' approval of the capital cost of the project with a capacity of 1015 MW (2 x 507.5 MW) for ₹4299.12 crore, inclusive of Interest During Construction (IDC) and Financing Charges (FC). Thereafter, the petitioner entered into a Power Purchase Agreement (PPA) on 26.12.2005 with

the respondent Nos.2 to 6 i.e. the distribution companies of Karnataka for sale of 90% of power generated from the project and PPA dated 29.9.2006 with respondent No.7, PSPCL for sale of the balance 10% of power. Subsequently, based on the recommendations of Justice (*Retd*) Gururajan Committee vide its report dated 23.9.2010, the Government of Karnataka by its order dated 25.10.2010 agreed for enhancement of the capacity of the generating station from 1015 MW to 1200 MW and for increase in the capital cost of the project by ₹583.85 crore, excluding IDC, subject to approval of this Commission. In the said order dated 25.10.2010, the petitioner was directed to file necessary particulars regarding increase in capital cost along with relevant documents before this Commission immediately.

4. The petitioner filed the present petition on 14.12.2011 for determination of tariff of Unit-I of the generating station which was declared under commercial operation (COD) on 11.11.2010. As regards Unit-II, the petitioner had submitted that declaration of commercial operation of the unit which was expected on 1.4.2012 was still pending on account of non-commissioning of 400 kV transmission line being developed by Karnataka Power Transmission Company Ltd. After issuance of notice to the parties including the objector herein, the petition was heard on 26.7.2012, and the Commission after considering the submissions and the replies of the respondents and the objector granted provisional tariff for Unit-I of the generating station by order dated 27.8.2012 for the period from 11.11.2010 to 31.3.2014.

5. Aggrieved by the said order, the respondent Nos. 1 to 6 filed appeal (Appeal No.190 of 2012 with I.A. No. 304 of 2012) before the Appellate Tribunal for Electricity ('the Tribunal') on the ground that the provisional tariff order dated 27.8.2012 was passed by the Commission without hearing the said respondents. The Tribunal by its order dated 8.10.2012 remanded the matter to the Commission with direction to pass appropriate orders in accordance with law, after hearing all the parties concerned and accordingly disposed of the said appeal.

6. Unit II of the generating station was declared under commercial operation on 19.8.2012 and accordingly, the petitioner filed Interlocutory Application (I.A.No.49/2012) revising the tariff

calculations, based on the actual audited capital expenditure as on the date of commercial operation of Unit I and the projected additional capital expenditure from the date of commercial operation of Unit-I (11.11.2010) to COD of Unit-II (19.8.2012).

7. Petition No.160/2012 along with I.A.No.49/2012 was heard on 23.10.2012 after issuance of notices to all the concerned parties. Considering the submissions of the parties, the Commission by its order dated 24.12.2012 granted provisional tariff for Unit-I of the generating station for the period from the date of commercial operation 11.11.2010 till 31.3.2014. Aggrieved by the said order, the respondent Nos. 1 to 6 have filed Appeal No. 18 of 2013 and I.A. No. 38 of 2013 before the Tribunal. The Tribunal by interim order dated 8.2.2013 disposed of the said I.A with the following directions:

> "*Having regard to the peculiar facts and circumstances of the case, we deem it appropriate to modify the Order to the effect that the Appellant will pay the provisional tariff as decided by the Central Commission in the impugned order with effect from 01.09.2012 to the Respondent no. 2 in respect of Unit Nos. 1 and 2 till the final determination of tariff by the Central Commission for these Units. The amount of arrears, which are to be paid from 01.09.2012, as directed, is to be paid by the Appellant in four equal installments by the end of every month. The first instalment would be paid on or before 28.02.2013.*
>
> *With these directions, the I.A. is disposed of.*
>
> *xxxxxx*
>
> *In the meantime, the Central Commission may go on with the proceedings for final determination of tariff of both Unit 1 and Unit 2. Both the parties shall cooperate with the Central Commission for the conduct of the said proceedings."*

8. In compliance with the directions of the Tribunal as quoted above, the Commission heard the petition on various dates i.e, 31.1.2013, 19.3.2013, 26.3.2013, 9.4.2013, 16.5.2013, 20.5.2013, 9.7.2013 and on 10.9.2013 and reserved orders on the same.

9. The petitioner has filed additional information in terms of the directions of the Commission. The respondents and the objector herein have filed their replies to the petition and the additional information submitted by the petitioner. Rejoinders to the said replies have been filed by the petitioner. In compliance with the directions of the Commission, written submissions have also been filed by the parties. Considering the submissions of the parties and the documents available on record, we now proceed to determine the tariff of Units-I & II of

the generating station for the period from their respective dates of commercial operation till 31.3.2014 by this order, subject to the final decision of the Tribunal in Appeal No. 18/2013.

10. The petitioner vide its affidavit dated 8.5.2013 has revised its claim for annual fixed charges. Accordingly, the capital cost and the annual fixed charges claimed by the petitioner are as under:

Capital cost

(₹in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 30.9.2011)	2011-12 (1.10.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Opening capital cost	315992	315992	315992	315992	622766	622766
Add: Projected additional capital expenditure	0	0	0	0	0	18273
Closing capital cost	**315992**	**315992**	**315992**	**315992**	**622766**	**641039**
Average capital cost	**315992**	**315992**	**315992**	**315992**	**622766**	**631903**

Annual Fixed Charges

(₹in lakh)

	2010-11 (11.11.2010 to 31.3.2011)*	2011-12 (1.4.2011 to 30.9.2011)**	2011-12 (1.10.2011 to 31.3.2012)**	2012-13 (1.4.2012 to 18.8.2012)@	2012-13 (19.8.2012 to 31.3.2013)#	2013-14
Return on Equity	5739.30	7457.74	7457.74	5739.73	18083.81	29827.11
Interest on Loan	11221.74	14797.90	14401.06	10989.22	36256.65	57213.42
Depreciation	6297.75	8175.50	8175.50	6292.15	19884.45	33184.54
Interest on Working Capital	1909.25	2925.69	3185.57	2899.73	9434.81	15409.05
O&M Expenses	2858.66	3924.00	3924.00	3190.91	10202.19	17544.00
Cost of secondary fuel oil	613.65	931.32	966.30	794.10	2566.17	4171.39
Differential Interest	174.19	352.41	472.18	304.89	1298.03	3095.48
Total	**28814.54**	**38564.56**	**38612.36**	**30210.72**	**97726.12**	**160445.00**

* *Prorated equivalent to 140.583 days,** Prorated equivalent to 183 days,@ Prorated equivalent to 140.458 days,# Prorated equivalent to 183 days*

11. Before proceeding, we, in a nutshell, take note of the preliminary issues raised by the respondents / objector during the proceedings held on 23.10.2012 for grant of provisional tariff for Unit I of the generating station and the findings of the Commission on the same, as follows:

(a) Jurisdiction of the Commission to determine the tariff of the generating station;

(b) Whether the PPA dated 26.12.2005 between the petitioner and Respondent Nos. 2 to 6 is legally binding on the parties and can be considered by the Commission while determining tariff?

(c) What is the scope of Regulation 37 of the 2009 Tariff Regulations? Whether the provisions of the 2009 Tariff Regulations can be given a go by in favour of the terms and conditions of the PPA in view of Regulation 37 of 2009 Tariff Regulations?

(d) Whether the tariff should be determined as per the provisions of the 2009 Tariff Regulations or as per the terms and conditions of the PPA?

12. On the issue of jurisdiction of the Commission to determine tariff, the petitioner had submitted that since there is a scheme to supply power from the generating station to more than one State i.e. Karnataka and Punjab, there is a composite scheme in terms of section 79(1) (b) of the Electricity Act, 2003 (the Act) and therefore, the jurisdiction of this Commission gets invoked and existence of the PPA is not relevant. The respondent Nos. 1 to 6 had submitted that the contention of the petitioner that the jurisdiction of the Commission to determine tariff in the absence of the PPA is misplaced as there should be some legal basis for the generating company agreeing to supply electricity to the purchaser. The respondents had also contended that the submission of the petitioner that the PPA should be ignored and the tariff should be determined without considering the provisions of the PPA for sale of electricity was misplaced. After considering the submissions of the parties, the Commission in its order dated 24.12.2012 concluded that a composite scheme for generation and supply of electricity in more than one state emerged from the PPAs entered into by the petitioner with the distribution companies of Karnataka and Punjab and hence, the Commission had the jurisdiction to determine tariff for the generating station. The relevant portion of the said order dated is extracted under:

"19……It is not in dispute that the Commission derives its jurisdiction from the Act and not from the agreement between parties. However, when the Act presupposes that the composite scheme should be based on agreements between the generating company and the purchasing states and in the absence of any evidence that the generating company has otherwise a composite scheme for generation and sale of electricity in more than one state, the importance of the PPAs cannot be overlooked. In our view, based on the PPAs entered into by the petitioner with the distribution companies of Karnataka and Punjab for generation and sale of power from the generating station, a composite scheme has emerged and the Commission has the jurisdiction to regulate the tariff for such composite scheme under section 79(1)(b) of the Act."

13. On the issue of consideration of PPAs for determination of tariff, the petitioner had submitted that in view of the provisions of Article 14.2 of the PPA dated 26.12.2005, the PPA is not valid and cannot be enforced. The respondents Nos. 1 to 6 submitted that the said clause deals with the conditions for enforcement of the PPA and does not say that the terms and

conditions set out in the PPA are not agreed terms. The respondents also submitted that the intention of above stated clause is that the parties will approach the Government of Karnataka and the Appropriate Commission in pursuance of the agreement reached for approval and this agreement will be enforced upon such approval. The Commission after considering the submissions of the parties and the observations of the Tribunal in its judgment dated 4.9.2012 in Appeal No. 94 & 95/2012 (BRPL Vs DERC & Another) with regard to the role of the Central Commission and the State Commission in the matter of determination of tariff of generating stations covered under Section 79(1)(a) and (b) of the Act, held that the PPA can be considered for the purpose of tariff determination only to the extent it is permissible under the 2009 Tariff Regulations. The relevant portion of the order is extracted as under:

> *"22.Therefore, it emerges from the above judgment that the tariff of the generating station of the petitioner shall be determined by this Commission in accordance with the 2009 Tariff Regulations. The State Commission will decide whether the PPA entered into between the generator and the distribution companies at the tariff determined by this Commission shall be approved or not from the point of view of deciding whether the power can be procured from other sources at a cheaper or in a more economical manner to supply the same to the concerned State. It is to be noted that Article 14.2 of the PPA does not say that the PPA is not valid, but it predicates its enforceability on the approval by the State Commission. Therefore, the PPA can be considered for the purpose of tariff determination by this Commission to the extent it is permissible under the 2009 Tariff Regulations. However, the tariff so determined will come into effect only when the PPA is approved by the State Commission and the tariff determined by this Commission is adopted under Rule 8 of the Electricity Rules, 2005."*

14. Regarding the scope of Regulation 37 of the 2009 Tariff Regulations and its applicability to the PPA dated 26.12.2005, the petitioner had submitted that the tariff of the generating station should be determined in accordance with the 2009 Tariff Regulations. The Respondents Nos. 1 to 6 had submitted that the Commission need to consider and implement the improved norms of operation as agreed to between the generating companies and the purchasers as such improved norms become the applicable norms in accordance with the provisions of Regulation 37 in place of the norms specified in the 2009 Tariff Regulations. It was further submitted that the individual aspects of tariff elements such as Capital Cost, Return on Equity, Interest on loan, Station Heat Rate, O&M expenses and Auxiliary Consumption being the improved norms as agreed to by the petitioner and the respondents have to be applied instead of the norms specified in the 2009 Tariff Regulations. Rejecting the prayer of

the respondents, the Commission observed that the norms of operation include Normative Annual Plant Availability Factor (NAPAF), Gross Station Heat Rate, Secondary fuel oil consumption and Auxiliary Energy Consumption and hence under Regulation 37 parties can agree to the improved norms of operation in respect of only these norms. It was also held that the factors like capital cost including IDC, debt equity ratio, return on equity, interest on loan and O&M charges are not covered under the norms of operation and cannot be decided by agreement between the parties and that these elements of tariff have necessarily to be decided in accordance with the provisions of 2009 Tariff Regulations. Accordingly, considering the ruling of the Hon'ble Supreme Court in PTC (I) Ltd-v-CERC & ors (2010) 4 SCC 603) that the Regulations made by the Commission in exercise of its power of subordinate legislation shall override the existing and future contracts, the Commission in its order dated 24.12.2012 held that except for the norms of operation, other elements of tariff shall be determined as per provisions of the 2009 Tariff Regulations. The relevant portion of the Commission's order is extracted as under:

> *"In view of the above judgment, the provisions in the PPA between the petitioner and the respondents shall have to confirm to the provisions of the 2009 Tariff Regulations in so far as determination of tariff is concerned. Accordingly, except for the norms of operation as stated in the preceding paragraphs, other elements of tariff shall be determined in accordance with the 2009 Tariff Regulations."*

15. The Respondents Nos. 1 to 6 in their affidavit dated 28.2.2013 has raised certain preliminary issues for consideration of the Commission as follows:

(a) There is a voluntary and duly executed PPA dated 26.12.2005 entered into between the parties which provide for various norms and parameters as provided for in the tariff regulations of the Commission. The better norms and parameters being in consumer interest and having the effect of reducing tariff ought to be given effect to. The petitioner had approached the respondents offering to establish the generating station and supply electricity with a capping of tariff as well as certain other parameters and entered in to a binding PPA.

(b) The regulatory set up and regulatory tariff determination mechanism is provided to ensure that the tariff for the consumers are regulated and not determined or allowed at a higher level than it is prudent. The consumer interest is paramount and the tariff determined should be most economical at the consumers end as per basic objective of the Act. This has been settled by the Tribunal in its order dated 3.6.2010 in NTPC-v-CERC & ors.

(c) It is not open to the petitioner to claim tariff in deviation of the agreed parameters provided in the PPA including for the reasons that the said terms may be onerous to the petitioner. There is no legal basis or equity for providing higher tariff to a generator than what he has agreed to.

The PPA cannot be reopened in a tariff determination process to provide higher tariff to the generators.

(d) The position of law is well settled that the law prohibits the generator from charging any tariff in excess of the tariff to be determined by this Commission applying the regulations. There is no prohibition to the generator agreeing to levy reduced tariff and any such agreement is binding and enforceable on the parties. It is open to the generator to agree to waive or limit the statutory rights and the norms and parameters being entitled to in tariff determination. Once, such improved norms as agreed to resulting in lower tariff to consumers, the same is valid. The Regulation 7, 37 and 38 of the 2009 Tariff Regulations of the Commission also recognise the above principle of law.

(e) Based on the order dated 7.8.2006 in Petition No. 40/2005, the petitioner entered into PPA with the respondents providing the terms and conditions for supply of electricity. In the circumstances, the norms and parameters provided in the PPA are valid and binding and enforceable. It is not open to the petitioner to claim that PPA should be ignored or otherwise it has no relevance for tariff determination.

16. The Respondent Nos. 1 to 6 vide their submissions dated 8.5.2013 have also contended that there has been no amendment or modification of the PPA or supplemental agreement signed between by the parties. Accordingly, it has been submitted that 2009 Tariff Regulations as well as the PPA dated 26.12.2005 read with Commission's orders dated 25.10.2005 and 7.8.2006 are the only documents which are binding and conclusive between the parties. The respondents have reiterated that PPA is a binding agreement between the parties and it is always open to the parties to agree to better norms and parameters as applicable, so long public interest is served. In support of the settled legal proposition on 'sanctity of contracts' (PPA), the Respondent Nos. 1 to 6 placed reliance on the judgments of the Hon'ble Supreme Court in Oil and Natural Gas Corporation Ltd [2003 (5) SCC 705], Nathani Steels Ltd -v- Associated Constructions [1995 Supp (3) SCC 324], Gherulal Parekh-v- Mahadeodas Maiya [AIR 1995 SC 781] and the judgment of the High Court of Allahabad in Ganga Singh-v-Santose Kumar [AIR 1963 All 194] and Delhi High Court in M/s Simple Concrete Piles-v-Union of India (decided on 23.2.2010). The Objector in its objections dated 11.3.2013 has reiterated that the petitioner is not entitled to any increase in capital cost than what has been granted to it by the Commission in the 'in-principle' cost and tariff beyond what is contemplated in the PPA. During the hearing, the respondent, PSPCL adopted the submissions of the respondent No. 1 to 6 on this issue. The Objector in his written submission dated 25.7.2013 has also submitted that the

petitioner is bound by the terms and conditions of the PPA dated 26.12.2005 and cannot claim any amount contrary to the PPA. It has also submitted that the petitioners have admittedly agreed on the norms specified in the PPA and as these norms provided in the PPA are more beneficial to the interest of consumers, the PPA norms should be applied as against the ceiling norms provided under the 2009 Tariff Regulations as per Regulation 37 of the 2009 Tariff Regulations.

17. The petitioner has objected to the above said submissions and has contended as under:

(a) As the respondents in its reply have accepted the increase of ₹131 crore in the capital cost, the in-principle approval granted by the Commission is not final and binding is also accepted by the respondents. The respondents have also accepted that the increase in capital cost on account of augmentation of capacity from 1015 MW to 1200 MW and that the tariff has to be determined based on norms, which are prudent, reasonable and in the interest of consumers.

(b) The respondents are owned and controlled by the GOK. The respondents not only concurred in the appointment of Justice (Retd) Gururajan Committee, but also participated in the deliberation of the Committee, filed various pleadings and made submissions. The report of the said Committee was accepted by the GOK by its order dated 25.10.2010. The GOK accorded approval for enhancement of capacity of the project and accepted the increase in the capital cost to the extent of ₹583 crore excl. IDC subject to final orders of this Commission and directed the petitioner to file tariff petition before the Commission.

(c) The respondents are now estopped from contending anything other than accepting the capital cost increase as recommended by Justice Gururajan Committee as it was based on detailed verification on the factual aspects of capital cost increase, duly accepted by the respondents. In any event, the recommendations of the Committee particularly relating to capital cost are deemed to be read into the Karnataka PPA and deemed to have been agreed to by the parties.

18. In addition to the above, the petitioner has also submitted that the PPA was signed under protest. It has also submitted that several changes to the PPA were sought by the petitioner before and at the time of signing the PPA and thereafter. The petitioner has further submitted that these changes were discussed by the petitioner and the respondents and the Govt. of Karnataka (GOK) from time to time and based on the assurances provided by the respondents

and the GOK that the PPA would be modified at a future date and on the strength of assurances that PFC had agreed to advance funds for the project, the petitioner proceeded to implement the project. It has further submitted that the Commission has to take into consideration the development of the industry, making it viable, balancing the requirement of such viability with consumer interest and not to fix tariff at artificially low levels at the cost of existence of the industry.

19. We have examined the submissions. The respondents have contended that the PPA cannot be reopened in a tariff determination process in exercise of regulatory powers since the PPA signed by the parties is based on the order of the Commission and any claim of the petitioner is contrary to public interest. In response, the petitioner has submitted that since the GOK and the respondents have agreed to increase in capital cost as per Justice (*Retd*) Gururajan Committee report, the same should be deemed to form part of the PPA. There is no denial of the fact that sanctity of contracts (PPA) are required to be maintained as a matter of public policy and public interest as is evident from the said judgments relied upon by the respondents. In our view, these judgments referred to above do not support the case of the respondents. The PPAs are not only to be governed by the provisions of the Indian Contract Act, 1872 but also by the provisions of the Electricity Act, 2003 and the Rules and Regulations made thereunder. It has been settled by the Hon'ble Supreme Court in PTC India Ltd Vs CERC (2010) 4 SCC 603) that the Regulations made by the Commission in exercise of its power of subordinate legislation shall override the existing and future contracts and the regulated entities are required to align their existing and future contracts with the said regulations. The relevant portion of the judgment is extracted as under:

> *"A regulation under Section 178, as a part of regulatory framework, intervenes and even overrides the existing contracts between the regulated entities in as much as it casts a statutory obligation on the regulated entities to align their existing and future contracts with the said regulations."*

20. Similarly, the Tribunal in Appeal No. 114/2012 (JVVNL-v- Kalpataru Power Transmission Ltd) while upholding the order of Rajasthan Electricity Regulatory Commission deciding tariff as

per Tariff Regulations, instead of the PPA entered into between the parties, has by its judgment dated 9.10.2012 observed as under:

> *"25.According to the Ld. Counsel for the Appellants, the State Commission has nullified the provisions of the PPA by not determining the project specific tariff. We find that the State Commission has given the findings following its Tariff Regulations. Regulations are subordinate legislation and their provision will prevail over the provisions of the PPA. When the Regulations specify the tariff in a particular manner, the same will prevail over the provisions of the PPA."*

21. Therefore, the provisions of the PPA need to be given purposive construction keeping in view the settled legal position as discussed above. While the petitioner and the respondents are bound by the provisions of the PPA with regard to the generation and supply of power and the timely payment made thereof, the tariff for generation and supply of power has to be determined in accordance with the regulations framed by the Appropriate Commission. It also flows from the provisions of Article 4.2 (a) of the PPA that the tariff shall be as determined by the Commission on the basis of the two part tariff structure. The said provision is extracted under:

> "*Tariff for Electricity shall be the sum of Recoverable Capacity (fixed charges), Energy Charges and Incentive payment (if any) each as calculated pursuant to this Article and as determined by the Commission on the basis of a the two-part tariff structure and shall be fixed for each tariff period and shall be in force for the period notified by the Commission. The tariff shall be calculated on the basis of the capacity contracted to the Principal buyers*."

Therefore, the Commission is required to determine the tariff of the tariff in accordance with the tariff regulations, keeping in view the provisions of the PPA.

22. Accordingly, in line with our findings in order dated 24.12.2012 on the preliminary issues raised in para 11 above and in consideration of the observations contained in the judgments of the Supreme Court and the Tribunal as referred above, we are of the considered view that the tariff of the generating station of the petitioner shall be determined by this Commission in accordance with the provisions of the 2009 Tariff Regulations. The provisions of the PPA entered into by the parties can be considered for the purpose of determination of tariff only to the extent permissible under the 2009 Tariff Regulations. As regards the submission of the petitioner that the report of Justice (*Retd*) Gururajan Committee having been accepted by the GOK and the respondents, should form part of the PPA, is concerned, the Commission during

the hearing of this petition on 9.4.2013 had directed the parties to file their submissions in terms of the regulations/PPA uninfluenced by the said report of the Committee. In compliance with this direction, the parties have filed their respective submissions which are considered by the Commission. As regards the submissions of the respondents 1 to 6 that the consumer interest is paramount and that the tariff determined should be most economical at the consumers end as per basic objective of the Act, it must be remembered that Section 61 (d) of the Act mandates the Commission to specify the terms and conditions of tariff by balancing the interest of the consumer with the reasonable recovery of the cost of electricity by the project developer and determine the tariff in accordance with the said terms and conditions. Therefore, the consumer interest cannot be achieved by not reimbursing the cost of production of electricity to the project developer. In that event, the project developer, will not be in a position to supply the power over a period of 25 years of the life span of the PPA when he is unable to recover the investment made in the project. In our view, the consumer interest is adequately protected when tariff is determined in accordance with the provisions of the 2009 Tariff Regulations which has been specified by the Commission in exercise of the power under Regulation 178 of the Act, after extensive stakeholder consultations. Accordingly, the preliminary submissions of the parties are disposed of.

Commissioning Schedule and Time Overrun

23. As per the PPA dated 26.12.2005 entered into by the petitioner with the respondent Nos. 1 to 6, the scheduled Date of Commercial Operation (COD) of Unit-I and Unit-II (507.5 MW each) was 38 months and 42 months respectively, from the effective date, which was 12 months after 26.12.2005 i.e. 26.12.2006. The schedule and the actual date of commissioning of Unit-I and Unit-II of the generating station are as under:

Units	Schedule COD as per PPA dated 26.12.2005	Date of actual COD	Time overrun
Unit-I	**26.2.2010**	**11.11.2010**	**8.5 months**
Unit-II	**26.6.2010**	**19.8.2012**	**26 months**

Submissions of the Petitioner

24. The petitioner has submitted that as per provisions of PPA, the scheduled COD of Unit-I was 26.2.2010 and Unit-II was 26.6.2010. With the enhancement of capacity from 2x 507.5 MW to 2x 600 MW, the commissioning schedule for Unit-I and Unit-II were revised to 30.4.2010 and 31.8.2010 respectively. It has also submitted that since the commencement of the project in 1994, there have been many hurdles and roadblocks which have had to be negotiated for bringing the project up to the commissioning stage. The petitioner has further submitted that despite having obtained the necessary consents and approval for development and construction of the project from various governmental agencies, including techno-economic clearance from CEA (on 29.4.1999), for various reasons beyond the control of the petitioner including lack of bankable payment security mechanism, the PPAs could not be concluded. It has been contended that the PPA entered into by the parties on 26.12.2005 was after a long delay and that various coal suppliers have withdrawn their competitive offers to supply coal due to failure to finalize the PPA or the Coal Supply Agreements. The petitioner has also stated that due to delay in payment, the EPC Contractor initially selected for the project also withdrew its offer at the agreed price and finally, in 2006, the then promoters of the project decided to withdraw from the project.

25. Accordingly, the Force majeure events leading to the delay in the completion and commissioning of Unit-I as claimed by the petitioner is as follows:

(a) Delay in land acquisition;
(b) Earthquake in China;
(c) Changes in Visa Policy;

26. The 'Force Majeure' event claimed by the Principal buyers' (*the respondents 2 to 6)* is on account of the "Delay in providing Evacuation facility" due to delay in Stage-II Forest clearance.

27. We now examine the submissions of the parties in respect of Force Majeure. The submissions of the petitioner giving reasons for the delay in the completion of project is summarised as under:

(a) Delay in land Acquisition

(i) The Karnataka Industrial Area Development Board (KIADB), a body established by the Government of Karnataka under KIADB Act, 1966 acquired the land for the project and the petitioner had deposited the amounts requisitioned by KIADB for acquisition of the land for the project and finally the land was transferred in parts by KIADB from 2007 onwards. Even then, Civil works in the power plant area could not be started because some of the land and house hold owners continued to occupy the power plant area.

(ii) Most of the land owners filed lawsuits in the District Courts of Karnataka and the High Court of Karnataka challenging the land acquisition by KIADB. In September, 2007 the High Court by its judgment declared that the land vested with KIADB irrespective of the fact whether the land losers had received compensation or not. This order was challenged before the Hon'ble Supreme Court and the same was dismissed by the Court during 2010. From November, 2007 onwards, the land and household owners of the power plant area moved out and handed over the possession of land to the petitioner. The boiler foundation works (first civil works activity of the plant) was then taken up during November, 2007 and in the period of 36 months, the applicant achieved commercial operation.

(iii) During execution of the project petitioner faced enormous delays in obtaining possession of land and non-vacation of land by land losers in spite of completion of land acquisition formalities. The lease-cum sale deed for main plant area of 420.25 acres was executed only on 27.11.2007.

(b) Earthquake in China

(i) A massive earthquake in China during May, 2008 dealt a severe blow to the project activities since boiler manufacturing facilities of M/s Dongfang Electric Corporation (DEC), who are the OEM supplier was severely affected.

(ii) DEC had notified this event of 'Force Majeure' to Lanco Infratech Limited (LITL), who are the Engineering, Procurement and Construction (EPC) contractor for the project.

(iii) An initial estimate of 6 to 8 months delay to the contracted delivery schedule was made as a result of the earthquake. LITL's assessment team was sent to DEC headquarter at Chengdu for assessing the damage and the reasonableness of the time delays.

(iv) Keeping a composite and close track on the turbine component manufacturing, the last component of turbine of Unit-I was received only by end November, 2009 and for Unit-II by

middle of July, 2010. This has resulted in the commissioning schedule of Units-I and II getting extended by six months.

(v) Force Majeure Notice was issued by UPCL to the Principal buyers (respondents 2 to 6) on 17.7.2008 requesting for four months extension to the commissioning schedule. Cessation notice of the Force Majeure event was also issued by letter dated 13.11.2010.

(vi) The Principal buyers for the first time after 38 months wrote to the petitioner that the documents enclosed with the request for Force Majeure was not sufficient to substantiate the force majeure and requested to provide necessary documentary evidence to support Force Majeure Notice. The petitioner on 27.7.2011 enclosed hard copy of the presentation showing the impact of the earthquake which affected equipment delivery. However, Principal buyers have not accepted this force majeure till date.

(c) Changes in Visa Policy

(i) Due to changes in Visa policies of the Govt. of India, Chinese experts working at the project site left India during the period between July, 2009 and October, 2009 and it was only after making vigorous efforts that the Chinese experts started obtaining Visas from November, 2009.

(ii) At this stage, pre-commissioning activities were in full swing and around 65 experts were required to be present at the site for this purpose. In November,2009 only 4 experts were issued Visas, and gradually the number was increased to 12 in December, 2009, 30 in January, 2010, 45 in February, 2010 and the required number of 65 experts were present only in May, 2010 to re-commence the work.

(iii) Since, the equipment is being supplied by DEC, it needs to be installed under the supervision of DEC Engineers failing which the warranties provided by DEC for the performance of the equipment will be rendered invalid. Therefore, the petitioner had no alternative but to wait for the return and resumption of work by Chinese Engineers. The petitioner was compelled to declare force majeure event both under the PPA as well as the Coal Supply Agreements entered into by it.

(iv) Due to absence of Chinese experts for erection supervision as well as supervision during commissioning stage, it was not possible to proceed with construction and commissioning in critical areas like Air Pre-heaters, Fans (ID, FD, PA), Critical piping, Burner Management system, Turbine Governing system, TG tube oil system etc., As a result various pre-commissioning activities remained pending and consequently subsequent activities were delayed. Even on gradual return of Chinese experts from

November, 2009 onwards when the issue was partially addressed, works on all the fronts could not be opened simultaneously to minimise delays. Thus, absence of Chinese experts during peak project activities has had a direct impact on project progress leading to an overall delay of more than 6 months. Chinese experts were made available to Unit-II only after Unit-I activities achieved significant progress. Also, various sub-contracting agencies started de-mobilising from site as sufficient erection fronts were not available to them due to the delays and re-mobilisation of these agencies at site required special efforts.

(v) The original schedule for Unit-I envisaged Boiler light up in November,2009, synchronization in January,2010 and Commercial Operation in April,2010. Boiler light up involves the convergence of completion of erection, testing and commissioning of a number of equipment's and systems, and it was during this critical period that Chinese experts were compelled to leave the project site. As a result of the above mentioned delays, synchronisation of the Unit-I was achieved only on 18.7.2010 and after completion of all tests as per PPA, Unit-I was declared under commercial operation on 11.11.2010.

(vi) Activities of Unit-II were originally planned to occur within a gap of 4 months from Unit-I and upto July, 2009 the progress was according to schedule. It was during July, 2009 when the project activities were at its peak, the Chinese experts were asked to leave. Due to this most of the construction activities for Unit-II scheduled during July, 2009 to December, 2009 got delayed and piled up. Major activities which got delayed are Boiler Structure and Pressure Parts, ID, FD and PA Fans, ESP and Turbine. Inspite of the bottlenecks, Unit-II was ready for synchronisation in January, 2011.

(vii) Force Majeure notice was issued to the Principal buyers on 26.12.2009 after attaching all the documents. The petitioner further issued cessation notice of the force majeure event by letter dated 13.11.2010 seeking force majeure for 8 months, enclosing the documents which the Principal buyers requested the petitioner during June, 2010 for the documents. During August 2011, the Principal buyers rejected the claim on this count.

(viii) As a result of the above mentioned delays, synchronization of Unit-I (600 MW) could be achieved only on 18.7.2010. UPCL had declared commercial operation of Unit-I on 11.11.2010 after completion of all tests as per PPA.

(d) Delay in providing Start up power and Evacuation facility

(i) Despite making substantial progress after overcoming outside interference, the commissioning activities for Unit-I and erection works for Unit-II got hampered due to non–readiness of 220 kV transmission lines for provision of start-up and pre-commissioning

power to the plant, which was the responsibility of respondent Nos.1 to 6. As against the project requirement of March, 2009, these lines were made available only in September, 2009 causing 6 months delay. This has resulted in significant overrun charges and claims. Had the 220 kV line been constructed in a timely manner, the delay in commissioning of plant could have been avoided.

(ii) Power from Unit-I was being evacuated at 220 kV which was up-rated by Karnataka Power Transmission Corporation Limited (KPTCL) from a carrying capacity of 325 MW to 600 MW on 18.6.2010 after getting the required approval from Chief Electrical Inspector, GOK. Hence, it is clear that Principal buyers of power were not ready to accept power from Unit-I before 18.6.2010.

(iii) Despite several obstacles due to which the schedule for commissioning of project got extended due to reasons beyond the control of the petitioner, the petitioner put in best efforts and continued with the project. Unit-II was ready for synchronisation in January, 2011 and was actually synchronised with the grid on 7.3.2011 due to delay on the part of the principle buyers in giving consent for synchronisation. Even though Unit-II reached full capacity on 16.4.2011, determination of COD for Unit-II was pending for want of 400 kV transmission lines.

(iii) Karnataka Power Transmission Corporation Ltd (KPTCL), the agency responsible for installing the transmission lines in the State of Karnataka and 400 kV transmission lines between the petitioners' generating station and Shantigrama, Hassan Inter State Transmission System of Power Grid Corporation Limited (PGCIL) (on behalf of the respondent Nos. 1 to 6), communicated an occurrence of an event of Force Majeure on 7.3.2011, intimating the petitioner the delay in obtaining environmental clearance from the Ministry of Environment & Forests (MOEF), Government of India. This was supplemented with copies of documents in support of their claim by a communication dated 12.5.2011.

(iv) Further, KPTCL informed the petitioner vide its letter dated 1.10.2011 that the clearance of MOEF for Stage-II was expected by 2nd week of October, 2011 and with this 400 kV transmission lines was expected to be commissioned by end of February/March,2012. Accordingly, the petitioner had considered the COD of Unit-II as April, 2012 for computation of fixed charges in the tariff petition.

(v) The petitioner had communicated to the Chief Electrical Inspector to the GOK on 15.4.2009 that the Switchyard was ready. Further, LITL issued notice to petitioner on 3.3.2009 about non-availability of start-up power at site which was required by January,

2009. The petitioner had been reminding the respondents from time to time about the delay in making available the lines for start-up power.

(vi) In a meeting held on 7.7.2009, under the Chairmanship of the Minister for Energy, GOK, the matter was discussed when the respondent explained the reasons for delay in making the line available for start-up power. The documents establish the delay in making available the 220 kV line by respondents.

(e) Delay on account of augmentation of capacity

As per provisions of the PPA entered into between the parties, Unit-I (507.5 MW) was scheduled to achieve COD by 26.2.2010 and Unit-II (507.5 MW) by 26.6.2010.With the enhancement of capacity from 1050 MW (2 x 507.5 MW) to 1200 MW (2 x 600 MW), the commissioning schedule for Unit-I was revised to 30.4.2010 and Unit-II to 31.8.2010. Due to aforementioned delays, breaches and Force Majeure events, the commissioning activities got further extended.

28. Accordingly, the petitioner has justified the delay in the commissioning of the project leading to time and cost overrun on account of the above 'Force Majeure' events and has submitted that the same is not attributable to it and accordingly be allowed.

Submissions of Respondent Nos. 1 to 6

29. The respondent No.1 in its objections vide affidavit dated 19.1.2012 has submitted that as per terms of the PPA under Article 2.A.5. l (i), the Scheduled COD of Unit-I would be by end of the 38th month from effective date and that of Unit-II would be end of 42nd month from effective date. It has also submitted that one of the condition precedent in the PPA is the signing of EPC contract which happened on 26.12.2006 and thus, the effective date as per PPA would be 26.12.2006. Accordingly, the respondent has submitted that COD of Unit-I should have been within 38 months (26.2.2010), but the same had achieved COD on 11.11.2010. It has also submitted that Unit-II should have been declared COD within 42 months from the effective date (26.6.2010) and since the petitioner has not adhered to the conditions stipulated by the Karnataka Pollution Control Board (KPCB), the COD of Unit-II has not been achieved.

30. The Respondents 1 to 6 have claimed Force Majeure events leading to delay in the project and has submitted in the objections vide affidavit dated 19.1.2012 that as per provisions of the PPA, the following evacuation scheme have to be provided by the Principal buyers:

(a) 400 kV D/C lie from the project switchyard connecting to Hassan for power evacuation;

(b) Two nos. 220 kV D/C lines for inter connecting from the project switchyard connecting with the 220 kV switchyard of KPTCL at Kenar and Kavoor.

Delay in providing Start up power and Evacuation facility

31. It has been submitted that a Bulk Power Transmission Agreement was entered into with Karnataka Power Transmission Company Ltd (KPTCL), a State Transmission Utility, for providing the above evacuation scheme and the completion of 400 kV D/C line by KPTCL from the project switchyard to Hassan was delayed for want of Stage-II clearance from Ministry of Forests & Environments (MOE&F), Govt. of India. It has further submitted that as obtaining Forest clearance by KPTCL was beyond its control, KPTCL on behalf of the distribution companies of Karnataka, invoked 'Force Majeure' event on 7.3.2011 on the petitioner under Article 10 of the PPA dated 26.12.2005. It has clarified that Stage-II clearance was yet to be received. The submissions of the respondents are summarised as under:

(i) The allegations made by the petitioner that there was a delay in providing Start-up power by the respondents leading to the delay in completion of the project is also without any merit. As per the contract entered into between LITL and petitioner, the Start-up power has to be arranged by LITL. There is no provision in the PPA entered into between the parties specifying any obligation on the part of the respondents to provide the Start -up power by a specific date.

(ii) The contract entered into by the petitioner with the LITL clearly provides that the fuel and electricity for start-up power are to be provided by the petitioner at its cost. It is, therefore, the obligation of the petitioner to provide the Start-up power by making necessary arrangements by obtaining the same from the respondents. Failure on the part of petitioner (switchyard of the petitioner was not ready for receiving start-up power) to make necessary arrangements for receiving start up power can not entail the petitioner to claim any obligation on the part of the respondents to provide the Start-up power.

(iii) The bidding documents now made available by the petitioner clearly provides that it is the

duty and obligation of the bidder to arrange for the alternative start up power at its own cost and expense. When such a clause is provided, namely the obligation is placed by the petitioner on the EPC contractors, the claim now made by the petitioner against the respondents is clearly misconceived and false.

(iv) In any event, the switchyard of the petitioner was itself not ready for receiving start-up power as is evident from the following:

(a) 3.3.2009: The petitioner requested the Chief Electrical Inspector for approval of drawings of the 220 kV switchyard and station transformer of the petitioner.

(b) 2.4.2009: The Chief Electrical Inspector communicated approval for the drawings.

(c) 5.8.2009: Upon construction of the switchyard, the petitioner requested the Chief Electrical Inspector for inspection of switchyard. Thus, before August, 2009 even the basic construction of the switchyard was not complete. Upon inspection, the petitioner was required to submit a compliance report to the Chief Electrical Inspector.

(d) 9.9.2009: The petitioner submitted the compliance report.

(e) 14.9.2009: The Chief Electrical Inspector accorded provisional approval for the 220 kV Switchyard granting two months' time to the petitioner for attending the observations and seeking regular approval.

(f) 22.9.2009: KPTCL 220 kV line was charged by the licensee for providing start up power to the petitioner.

(v) In terms of the above, there is no merit whatsoever in the claim of the petitioner that it was not supplied start up power and because of this reason the commissioning of the generating station was delayed.

(vi) While it is correct that the evacuation facilities are the responsibility of the answering respondents and the same was delayed on account of force majeure condition, namely, the non-availability of forest clearance in a timely manner despite due application having been made and all conditions being fulfilled, the delay in the commissioning of the generating unit by the petitioner was not on account of the delay in the evacuation facilities which would be clear from the following:

(a) Under the PPA, the Unit No. II was to be commissioned by 26.6.2010. Even as per the amended EPC contract of the petitioner, the Unit No.II should have been commissioned by 24.8.2010. This is without admitting that the extension in the EPC contract has any bearing to the PPA between the parties. Thus, in any event there is a delay from June, 2010 to August, 2012 which is to the account of the petitioner.

(b) There was an existing 220 kV line which was evacuating power from Unit No. I on which the petitioner was entitled to synchronize the Unit No. II and declare the same for commercial operation. Even otherwise, in terms of clause 2.A.5.3 of the PPA, it was always open to the petitioner to nominate a reputed engineering firm to certify that the generating unit is technically capable of achieving commercial operation and that the commercial operation has been delayed due to the failure of providing transmission facility by the answering respondents. The above was not done by the Petitioner.

(c) On the other hand the petitioner on 20.4.2011 and 3.5.2011 proposed to conduct the initial capacity test in the first week of May, 2011 in the presence of NTPC consulting wing as independent observers.

(d) One of the primary statutory clearances to be taken by the petitioner was from the KSPCB after satisfying all requirements from the environmental point of view and after fulfilling all the conditions placed for pollution control. The consent for operation i.e. approval was given to the petitioner for capacity test for Unit No. II only on 1.7.2011 by the KSPCB. Thus, admittedly under no circumstances could the petitioner became ready to synchronize or commission the Unit No.II at any time prior to 1.7.2011.In the circumstances, the claim of the petitioner that the unit was ready for commissioning and commercial operation prior to 1.7.2011 is patently wrong.

(e) The petitioner sought approval of respondents for carrying out commissioning tests for Unit II by suppressing the directions issued by KSPCB relating to environmental issues. This clearly shows that the petitioner has misguided two different State Government entities. The petitioner cannot take advantage of its own defaults and actions which clearly lack bona fide.

(vii) Karnataka State Pollution Control Board (KSPCB) in their letter dated 6.4.2011 (enclosed by petitioner as a part of Annexure -RK 18) addressed to the petitioner have issued directions that the 2nd unit of 600 MW shall not be commissioned without complying to the directions brought out in their letter. KSPCB has also directed the petitioner to submit action plan within

15th April 2011. From the Terms and Conditions of Annexure -RK 6 issued by KSPCB vide letter dated 18.8.2010, it is noticed that:

(a) The consent is valid for 2x600 MW for the period 1.7.2010 to 30.6.2011.

(b) For renewal of consent, the petitioner has to file an application at least 120 days prior to expiry of consent.

(c) The petitioner has to comply with consent conditions and furnish report within 30 days.

(viii) As per above, the petitioner ought to have filed application for renewal on or before 1.3.2011. However, the petitioner filed the application only on 23.3.2011. Further, the petitioner has furnished compliance report to KSPCB only on 25.2.2011 as against a stipulated date of 18.9.2010. This clearly indicates that the petitioner has violated the stipulated terms and conditions of KSPCB.

(ix) Even as on 17.5.2011, the petitioner did not adhere to the directions of KSPCB regarding fly ash utilization and has failed to submit action plan and risk analysis (enclosed as Annexure RK18 by petitioner).

(x) KSPCB has also objected that the petitioner has synchronized the 2nd unit of 600 MW capacity inspite of the directions issued on 7.3.2011. Responding to this, the petitioner representatives informed that both units are operating with a view to meet eventuality of power demand and total power generation will not go beyond 600 MW at any point of time due to eviction problem.

(xi) KSPCB observed that, the petitioner is slow in implementing consent conditions and directions / instructions issued by KSPCB from time to time. The petitioner is yet to submit time bound action plans even after stipulated time.

(xii) The petitioner vide letter dated 13.4.2011 (Annexure RK 18) addressed to KSPCB have themselves informed that the power generation will be restricted either from Unit I or Unit II. As such, fly ash generation will be limited to one unit quantity. This clearly indicates that the petitioner was intending to operate only one unit at a point of time, since their ash pond was not ready to handle ash utilization for both the units together. Thus, the petitioner was not permitted and could not have operated both units even if the evacuation facilities were provided. Thus, the contention of the petitioner that carrying out of reliability tests for Unit II scheduled during May, 2011 was prevented by respondents, is baseless and far away from truth.

(xiii) Further, the allegation made by petitioner that even during July 2011, respondents prevented the petitioner for carrying out reliability tests for Unit II is baseless for the following:

(a) Even though KSPCB vide their letter dated 1.7.2011 accorded no objection for carrying out capacity test of unit II, KSPCB vide their letter dated 2.7.2011 withdrew the no objection granted vide letter dated 1.7.2011 on account of the fact that the petitioner had defaulted in complying with the conditions stipulated by pollution control. On the other hand, the petitioner was advised to comply with all the conditions stipulated by KSPCB and obtain consent for operation before commissioning of Unit II.

(b) In response to petitioner's request for witnessing of capacity tests in respect of Unit II during July 2011, the petitioner was requested on 24.6.2011 for providing NOC obtained from KSPCB, since KSPCB had instructed that Unit II of 600 MW of the generating station shall not be commissioned without complying with the directions of KSPCB.

(c) In view of withdrawal of NOC by KSPCB, the request of petitioner to depute officers to witness capacity tests for Unit II during July. 2011 does not arise. The same was also informed to petitioner on 2.7.2011. Such being the case, the contention made by the petitioner that the respondents prevented the petitioner from carrying out reliability tests for Unit II scheduled on 4.7.2011 onwards is baseless.

(xiv) The petitioner has chosen to operate only one unit at a time to offset his default in construction of ash pond and not due to non readiness of 400 kV evacuation line by the respondents.

(xv) For the above reasons, the respondent denies to the averments made by the petitioner that they have adhered to the conditions stipulated by KSPCB. The contentions of the petitioner that the respondents have resorted to unjustified claims are wrong and are denied.

(xvi) Even as on 17.5.2011, the petitioner had not adhered to the directions of KSPCB regarding fly ash utilization and failed to submit action plan and risk analysis. It is also contradictory to their own statement that they still require 60 days of time after completion of 400 kV line for declaration of COD of Unit II. The contention of the petitioner that Unit II was ready for commissioning during January, 2011 is far away from truth, as is evident from KSPCB's letter dated 2.7.2011 as on the said date also, the petitioner has not adhered to the stipulated conditions. In the circumstances, the petitioner was not in a position to Commission the generating station even in July, 2011.

(xvii) If the contention of petitioner that Unit II was ready for commissioning from 1.1.2011 is accepted then the unit II must have synchronized much prior to 1.1.2011. However, in the instant case Unit II was synchronized only on 7.3.2011.

(xviii) Since, the petitioner has not adhered to the conditions stipulated by KSPCB, which is a nodal agency in the State of Karnataka for overseeing the prevention and control of pollution, the Commission may make KSPCB as another respondent.

(xix) Further, KPTCL, a State Transmission Utility has every right to refer the matter to any agency for assessing the technical stability of the grid. Based on the CPRI report, petitioner was advised on 4.3.2011 to synchronize unit II and allowed to generate power to an extent of 80 MW initially with the unit I also being in operation. If the claim of the petitioner is bona fide, it would have commissioned the same and then claimed relief for deemed generation.

(xx) In any event, the contention of the petitioner that unit II was ready for achieving COD during March 2011 is incorrect, since the petitioner does not have a valid NOC from KSPCB for commissioning unit II as is evident from KSPCB's letter dated 6.4.2011.

(xxi) On 2.7.2011 after reviewing the compliances made by the petitioner on the environmental aspects, the Pollution Control Board came to the specific finding that the petitioner had defaulted on the compliances on various provisions and conditions. A detailed list of non-compliances by the petitioner was specified by the Pollution Control Board and in the circumstances the no objection given for commissioning of Unit II was revoked till full compliance by the petitioner.

(xxii) This was only on account of the default on the part of the petitioner as is evident from the communication of the Pollution Control Board. If the petitioner has defaulted on its obligations, the consequences of the same should also be only that of the petitioner. The claim of the petitioner that the synchronization and commercial operation could not be achieved because of the non-availability of 400 kV line to be constructed by the answering respondents is clearly wrong and misleading as is evident from the communications of the Pollution Control Board, the non-invocation of Article 2.A.5.3 by the petitioner for deemed commercial operation and also the important fact that when the commercial operation was finally declared for the Unit No. 2 on 19.8.2012 after compliance with the conditions laid down by the Pollution Control Board, the commercial operation was declared in the absence of the 400 kV line and on the existing 220 kV which was in existence much prior to the year 2011. It is to submit that Unit No. II was synchronized with KPTCL grid on 220 kV line and not on the 400 kV line.

(xxiii) In the circumstances, when the petitioner was in a position to synchronize and declare commercial operation on the existing 220 kV line, there was no question of the petitioner now claiming that the commercial operation could not have been declared by the petitioner in the absence of a 400 kV line. The 400 kV line was only required for evacuating the full load from both the generating units and did not in any manner prevent the petitioner from synchronization and declaring commercial operation of the unit No. II In case the petitioner was acting in a bona fide manner and was actually ready to synchronize and declare commercial operation of the Unit-II after fulfilling all its obligations, the petitioner could have done the same in the year 2011 itself. In the circumstances, the claim of the petitioner for IDC for the delay in commissioning of the Unit-II is also baseless and liable to be rejected.

32. In response to the 'Force Majeure' events claimed by the petitioner, as above, the respondents 1 to 6 has submitted as under:

Earthquake in China

(i) As per provisions of the PPA, under Article 10.4, the party having invoked such event of force majeure as a cause for such delay shall submit to the other party reasonable proof of the nature of such delay and its effect upon time of performance following the termination of such event of force majeure.

(ii) The petitioner has failed to adhere to the said provision as the cessation has been informed much later after its occurrence i.e on 13.11.2010. This clause has been invoked as an afterthought.

(iii) As per the supply contract entered into between M/s NPCL (*now UPCL*) and LITL on 24.12.2006, the commissioning schedules for Unit-I was 34 months i.e. 24.10.2009 and for Unit-II was 38 months i.e. 24.2.2010, As per PPA dated 26.12.2005, the commissioning schedules for Unit-I was 38 months i.e. 26.2.2010 and for Unit-II was 42 months i.e. 26.6.2010. Even though LITL vide letter dated 12.7.2008 informed the petitioner that due to earthquake in China, the commissioning schedules shall have to be postponed by four months time, the changes were not effected in the amendment to the supply contract dated 3.10.208 entered into between the petitioner and LITL.

(iv) At the outset, any event affecting DEC or any other supplier of equipment or service provider to LITL cannot be said to be a Force Majeure covered under Article 10 of PPA. Such persons or concern are not the affected parties as recognized under Article 10.1 of the PPA. The respondents as well as the petitioner herein are not concerned with the Force Majeure

events of sub-contractor/sub-suppliers. It is the responsibility of LITL to arrange the completion of the project at its cost and within the time frame stipulated.

(v) The Force Majeure conditions can be only those governed by the PPA between the parties. There is no independent force majeure clause apart from the Force Majeure clause contained in Article 10 of PPA. The only extended force majeure event is contained in Article 10.1 (b) which provides for the force majeure conditions affecting the contractor/supplier of the petitioner to be a force majeure of the petitioner.

(vi) In the present case, neither the petitioner nor the EPC contractor of the petitioner, namely, LITL were affected by the earthquake in China or the alleged visa restrictions. Both the petitioner and LITL are Indian Companies. The petitioner has a contract only with the LITL. It is the LITL to supply the requisite boilers and equipment's etc, to the petitioner. The contractor of the petitioner has chosen to procure the equipment's from a company in China. There is no privity of contract between the petitioner and the sub-contractor of LITL, leave alone any privity of contract between the respondents and the company in China.

(vii) The above is particularly so when the petitioner given the EPC contract to its sister concern. It is not open to the petitioner to now claim that its own sister concern is not liable to fulfil the EPC contract because its sub-contractor is claiming force majeure.

(viii) It is not open to the petitioner to claim that additional cost and expenses is to be allowed on account of factors allegedly affecting the sub-contractors. The petitioner is blowing hot and cold with the object of increasing the capital cost for its own profit and profit of its sister concern at the cost of the respondents and the consumers at large.

(ix) Without prejudice to the above, the claim made by the petitioner that the completion of the project was affected by Force Majeure of earthquake in China is wrong for following reasons:

(a) The earthquake in China was in the year 2008. The amendment agreement to the supply contract was signed by LITL with petitioner on 3.10.2008, which was subsequent to the earthquake did not make any change in the commissioning schedule of the plant for Unit-I and Unit-II. If DEC was affected by earthquake in 2008 leading to delay in completion of contract, it would have specifically raised the issue with LITL and would not have committed to the scheduled COD.

(b) The petitioner submitted DPR for augmenting the plant capacity from 1015 MW to 1200 MW and sought two months extension of time for two months for commissioning both units by communication dated 8.6.2009, which is much after the earthquake in

China. Accordingly, the earthquake was not a cause for the delay in completion of the project.

(c) The petitioner had Fuel Supply Agreement (FSA) with 4 coal suppliers viz., M/s. PT Adaro, M/s PT Indominco, M/s. Glencore and M/s. Aditya. This FSA provided for a commitment on the part of the petitioner to take fuel latest by 31.12.2009 i.e the commissioning of the power plant should not be earlier than 1.1.2009 and not later than 31.12.2009. The FSA were terminated by the fuel suppliers on account of delay in the commissioning of the generating station by the petitioner. The petitioner did not even claim the earthquake in China as a force majeure condition against the fuel suppliers due to which the project was delayed as contended by the petitioner. If China earthquake was a Force Majeure event affecting the petitioner, the petitioner would have made some claim with the Fuel Supplier instead of allowing the Fuel Supplier to terminate the contract for fuel supply on the ground that the project is not commissioned by the date set-forth. The petitioner did not raise the issue of earthquake in China as a Force Majeure event with the Fuel Supplier for the delay in commissioning of the generating station.

(d) The petitioner is guilty of unilaterally terminating the contracts with M/s BHEL, Simplex and Navyuga and awarding the contract to LITL. The process of the purported International Competitive Bidding held to select LITL was farce. The petitioner, therefore, has to take the liability for all consequences arising out of the above imprudent and improper act. Had the contract continued with BHEL, Simplex and Navyuga, the issue of Force Majeure would not have arisen. The petitioner has brought upon the above situation by its own doing and, therefore, cannot make the respondents or the consumers in the State liable or responsible for payment of any consequential additional cost. The petitioner cannot now allege the Force Majeure event of the supplier of equipment as a ground for claiming Interest during Construction or additional cost.

(b) Change in Visa Policy

(i) The petitioner's contract was initially with M/s BHEL, M/s Simplex and M/s Navyuga. The petitioner unilaterally changed the contract to LITL by doing a purported International Competitive Bidding which was farce. In any event, LITL is an Indian Company. Neither the petitioner nor the respondents is concerned with the manner in which LITL organizes the construction of the Power Plant. The restriction of Visa applicable to Chinese workers does not constitute a Force Majeure event. It was open to LITL to arrange for the work force in India. The Force Majeure event by a sub-contractor cannot be a ground to release LITL from its obligation or otherwise allow any increase in the cost. Even assuming but not admitting on the force majeure, there shall not be any financial implications on either of the parties due to force

majeure events, instead, only the commissioning time shall get postponed. These are all bilateral issues to be sorted out by the petitioner and LITL and between LITL and Dongfang. In this regard this Commission has consistently taken the view that contractual issues between a generating company and its contractor are bilateral issues and cannot be treated as a pass through in the tariff.

(ii) Even on merits, the claim of the petitioner that there were visa restrictions hampering the entry of foreigners for the establishment of the generating station is incorrect. The Government of India only specified that unskilled and semi-skilled workers should not be brought from outside India when there is large number of labour force available in India. The visa was to be granted for skilled and qualified professionals up to a particular limit and even for additional skilled workers the details were required to be forwarded to Government of India to justify the requirements. The claim on account of alleged visa restrictions was also not accepted by the fuel suppliers of the petitioner as a force majeure condition and the fuel supply agreements were terminated for delay of the petitioner to Commission the generating station in time.

(iii) The onus of establishing each and every element of alleged force majeure condition including the actual number of employees allegedly falling short on account of visa restrictions, the fact that the petitioner could not find equivalent workers in India to undertake the task etc is on the petitioner. Merely by stating that there were visa restrictions, there can be no claim maintainable for additional costs by the petitioner.

(iv) Without prejudice to the submissions that it was for the EPC contractor of the petitioner to take adequate steps to ensure adequate manpower and any issues if any are between the EPC Contractor and its sub-contractor, it is submitted as under:

(a) The provisions regarding guidelines of granting employment visas by Ministry of Labour and Employment, Government of India stipulates that employment visa for foreign personal coming to India for execution of project/contracts may be granted by Indian Missions to highly skilled and professionals to the extent of 1% of total persons employed on the project or maximum of 40 persons for power projects.

(b) Letter dated 19.11.2009 of LITL addressed to Consulate General of India, Guangzhou indicates that 1% of total staff in the petitioner's project is 70 in number. For 13 number of staff, visas had already been obtained. For 26 numbers, visa has been applied for and for 46 number of more personnel, request for visa was made. Thus, the total number of visas works out to 85 even as per the admission of the petitioner.

(c) However, in another letter dated 29.10.2010 of LITL addressed to the petitioner, LITL has indicated that due to change in capacity augmentation, the strength of Chinese experts was increased from 40 to 65 in number.

(d) It is also not clear whether the Chinese expert for the petitioner project is 70 or 17 or 85 or 65 in number. As per the guidelines of Government of India, maximum number of foreign highly skilled experts should be 40 in numbers. However, in case the number exceeds 40, clearance of Ministry of Labour and Employment, Government of India is required. There is no evidence that the clearance has been obtained from Ministry of Labour and Employment, Government of India, since the number of Chinese experts for the petitioner's project exceeds 40. If so, what was the constraint in increasing the number of workers.

(e) The petitioner was requested on 25.6.2011 for providing the details of technical qualifications and skills and the nature of specialized job the personnel are required to perform on the Petitioner's project alone. By their letter dated 27.7.2011, the petitioner furnished certain details, which were not adequate or sufficient and not accepted by the respondents.

(f) On 27.1.2012, the petitioner again requested for re-considering the respondents decision on Visa policy. No new details were provided by the petitioner and the same was not acceptable to the answering respondents.

(g) In the circumstances mentioned above, the earthquake in China and the alleged visa restriction imposed by the Government of India on Chinese citizen cannot be construed as an event of Force Majeure or otherwise give any right to the petitioner to claim any extra capital cost for the purpose of tariff. The delay in the commissioning of the plant is clearly attributable to the petitioner.

(h) Assuming but not admitting to the above, the provisions of Article 2.A.5.3 of PPA provides that the commissioning period shall be extended for force majeure events. However, the IDC shall be allowed for capitalization in the capital expenditure only upto scheduled COD.

Augmentation of capacity of the project

(i) There is no justification for increasing the time schedule for augmentation of the capacity from 507.5 MW to 600 MW as it is evident that the petitioner was always prepared for a 600 MW capacity since 507.5 MW was not a standard size.The approval was also accorded by GOK for enhancing the plant capacity subject to provisions of original PPA.

(ii) Inspite of earthquake, the petitioner has sought extension of only 2 months that too for implementing augmented capacity. On the other hand petitioner has informed that no gestation period is required for implementing the augmented capacity, since Dongfang is offering their standard steam generator and turbine generator modules of 600 MW capacity instead of 507.5 MW.

33. Accordingly, the respondents 1 to 6 have submitted that there can be no question of any 'Force Majeure' events claimed by the petitioner for the delay in the commissioning of the Units and for seeking any additional costs and expenses from the respondents and the consumers at large.

Analysis and Decision

34. As per Article 2.A.5.1 of the PPA dated 26.12.2005 the term "Commissioning" has been defined as follows:

> *" The Seller shall use all reasonable efforts to cause the Commercial Operation Date to occur on or before the date set forth below:*
>
> *The Scheduled Commercial Operation Date of the first unit of 507.5 MW will be the end of 38th month from the Effective Date and that of the second unit of 507.5 MW will be the end of 42nd month from the Effective Date.*
>
> *If the Commercial Operation Date does not occur on or before the above mentioned date from the Effective date , then the Seller shall pay to the Principal Buyers a penalty of ₹30000 per day ……..*
>
> *The Seller shall, prior to 120 days of the Commercial Operation Date of unit, furnish a schedule of expected dates of Commissioning and capacity testing as per Article 2A."*
>
> ***Definition of Effective Date***;
>
> *" Effective Date" means the later of the date of execution and delivery of this Agreement or the date on which each of the conditions precedent set forth in Article 2A is satisfied which in no case shall be greater than 1 year from the date of execution of this Agreement.*
>
> ***Article 2.A.2 Conditions Precedent to the Sellers obligation***
>
> *The obligation of the Seller under this agreement is contingent upon compliance of the following;*
>
> *The Government of Karnataka shall have executed and delivered the Seller the GoK Guarantee and the guarantees are valid and enforceable;*
>
> *The Seller shall have obtained all necessary Legal Approvals required for the construction, execution and operation of the Unit, and any other Legal Approvals otherwise necessary for the Seller to perform its obligations under implementation contracts, either unconditionally or subject to conditions which do not materially adversely after the Seller, including its ability to perform its obligations under each of the Contracts.*
>
> ***Occurrence of Finance closing Date***.
> *Signing of engineering, procurement and construction (EPC) contact by the Seller*.

35. However, as per PPA dated 29.9.2006 with the respondent PSPCL, the effective date is for computation of commissioning schedule after satisfying the condition precedent as set forth in Article 2A is 26.12.2006. It is noticed that the EPC contract for main plant supply, civil works services, etc. were placed on 24.12.2006. However, due to various litigations before the District Courts and the High Court of Karnataka, challenging the land acquisition by KIADB and transfer to developer of the project, the first civil works (Boiler foundation works) in the power plant area could only start during November, 2007.

36. Based on the submissions of the parties and the available documents, the delay in the declaration of CODs of Unit-I and Unit-II are detailed as under:

	Start Date	**Schedule COD**	**Actual COD**	**Time overrun**
Unit-I	26.12.2006	25.2.2010	11.11.2010	8.5 months
Unit-II	26.12.2006	25.6.2010	19.08.2012	26 months

37. The delay in the declaration of COD of Unit-I and Unit-II are on account of the following reasons:

Sl No.	**Reasons for delay**	**Start Date**	**Period of Delay**
1.	Land Acquisition	November, 2007	11 months
2.	**Force Majeure**		
(i)	Earthquake in China	May,2008	4 months
(ii)	Change in Visa Policy	July,2009 ,	6 months
3.	Non readiness of 400 kV Transmission line	16.4.2011	16 months

38. We now examine the various reasons as above for the delay in completion of project in the light of the submissions of the parties and the provisions under the PPA entered into between them, as under.

Delay in Land Acquisition

39. It could be observed from the above tables that though the effective date was 26.12.2006, due to land acquisition problem the petitioner had to lose 11 valuable months at the start of the commissioning work. The respondents have also not denied this fact of delay in handing over the land to the petitioner. Accordingly, we find that the delay in acquisition of land by the petitioner was beyond their control and hence not attributable to them. Accordingly, the

time over run of 8.5 months for Unit-I is allowed as the same is not be attributable to the petitioner. In view of this, the increase in IEDC, IDC and FC due to delay of Unit-I has been allowed.

40. Unit-II of the generating station has been declared commercial on 19.8.2012 which is about 26 months delay from the schedule COD of 25.6.2010 of the generating station. As in case of Unit I, Unit II is equally affected due to delay in land acquisition by the State Government and therefore, the loss of 10 months due to litigation in land acquisition has been considered as beyond the control of the petitioner and is allowed. Accordingly, the actual delay in COD of Unit-II of the generating station works out to 16 months only.

Earthquake in China and Change in Visa policy

41. The petitioner has claimed Force Majeure due to Earthquake in China resulting in extension of schedule by four months and also due to Change in Visa policy by the Govt. of India leading to withdrawal of the Chinese personnel working in Indian projects, which had impacted the critical activities at site not being carried out thereby resulting in extension of schedule. The respondents 1 to 6 have denied the existence of force majeure on account of earthquake and have submitted that the contract of the petitioner is with LITL and the earthquake affecting the Chinese supplier of LITL has no relevance. It has also submitted that there is no privity of contract between the petitioner and Chinese supplier and extension of four months' time had not been sought by the petitioner due to earthquake while providing the DPR for expansion of project. In response, the petitioner has submitted that the earthquake in China has directly impacted the EPC contract and the petitioner since the main plant package for the project was imported from China, which fact was within the knowledge and approval of the respondents. The petitioner has submitted that since the respondents have not disputed the occurrence of earthquake in China, which has affected the equipment supplier facilities the delay on account of earthquake may be condoned and IDC and IEDC for the said period may be allowed. Similarly, the petitioner has submitted that the change in visa policy by GOI leading

to withdrawal of Chinese personnel working in projects, introduction of new category of Visa and imposition of restriction on the number of Chinese personnel to be permitted to work in Indian projects are also events which affected the execution of the projects and such events were beyond the control of the petitioner. The respondents have submitted that the claim should not be allowed as there is no privity on contract between the Chinese supplier and petitioner. It has also been submitted that the permission was available for Chinese personnel to work on site and there was no total prohibition. In response, the petitioner has submitted that the Change in visa policy is beyond the control of the petitioner which had a direct impact on the critical project activities that required the presence of Chinese personnel. It has also submitted that the GOK and the respondents had themselves accepted that the project was impacted by the change in visa policy.

42. We have examined the submissions of the parties. The question for consideration is whether the claim of the petitioner that the Earthquake in China and the Change in Visa policy leading to delay in completion of the project could be considered as an event under 'Force Majeure' in terms of the provisions in the PPA and the EPC contract awarded through ICB. Article 10 of the PPA defines 'Force Majeure' as under:

> **"10.1 Definition of Force Majeure**
>
> (a) Force majeure means any event or circumstance or combination of events or circumstances met with by the Party affected, but only if and to the extent that
>
> (i) Such event or circumstances or combination of events or circumstances, despite the exercise of reasonable diligence, cannot be, or be caused to be, prevented, avoided or removed by such party; and
>
> (ii) Such event or circumstance or combination of events or circumstances materially and adversely affects (in cost and/or time) the ability of the party to perform its obligation under this Agreement, and such Party has taken all reasonable precaution, due care and reasonable alternative measures in order to avoid the effect of such event or circumstance or combination of events or circumstances and to mitigate the consequences thereof,
>
> (b) Any event or circumstance or combination of events or circumstances meeting the description of an event of Force majeure which have the same effect upon the performance of any of the contractors / suppliers of the Seller shall constitute an event of Force majeure with respect to the Seller.

10.2 Instances of Force Majeure

No party shall be liable for any claim for any loss or damage whatsoever arising out of failure to carry out the terms of the Agreement to the extent that such a failure is due to force majeure events such as war, rebellion, mutiny, civil commotion, riot, strike, lock-out, forces of nature, accident, act of God and any other reason beyond the control of concerned party. But any Party claim in the benefit of this clause shall reasonable satisfy the other party of the existence of such as event and give written notice within a reasonable time to the other Party to this effect Generation/drawl of power shall be started as soon as practicable by the parties concerned after such eventuality has come to an end or ceased to exist.

(a) Subject to the provisions of Article 10.1, events of 'Force Majeure' shall include, but not be limited to:

(i) Fire, chemical or radioactive contamination or ionizing radiation, earthquakes, lightning, cyclones, hurricanes, floods, epidemic, quarantine and other acts of God;

(ii) Explosion, accident chemical contamination (other than resulting from an act of war)

(iii) Strikes, lock-outs, not set forth in (vii) below (excluding such events which are site specific and attributable to the seller);

(v) Shipwreck;

(v) Any interruption in the supply of fuel to the Seller for the Unit resulting from the withdrawal or material modification to any authorization of the GoI which prevents fuel suppliers to supply fuel under a fuel supply contract;

(vi) Act of war (whether declared or undeclared), invasion, acts of terrorists, blockade and riot;

(vii) Strikes, lock-outs, work to rule actions and other industrial action or labour disputes in the district or state of Karnataka or at the national level which are not primarily motivated by the desire to influence the action of an enterprise so as to preserve or improve conditions of employment (excluding such events which are site specific and attributable to the Seller);

(viii) Expropriation or compulsory acquisition of the Unit or the site or any material assets of the Seller relating to the Unit;

(ix) Change in Law.

(b) Provided further that

(i) Such circumstances, despite the exercise of reasonable diligence, cannot be or be caused to be prevented, avoided or removed by such Affected party to the material contract;

(ii) Such event materially and adversely affects the ability of such Affected party to such material contract to perform its obligations under the contract; and

(iii) Such Affected party to the material contract has taken all reasonable precautions, due care and reasonable alternative measures in order to avoid the effect of such event on the Affect party's ability to perform its obligation under the relevant contract and to mitigate the consequences thereof.

43. EPC contract or popularly known as 'Turnkey contract' is awarded to a single contractor who is responsible for the Supply, Erection and Commissioning of a project, to be completed within the time period guaranteed, based on agreed price and guaranteed performance. Thus, the EPC contractor is responsible for timely completion of the project and handing over the same to the petitioner as per provisions of the contract. The sub-contractors of the EPC contractor do not directly form part of the obligation under the PPA between the parties. In the present case, the petitioner has contract with LITL, the EPC contractor. However, there exists no privity of contract between the Chinese supplier (DEC) and the petitioner. Accordingly, the respondents have prayed that the question of force majeure does not arise. However, Clause 10.1 (b) of the PPA (*as quoted above*) provides that any event or combination of events which have the same effect upon the performance of any of the contractors/suppliers of the seller shall constitute Force Majeure. In terms of this, though the sub-contractor of the EPC contractor is not a party to the PPA, the events or combination of events which have the effect upon performance of any of the contractors/suppliers would fall within the ambit of Force Majeure as per PPA. Thus, the contention of the respondents that there is no privity of contract between the Chinese supplier and the petitioner and hence the question of Force Majeure does not arise, is not accepted. We now examine if the events relied upon by the petitioner causing delay in the completion of the project could be considered under this head.

44. As regards 'Force Majeure' due to Earthquake, it is noticed that DEC, China (*sub-contractor*) in its letter dated 15.7.2008 addressed to LITL (*EPC contractor*) has informed that due to change in configuration from 507.5 MW to 600 MW, there would not be any change in the supply schedules. Also, as stated by the respondents, the amendment to the agreement entered in to by LITL with the petitioner on 3.10.2008 did not make any change in the

commissioning schedule of Units I and II even though the agreement was entered into subsequent to the earthquake. In this background, the reason as to why DEC had not sought extension of time for supply of equipment's as per schedule in case they were affected by earthquake in May 2008, remain unanswered and therefore we are of the view that the petitioner has not put forth sufficient reasons for condonation of delay due to earthquake in China. However, the delay of 8.5 months due to earthquake is subsumed in the period of delay in land acquisition which has already been condoned and therefore, does not materially affect the commissioning of Unit-I.

45. As regards the Change in Visa policy by the Government of India for Chinese nationals, it is observed that the Ministry of Commerce and Industry, GOI, by its letter dated 20.8.2009 had issued clarification on the requirement of Visa for foreign nationals engaged in execution of projects/ contractual work in India. Subsequently, by letter dated 25.9.2009 further clarification was issued by the Ministry of Home Affairs, GOI, on this issue. Some of the clarifications/conditions specified by the GOI in its letters above are extracted as under:

- Foreign nationals coming to India for executing projects/contracts in India will henceforth have to come only on employment visas.

- All foreign nationals currently in India on business visas (BV) and engaged in project or contract work should return to their home countries on expiry of their visas or by 31st October 2009 whichever is earlier. No visa extension will be granted in such cases.

- Foreign nationals have to obtain Employment Visas (EV) only from their country of citizenship in order to come to India to work on projects/ contracts.

- Employment visa to be issued in strict conformity with the Employment Visa Manual adhering to the listed guidelines:

- Employment visa to be granted to skilled or qualified professional; or to a person engaged or appointed by a company /organisation on contractor on employment basis at a senior level or skilled position such as technical expert /senior executive or in a managerial position etc. Employment visa not to be issued for routine, ordinary or secretarial/clerical jobs.

- Indian company engaging foreign nationals for executing projects /contracts in India shall be responsible for their conduct as well as departure from India.

- Ministry of External Affairs (MEA) will advise the Indian missions located in neighbouring countries not to grant BV's to the foreign nationals who come to India for execution of projects/contracts.

Issuance of Employment visa to Chinese nationals

- Applications for EV to the Indian Mission in China by the Indian / Chinese company has to be submitted incorporating the following additional information:

- Educational qualifications and the current job, and

- Nature of job proposed to be performed in India

- Indian /Chinese company is also required to forward the copy of the visa application to Ministry of Home Affairs (MHA) (Foreigners Division)

- Indian Mission is also required to send the information so received to MHA (FD).Visa has to be processed by MHA within a period of 60 days.

- MHA on receiving the information / application forwards the same to the following two parties:

  Intelligence Bureau (IB) and IB to give clearance within 15 days
  Ministry of Labour (MOL): MOL to give clearance within 45 days

- MEA as a point of caution will also collate details of Chinese nationals on projects in India since 1st January 2008 on BV from the Indian Missions in China. This shall be provided to IB.

46. The guidelines for granting employment visas by Ministry of Labour & Employment, GOI, stipulates that employment visa for foreign personnel coming to India for execution of contracts may be granted by Indian missions to highly skilled and professionals to the extent of 1% of total persons on the project or maximum of 40 persons for each power project. The respondent No.1 to 6 has submitted that it is not clear whether the Chinese experts for the petitioner project are 70 or 17 or 85 or 65 in number. Since, clearance of Ministry of Labour & Employment is required in case the number exceeds 40, there is no evidence that clearance has been obtained since the number of Chinese experts for the petitioner's project exceeds 40, the petitioner has added. The petitioner has clarified that at the stage of pre-commissioning activities around 65 experts were required to be present at the site for this purpose. It has also submitted that in November, 2009 only 4 experts were issued Visas, and gradually the number was increased to 12 (in December, 2009), 30 (in January, 2010), 45 (in February, 2010) and the required number of 65 experts were present only during May, 2010 to re-commence the work and the petitioner had no other alternative but to wait for their return and resumption of work by Chinese Engineers. The petitioner has further submitted that since the equipment is

being supplied by DEC, it needs to be installed under the supervision of DEC engineers failing which the warranties provided by DEC for the performance of the equipment will be rendered invalid. It has also submitted that due to absence of Chinese experts for erection supervision as well as supervision during commissioning stage, it was not possible to proceed with construction and commissioning in critical areas like Air Pre-heaters, Fans (ID, FD, PA), Critical piping, Burner Management system, Turbine Governing system, TG tube oil system etc., and as a result various pre-commissioning activities remained pending and consequently subsequent activities were delayed. Accordingly, the petitioner has submitted that the absence of Chinese experts during peak project activities has had a direct impact on project progress leading to an overall delay of 6 months and was compelled to declare force majeure event both under the PPA as well as the Coal Supply Agreements entered into by it.

47. We find force in the submission of the petitioner. In our view, the absence of sufficient number of experts from OEM, who are Chinese nationals, during peak project activities, has had a direct impact on the progress of the project leading to the delay in the completion of the project. Clause 10.1(b) of the PPA, provides that any event, circumstances or the combination of events which have the effect upon the performance of any of the contractors/suppliers of the seller shall constitute an event of Force Majeure. Applying the same principle in this case, we conclude that the change in Visa policy by the Govt. of India has affected the entry of Chinese personnel thereby affecting the commissioning and testing activities of the petitioner, which constitutes an event of Force Majeure. Accordingly, for the above considerations, we hold that the delay of 6 months in the completion of the project due to Change in Visa policy was beyond the control of the petitioner and accordingly allow the same.

Delay in providing Start-up power

48**.** We have examined the submissions of the parties as regards the delay in providing start up power by the respondents narrated above. It is observed from Clause 3.2 of PPA that the petitioner shall enter into an agreement with the distribution licensee to avail start up/back-up or

any other power required for the facility at the rates as approved by the Commission for the distribution licensee. The Principal buyers shall not be responsible for arrangement of this power. Further, in Annexure-4 of the said PPA, titled "Description of Facility and Site" provides as under:

> *"Construction power will be drawn from KPTCL' s 220KV/110 KV/33 KV system. For this purpose, Principal Buyers shall provide a line up to plant and Company will provide necessary receiving sub-station, step-down transformer, switchgear, etc. The start-up power will be drawn from either Kemar or Kavoor substation of KPTCL through 220 KV lines and Switchyard to be constructed as part of the plant. The Seller will avail the construction and startup power or any other power from the jurisdictional distribution licensee. "*

49. It is evident from the above that it was the responsibility of the Principal buyers to provide a transmission line from 220 kV/110 kV/33 kV sub-station of KPTCL to the plant for providing power for construction of the plant and the necessary receiving sub-station, step–down transformer, switchgear was to be built by the petitioner. Similarly, the start–up/commissioning power was to be drawn from Kemar or Kavoor substation of the respondent KPTCL through 220 kV lines and Switchyard was to be constructed by the petitioner as part of the plant. The petitioner has submitted that due to non-readiness of 220 kV transmission line, the commissioning activities for Unit I and erection work for Unit II were hampered. It has submitted that as against the requirement in March, 2009, the 220 kV transmission line was provided by the respondents only during September,2009 thereby leading to a delay of 6 months in the commissioning of plant. We notice that in terms of the PPA, the construction of receiving station at the plant site was the responsibility of the petitioner. The switchyard of the receiving station was not ready before 14.9.2009 as per report of the Chief Electrical Inspector. Accordingly, we find no merit in the argument of the petitioner that due to delay in providing 220 kV line a delay of 6 months had occurred in the commissioning schedule of the project. Notwithstanding this, we notice that there has been no overall impact in the COD of Unit I and Unit II since the delay of 8.5 months in the COD of Unit I had already form part of the initial delay of 10 months in land acquisition. However, in case of Unit II, the delay of 6 months on account of the delay in providing start-up power had no consequence as Unit-II could not be

declared under commercial operation due to the non-readiness of 400 kV transmission line for evacuation of power from Unit-II as decided in this order.

Delay on account of Augmentation of Capacity

50. We have also examined the submissions of the parties as regards the delay on account of augmentation of capacity of the plant from 1015 MW to 1200 MW. It is observed from the letter dated 15.7.2008 of DEC (supplier of BTG package) to LITL that though the package offered by DEC was as per LITL's requirement for 2x 507.5 MW, this was a standard model which can operate at 600 MW continuously and hence there would not be any change in the layout of the BTG package. DEC had further stated that supply schedule, scope of services like erection, supervision and commissioning of BTG package shall remain unchanged. Accordingly, if there is any additional time required for the completion of project, then it was for augmentation of BOP systems. However, the petitioner has not furnished any justification, quantifying the number of additional days required for the augmentation of BOP system. In view of this, we are not inclined to accept the submission of the petitioner that the delay of 2 months was on account of augmentation of capacity

Delay in Construction of 400 kV Transmission line

51. The petitioner has submitted that despite Unit-II of the generating station being ready for synchronisation and commercial operation during January-February, 2011, the same could not be commissioned and declared for commercial operation for want of evacuation facilities. In short, the petitioner has contended that due to designated 400 kV evacuation line not being ready there has been delay in the commercial operation of Unit-II of the generating station. In response, the respondents have submitted that the evacuation facilities are the responsibility of the respondents and the same was delayed on account of Force majeure namely, the non-availability of forest clearance in a timely manner despite due application and all conditions being fulfilled. However, the respondents have submitted that delay of COD of Unit-II was not on account of the delay in evacuation facility since there was an existing 220 kV line catering to

Unit-I on which the petitioner was entitled to synchronise the generating station and declare the same for commercial operation. It has also contended that the delay for the period from June, 2010 (scheduled COD of Unit-II) to February, 2011 is on account of the petitioner. The respondents have further submitted that the petitioner after satisfying the pollution control norms had obtained consent for operation for Unit-II only on 1.7.2011 by KPSCB and under no circumstances the petitioner was ready to synchronise or commission Unit-II at any time prior to 1.7.2011. The petitioner while contending that Unit-II was delayed due to non-readiness of 400 kV transmission lines has submitted that Unit-II after synchronization with grid on 7.3.2011 reached full capacity (611.5 MW) on 16.4.2011. However, in case Unit-II was capable of achieving COD after achieving full load on 16.4.2011 and could not be declared so due to failure of the respondents 1 to 6 to construct the 400 kV transmission line, in that event, there is no reason for the petitioner not to invoke the "Deemed Commercial Operation" in terms of Clause 2.A.5.3 of PPA dated 26.12.2005. The petitioner has also submitted that it had refused to provide an undertaking to the respondents that it will not claim deemed generation charges, as sought by the respondents. Clause 2.A.5.3 of the PPA provides as under:

> **"*2.A.5.3 Deemed Commercial Operation***
> *"If in the opinion of a reputed engineering firm mutually acceptable to the Principle Buyers and the Seller, the Unit is technically capable of achieving Commercial Operation Date and such Commercial Operation Date is delayed beyond the stipulated period as mentioned in section 2aA.5.1 due to Principal Buyer's and/or the Transmission Utilities failure in its obligation with regard to Transmission Improvements, for such delay and the length of the delay associated therewith to the maximum of 180 days, the Principal Buyers would be required to make payment to the extent of the Debt recovery (repayment + interest) for the delayed period. Such a payment payable by the Principal Buyers to the Seller during such period of delay shall be calculated as if the Commercial Operation Date had occurred ("Deemed Commercial Operation") on the date it would otherwise have occurred but for such delay as described herein*. "

52. It is observed that based on petitioner's letter dated 28.6.2011, KPSCB vide letter 1.7.2011 had granted No-Objection Certificate (NOC) for carrying out the capacity test of Unit-II and subsequently, by letter dated 2.7.2011 had withdrawn the same after finding that the consent conditions stipulated by the Board had not been fully complied with by the petitioner. The petitioner has submitted that the respondents in tandem with the Pollution Control Board ensured revocation of permission which was legitimately provided for operating Unit-II. It has also submitted it was in possession of a valid approval for operating Unit-II until 30.6.2012 and

hence the contention of the respondents that it was not capable for generation till that time is baseless. On the contrary, the respondents have submitted that the consent to operate as per letter of KPSCB dated 18.8.2010 for 2 x 600 MW was for the period from 1.7.2010 to 30.6.2011 and even on 17.5.2011, the petitioner had not adhered to the directions of KPSCB reading fly ash utilisation and failed to submit action plan and risk analysis. We have examined the matter. There is no denying the fact that any industry prior to its commercial operation has to fulfil the conditions specified by the State/Central Pollution Control Board. In this case, it has been alleged by the respondents that the petitioner had not complied with the conditions stipulated by KSPCB for which the NOC was apparently granted. We do not propose to traverse into the reasons for which NOC had been revoked by KPSCB as alleged by the parties. In case the petitioner was aggrieved by the action of KPSCB, the petitioner was at liberty to approach the appropriate forum for remedy of its grievance, which admittedly was not done. We notice that even during June-July, 2011, the petitioner was not ready to declare the COD of Unit-II as it had apparently not fulfilled the requirements of the KPSCB. However, it is noticed from the submission of the petitioner vide its affidavit dated 10.8.2013, that KSPCB vide its letter dated 25.1.2012 had permitted the petitioner to operate Unit-II of 600 MW by parallel shutting down Unit-I of the generating station. Thus, it is evident that the petitioner had fulfilled the conditions of KSPCB prior to 25.1.2012 and was ready for declaration of commercial operation of Unit-II immediately after 25.1.2012. However, in the absence of 400 kV line for evacuation of the same, there has been delay in the commissioning of Unit-II by the petitioner. It is also noticed that the petitioner was informed by the respondents 1 to 6 vide letter dated 13.8.2012 that the 400 kV line would be charged on or after 20.8.2012 and accordingly, the petitioner had declared commercial operation of Unit-II on 19.8.2012 on 220 kV line.

53. We now examine the 'Force Majeure' clause invoked by the respondents contributing to the delay in the construction of 400 kV transmission line and its readiness for evacuation of power from Unit-II of the generating station. As stated, the respondent No 1 was responsible for the construction of the 400 kV line from the generating station of petitioner to 400/220 kV,

Shanthigrama sub-station in Hassan District. The respondent vide its letter dated 7.3.2011 had communicated the occurrence of an event of 'Force Majeure' and the documents in support of its claim were furnished vide its letter dated 12.5.2011. The event based on which Force Majeure was claimed by the respondent is the delay in Stage-II Forest clearance. It is noticed that Stage-I clearance was obtained on 17.2.2011. It is also observed from the letters of the respondent (KPTCL) dated 7.3.2011 and 12.5.2011 that though Forest Clearance was applied on 27.2.2008, the application for allotment of land for Compensatory afforestation was submitted by the respondent KPTCL to the Deputy Commissioner of Forests only on 4.3.2009 i.e. after expiry of more than one year. KPTCL has not substantiated the gap between the application for forest clearance and application for allotment of land for compensatory afforestation. It is further observed that the forest clearance has not been earnestly pursued by KPTCL with the Forest Department as no documentary proof has been placed on record. Only on 15.4.2010, the Principal Secretary, Forest, Ecology and Environment, GOK had addressed letter to the MOEF, GOI in connection with the forest clearance. Thereafter, forest clearance had been granted. Subsequent thereto, the 400 kV line was constructed and charged on 24.8.2012. From the documents and discussions above, it is apparent that there has admittedly been delay on the part of the respondents to construct the 400 kV line. Hence, the said delay in construction is attributable to the respondents and the contention that even otherwise, the Unit-II of the petitioner was not ready for COD cannot be accepted. The respondent's have argued that even if the construction of 400 kV line was completed in time, the petitioner was not in a position to declare the COD of the station due to non-availability of clearance from KSPCB. The petitioner has contended that the generating station could not be declared under commercial operation due to non-availability of the transmission line. However, the factual position is that the transmission line was not available for the declaration of COD of Unit-II by the petitioner. It is pertinent to mention that setting up of a generating station involves huge cost and having invested in the project there could be no reason for the generator to deliberately delay the execution of the project, considering the fact that the delay would not only lead to increased cost, but also loss of profits for the generating company for the said period of delay. However,

any delay due to 'Force Majeure' condition, Change-in-law etc., would have cost implication and it would not be prudent to deny consideration of such cost implications, if such events were beyond their control. Considering the facts in totality, we are of the considered view that the delay in the construction of the 400 kV line by the respondents has contributed to the delay in the declaration of COD of Unit-II by the petitioner and the petitioner cannot be faulted on this count. Accordingly, the invocation of 'Force Majeure' by the respondents cannot be sustained based on the facts of this case. Since Unit-II of the generating station could not have been declared on Commercial Operation in the absence of any evacuation arrangement, further delay of 16 months in the declaration of COD of Unit II on this account is not attributable to the petitioner. Accordingly, the period of delay in COD of Unit II is beyond the control of the petitioner and is therefore allowed. It is an admitted fact that the construction of power plant and the construction of transmission line up to the COD of transmission line are parallel activities which go together. Hence, the delay in declaration of Unit-I due to Force majeure on account of Earthquake, which has not been admitted in this order, becomes inconsequential considering that the declaration of Unit-II by the petitioner had been delayed due to the non-completion of transmission line by the respondents. Accordingly, the increase in cost, IEDC and Interest During Construction (IDC) & Financing Charges (FC) shall be admissible for the period of delay not found attributable to the petitioner.

Additional Return on Equity

54. Since the actual COD of the Unit I and II is beyond the time limit specified under the 2009 Tariff Regulations, the additional Return on Equity of 0.5% is not admissible for the purpose of tariff.

Augmentation of Capacity and Capital Cost of the Project

55. As stated, the Commission by its order dated 25.10.2005 in Petition No.40/2005 had accorded 'in-principle' approval of the capital cost of the project with a capacity of 1015 MW for ₹4299.12 crore, inclusive of Interest During Construction (IDC) and Financing Charges (FC) with certain observations as under:

”55. The "in principle" approval of the above capital cost is subject to the following conditions:

(a) For the purpose of tariff, the completed capital cost shall not exceed the amount indicated in para 54.

(b) The petitioner shall achieve the financial closure within 120 days from the date of this order.

(c) The norms specified in the 2004 regulations are the ceiling norms and parties may agree to improved norms and where the improved norms are agreed to, such norms shall be the basis for determination of tariff.

(d) No additional capital expenditure incurred on maintaining operational and performance parameters shall be admissible for tariff enhancement during the rated life of the generating station."

56. The capital cost of the project as claimed by the petitioner is the ‘in-principle approved cost’ of ₹4299.12 crore as approved by the Commission in the said order *plus* the increase agreed to by the GOK for augmentation of capacity from1015 MW to 1200 MW and Interest During Construction and establishment expenses, at actuals. In view of the declaration of COD of Unit-II, the project cost upto19.8.2012 incurred for the generating station was firmed up and the tariff filing forms were revised by the petitioner vide Interlocutory Application No. 49/2012.. However, pursuant to directions of the Commission during the hearing on 9.4.2013, the petitioner, vide its affidavit dated 7.5.2013, has submitted the Capital Cost and the Tariff admissible to the generating station, uninfluenced by the report of the Justice *(Retd)* Gururajan Committee.

57. Pursuant to the hearing of the matter on 9.4.2013, the Commission directed the respondents to file the details of equipment and materials along with the price for which certificate was issued by them for availing customs duty exemption. The Commission also directed the petitioner to furnish the following information:

(a) A copy of the contract between LITL and DEC, the OEM;

(b)A copy of the invoice raised by M/s DEC on LITL and in respect of all major equipments including balance of plant;

58. In compliance, the parties have filed the information as sought for by the Commission. Subsequently, during the proceedings held on 16.5.2013, the Commission, based on the submissions of the parties, directed the petitioner to submit all necessary documents/

agreements as indicated by the respondent, PCKL in page No. 91, para C of its submissions dated 4.5.2013 including those related to EPC, Civil works and the External coal handling contract entered into between LITL and Dongfang, with all annexures and necessary translations. The Commission further directed the petitioner to submit the following information:

> *(i) Reasons for increase in FERV from 120 million US dollars as per agreement dated 24.12.2006 to 293.96 US dollar at time of enhancement of capacity from 1015 MW to 1200 ME in 4th amendment of agreement dated 10.7.2009;*
>
> *(ii) Bidding documents for ICB by petitioner for selection of EPC contractor after termination of contract of M/S BHEL ; and*
>
> (iii)*A copy of contract entered in between the EPC contractor M/S Lanco Infratech Ltd. and M/s Dongfang Electric Corporation on 16.12.2006*.

59. The information as required above has also been filed by the petitioner. Some of the important submissions made by the parties with regard to the augmentation of capacity of the project and the capital cost claimed are summarized under:

Submissions of Petitioner

60. As regards capital cost claimed and augmentation of capacity of the project, the petitioner has mainly submitted as under**:**

(i)Tender for selection of EPC contractor was floated during June, 2003 and based on the bids received and discussions with bidders, the main EPC contract was awarded to BHEL and Simplex Concrete piles (I) Ltd on 10.9.2004 and to Navyuga Engineering Company Ltd for External Coal Handling System on 31.12.2004.

(ii) Due to delay in providing guarantee the GOK, which delayed the financial closure, the initial advance to BHEL could not be made. Finally BHEL conveyed that the proposal of BHEL would be valid only on payment of full initial advance by 24.10.2006.The petitioner could not release advance payment to BHEL as it could not avail disbursement from financial institutions, lack of progress in land acquisition and non-receipt of government guarantee.

(iii) Thus, it became necessary to select new contractor for main plant package in order to obtain current and updated prices based on optimized specifications. Fresh bids to select EPC contractor through International Competitive Bidding (ICB) for supply, erection and commissioning of the plant was published during October-November, 2006. None of the three contractors (BHEL, Navyuga & Simplex) participated in the ICB and the same was finalized in December, 2006 in favour of Lanco Infratech Ltd (LITL).

(iv) Though the project was initially proposed to be developed with 2 x 507.50 MW capacity, DEC offered BTG package of 600 MW since 507.5 MW was not a standard size of BTG package It is not merely the capacity of the turbines that consist of the entire plant, but also the 'balance of the plant' systems that control the generation capacity. The original balance of plant size envisaged was commensurate with a unit of 507.50 MW each and was required to be modified to be augmented to be compatible with the turbine and boilers of 600 MW. Thus, the augmentation was required on account of the subsequent permission to increase Therefore, by letter dated 29.7.2008, permission of the GOK for augmentation of capacity was sought for from 1015 MW to 1200 MW and one additional unit of 300 MW. GOK vide letter dated 3.2.2009 permitted augmentation of capacity subject to 90% of power generated being made available to GOK and the Power Purchase would be as per tariff determined by CERC and norms and conditions specified accordingly.

(v) MOEF, GOI vide latter dated 9.9.2009 granted 'NOC' for enhancement of capacity.

(vi) The details of additional cost incurred for augmentation of capacity to 1200 MW was referred by GOK to Justice Gururajan Committee and it was informed by GOK that the increase in capital cost of ₹339.60 crore plus IDC at actuals has been approved, subject to concurrence by CERC.

(vii) Since PPA is only for 1015 MW and since the petitioner proposed to augment the project based on the in-principle approval of the GOK, which clearly stated that the tariff would be determined based on CERC norms, the provisions of the PPA relating to a cap on the capital cost (₹4299.12 crore) would no longer apply.

(viii) Respondents have also not disputed that there is a need to consider an appropriate increase in the capital cost for the additional 185 MW. It is only the quantum which is currently in dispute. The Commission may decide the capital cost to be allowed taking into account reasonable cost of enhanced capacity.

(ix) The GOK vide its order dated 25.10.2010 had accorded its approval to enhance the capacity of the project from 1015 MW to 1200 MW and accepted the recommendation of Justice (Retd) Gururajan Committee for allowing the increase in the capital cost to the extent of ₹583 crore excluding IDC & FC. Subsequently, with the enhancement of project capacity to 1200 MW, the GOK on the basis of the recommendation of Justice Gururajan Committee approved the project cost of ₹4882.97 crore excluding IDC & FC. Though, the project cost was ₹6195.27 crore including IDC & FC of ₹1188.50 crore on the date of commercial operation of Unit-II, the claim of ₹421 crore was not made in I.A No. 49/2012. The project cost of ₹5774.10 was claimed as on COD of Unit II which is at par with the GOK approved cost, though IDC was not quantified in the order of GOK.

(x) The total capital expenditure incurred as on 18.8.2012 as per books of accounts and certified by Chartered Accountant is ₹6173.45 crore. The incurred capital expenditure as on 18.8.2012 includes liability/provision of 154.80 crore. The total project cost claimed is ₹6195.27 crore as per Form-5B of I.A No.49/2012. However, the project cost claimed is ₹5774.10 crore as on COD of Unit II (19.8.2012) i.e. the COD of generating station. The project cost of ₹5774.10 crore includes liability of ₹154.80 crore and expenditure of ₹21.83 crore projected to be incurred from COD of Unit II to 31.3.2013. The additional capitalization proposed during 2013-14 is ₹182.73 crore. Thus, the total capital cost including additional capitalization up to 31.3.2014 works out to be ₹5956.83 crore. The IDC, FC, FERV etc. included in the project cost claimed is ₹1361.73 crore. The details of capital cost as claimed are as under:

(₹ in Crore)

Incurred Capital expenditure as on 18.8.2012	Liability /provision as on 18.8.2012	Projected to be incurred from 18.8.2012 to 31.3.2013	Total Project cost as on 31.3.2013	Amount not claimed	Project cost claimed as on 31.3.2013	Additional capitalization proposed after COD during 2013-14	Total capital cost as on 31.3.2014
6173.45	154.80	21.83	6195.27	421.17	5774.10	182.73	5956.83

(xi) In comparison with the cost with Simhadri Stage-II, Sipat Stage-I of NTPC and Indira Gandhi Super Thermal (a joint venture of NTPC), the project cost claimed is competitive as justified under:

(₹ in crore)

Name of project	**Simhadri TPS, Stage-II**	**Indira Gandhi STPS**	**Sipat TPS Stage-I**	**Udupi TPS (*petitioner* herein)**
Installed capacity	2x500 MW	3x 500 MW	2x 660 MW	2x600 MW
Sanctioned Project cost	4387.41	7729.37	7857.20	4299.12 (for 1015 MW)
Anticipated completion cost	5476.97	8587.97	8343.45	5956.83 (for 1200 MW)
IDC & FERV	638.25	1249.34	-	1371.70
Project cost (exclusive of IDC)	4838.72	7338.63	-	4585.13
Expected COD				
Unit I	Declared	1.10.2011	awaited	11.11.2010
Unit II	-	-	-	19.08.2012
Cost/MW (excl. of IDC & FERV)	4.84	4.89	-	3.82
Cost/MW (incl. of IDC & FERV	5.48	5.72	-	4.96

(xii) The current project is unique in India which has features such as dedicated Jetty, desalination plant, Sea Water Pipe lines, Separate FGD for each boiler, Impervious layer in CHP and Ash Pond etc. For 1200 MW capacity, the final EPC cost agreed and paid to EPC Contractor is ₹4571 crore which works out to ₹3.81 crore/MW. The EPC cost excluding above features (600 crore approx) is about ₹3.31 crore/MW. This is much lower than the EPC costs of many other projects with 500/600 MW machines and is one of the lowest EPC costs in India.

(xiii) The Capital Cost of the project and tariff admissible to the generating station,along with figures and detailed calculations uninfluenced by the Justice Gururajan Committee Report has been filed vide affidavit dated 7.5.2013 as per the directions of the Commission in the Record of Proceedings dated 9.4.2013. There has been an increase in the Capital Cost of the project *inter alia* on account of IDC and Financing Charges, FERV, cost of land, establishment and pre-operative expenses, taxes, duties,start-up fuel cost , staff colony, additional expenditures due to augmentation of capacity of Balance of Plant Equipments and other expenditures. The actual increase in various heads has been explained to justify the increase in capital cost of the project.

(xiv) Due to augmentation of capacity from 1015 MW to 1200 MW, it has incurred additional expenditures of ₹750.91 crore in the EPC scope for the civil foundations of some auxiliaries of the main plant such as mill bay area, electrostatic precipitator etc. under BTG Civil, augmentation of capacity of coal handling system, Sea Water System, Cooling Water System, RO & DM water System, Ash Handling System, Fuel Oil System, Air & Flue Gas System, Electrical System, C&I System, Others which include Initial Spares and Cost of Erection, Finance Charges, Design and Engineering Charges, Coal Slurry Settling Pond, Drift Eliminator, Additional Coal Silo near Jetty, Replacement of Bitumen Road with Concrete Road, Dredging, Additional BTG spares and Replacement of GRP pipeline with MS pipe line. Out of ₹750.91 crore, an amount of ₹337.70 crore was approved by GOK based on the report of Justice Gururajan Committee as summarized under:

	Details	***(₹ in crore)***	
		Additional Expenditure incurred	Additional Expenditure approved by GOK
1	Performance Guarantee	129.00	87.47
2	BTG Civil	5.50	5.50
3	Coal Handling System		
	Jetty	6.00	6.00
	Unloaders	17.00	12.00
	Coal Conveyor	31.00	10.00
	Stacker & Re-claimer	12.00	0.00
	Coal Stacking Yard	6.00	6.00
	Wagon Loading System	3.00	0.00

	Internal Coal Handling System	39.5	30.00
4	Sea Water System	23.00	23.00
5	Cooling Water System		
	Cooling Towers	47.80	28.00
	Cooling Water Pumps	17.05	17.05
6	RO & DM Water Plant	31.50	12.97
7	Ash Handling System & Air flue	15.50	15.50
8	BOP Electrical	29.90	29.90
9	Fuel oil System	1.00	1.00
10	Air & Flue gas systems	109.25	29.56
11	C&I system	30.60	0.00
12	Others		
	Initial Spares	10.00	10.00
	Erection	53.20	13.75
13	Design & Engineering*	1.00	0.00
14	Coal Slurry Pond*	9.23	0.00
15	Drift Eliminator *	5.77	0.00
16	Coal Silo*	14.08	0.00
17	Concrete Road*	22.56	0.00
18	Dredging*	24.40	0.00
19	BTG Spares*	30.36	0.00
20	Inlet Pipe*	25.76	0.00
	Total	**750.96**	**337.70**

** incurred post Committee Report*

(xv) Additional capital expenditure of ₹182.73 crore claimed during 2013-14 include an expenditure of ₹45.00 crore for staff colony, ₹90.68 crore on coal shed, ₹2.20 crore for additional spares, ₹56.00 crore for replacement of GRP Sea Water Outfall pipeline with M.S. Pipeline and ₹5.00 crore for widening of Culvert in NH-66. Further, additional capital expenditure of ₹182.73 crore also include ₹2.32 crore on Taxes & duties and ₹9.97 crore for IDC, FC, FERV etc. The petitioner has also claimed other cost of ₹28.71 crore which include ₹10.73 crore for 2nd ICT, 33 kV line and CSR expenditure, ₹13.17 crore towards Vehicle/computer/furniture etc. and ₹4.81 crore as preservation cost for Unit-II.

(xv) The break-up of the capital cost approved for 1015 MW and the increase in the capital cost due to augmentation of capacity from 1015 MW to 1200 MW as claimed by the petitioner vide affidavit dated 7.5.2013 with IDC, FC, FERV etc. are as given overleaf:

							(₹in crore)
Description	**Approved (1015 MW) considered**	**Increase**	**Total cost for 1200 MW**	**Incurred upto 18.8.2012**	**To be incurred 18.8.2012 to 31.3.2013**	**Addl. Capital expenditure in 2013-14**	**Final Cost**
Cost of Land & site Development	32.80	30.20	63.00	57.65	5.35	-	63.00
EPC Cost	**3688.35**	**752.61**	**4440.96**	**4431.65**	**9.31**		**4440.96**
Taxes & Duties	108.00	22.83	130.83	116.29	14.54	2.32	133.15

Construction & Pre-commissioning expenses	19.00	22.80	41.80	41.80	0.00	-	41.80
Overheads	101.53	78.26	179.79	171.46	8.33		179.79
Other Cost and Add-Cap	-	28.71	170.44	19.14	9.57	170.44	199.15
Capital cost (excluding IDC, FC)	**3949.68**	**935.41**	**4885.09**	**4837.99**	**47.10**	**172.76**	**5057.85**
IDC, FC, FERV, Hedging Cost	350.14	1027.57	1377.71	1370.60	7.11	9.97	1387.68
Capital cost (including IDC, FC, FERV etc)	**4299.82**	**1962.98**	**6262.80**	**6208.59**	**54.21**	**182.73**	**6445.53**
Less : UI charges recovered	-	-	(-) 35.14	(-) 35.14	-	-	(-) 35.14
Net Project Cost	-	-	**6227.66**	**6173.45**	**54.21**	**182.73**	**6410.39**

Submissions of Respondents (1 to 6)

61. The respondents 1 to 6 has while raising objections to the claim of the petitioner for increase in capital cost has also raised certain issues on the augmentation of capacity of the project from 1015 MW to 1200 MW leading to the said increase in cost of the project. The submissions of the respondents in its various affidavits are summarized as under:

(i) Even though EPC contract was awarded to BHEL prior to the signing of the PPA, the submission of the petitioner that contract with BHEL would not be honoured for want of initial advance is not based on facts since the petitioner in the petition filed before CERC in 2005 had mentioned that initial advance has been paid to BHEL.

(ii) Even though PPA was executed on 26.12.2005, financial closure could not been achieved by the petitioner within the stipulated time of 120 days from 25.10.2005. The petitioner had approached the Commission twice for extension of time for financial closure and the Commission had granted time till 31.10.2006.

(iii) The petitioner had awarded the EPC contract to their sister concern LITL by defeating transparency in the invitation of bids. The respondent by letter dated 22.11.2006 had informed the petitioner that there will be no price increase on any account and calling for fresh bids was not acceptable. It was also informed that any upward change in the project cost and tariff parameters cannot be accepted and not binding either on ESCOMs or by GOK. As the petitioner failed to adhere to its obligations and as such any increase for 1015 MW capacity is not binding on the respondents /GOK.

(iv) The in-principle approval granted by the Commission in order dated 25.10.2005 for 1015 MW is ₹4299.12 crore with the condition that the capital cost shall not exceed the above

amount. The difference in the capital cost now claimed at ₹6410 crore for 1200 MW and ₹4299.12 crore for 1015 MW works out to ₹2111 crore.

(v) The respondents had agreed to the capital cost at ₹4299.12 crore including IDC & FC of ₹350.14 crore for a capacity of 1015 MW as per PPA and subsequently, due to enhancement in the capacity to 1200 MW, the respondents have agreed to accept the capital cost as ₹4430 crore. Therefore, the petitioner is required to limit its claim to the above amount and cannot claim any additional cost for the purpose of tariff determination.

(vi) The report of Justice (Retd) Gururajan Committee providing for a higher capital cost of ₹583 crore excl. of IDC is not correct. The total capital cost claimed by the petitioner for determination of tariff is ₹6378 crore. In other words, for an increase of 185 MW in the capacity, the total capital cost has been increased from ₹4299 crore by about ₹2079 crore which is patently wrong.

(vii) It is of utmost importance to give effect to the decision taken by the Commission in orders dated 25.10.2005 and 7.8.2006. The capital cost at ₹4299.12 crore decided by the Commission in order dated 25.10.2005 has frozen (duly agreed to by the petitioner at the relevant time) for 1015 MW, should not be allowed to be re-opened at this stage at any cost.

(viii) The capital cost of ₹4299.12 crore can be varied only under specific circumstances, namely, for reasons of 'Force Majeure' or 'Change in Law''. Even for 'Force Majeure' while there should be an extension of time for completion of the project, there canot be any additional IDC beyond the scheduled COD. This is because the petitioner had specifically agreed to that no IDC over and above what was included in the above frozen capital cost of ₹4299.12 crore will be claimed.

(ix) The only other ground on which the increase in capital cost can possibly be claimed is specific to 'Change in law'. 'Change in law' applies both applies both ways and if there is a change in law which reduces the capital cost, the same is to be passed on to the respondents. Accordingly, on the aspect of 1015 MW, there cannot be any increase in the capital cost whatsoever, except if the petitioner is able to show any specific changes in law increasing the outflow from petitioner.

(x) The in-principle approval to the capped capital cost of ₹4299.12 crore was given and the PPA dated 26.12.2005 was entered in the background of:

(a)The petitioner having entered into a firm binding and concluded EPC Contract with M/s Bharat Heavy Electricals Limited (`BHEL') on 10.9.2004 pursuant to an International Competitive Bidding process;

(b) The petitioner having entered into a firm binding and concluded Civil Works Contract with M/s Simplex Concrete Piles India Limited on 10.9.2004 pursuant to an International Competitive Bidding process;

(c) The petitioner having entered into a firm binding and concluded contract with M/s Navyuga Engineering Company Limited on 31.12.2004 for external coal handling system pursuant to an International Competitive Bidding process;

(d)The petitioner giving the tariff proposal setting out the various cost elements of the contract aggregating to ₹4299.12 crore based on the concluded EPC Contract, the Civil Works Contract and the External Coal Handling System Contract, namely all the principal contracts;

(e)The petitioner having voluntarily reduced the capital cost proposed from ₹5496 Crores to ₹4299.12 crore to be competitive and to induce the respondents to enter into the PPA; and

(f) In the proceedings before the Commission, the petitioner agreed that the capital cost of the Project inclusive of IDC shall not exceed ₹4299.12 crore;

(xi) The order dated 25.10.2005 was passed by the Commission (a) based on the specific representations made by the petitioner, (b) after hearing all the concerned parties including the Consultant and the equipment supplier, M/s BHEL,(c) after considering the firm price in the concluded contracts entered into for EPC, Civil Works and External Coal Handling System which are in place and the petitioner's project is in the stage of takeoff, (d) after considering the transparency in the bidding earlier done by the petitioner for selecting the above contractors, and (e) after specifically taking into account the break-up of capital cost (*as in Para 32 of the order dated 25.10.2005*);

(xii) In the above order dated 25.10.2005, the Commission came to a specific finding that the Competitive bidding process was fair and that the same needed to be accepted and adopted in the tariff determination exercise.

(xiii)The 2009 Tariff Regulations, the PPA dated 25.12.2005 on its terms read with the Commission's orders dated 25.10.2005 and 7.8.2006 are the only documents, instruments binding and conclusive between the parties.

(xiv)The PPA does not envisage anything other than the above for the increase in the capped capital cost. The alleged increase in the capital cost claimed for increase in the capacity shown by the petitioner is clearly fraudulent as detailed hereunder as no such additional cost and

expenses arose and the claim made by the petitioner is only to gain unjust benefits for itself and its sister concern at the cost of the interest of the public at large.

(xv) At the time when the petitioner approached this Commission with an application for in-principle approval of the capital cost, the petitioner had a firm concluded and binding EPC Contract with BHEL, civil contract with Simplex and external coal handling contract with Navyuga, which were executed pursuant to a International Competitive Bidding process. After the majority and controlling shares of the Petitioner were acquired by Lanco Group, the Petitioner purported to terminate the agreement with BHEL, Simplex and Navyuga and purported to do International Competitive bidding and in pursuance thereof the entire contracts were given to LITL a group company of the petitioner. The termination of the contracts with BHEL, Simplex and Navyuga was unilateral, self-serving and a fraudulent act. All the consequences of the above are to be borne by the petitioner and cannot be passed on to the respondent /consumers in the State of Karnataka.

(xvi) The contract with BHEL was purported to be terminated by petitioner on account of non-payment of advance money to BHEL which in turn was alleged to be on account of non-availability of Government Guarantee. How these things are related has not been explained. It is preposterous that the petitioner was not able to arrange advance money to be paid to BHEL but was in a position to undertake an International Competitive Bidding for selection of a new EPC contractor and make significant financial commitment. This was the claim made by the petitioner to the respondents also for change in the EPC contractor.

(xvii) The agreement between LITL and DEC dated 16.12.2006 (now available in part) clearly show that the plant size contracted is 2 x 600 MW and not 2 x 507.5 MW. This aspect was not known to the respondents at the time, when the additional cost of ₹131 crores was agreed for augmentation of capacity. In other words, right from the beginning, the contracted plant capacity of LITL with petitioner was for all intent and purpose is 2 x 600 MW. The petitioner, LITL and DEC proceeded to falsely represent in the year 2008 that augmentation of the capacity from 507.5 MW to 600 MW will require additional cost concealing that right from the beginning the contract is for 600 MW units.

(xviii) Accordingly, any increased claim of the petitioner on account of the increase in the capacity from 507.5 MW to 600 MW units based on the representation that the initial capacity agreed with DEC was only 507.5 MW is required to be disallowed as being a fraudulent and false claim to unduly enrich at the cost of the respondents and consumers in the State at large. In fact, this Commission should penalise the petitioner for the above attempt to conceal the facts and procure additional money at the cost of the consumers in the State and reject any

claim over the capped capital cost of ₹4299.12 crore.

(xix)The petitioner had cancelled the contract with BHEL, Simplex and Navyuga and gave the entire contract to its group company LITL on the basis that the total capital cost to the petitioner will be less than the capital cost of BHEL, Simplex and Navyuga. In this regard the evaluation report of bids invited for giving the contract to LITL, inter alia, states as under:

> *"12.2 As mentioned by NPCL, the approved capital cost of the project is ₹4299.12 crore out of which, the total EPC cost is ₹3673 Cr. The EPC cost indicated by LITL is ₹3526.44 Cr. Even though the EPC Scope of work has been examined in detail, there could be some minor variations during detailed engineering. However, even with these minor variations, it is expected that the total EPC cost would be within the EPC cost approved by CERC"*

(xx) The contract proposed with LITL was for 2 x 600 MW as it is clear from the agreement dated 16.12.2006 entered into with DEC. The above contract was concealed by the petitioner and was not produced before the Commission. The petitioner has till date not produced the contract between the petitioner and LITL prior to 16.12.2006 even though the contract dated 16.12.2006 specifically refers to the said Agreement.

(xxi) The Heat Balance Diagram prepared by DEC for the petitioner's generating station, produced by the Petitioner itself is dated 06.10.2006 and for 2 x 600 MW capacity. That is even much before petitioner invited fresh bids for selection of EPC contractor during November, 2006. Thus, in October, 2006 itself there was some arrangement by the petitioner for its generating station for a total capacity of 2 x 600 MW.

(xxii) Even as late as on 21.6.2013, the petitioner have furnished the drawing approved by DEC on 06.10.2006 and 29.1.2007 for a load of 600 MW with specific reference to the petitioner's generating station of 2 x 600 MW despite their being a claim that there was no agreement between the petitioner and LITL for 2 x 600 MW. Even while carrying out provisional acceptance tests also, petitioner has referred to contract for 2 x 600 MW which is claimed that it does not exist. Even the correction curves for Steam Turbine Provisional Acceptance Test have been approved by DEC in 29.1.2007 for a load of 600 MW.

(xxiii) The petitioner has confirmed that the capital cost and financials of the contract dated 16.12.2006 for 2 x 600 MW and the contract shown on 21.04.2007 for 2 x 507.5 MW are the same. There is no justification for reduction in capacity from 2 x 600 MW to 2 x 507.5 MW at the same cost and then after two years claiming additional cost for increase in capacity back to 2 x 600 MW.

(xxiv) That the petitioner had in reality entered into the contract with LITL, its affiliate for 2 x 600 MW units and not 2 x 507.5 MW, but has concealed this fact and the actual agreement from the respondent and also from GOK and other authorities and also this Commission. If the supply

contract with DEC was for 2 x 600 MW as on 16.12.2006, each and every work contracted with LITL under four contracts entered on 24.12.2006 can only be for 2 x 600 MW and not for 2 x 507.5 MW. On the other hand, the agreement with DEC dated 16.12.2006 specifically states that the petitioner and LITL have already entered into an agreement, which is obviously for 2 X 600 MW.

(xxv) Accordingly, the substitution of the contract with LITL in place of BHEL, Simplex and Navyuga was for 2 x 600 MW at a cost lower than ₹4299.12 crore. Accordingly, as per the now available details of DEC contract and consistent refusal on the part of the petitioner to disclose all the relevant details of contracts entered into by LITL with suppliers and service provides the inference to be drawn is that the substituted contract with LITL for 2x600 MW to be established within the capped capital cost.

(xxvi) The claim of the petitioner that the agreement dated 16.12.2006 for a capacity of 2 x 600 MW between LITL and DEC was cancelled on 20.4.2007 and a new agreement dated 21.4.2007 for a capacity of 2 x 507.5 MW was executed is on the face of it false and fraudulent.

(xxvii) The alleged agreement dated 20.4.2007 produced by the petitioner does not inspire any confidence. The Agreement is neither on a stamp paper nor is there any witness to the Agreement. Further the alleged agreement dated 20.4.2007 does not also recognize any of the past events in the preamble, namely, the previous agreement dated 16.12.2006, the alleged cancellation, the purported competitive bidding process etc. There is no reason given for the cancellation of the agreement dated 16.12.2006. In a commercial transaction between two large companies, it is impossible to believe that the companies simply cancel an earlier agreement on a plain paper without any witnesses only to enter into a new agreement the very next day for only changing the plant capacity.

(xxviii) The purported agreement dated 21.4.2007 also does not even mention about the previous agreement dated 16.12.2006 and the cancellation agreement dated 20.4.2007 nor the competitive bidding process. The only effect that is purported to have been made is that the capacity was decreased from 2 x 600 MW to 2 x 507.5 MW. There was no reason mentioned for decrease in such capacity.

(xxix) The claim now made is that even though there was a previous agreement dated 16.12.2006 for a capacity of 2 x 600 MW, the same was cancelled and an Agreement for 2 x 507.5 MW was signed on 21.4.2007. After a year, the capacity was once again increased to 2 x 600 MW with additional costs and expenses to be incurred. This claim is on the face of it fraudulent.

(xxx) The petitioner has also not produced any agreement wherein the increase in the capacity was agreed to and the purported agreement dated 21.4.2007 was amended for 2 x 600 MW. The entire object of the Petitioner has been only to suppress material, play fraud on the Respondents and claim additional costs and expenses at the cost of the consumers at large.

(xxxi) The petitioner also at the relevant time did not give any bidding documents for the purported competitive bidding process conducted. On the other hand, when the petitioner purported to start a competitive bidding process, the respondents by letter dated 22.11.2006 stated that there was no rationale to conduct a competitive bidding process by terminating the contract with BHEL which was based on the approval granted by this Commission. The respondents (then State Power Procurement Co-ordination Centre) also stated that no additional tariff would be given on account of this competitive bidding process. It has now come to light that the liquidated damages for every 1 kW shortfall in the generator output below the guaranteed output is USD 939.80 as per the contract between the petitioner and LITL. Whereas the contract between LITL and DEC, the liquidated damages to LITL is USD 1074.Similarly, the limitation of liability of liquidated damages in the contract between LITL and the petitioner is 5% of the contract price. However, the same is 20% of the contract price in the contract between LITL and DEC.

(xxxii) It is evident that the sister concern on the petitioner, LITL is making profit from both sides i.e from Karnataka Distribution Companies on one hand and DEC on the other hand.

(xxxiii) The petitioner has claimed additional amount of ₹129 crore on account of enhancement of capacity claiming additional performance guarantee payable to DEC towards BTG and also on account of balance of plant (BOP). This claim is on the face of it erroneous and only to seek an unjust additional cost by suppression of material facts.

(xxxiv) The CPRI report filed by the respondents confirms that the infrastructure which was envisaged for plant capacity of 2x507.5 MW is capable of catering the need of generating units of 2 x 600 MW.

62. Based on the above, the respondents have submitted that there is no justification for augmentation of capacity and the increase in capital cost of the project is not binding on the respondents and the consequences of the same have to be borne by the petitioner. It has also submitted that the benchmarking of this project with other projects do establish that the capital cost claimed by the petitioner is high.

Submissions of objector

63. The Objector, Janajagriti Samthi has mainly submitted as under:

(i) The application for tariff and capital cost was filed by the petitioner on the basis of EPC contract awarded to BHEL after ICB process and on that basis, in-principle approval of project cost was approved by the Commission. However, the petitioner had unilaterally and without any cogent or justifiable reason called for ICB for the same purpose and awarded the contract to DEC without any permission of the Commission.

(ii) The in-principle approval order of the Commission is a judicial order that is binding on the petitioner and any act of voluntary variation there from ought to have been taken only after approval of the Commission.

(iii) The petitioner is claiming increase in cost despite the fact that the equipment and services from Chinese companies are cheaper in price than compared to that of the Indian companies.

(iv) The delays in the project would not have occurred, if the original EPC contractor BHEL had been continued with by the petitioner. Also, there is no reason for increase in cost of acquisition of land since an amount of ₹21.80 crore was permitted in the in-principle order of the Commission.

Submission of Respondent PSPCL

64. The respondent, PSPCL has mainly submitted as under:

(i) In the PPA with PSPCL, the capital cost of ₹4299.12 crore shall be firm. Hence, as per PPA also, the capital cost for the purpose of tariff should not exceed ₹4299.12 crore.

(ii)The capital cost escalation resulting from re-bidding must not be allowed since it was no BHEL that withdrew, but the petitioner which delayed the advance payment and caused the contract awarded to BHEL to become non operative.

(iii) Chinese equipments have got much lower capital cost as compared to BHEL. Hence, by re-bidding for 2 x 600 MW capacity, it can be expected that the capital cost for BTG of 2 x 600 MW Chinese unit must be lower than the capital cost of 2 x 507.5 MW BHEL units.

(iv) The capital cost data of some of the projects of 600 MW capacity with Chinese equipments has been taken from the CEA website is given along with the year of commissioning and the calculated capital cost.

(₹ in crore/MW)

Hisar	Raghunathpur	Anpara-C	Sterlite Jharsuguda	Udupi
3.76	3.43	3.43	3.2	4.85

Response of Petitioner

65. In response, the petitioner has clarified as under:

(i) The order dated 25.10.2005 was passed at a time when the 2004 Tariff Regulations were in vogue and consequently it was in light thereof that the Commission made observation regarding the capital cost approved. The said regulations have been amended by the 2009 Tariff Regulations and Clause 7 *inter alia* provides that where PPA provides for ceiling of capital expenditure, the capital expenditure admitted by the Commission "*shall take into consideration such ceiling for determination of tariff*." Thus, in the present regulatory regime, the PPA ceiling is only a factor to be taken into consideration and is not binding on the Commission.

(ii) The order dated 25.10.2005 as well as order dated 7.8.2006 are on a principle footing and are subject to final determination by this Commission. The in-principle approval is *pro tem* for specific purpose.

(iii)The ICB which resulted in the appointment of the new EPC contractor (LITL) is a transparent process to the knowledge of GOK and the respondents and in the execution of which the GOK participated. The issue relating to ICB is an afterthought of the respondents. If the respondents had any objections to the ICB, they would have challenged the same during the proceedings before the Justice (Retd) Gururajan Committee, which was considering the approval of enhanced capital cost.

(iv) The respondents have unequivocally accepted LITL as the new EPC contractor, as the GOK duly certified the list of equipment to be imported by LITL from its sub-contractors under the EPC contract, required for setting up the project.

(v) It is not merely the capacity of the turbines that consist of the entire plant, but also the balance of plant systems that control the generation capacity. The original balance of plant size envisaged was commensurate with a unit of 507.5 MW each and was required to be modified to be augmented to be compatible with the turbine and boilers of 600 MW. Thus, the augmentation was required on account of subsequent permission to increase the generation capacity, which also resulted in extra time being consumed for that purpose.

(vi) The petitioner did not cancel the BHEL contract. Since BHEL could not hold the prices after 24.10.2006, it necessitated calling for fresh tender under ICB guidelines. The petitioner invited new bids after 31.10.2006 and also requested BHEL to participate in the bid. However, BHEL did not participate in this process. The allegation that the contract was cancelled with the intention to award the contract to LITL is denied as it was open to BHEL to participate in the bid, which it had not done so.

(vii) All the facts alleged to have been undisclosed from the respondents are already referred to in the detailed project report provided to the respondents when seeking augmentation of capacity in 2009 itself. Further documents/justification were also provided to the respondents at the time of the respondents assessing the capital cost for augmentation of the project. The perusal of documents in the possession of the respondents shows that the respondents were fully aware of the petitioner's proposal and therefore the respondents cannot allege that there is lack of bonafide on the part of the petitioner.

(viii) On re-bidding, bids were received from three companies viz LITL, Zelan and GEA and on the basis of evaluation of independent consultant, contract was awarded to LITL. The contract price awarded to LITL is lower than BHEL, Navyuga and Simplex projects together.

(ix) There is no basis in the allegation of the respondents that the bidding process as not transparent and the bids were called in a hurried manner without giving adequate time. The respondents have given 'no- objection' to the petitioner for calling of snap bids which was based on ensuring better terms and no increase in price.

(x) There is no fixed time for conducting ICB process. Since all the specifications were readily available for the existing contracts and ICB process had already been carried out earlier, much of the preparatory works had been done and hence it was possible for the petitioner to finales the revised bids in a relatively short span of time.

(xi) The project has since been completed and thus at this stage it is not appropriate on the part of the respondents tom question the transparency of the bidding process when they had clearly permitted the petitioner to go for snap bids as long as the EPC cost remain lower than the existing cost. If the respondents had considered that the bidding process had been conducted fraudulently or without giving sufficient time frame, they ought to have raised the same in 2006 itself since the outcome of the bidding was known by February, 2008 ie the date on which the respondents and GOK issued the project essentiality certificate. (*This has been disputed by the respondents vide affidavit dated 7.5.2013 stating that for the purpose of claiming benefit of Customs duty under the Mega Power Policy, the petitioner had sought from*

the GOK Essentiality Certificate in confirmation that the equipments being imported are required for setting up the generating station).

(xii) The respondents have never raised any objection as to the change in EPC contractor for over a period of 6-7 years during which period the petitioner made investments and commissioned the project. The respondents have also derived and accepted the benefit from the project implemented through the EPC contractor without any objection.

(xiii) The contract dated 24.12.2006 with the EPC contractor was for 1015 MW only. It was only in 2009 after receipt of necessary approvals that the EPC contract was amended to provide for augmentation. No separate contract was placed for augmentation. The amendment to the contract dated 10.7.2009 covers the technical amendments to augment the BOP systems for 2 x 507.5 MW to meet the requirements for 2 x 600 MW.

(xiv) The respondents are fully aware from inception that the standard 600 MW module was procured from the BTG supplier and the same will have a standard capacity which can be adjusted for each plant. When the contract was placed on BHEL from 507.5 MW, BHEL offered to use a standard 500 MW module which was capable of operating at 507.5 MW. Likewise, DEC offered a standard module of 600 MW capable of operating at 507.5 MW and accordingly, the guarantees were provided for only 507.5 MW. While augmenting the capacity, it is necessary to obtain from DEC fresh guarantee for augmented plant capacity. The terms and conditions including price for augmentation of BOP systems were discussed and agreed after approvals were taken from GOK and statutory authorities for augmentation. The augmentation cost was assessed by the consulting engineers of the petitioner, the independent engineer of PFC and other consortium leaders. Therefore, at this stage, the suggestion of the respondent that the petitioner should develop the 1200 MW project for the cost of 1015 MW at prices which were fixed in 2005 after years of delay caused by respondent's inactions is totally unjust.

(xv) The contract documents which establish the terms and conditions of supply and rights and obligations of the parties clearly provide for a 1015 MW plant which was contracted in 2006 and an augmented plant of 1200 MW was contacted in 2009. There is always a cost for augmentation and it is this Commission alone which has the jurisdiction to decide the issue. The capital cost should be decided by this Commission applying its benchmark norms considering all the relevant factors.

(xvi) The respondents have submitted that since the EPC contractor had signed the contract for 600 MW on 16.12.2006 which was subsequently cancelled in April 2007 and a fresh contract was entered into for 507.5 MW on 21.4.2007, there was a contract for 600 MW BTG supply.

The contract dated 16.12.2006 was entered into between the EPC contractor and its supplier and not with the petitioner. The petitioner only entered into an EPC contract for 1015 MW on 24.12.2006 which was amended for augmentation of capacity in 2009. As submitted by affidavits dated 30.5.2013 and 21.6.2013 there has been no agreement prior to 16.12.2006 between the petitioner and LITL. A letter from LITL clarifying the reason for inclusion of a sentence in the agreement between LITL and DEC indicating existence of contract between LITL and the petitioner. In the said letter dated 18.6.2013 LITL has clarified that no contact has been entered into with UPCL prior to 24.12.2006 and the reference to the project was an inadvertent error in its contract with DEC on 16.12.2006 and thus same may be disregarded.

(xvii) All the documents and information sought for by the respondent have been provided and it is completely imaginary on the part of the respondents to suggest that augmentation cost should not be allowed at all.

(xviii) As regards respondent PSPCL submissions for comparison of the capital cost of similar project it is submitted that benchmark capital cost is comparable to the capital cost of Simhadri Stage II, Indira Gandhi TPS, North Chennai TPS Stage I and Stage II (2x600MW) with EPC contract on BHEL and Mettur TPS (1x600MW) with EPC contract on BGR Energy Ltd. which were due for commissioning during October 2010 but delayed. If IDC for the delayed period is included in the capital cost, the cost per MW would work out to more than the cost per MW of the generating station of the petitioner. The project of the petitioner has additional features like captive Jetty, Flue Gas De-sulphurization plant etc. than the conventional project executed by NTPC. The cost of the contract awarded to the EPC contractor was lower than the contract with BHEL. The Anpara project and the petitioner's project are not comparable.

(xix) Nowhere in the report of Justice Gururajan Committee has it been stated that the respondent has not given opportunity before said committee or that they have not accepted the recommendation of the committee. The board members of the respondent company have endorsed the decisions of the GOK and have acted in furtherance of such directions. It is thus the quantum of increase in capital cost which is in dispute and the Commission may decide the same accordingly.

Analysis

66. Based on the submissions of the parties and the documents available on record, we proceed to examine the issues raised by the parties, as under:

Augmentation of Capacity

67. The petitioner has submitted that the EPC contract with LITL on 24.12006 was for 1015 MW capacity and it was only after necessary approval of the GOK, the EPC contract was amended during 2009 for augmentation of capacity to 2 x 600 MW. Accordingly the petitioner has contended that the contract documents submitted clearly establish that the terms and conditions and obligations of the parties were for 1015 MW plant in 2006 which was augmented to a 1200 MW capacity plant in 2009. However, the respondents 1 to 6 have argued that the agreement between LITL and DEC dated 16.12.2006 show that the plant size contracted was 2 x 600 MW and not 2 x 507.5 MW. It has also submitted that the agreement with DCE dated 16.12.2006 specifically states that the petitioner and LITL have already entered into agreement for 2 x 600 MW. Accordingly, it has contended that the petitioner had falsely represented during 2008 that augmentation of capacity from 507.5 MW to 600 MW will require additional cost, concealing that right from the beginning the fact that the contract was for 600 MW. Therefore, the respondents 1 to 6 have submitted that there is no reason to consider the additional cost and expenses incurred for increase in capacity from 1015 MW to 1200 MW. It is observed that while the respondents have alleged fraud on the part of the petitioner in concealing the capacity of the plant as 600 MW instead of 507.5 MW, the petitioner has submitted that the contract dated 16.12.2006 was signed between the EPC contractor and the supplier and that the EPC contract entered into by the petitioner on 24.12.2006 was for 507.5 MW capacity which was amended for augmentation of capacity in 2009. Further, the petitioner by affidavits dated 31.5.2013 and 21.6.2013 has reiterated that there has been no agreement prior to 16.12.2006 and has enclosed letter of LITL dated 18.6.2013 indicating that the reference of the agreement between petitioner and DEC in the agreement dated 16.12.2006 was an inadvertent error which may be disregarded. The petitioner should have taken note of the errors in the documents in their custody and should have dispelled all doubts on the respondents' minds which in our view would have settled the issue once for all. However, we do not wish to traverse further, keeping in view that the petitioner had sought permission of the GOK for augmentation of capacity of the project from 1015 MW to 1200 MW vide letter dated 29.7.2008 and the GOK vide its letter dated 3.2.2009 had accordingly permitted the augmentation of

capacity of the project, subject to 90% of power generated from the project to be made available to the GOK as per PPA and that the said purchase of power is required to be as per the tariff determined by this Commission. It is also noticed that for additional cost for augmentation of capacity, GOK had referred the matter to Justice (*Retd*) Gururajan Committee, based on which the GOK had in-principle approved the increase in capital cost of ₹339.60 crore *plus* IDC, subject to concurrence of this Commission. Considering the fact that the Govt. of Karnataka had already permitted the augmentation of capacity (from 1015 MW to 1200 MW) and the project having been declared under commercial operation, we are of the view that it would not be prudent for us, at this stage, to allow the 1200 MW project of the petitioner to be developed at the cost of 1015 MW capacity, at prices firmed up in 2005. Considering all the factors in totality, in our view, the 'quantum of increase in capital cost' that is admissible on account of augmentation of capacity of the project from 1015 MW to 1200 MW is only to be determined in this order. For this, the factors responsible for the increase in EPC cost due to augmentation of capacity are required to be examined. However, before proceeding, we deal with the objection raised by the respondents 1 to 6 with regard to the determination of capital cost of the project in the subsequent paragraph.

Capping of Capital cost

68. One more objection raised by the respondents 1 to 6 is that the petitioner has duly accepted the capital cost capped at ₹4299.12 crore inclusive of IDC (*as per in-principle approva*l *order dated 25.10.2005*) and having entered in to PPA, it is not open to the petitioner to claim more than the capped capital cost of ₹4299.12 crore for 1015 MW, subject to Force Majeure under Article 10 and Change-in-law as provided in the PPA dated 26.12.2005. It has also submitted that the PPA does not envisage anything other than the above for increase in the capped capital cost. The respondents have further submitted that in respect of the increase in capacity from 1015 MW to 1200 MW, there is no dispute for the need to consider an appropriate increase in the capital cost admissible to the petitioner. Accordingly, it has submitted that there has been no amendment of the PPA and so as far as 1015 MW concerned

the petitioner can only refer to the provisions of the PPA for any increase in capital cost. Similar submissions have been made by the respondent PSPCL and the objector. The petitioner has clarified that the PPA was signed under protest and the petitioner had sought several changes to the PPA before signing of the PPA, at the time of signing of the PPA and thereafter. It has also submitted that these changes have been discussed by the petitioner, the respondents and the GOK from time to time and based on the assurances that the terms of PPA would be modified at a future date, the petitioner proceeded to implement the project and PFC as a lender agreed to advance funds to the project. The petitioner has added that the PPA is only for 1015 MW and since the petitioner proposed to augment the project based on in-principle approval of the GOK, which stated that the tariff would be determined based on CERC norms, the provisions of the PPA relating to cap on the capital cost no longer apply.

69. We have considered the submissions of the parties. The Commission by its order dated 25.12.2005 had accorded in-principle approval of the capital cost of ₹4299.12 crore including IDC for 1015 MW project capacity which was incorporated in the PPA signed by the parties. While granting interim tariff, the GOK had considered capital cost of ₹4299.12 crore plus additional amount of ₹583.00 crore (totaling ₹4882.97 crore) which was approved by Justice Gururajan Committee for 1200 MW project, subject to tariff determination by this Commission. The petitioner has claimed tariff based on the capital cost of ₹6227.66 crore, upto 31.3.2013, for 1200 MW project, after augmentation of capacity. The respondents while contending that the petitioner is entitled to a capital cost of ₹4299.12 crore for 1015 MW *plus* an additional amount of ₹131.00 crore which was endorsed by the Official Committee of GOK in its report dated 27.1.2010 towards increase in capital cost for augmentation of capacity from 1015 MW to 1200 MW, have also not disputed the need to consider an appropriate increase in capital cost for such increase in capacity, to be determined in a prudent manner. It is evident from the above, that the contentions of the parties narrow down only to the 'quantum of increase in capital cost' admissible to the generating station. The respondents contention that the order dated 25.10.2005 granting in-principle approval of capital cost agreed to by the petitioner and

specified in the PPA cannot be reopened cannot be acceptable. The Commission vide its order dated 25.10.2005 in Petition No.40/2005 had accorded `in-principle` approval of the capital cost of ₹4299.12 crore including IDC for the generating station in terms of the second proviso to Regulation 17 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. The third proviso to the said regulation provides that, "*where the Commission has given 'in principle' acceptance to the estimate of the project capital cost and financing plan, the same shall be the guiding factor for applying prudence check on the actual capital expenditure*". Therefore, the in-principle approval of capital cost has the limited purpose of being applied as a guiding factor for applying prudence check on the actual capital expenditure and cannot be read as a cap to limit the actual capital expenditure incurred for execution of the project. It is further noticed that in terms of the said proviso, the Commission by its order dated 11.1.2010 in Petition No.109/2009 (SUGEN Power Plant) had determined the capital cost of the said generating station, on prudence check, in accordance with Regulation 7(1)(a) of the 2009 Tariff Regulations after comparing the capital cost approved while granting in-principle approval. Adopting the same methodology in the instant case, the capital cost of the generating station (1200 MW) shall be determined after prudence check, in accordance with Regulation 7(1)(a) of the 2009 Tariff Regulations after scrutiny of all the documents submitted by the parties.

Substitution of EPC Contract

70. The respondents 1 to 6 has argued that the entire competitive bidding was a farce and was schemed to substitute LITL, a group company of the petitioner, in place of BHEL, Simplex and Navyuga selected through a transparent process of bidding for EPC, Civil and External Coal Handling contracts. It has further submitted that no explanation was given as to why the contracts with BHEL, Simplex and Navyuga were terminated and the entire contract given to LITL by petitioner. The respondents have further submitted that even though the petitioner has claimed that it could not arrange for initial advance to be paid to BHEL by 24.10.2006 and therefore the contract was terminated as on 6.10.2006, the contract appears to have been

concluded with LITL and DEC for 2 x 600 MW and designed was also completed by them. The respondents have argued that the petitioner and LITL decided to terminate the agreements with BHEL, Simplex and Navyuga and undertake the entire contracted work of the above three parties for their own personal gain and advantage and the ICB was a scheme to be a cover for imprudent act of giving the contracts to LITL. Accordingly, the respondents have submitted that the above act of the petitioner was a commercial decision taken by Lanco group to undertake the project at a much cheaper price as compared to the cost payable to BHEL, Simplex and Navyuga should be held to be entirely to the cost and risk of the petitioner and the petitioner cannot claim any increase in the cost. The petitioned while maintaining that it could not arrange for the release of total initial advance payment to BHEL within the time limit has stated that on account of BHEL's refusal to hold price lines and validity, it had become necessary to select a new contractor for the main plant package in order to obtain current and updated prices based on optimized specifications. The petitioner while pointing out that the respondents had agreed to the snap bids has submitted that the change in contract can be considered if the contract price and parameters were more beneficial than the previous EPC contract. The petitioner has argued that the respondents had at no point of time objected to the retendering process or calling of snap bids or had asserted that there was any lack of transparency or malafide on the part of the petitioner for re-tendering. The petitioner has asserted that while there has been no rejection of the petitioner's proposal for re-bidding, the same was allowed subject to price and terms being beneficial. Accordingly, the petitioner has argued that it is not appropriate for the respondents at this stage to question the transparency of the bidding process after permitting the same so long as the EPC cost remained lower than the existing EPC cost.

71. We have examined the matter. We notice that the respondents by its letter dated 22.11.2006 had communicated its no objection for initiating ICB process for appointment of new contractor in place of BHEL, Simplex and Navyuga, subject to price and terms being better. Based on this, the petitioner had completed the retendering and awarded the contract to LITL and the project has been fully developed and declared under commercial operation. The

issue of fraudulent termination of contract of BHEL, Simplex and Navyuga had not been raised by the respondents during 2006 and on the contrary had granted no-objection for execution of the project, subject to terms and price being beneficial. It is further noticed that the contract price awarded to LITL for EPC contract is lower than BHEL, Simplex and Navyuga projects together (₹*3526.64 crore as against* ₹*3688.35 crore*). This being so, there is no reason for the respondents to question the termination of the contract by the petitioner, at this belated stage (after 6 to 7 years) on the ground that the bidding process was not transparent. Even otherwise, the issue of termination of contract and re-bidding by the petitioner were never raised by the respondents before the Justice *(Retd)* Gururajan Committee or the Committee formed by GOK to determine the quantum of additional cost to be allowed for augmentation of capacity. With this background, we do not understand the reason as to why the respondents had failed to raise such issues before these Committee/forums. We find no justification to consider the issue of termination of EPC contracts with BHEL, Simplex and Navyuga, as raised above by the respondents at this belated stage, more so, after the project had been declared under commercial operation. Moreover, the prayer, if allowed, would have the effect of rendering to a nullity all contracts and investments made by the petitioner. Section 61(d) of the Act provides that the Commission shall be guided by the principle of safeguarding the interest of consumers, and at the same time, allow the recovery of cost of electricity in a reasonable manner. In this background we do not accept the submissions of the respondents. Accordingly, taking into consideration the claims of the petitioner and the submissions of the respondents, proceed to determine the capital cost of the generating station, on prudence check.

72. We notice that the respondent, PSPCL has not furnished the details of the cost in the data furnished in para 64 of this order. It is not clear from the above whether the cost involved is the EPC cost or the hard cost or the total project cost. In case of DVC's Raghunathpur TPS with a capacity of 1200 MW (2 x600 MW), it is observed from the sanction order dated 29.3.2011, that the revised EPC cost is ₹4545.35 crore and the same works out to ₹3.79 crore/MW. Also, the revised estimated project hard cost is ₹5901.94 crore which works out to

₹4.92 crore/MW. In the absence of full particulars and the details of the scope of work involved in these projects, the submissions made by the respondent, PSPCL cannot be corroborated / verified, in order to the arrive at a reasonable conclusion on the capital cost of the generating station of the petitioner.

Prudence Check of Capital cost

73. It is noticed that the EPC cost of ₹3526.64 crore quoted by the lowest bidder, LITL which was accepted by the petitioner, is less than the EPC cost ₹3673.00 crore in respect of BHEL contract. It is also noticed that the EPC contract with BHEL was scraped due to refusal of BHEL to hold the price lines and validity of its offer beyond 24.10.2006. In the light of above, we limit ourselves to examine the reasonableness of the capital cost of the project in the backdrop of the "in-principle" approval of capital cost by the Commission for a capacity of 2 x 507.5 MW and the subsequent augmentation of capacity to 2 x 600 MW. The reasonableness of the capital cost on the basis of revised EPC contract is examined afresh based on the EPC price quoted by the new contractor under the scope of work agreed to in the contractual documents signed on 26.12.2006 for 1015 MW and the subsequent amendments due to augmentation of capacity from 1015 MW to 1200 MW. We find that the hard cost of ₹5057.85 crore (₹4.21 crore/MW) with site specific features is comparable to other similar projects such as Simhadri Stage-II, Indira Gandhi Super Thermal, Sipat Stage-I of NTPC and also comparable to the bench mark hard cost for coal based thermal power projects specified by the Commission, which works out as ₹4.87 crore/MW for Unit I and ₹4.54 crore for Unit II. However, we propose not to dwelve on the issue of competitiveness of hard cost or the project cost, since the question which arises for consideration in this order is only for the determination of the 'quantum of increase in capital cost" which is found reasonable and justifiable, on account of augmentation of capacity of the project from 1015 MW to 1200 MW. In doing so, we are neither guided by the recommendations of the Justice *(Retd)* Gururajan Committee nor have we limited ourselves to the price agreed to by the parties in the PPA based on the in-principle approval of the Commission, under BHEL EPC contract.

74. Clause 7(1) of the 2009 Tariff Regulations, provides as follows:

"The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan- (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the finds deployed, by treating the excess equity as normative loan, or (i) being equal to the actual amount of loan in the event of the actual equal less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

Capitalized initial spares subject of the ceiling rates specified in regulation 8; and

Additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but in use shall be taken out of the capital cost.
The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff;

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time.

75. The petitioner's claim for capital cost is summarised as under:

(₹ in crore)

Particulars (1)	**Cost actually incurred up to 19.8.2012 (i.e. COD of Unit-II) (2)**	**Cost to be incurred post 19.8.2012 (*but claimed on 19.8.2012*) (3)**	**Total capital cost claimed on 19.8.2012 (4)**	**Capital cost claimed as on COD of Unit-I (*allocated portion of capital cost as at column 4*) (5)**	**Capital cost claimed as on COD of Unit-II (Allocated portion of capital cost as at column 4) (6)**	**Additional Capital Expenditure (7)**	**Final Cost (8)**
Hard cost	4783.71	37.53	4821.24	2635.13	2186.12	2.32	4823.56
IDC,FC,FERV	1370.60	7.11	1377.71	511.65	866.06	9.97	1387.68
Other Cost	19.14	9.57	28.71	13.15	15.57	170.44	199.15
Total	**6173.45**	**54.21**	**6227.66**	**3159.92**	**3067.75**	**182.73**	**6410.39**

76. The petitioner vide affidavit dated 28.11.2012 has furnished the auditor certified capital cost (Auditor certificate dated 27.11.2012) as on respective COD's, which is as under:

(₹ in crore)

	As at 10.11.2010 (COD of Unit-I)	**As at 18.8.2012 (COD of Unit-II / station)**
	(Balances at close of the day)	
Gross Block of Fixed Assets	2804.83	6173.44
Capital Work-in-Progress	1952.21	8.80
Pre-operative expenses pending capitalization	410.62	0.00
Liabilities / Provision against the above	498.29	174.31

77. Further, the petitioner vide its affidavit dated 31.12.2012 has furnished the details of liabilities as required at Form-9A / 9B, as shown below:

(₹ in lakh)

	As at 10.11.2010 (COD of Unit-I)	**As at 18.8.2012 (COD of Unit-II / station)**
Liabilities included in Gross Block	24132	17431
Liabilities included in Capital Work-in-Progress	25697	0.00
Total Liabilities	**49829**	**17431**

78. It is observed that the EPC price quoted by LITL for 1015 MW as per bid analysis submitted by the petitioner vide its affidavit dated 24.4.2012 was US$ 120 million + ₹3002.00 crore, totaling ₹3526.64 crore. The scope included in the above price was as follows:

> "*The EPC contract involves design, engineering, testing and inspection at works, packing, transportation, delivery to site, unloading and handling at site, erection, commissioning and Performance & Guarantee testing of complete 2x507.5 MW Power Plant "*

79. Thus, had there not been any change in the capacity of the generating station (2x 507.5 MW), the capital cost of the project would have been the EPC cost + Non EPC cost including Finance Charges, IDC, FERV etc.

80. As stated, the dispute in capital cost is due to augmentation of capacity from 1015 MW to 1200 MW. The EPC cost agreed in the contract dated 24.12.2006 between the petitioner and LITL includes Boiler Turbine Generator (BTG) Package + Balance of Plant (BoP) equipments. The BTG package was procured from DEC, China which offered 600 MW since 507.5 MW was not a standard capacity size of BTG package. We are of the view that the BTG package is generally standard model. The equipments involved are highly technology oriented, and worldwide, there are limited manufacturers of the main plant equipment. However, the BoP system depends on the capacity of the generating station apart from other site specific conditions. The cost of BoP of a thermal power plant is generally 40% to 45% of the total hard cost of thermal power plant. Since the instant project has special features like jetty, FGD etc, the BOP cost has been considered slightly higher i.e 47% of the total hard cost. The total hard cost as per original estimate for 1015 MW is ₹3949.68 crore Thus, the BoP cost, presumed to

be included in the Hard cost of ₹3949.68 crore is ₹1856.35 crore (say 1860.00 crore) {₹3949.68 *0.47} for 1015 MW capacity**.**

81. Due to augmentation of capacity, there would not be any change in the BTG price as the bid price quoted by LITL for rated capacity of 507.5 MW and procured from DEC, China is a standard capacity of 600 MW model with all ancillaries which can operate at 600 MW continuously. This can be observed from letter dated15.7.2008 of DEC to LITL, the EPC contractor. DEC had offered that the performance guarantee can be revised for 600 MW with a nominal cost of US$ 23.5 million which was later reduced to US$ 20.0 million in the MoM dated 21.7.2008.

82. We have examined the EPC contract for 1015 MW, subsequently amended based on the enhanced capacity of 1200 MW, independent of the approval of GoK for increase in the EPC cost, based on Justice *(Retd)* Gururajan Committee or the amount of ₹421.00 crore, not claimed by the petitioner to keep the project cost at par to the cost approved by GoK. The EPC contract awarded to LITL for 2x 507.5 MW was under 4 separate agreements dated 24.12.2006 which are as under:

(₹ in crore)

Supply Contract	**Civil Contract**	**Services**	**Infrastructure**	**Total**
US$ 120 million + INR 1799 crore=Total ₹2323.64	808.00	253.00	142.00	**3526.64**

83. The scope of supply contract included Boiler and auxiliaries, FGD, Steam turbine generator and auxiliaries, Power cycle piping, Plant water system, Ash handling and disposal, coal handling system, fire protection system, electrical systems, 400 kV/220 kV switchyard, control and Instrumentation, Auxiliary steam piping, external coal handling system, oil, lubricants, consumables etc. The scope of Civil contract was all civil works of the 2x507.5 MW capacity generating station. The scope of services contract was total services including Erection, Commissioning, Performance Guarantee, Project Management, Plant Engineering Services, Site management, Training of O&M personnel, inland transportation of all plant &

equipments, receiving port to site on case of imported equipment. The scope of infrastructure contract was design, engineering, construction and finishing of all civil, structural work at port jetty, railway siding, Plant area. After augmentation of capacity of the project, the above said contracts (4 nos) under the EPC were revised and the revised price for different contracts is as follows:

(₹in crore)

Supply Contract	Civil Contract	Services	Infrastructure	Misc. (awarded on 27.12.2007)	Total
US$ 293.96 million + ₹1475.71 crore + US $ 29.50 Million for Performance Guarantee for 600 MW capacity-Total=₹2760.90 crore +128.97 crore (P.G.)	868.25	312.00	142.00	106.00	4318.12

84. Thus, there is a difference of ₹791.48 crore (₹4318.12 crore–₹3526.64 crore) in the EPC contract price quoted and agreed at time of contract dated 24.12.2006 and revised after augmentation of capacity as per amendments during June, 2007. The petitioner vide its affidavit dated 7.5.2013 has furnished the following details of the additional expenditure incurred on account of capacity augmentation in the EPC contract scope:

(₹ in crore)

Details	Amount
Performance Guarantee	129.00
BTG Civil	5.50
Coal Handling System	114.50
Sea Water System	23.00
Cooling Water System	64.85
RO & DM Water Plant	31.50
Ash Handling System & Air flue	15.50
BOP Electrical	29.90
Fuel oil System	1.00
Air & Flue gas systems	109.25
Others	63.20
Design & Engineering	1.00
Coal Slurry Pond	9.23
Drift Eliminator	5.77
Coal Silo	14.08
Concrete Road	22.56
Dredging	24.40
BTG Spares	30.36
Inlet Pipe	25.76
C&I system	30.60
Total	**751.96**

85. It is observed from the above summation that the total increase is ₹750.96 crore (*instead of ₹751.96 crore*). The increase in EPC cost includes Performance Guarantee charges of ₹ 129.00 crore, which include ₹87.44 crore i.e US$ 20.00 Million (US$ 20.0 Million x Foreign Exchange variation rate @ ₹43.72) claimed by DEC as Performance Guarantee fee for BTG + ₹ 41.53 crore claimed by LITL (the EPC contractor) for Performance Guarantee in respect of BoP for enhancing capacity of the generating station from 1015 MW to 1200 MW. It is seen that initially LITL had entered into BTG contract with DEC on 16.12.2006 for plant with capacity of 2x 600 MW. This contract was later cancelled by an agreement and a new contract between the LITL and DEC was signed on 27.4.2007 for BTG package having capacity 2x 507.5 MW. However, the commercial terms & conditions remained unaltered. As the augmentation of capacity of the generating station from 1015 MW to 1200 MW took place midway through the execution of project and since Performance Guarantee for 2x 600 MW capacity from the BTG supplier was necessary to ensure that the generating station performed to its rated capacity. It could be observed from the letter of DEC dated 15.7.2008 that it was agreeable to provide Performance Guarantee for 600 MW with additional cost of US$ 23.50 million which was finally settled as US$ 20.00 Million. In view of this, we are of the view that the petitioner had no choice but to pay for the Performance Guarantees for enhanced capacity in BTG package. We therefore, allow the same. Apart from above, an amount of ₹41.33 crore as claimed by LITL from the petitioner, towards extending the Performance Guarantee for Balance of Plant (for 1200 MW instead of 1015 MW) has been allowed in view of the fact that the EPC contractor had to change/augment the capacity of Balance of Plants equipment's commensurate with the capacity of BTG system of 600 MW rating. Such up-rating of the BoP system and its continued operation at optimum level cannot be expected without any extra costs. It is noticed that even after considering the additional cost incurred for ensuring Performance Guarantee from the OEM for the enhanced capacity, the overall cost of the project remains competitive and comparable or even better than the contemporary projects. Accordingly, we are inclined to

allow the additional charge of ₹129.00 crore towards Performance Guarantee for BTG package and BOP systems. We order accordingly.

86. The increase in EPC cost on others, such as BTG Civil i.e. foundations of some auxiliaries of the main plant such as mill bay area, electrostatic precipitator etc, augmentation of capacity of coal handling system, Sea Water System, Cooling Water System, RO & DM water System, Ash Handling System, Fuel Oil System, Air & Flue Gas System, Electrical System, C&I System, Others which include Initial Spares and Cost of Erection, Finance Charges, Design and Engineering Charges, Coal Slurry Settling Pond, Drift eliminator, additional Coal Silo near Jetty, Replacement of Bitumen road with Concrete road, Dredging, additional BTG spares and Replacement of GRP pipeline with MS pipe line pertains to balance of plant due to increase in capacities of various BOP packages, due to increase in capacity of the generating station from 1015 MW to 1200 MW.

87. The Balance of Plants (BOP) system includes all plants and equipment other than those included in main plant system. The major components of BOP system include coal handling plant, ash handling plant, fuel oil handling & unloading system, water treatment system, circulating water system, Electrical System and fire protection, detection & alarm system which depends on the capacity of the generating station, site specific features, source of coal, coal quality etc. Accordingly, augmentation of capacity of coal handling system, Sea Water System, Cooling Water System, RO & DM water System, Ash Handling System, Fuel Oil System, Air & Flue Gas System, Electrical System, Other expenditures on initial spares and Erection cost are considered to be a part of BoP system and is required to be augmented due to increase in capacity of the generating station. In view of this, additional expenditure incurred on these systems has been considered after prudence check. However, BTG Civil is as per standard capacity of 600 MW. Hence, additional expenditure of ₹5.50 crore on BTG Civil has not been allowed**.**

88. The additional expenditure claimed on above mentioned systems under BoP and allowed after prudence check is discussed below:

Coal Handling system

89. The petitioner has claimed expenditure of ₹114.50 crore for augmentation of capacity from 1015 MW to 1200 MW. The Coal Handling system includes External and Internal Handling system. Due to augmentation of capacity there is change in jetty length from 250 meters to 300 meters and duly certified by New Mangalore Port Authorities (NMPT). Coal Un loaders from Ship has been changed from 3 x700 tonnes/hr. to 2x 1650 tonnes/hr. Conveyor capacity has been augmented from 1500 tonnes/Hr. to 3300 tonnes/Hr. Stacker & Reclaimer capacity has been increased to 3300 tonnes/Hr. from the original capacity of 1500 tonnes/Hr. The capacity of Coal stacking Yard has been increased as multiple stockpiles will be required to stack coals received from various sources of origin. Further, stockpile area is to be provided with impervious layer in order to prevent the ground soil from leaching and contamination. The capacity of Wagon Loading system has been increased due to changes in moving un loader capacity and conveyor capacity. Further, internal coal handling system including stacker reclaimer had to be modified to handle increase quantity of coal. Considering the fact that Coal handling system is required to be modified to cater the coal requirement for additional 185 MW, we find justification in the additional expenditure claimed by the petitioner. It is observed from the in-principle approval order of the Commission dated 25.10.2005 that the Commission had allowed ₹345.70 crore for Coal Handling System including Civil works for 1015 MW capacity. In view of the above, we restrict the claim of the petitioner to *pro rata* additional cost due to increase in capacity by 185 MW (from 1015 MW to1200 MW). Accordingly, expenditure of ₹63.01 crore has been allowed towards Coal Handling system.

90. Similarly, the additional cost for C&I system has been restricted to ₹2.98 crore as against the claim of ₹30.60 crore, based on the consideration that 75% of the C&I cost of ₹65.39 crore as per approval of project cost by this Commission, pertains to BTG package and on the balance, proportionate increase has been allowed. Similarly, the claim towards cost of Spares

for ₹10.00 crore is restricted to ₹7.28 crore i.e. 2.5% of the increase in BOP cost of ₹291.22 crore (excluding cost of performance guarantee of ₹129.00 Cr.). The Erection cost of ₹53.20 crore claimed has been restricted to ₹27.89 crore, i.e at 7.68% based on erection cost of ₹287.50 crore on total EPC cost of ₹3742.80 crore as approved by the Commission. Also, Air & Flue gas systems has been restricted to ₹27.34 crore based on the in –principle approval as against the claim of ₹109.25 crore by the petitioner for augmentation of capacity by 185 MW. Expenditures for Sea-water system for ₹23.00 crore is based on a study and recommendations of National Institute of Oceanography to locate intake at a distance of 1430 meters from the shore and let the blow down water into the sea at a distance of 670 meters from the shore. This is a highly specialized construction activity and accordingly the expenditure of ₹23.00 crore has been allowed. The expenditure for Cooling Water system for ₹64.85 crore is proportionate to the expenditure of ₹352.00 crore allowed by the Commission for 1015 MW in in-principle order and hence the same is allowed. Further, expenditure for BOP Electrical for ₹29.90 crore has been allowed since it is below the *pro rata* increase of ₹301.81 crore allowed earlier for 1015 MW. Expenditure for RO & DM Water Plant for ₹31.50 crore, Ash Handling System for ₹15.50 crore, Fuel oil System for ₹1.00 crore have been claimed by the petitioner. The expenditure of ₹31.50 crore for R.O. and D.M. Water plant has been allowed on the ground that in case of R.O. Plant the increase in cost due to augmentation of capacity is not *pro rata* but due to the exponential increase with the increase in the capacity of the plant. The expenditure of ₹15.50 crore for Ash handling system and ₹1.00 crore for Fuel oil system is justified considering the capacity increase by 185 MW. Hence, allowed. Other expenditures such as Coal Slurry Pond of ₹9.23 crore, Coal Silo for ₹14.08 crore and ₹1.00 crore for Design and Engineering have been allowed as claimed by the petitioner considering the fact that these expenditures are necessary due to augmentation of capacity.

91. Expenditure for items other than BoP systems such as Drift Eliminator of ₹5.77 crore Dredging for ₹24.40 crore and ₹27.34 crore for Air & Flue Gas System have been allowed as against the expenditure of ₹109.25 crore claimed by petitioner. The petitioner has claimed

expenditure of ₹22.56 crore towards Concrete Road and ₹30.36 crore towards BTG spares. These do not form part of BoP systems and are in the nature of additional scope of work. Out of this expenditure, ₹22.56 crore for Concrete Road is allowed on the head "other than BoP" as the same is considered necessary. However, expenditure of ₹30.36 crore for BTG spares has not been allowed. Further, the expenditure of ₹25.76 crore towards replacement of intake sea-water GRP pipeline (inlet Pipe) with M.S. pipeline claimed in order to meet the direction of State Pollution Control Board has not been supported by any documentary evidence and hence the same has not been considered as additional expenditure due to augmentation of capacity.

92. Based on above discussions, the following items have been allowed as additional expenditure towards increase in BoP capacity.

(₹in crore)

	Details	Additional Expenditure incurred	Allowed
1	Performance Guarantee	129.00	129.00
2	BTG Civil	5.50	0.00
3	Coal Handling System		63.01
	Jetty	6.00	
	Unloaders	17.00	
	Coal Conveyor	31.00	
	Stacker & Re-claimer	12.00	
	Coal Stacking Yard	6.00	
	Wagon Loading System	3.00	
	Internal Coal Handling System	39.50	
4	Sea Water System	23.00	23.00
5	Cooling Water System		64.85
	Cooling Towers	47.80	
	Cooling Water Pumps	17.05	
6	RO & DM Water Plant	31.50	31.50
7	Ash Handling System & Air flue	15.50	15.50
8	BOP Electrical	29.90	29.90
9	Fuel oil System	1.00	1.00
11	C&I system	30.60	2.98
12	Others		
	Initial Spares	10.00	7.28
	Erection	53.20	27.89
	Design & Engineering	1.00	1.00
	Coal Slurry Pond	9.23	9.23
	Coal Silo	14.08	14.08
	Concrete Road	22.56	0.00
	BTG Spares	30.36	0.00
	Inlet Pipe	25.76	0.00
	Total BoP	**611.54**	**420.22**
	Other than BOP		
13	Concrete Road		22.56

14	Air & Flue gas systems	109.25	27.34
15	Drift Eliminator	5.77	5.77
16	Dredging	24.40	24.40
	Total other than BOP	**139.42**	**80.07**
	Total	**750.96**	**500.29**

93. We now examine whether the increase in cost of BOP and other than BOP systems to the tune of ₹500.29 crore is justified. It is noticed on verification that the actual increase in the BoP system under EPC package is only ₹332.55 crore (excluding performance guarantee of ₹87.44 Crore for BTG package). As stated, the BOP cost of a thermal power plant is generally 40% to 45% of the total hard cost of thermal power plant. Since the instant generating station has special features like jetty, FGD etc, the BOP cost has been considered as 47% of the hard cost of ₹3949.68 crore. The proportionate increase in the cost of BOP package works out as (1200-1015)/1015)x0.47x3949.68=₹338.35 crore. Therefore, the increase of ₹332.55 crore is reasonable. Apart from BOP packages above, there is increase in the cost due to Concrete Road, cost of FGD due to increased air flow and flue gases, additional cost of dredging and installation of drift eliminator as per MOEF guidelines for which the expenditure is considered necessary and accordingly allowed. Accordingly, the increase in cost of ₹500.29 crore is justifiable and has been allowed against the claim of ₹750.96 crore towards BoP and other than BoP package.

94. Accordingly, the consequential increase in taxes and duties has also been restricted to ₹ 15.18 crore pro-rata to increase allowed in EPC cost to ₹500.29 crore against the claim of ₹22. 83 crore for increase in EPC cost claimed of ₹752.61 Crore. The increase in Start-up fuel cost of ₹22.80 crore under the head 'Construction & Pre-commissioning expenses' is on account of increase in fuel cost and has accordingly been allowed. The increase in establishment and design & engineering charges of ₹78.26 crore (excluding contingencies) under the head "Overheads" on account of time overrun, which has been held to be beyond the control of the petitioner, has been allowed. Similarly, the preservation cost of ₹4.81 crore claimed for delay in the construction of 400 kV evacuation line has also been allowed under

head "Other cost". Further, an expenditure of ₹10.73 crore for 2nd ICT, 33 kV line and CSR and ₹13.17 crore for Vehicles /Computers /Furniture has also been allowed under the head "Other cost" as these expenditures are considered necessary based on the justification furnished by the petitioner vide its affidavit dated 7.5.2013. Accordingly, total expenditure of ₹28.71 crore has been allowed under head "Other Cost ". The total increase allowed in capital cost due to augmentation of capacity is ₹675.93 crore. Out of this, an expenditure of ₹36.32 crore has been incurred after the COD of the generating station till 31.3.2013. Accordingly, expenditure of ₹36.32 crore has been considered as additional capital expenditure for the period from 19.8.2012 to 31.3.2013.

Initial Spares

95. Initial spares allowed in the in-principle order of the Commission was ₹74.30 crore in the total hard cost of ₹3949.68 crore, which constituted 1.88% of the hard cost. The hard cost allowed for 1200 MW capacity up to 31.3.2014 is ₹4601.40 crore and the additional spares allowed in addition to ₹74.30 crore allowed earlier is ₹7.28 crore up to 31.3.2014. Thus, the total initial spares allowed is ₹81.584 crore (74.30 +7.284), which constitutes 1.77% of the total project cost of ₹4601.40 crore as on 31.3.2014. This is well within the ceiling limit of 2.5 % of the project cost permissible up to cut-off date, as per provisions of the 2009 Tariff Regulations.

96**.** The petitioner has claimed additional capital expenditure of ₹182.73 crore during 2013-14 which include an expenditure of ₹45.00 crore for Staff colony, ₹90.68 crore for Coal shed, ₹2.20 crore for additional spares, ₹27.56 crore for replacement of GRP Sea Water Outfall pipeline with M.S. pipeline and ₹5.00 crore for widening of Culvert in NH-66 to protect the sea water pipeline which have been laid underneath of NH-66. Further, additional capital expenditure also include taxes & duties of ₹2.32 crore, IDC of ₹9.28 crore and Finance Charges of ₹0.69 crore.

97. The expenditure for Staff colony and Coal shed were not considered in the in-principle approved cost and are new additions. In our view, staff colony for any project is a necessity and

being beneficial to the employees working in the project, the expenditure has been allowed. The proposed expenditure on Coal shed is also justifiable considering the fact that the project site is a 'cyclone prone area'. Hence, expenditure is allowed. The expenditure towards Taxes & Duties amounting to ₹2.32 crore has also been allowed to be capitalized. From the balance amount of ₹12.20 crore, initial spares to the tune of ₹2.20 crore has been additionally procured due to augmentation of capacity. However, initial spares has been restricted to ₹7.28 crore, as a ceiling of 2.5% of increase in the BoP cost of ₹291.22 crore (excluding BTG & BoP PG charges). Accordingly, the balance spares of ₹2.20 crore have been disallowed. Further, it is observed that an expenditure of ₹27.56 crore is proposed to be incurred for replacement of return GRP Sea Water pipeline with M.S. pipeline for improving and maintaining the environmental parameters. The Petitioner has furnished the original cost of GRP pipeline as ₹19.5 Crore inclusive of erection cost. However, the capitalization of ₹27.56 crore has not been considered as the petitioner has not furnished any documentary evidence in support of its claim that this has been necessitated due to environmental requirement. Expenditure of ₹5.00 crore for extension of culvert is not justifiable and hence disallowed. Accordingly, the additional capital expenditure of ₹138.00 crore (including taxes & duties of ₹2.32 crore) has been allowed during 2013-14 as against the claim for ₹182.73 crore**.**

98. Based on the above discussions, the Capital cost allowed for 1200 MW capacity up to COD of the generating station i.e. 19.8.2012 and the additional capital expenditure allowed for the year period from 19.8.2012 to 31.3.2014 and the final cost allowed, excluding IDC, FC and FERV, has been worked out and summarized under:

(₹in crore)

Description	Cost considered by Commission for (1015 MW) to evaluate capital cost for 1200 MW	Cost Increase allowed	Total cost for 1200 MW	Capital cost of Unit-I as on COD (11.11.2010)	Expenditure allowed as additional capital expenditure from 19.8.2012 to 31.3.2013	Capital cost up to COD of Unit-II (19.8.2012)	Additional Capital expenditure 2013-14	Final Cost
Cost of Land & site Development	32.80	30.20	63.00	-	5.35	57.65	0.00	63.00
EPC Cost	3526.64	500.29	4026.93	-	6.19	4020.74	0.00	4026.93
Taxes & Duties	108.00	15.18	123.18	-	6.89	116.29	2.32	125.50
Construction & Pre-commissioning expenses	19.00	22.80	41.80	-	0.00	41.80	0.00	41.80
Overheads	101.53	78.26	179.79	-	8.33	171.46	0.00	179.79
Other Cost		28.71	28.71	-	9.57	19.14	-	28.71
Additional capitalization after COD	-	-	-	-	-	-	135.68	135.68
Capital cost (excluding IDC, FC)	**3787.97**	**675.43**	**4463.40**	**2434.89**	**36.32**	**4427.08**	**138.00**	**4601.40**

99. As noticed above, the hard cost allowed for 1200 MW capacity is ₹4601.40 crore which works out to ₹3.83 crore/MW, as against the hard cost of ₹3.89 crore/MW for 1015 MW capacity approved in the in-principle approval of project cost in Commission's order dated 25.10.2005. Accordingly, the capital cost as above, excluding IDC, FC is considered reasonable and is justified.

100. The petitioner was directed to explain the reasons for the increase in the Foreign Exchange Variation component from US$ 120 million in the original contract with EPC contractor based on the bidding to US$ 293.46 million in the amended contract with the EPC contractor in December, 2009 for increase in the capacity to 1200 MW. However, the petitioner has not furnished proper justification for the same. As such, the increase in foreign component

is not justifiable and the same has been limited to US$ 120 million as per the original contract with the EPC contractor for the purpose of working out the FERV.

Interest During Construction, Finance Charges and FERV

101. The petitioner's claim for Interest During Construction (IDC), Finance Charges (FC) and FERV, is as under**:**

(₹ in crore)

Particulars (1)	**Cost actually incurred up to 19.8.2012 (COD of Unit-II) (2)**	**Cost to be incurred post 19.8.2012 (but claimed on 19.8.2012) (3)**	**Total capital cost claimed on 19.8.2012 (4)**	**Capital cost claimed as on COD of Unit-I (Allocated portion of capital cost shown at column 4) (5)**	**Capital cost claimed as on COD of Unit-II (Allocated portion of capital cost shown at column 4) (6)**	**Additional Capital Expenditure (7)**	**Final Cost (8)**
IDC	1188.50	0.00	1188.50	407.58	780.92	9.28	1197.78
FC	27.00	7.11	34.11	18.76	15.35	0.69	34.80
FERV	155.10	0.00	155.10	85.31	69.80	0.00	155.10
Total	**1370.60**	**7.11**	**1377.71**	**511.65**	**866.06**	**9.97**	**1387.68**

Submissions of Respondents 1 to 6

102. The respondents vide its affidavit dated 2.8.2013 has submitted the IDC claimed by the petitioner relates to two periods, namely the period upto the Scheduled Commercial Operation Date (SCOD) and for time over-run and cost over-run for the period beyond SCOD. It has also submitted that the project cost approved by the Commission includes IDC of ₹317.03 crore and the approved capital cost of ₹4299.12 crore including IDC was capped and accordingly, there cannot be any further IDC for the period upto the SCOD. The respondents have further submitted that clause 4.1 of the PPA specifically provides that the IDC is applicable only for the period till the SCOD and accordingly, the petitioner having expressly agreed to be entitled to IDC only till SCOD there is no question of the petitioner now claiming any IDC for the period after the SCOD. The respondents have contended that the provisions of the PPS under Article 2.A.5.3 provides for extension of commissioning period due to force majeure events subject to capitalising the IDC in the capital expenditure only up to the SCOD. The respondents have submitted that the above circumstances the claim for IDC for the period applicable to the SCOD on account of alleged forced majeure conditions is misconceived and likely to be

rejected. The respondents have also contended that in terms of the supply contracts entered into between the petitioner and LITL on 24.12.2006 the additional cost claimed by the petitioner towards IDC beyond the SCOD is not admissible. The respondents have reiterated that in any event the time over-run and cost over-run is attributable to the petitioner and is not attributable to any force majeure events or otherwise authorised under any other provisions of the PPA or under the 2009 Tariff Regulations. Similar contention had been made by the objector in its submissions dated 25.7.2013 and has argued that since IDC is already included in the project cost there cannot be any additional claim on this count.

Response of the Petitioner

103. In response, the petitioner vide its affidavit dated 10.8.2013 has submitted that the provision (clause 4.1) referred to by the respondents 1 to 6 is incomplete as the main provision provides that the capital expenditure shall be the actual cost in connection with the development, construction and commissioning of the project as approved by the Commission. It has also submitted that as per the provisions of the 2009 Tariff Regulations, IDC is allowed on actual upto the COD, and regulations of the Commission overrides the provisions of the PPA. The petitioner has further submitted that the provision (Article 2.8.5.3) referred to by the respondent would not be applicable. In terms of this provision, the respondents are liable to make deemed generation payments and hence capitalisation of interest is limited when deemed generation payment are made. It has argued that since the respondents 1 to 6 in this case have claimed force majeure since evacuation facility has not been made available and if the said contention of force majeure is upheld the said clause would not apply. The petitioner has also submitted that since the State guarantee was given after 13 months from the signing of PPA the effective dates get extended by 12 months over and above the time provided in Article 6.10 of the PPA for furnishing the guarantee. Taking into account the delay of 12 months in furnishing the GOK guarantee, the effective date is 11.12.2007 and accordingly the SCOD for Unit II is 11.6.2011. The petitioner has thus contended that IDC should be capitalised even as per the contention of the respondent's upto this period. The petitioner has submitted that

there is no provision relating to the payment of IDC in the EPC contract between the petitioner and LITL as submitted by the respondents since this is an obligation emanating from the financial agreement executed between the petitioner and the lenders.

104. We have considered submissions of the parties. As stated, the capital base considered for computation of the admissible capital cost for this generating station in this order is the in-principle order of Commission dated 25.10.2005 in Petition No.40/2005. As regards IDC and FC, the Commission in the said order had observed as under:

> "*Considering plant capacity of 1015 MW with COD of Units stated as for U-I: 1.9.2008 and U-II: 1.1.2009, and firmed up prices based on contracts finalized as stated below, IDC/Financing charges amounting to ₹350.14 crore with interest rate of 7.25% and D:E ratio of 70:30 was found to be reasonable/lowest."*

105. The capital cost of ₹4299.12 crore considered as ceiling limit in the in-principle order of the Commission was based on debt: equity ratio of 70:30 with the Foreign Exchange component of US$ 40 million, Euro 66 million at exchange rate of ₹43.72/US$ ₹57.33/Euro under the EPC contract with M/s BHEL, Civil contract with M/s Simplex and External coal handling with M/s Navyuga.

106. The Commission, after making comparison with a few projects of NTPC, as regards IDC, and in its in-principle approval order dated 25.10.2005, had observed as under:

> " *IDC in ₹crore/MW terms works out to ₹0.34 crore/MW for this project of NPCL as against TEC cost of ₹0.87 Crore/MW for Sipat-I, ₹0.91 crore/MW for Barh, ₹0.46 in crore/MW for Kahalgaon-II and ₹0.56 in crore/MW for Vindhayachal Stage-III.*

107. Based on above analysis, the Commission in its order dated 25.10.2005 had observed that the capital cost appeared to be reasonable on an overall basis and IDC and FC were the lowest for this generating station. It also observed that IDC of ₹350.14 crore was based on interest on loan of 7.25% and Guarantee charges for the loan from PFC for the borrower category falling in Grade I to IV bracket, applicable to the petitioner and that negotiations with PFC were underway. Further, the Commission in the said order observed as under:

> "*The interest applicable to NPCL shall be the rate applicable to the corresponding grade at the time of the disbursement. This is evident as per the PFC sanction letter. Petitioners submission*

is also noted that IDC and FC may vary depending upon the rate of interest and financing charges by the other member banks of consortium but are not likely to increase because the total composite rate (interest + financing charges) to be charged by other banks is not likely to exceed the present composite rate being charged by PFC".

108. The factors which had resulted in the increase in IDC actually incurred as against the in-principle capital cost approved by the Commission in order dated 25.10.2005, as submitted by the petitioner is as under:

(a) Increase in cost for procurement of land which is beyond the control of the petitioner;

(b) Force Majeure invoked by the petitioner and the respondents 1 to 6;

(c) Cost due to augmentation of capacity from 1015 MW to 1200 MW;

(d) Change in FERV component;

(e) Change in actual debt-equity ratio from 70:30 to 75.64:24.36 based on actual funding;

(f) Increase in interest rates.

109. As regards the submissions made by the petitioner in respect of the issues raised in serial nos. (a) to (c) above, we have in this order, examined the submissions of the parties on time overrun in the declaration of COD of the units of the generating station due to delay in acquisition of land and on account of Force majeure events invoked by petitioner like (i) Earthquake (ii) Change in Visa policy, and the delay in construction of 400 kV transmission facility due to Force majeure event invoked by the respondents 1 to 6. Considering the documents on record and the submissions of the parties, we have arrived at a conclusion that the delay in acquisition of land by the petitioner was beyond its control and hence not attributable to them. Accordingly, the time over run of 8.5 months for Unit-I has been allowed as the delay was not attributable to the petitioner. Similarly, the delay of 6 months in the completion of the project due to Change in Visa policy by the Govt of India has been held to be beyond the control of the petitioner for reasons stated there under. As the delay in commissioning of Unit–I due to delay in land acquisition has already be condoned, the delay in the supply of equipment by DEC on account of earthquake was found to be not materially affecting the commissioning of Unit-I. Rejecting the Force majeure event invoked by the respondents 1 to 6, due to delay in completion of evacuation facility for reasons stated, we have in this order held that the declaration of Unit-II by the petitioner has been delayed due to

the non-completion of transmission line by the respondents. As regards the delay due to augmentation of capacity of the project from 1015 MW to 1200 MW, we have in this order concluded that the Govt. of Karnataka had already permitted the augmentation of capacity from 1015 MW to 1200 MW and that the project having been declared under commercial operation, it would not be prudent at this stage, to allow the 1200 MW project of the petitioner to be developed at the cost of 1015 MW capacity, at prices firmed up in 2005. We have accordingly held that the quantum of increase in capital cost admissible due to augmentation of capacity of the project and the factors responsible for the said increase is only to be determined. Consequent upon the decisions arrived at as above, the increase in cost, IEDC and Interest During Construction (IDC) & Financing Charges (FC) shall be admissible for the period of delay not found attributable to the petitioner was directed to be determined. We proceed accordingly.

110. As regards impact due to change in FERV component, it is observed that the petitioner has considered the Forex component of US $308.20 million which comprises of the contract price of US $288.20 million and US$ 20 million towards BTG guarantee. As against the Forex component of US $308.20 million claimed by the petitioner, the Forex component of US$140 million (US$ 120 million towards EPC contract plus US$ 20 million towards BTG guarantee) has been considered to work out the admissible hard cost. Accordingly, the claim of ₹155.10 crore by the petitioner towards FERV has been worked out proportionately. As the terms of payment for original contract of US $120 million and the revised contract of US $288.20 million are the same and considering the allowance of US$20 million towards BTG guarantee the allowable FERV component works out to ₹79.34 crore.

111. The petitioner has considered debt-equity ratio of 75.64:24.36 as on COD of both the Units and for the purpose of projected additional capital expenditure. However, considering the position of cash expenditure as incurred based on their claims towards capital assets and debt position as on respective CODs, the debt-equity ratio as on COD of Unit-I and COD of Unit-II works out to 76.23:23.77 and 75.47:24.53, respectively. These ratios have been considered for

the purpose of tariff as on respective COD's of the generating station. Also, since the funding pattern of additional capital expenditure is not available, the debt-equity ratio of 70:30 has been considered. This is subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

112. As regards the impact due to increase in interest rates, the petitioner has contended that IDC should be allowed on actuals up to the COD, as per provisions of the 2009 Tariff Regulations. It has also submitted that in terms of the provisions of the 2009 Tariff Regulations, the generating company is entitled to the rate of interest at the weighted average rate of interest calculated on the basis of the actual loan portfolio applicable to the project subject to prudence check. In response, the respondents 1 to 6 in their submissions dated 28.2.2013 has contended that the PPA entered into by the parties caps the interest rate at the rate of 7.25% and the claim of the petitioner is substantially higher than 7.25% as provided in the PPA. The respondents have contended that since the petitioner has voluntarily agreed to a lower interest rate of 7.25%, the same is to be considered for tariff and its is not open to the petitioner to claim a higher interest rate, which is not in consumer interest. Accordingly, the respondents have contended that there is no justification for allowing such increase in costs as claimed by the petitioner to the consumers at large and the same ought to be on account of the petitioner. The petitioner while pointing out that that the interest rate of 7.25% in the PPA was the then prevailing rate, has submitted that it has been continuously representing to the respondents/GOK for amendment of the interest rate of 7.25% in the PPA to a variable interest rate. It has also submitted that the interest rate at actuals is payable as per provisions of the 2009 Tariff Regulations.

113. We have considered the submissions of the parties. We have in this order decided that the tariff of the generating station shall be decided in terms of the provisions of the 2009 Tariff Regulations without being influenced by the provisions of the PPA and the report of the Justice *(Retd)* Gururajan Committee, for the reasons stated there under. It is pertinent to mention that IDC is dependent on the hard cost of the project, and not vice versa. It is the hard cost along

with the time duration of the project and the applicable interest rate which decide IDC. As such the contention of the respondents 1 to 6 to restrict IDC to the total cost capped for the project by adjustment of the hard cost in case of increase in IDC, is unacceptable. Even otherwise all loans which the petitioner has shown have been drawn from public financial institutions which could be easily verified. Considering the above factors in totality and in terms of the provisions of the 2009 Tariff Regulations, the IDC claimed by the petitioner has been verified with reference to details of funding, the loan details, including the interest rates applicable and reset of interest rates, as furnished by the petitioner. Accordingly, against the amount of ₹1188.50 crore claimed as on 19.8.2012, the amount of ₹1165.33 crore (*after disallowing penal interest charged by banks to the petitioner towards NMPT, interest on short term loans and considering all the terms of loan agreement*) has been worked out. As the admitted hard cost as on 19.8.2012 has been worked out as ₹4427.08 crore, IDC has been proportionately computed as ₹1074.15 crore (4427.08*1165.33/4802.84) and the same has been allowed.

Financing Charges

114. As regards, petitioner's claim for ₹27.00 crore towards Financing Charges being paid to financial institution as commitment charges towards drawls, the same has been allowed.

115. In view of above discussions, the capital cost claimed and allowed (on accrual basis) as on 19.8.2012 is summarised as under:

(₹in lakh)

Particulars (1)	**Capital Cost claimed (2)**	**Capital cost claimed (based on cost incurred up to 19.8.2012) (3)**	**Capital cost allowed on 19.8.2012 (i.e. COD of Unit-II) (4)**
Hard Cost	484995.00	480284.00	442708.00
IDC	118849.99	118849.99	107415.49
FC	3411.00	2699.60	2699.60
FERV	15510.41	15510.41	7933.59
Total	**622766.40***	**617344.00**	**560756.68**

**capital cost claimed on accrual basis by considering un-discharged liabilities as part of claimed capital cost.*

116. Accordingly, the capital cost of ₹560756.68 lakh as on COD of Unit-II (the generating station) has been allowed and the allocated capital cost of ₹285649.44 lakh as on COD of Unit-I of the generating station has been worked out as under:

(₹ in lakh)

Particulars (1)	**Capital Cost allowed on 19.8.2012 (COD of Unit-II) (2)**	**Ratio of allocation to Unit-I (3)**	**Capital Cost allowed on 11.11.2010 (i.e. COD of Unit-I) (4)**
Hard Cost	442708.00	55.00%	243489.40
IDC	107415.49	34.27% (i.e. as capitalized in books)	36811.80
FC	2699.60	42.80% (i.e. as capitalized in books)	1155.39
FERV	7933.59	52.85% (i.e. as capitalized in books)	4192.85
Total	**560756.68**		**285649.44**

117. The capital cost claimed and those allowed as on the respective COD's of the Units of the generating station is as under:

(₹ in lakh)

Particulars (1)	**Claimed (2)**	**Allowed (4)**
COD of Unit-I (11.11.2010)	315992.00	285649.44
COD of Unit-II / Station (19.8.2012)	622766.40	560756.68

Un-discharged liabilities

118. Un-discharged liabilities amounting to ₹241.32 crore as on COD of Unit I (11.11.2010) and ₹174.31crore as on COD of Unit II/generating station (19.8.2012) as submitted by the petitioner vide affidavit dated 31.12.2012 in Form 9A and 9B and duly supported by Auditor's certificate have been taken into consideration for working out the admissible capital cost, on cash basis, as per clause 2 of Regulation 3 of the 2009 Tariff Regulations.

119. As stated, the petitioners claim for capital cost as on respective COD of the generating station are on accrual basis. The gross block as on COD of Unit-I and COD of Unit-II is inclusive of un-discharged liabilities amounting to ₹24132.00 lakh and ₹17431.00 lakh respectively. However, as per Regulations 2009-14, the tariff is required to be worked out on

cash basis. As such, for the purpose of tariff capital cost as shown below may be allowed on cash basis on respective COD's:

(₹ in lakh)

	COD of Unit-I (11.11.2010)	**COD of Unit-II / generating Station (19.8.2012)**
Capital cost as allowed above (on accrual basis)	285649.44	560756.68
Less: Un-discharged liabilities	24132.00	17431.00
Capital cost allowed (on cash basis)	**261517.44**	**543325.68**

120. The un-discharged liabilities deducted as above shall be allowed as additional capital expenditure during the year in which the same is discharged (by payments) by the petitioner.

121. The additional capital expenditure of ₹3632.00 lakh for the period from 19.8.2012 to 31.3.2013 and ₹13800.00 lakh for the year 2013-14 has been allowed. However, the claim on account of IDC & FC amounting to ₹1708.00 lakh has not been accounted for and the same will be considered on actuals at the time of truing-up of tariff in terms of Regulation 6 of the 2009 Tariff Regulations.

122. Based on the above, the final capital cost considered for the period 2009-14 is as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	**2011-12 (1.4.2011 to 31.3.2012)**	**2012-13 (1.4.2012 to 18.8.2012)**	**2012-13 (19.8.2012 to 31.3.2013)**	**2013-14**
Opening capital cost	261517.44	261517.44	261517.44	543325.68	546957.68
Add: Projected Additional capital expenditure	0.00	0.00	0.00	3632.00	13800.00
Closing capital cost	**261517.44**	**261517.44**	**261517.44**	**546957.68**	**560757.68**
Average capital cost	**261517.44**	**261517.44**	**261517.44**	**545141.68**	**553857.68**

Debt-Equity Ratio

123. Regulation 12 of the 2009 Tariff Regulations provides that*:*

> *"(a) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.*

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.

124. As stated in para 111 above, the debt-equity ratio as on COD of Unit-I and COD of Unit-II has been worked out as 76.23:23.77 and 75.47:24.53, respectively which has been considered for the purpose of tariff as on respective COD's of the generating station. This is subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations**.**

Return on Equity

125. Regulation 15 of the 2009 Tariff Regulations, as amended on 21.6.2011, provides that:

"(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II.

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed charges on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

126. The petitioner has claimed Return on Equity (RoE) @ 19.358% (15.50/(1-19.931%)) p.a. for the period up to 31.3.2011 and @ 19.377% (15.50/(1-20.008%)) p.a. for the subsequent periods, on normative equity after considering the base rate of 15.50%, in line with first proviso to clause (2) of the above regulation and MAT rate for respective years. The respondents 1 to 6 has submitted that the PPA entered into between the parties provides for return on equity at a fixed rate of 14% and the same being less than the entitlement as per the prevailing regulations having effect of reduction in tariff, the same is enforceable against the petitioner. The submissions of the respondents are not acceptable, as we have in this order decided that the tariff of the generating station is to be determined in terms of the provisions of the 2009 Tariff Regulations, Accordingly, the claim for return on equity as per the above provisions of the 2009 Tariff Regulations has been considered. Based on this, return on equity has been worked out after accounting for the admitted additional capital expenditure and allowed as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	**2011-12 (1.4.2011 to 31.3.2012)**	**2012-13 (1.4.2012 to 18.8.2012)**	**2012-13 (19.8.2012 to 31.3.2013)**	**2013-14**
Normative Equity -Opening	62158.62	62158.62	62158.62	133288.83	134378.43
Add: Additions on account of additional capital expenditure	0.00	0.00	0.00	1089.60	4140.00
Normative Equity - Closing	62158.62	62158.62	62158.62	134378.43	138518.43
Average Equity	62158.62	62158.62	62158.62	133833.63	136448.43
Return on Equity	**12032.67**	**12044.48**	**12044.48**	**25932.94**	**26439.61**

Interest on loan

127**.** Regulation 16 of the 2009 Tariff Regulations provides that:

"(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.

128. Interest on loan has been worked out as under:

(a) The gross normative loan corresponding to approved debt-equity ratio as on respective COD's works out to ₹199358.82 lakh and ₹410036.85 lakh, respectively.

(b) The net loan opening as on COD of Unit-I is same as gross loan and the cumulative repayment of loan up to previous year/period being 'nil'.

(c) Depreciation allowed for the period under consideration has been considered as repayment.

(d) Average net loan is calculated as average of opening and closing.

(e) Weighted average rate of interest has been calculated as shown below:

(i) Rate of interest considered in case of all loans is on annual rest basis.

(ii) Actual drawls as submitted by petitioner has been considered.

129. The necessary calculation for interest on loan is as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Gross Opening Loan	199358.82	199358.82	199358.82	410036.85	412579.25
Cumulative Repayment of Loan	0.00	5207.73	18729.28	23932.55	41301.76
Net Loan Opening	199358.82	194151.09	180629.54	386104.29	371277.48
Addition of loan due to projected Additional Capital Expenditure	0.00	0.00	0.00	2542.40	9660.00
Repayment of loan (Normative)	5207.73	13521.54	5203.27	17369.21	28685.62
Net Loan Closing	194151.09	180629.54	175426.27	371277.48	352251.87
Average Loan	196754.95	187390.31	178027.91	378690.89	361764.67
Weighted Average Rate of Interest on Loan	11.8729%	12.1191%	12.3424%	14.0145%	14.0192%
Interest on Loan	**23360.50**	**22709.93**	**21972.83**	**53071.49**	**50716.39**

Depreciation

130. Regulation 17 of the 2009 Tariff Regulations provides that:

"(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system.

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation] as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

131. The petitioner has calculated depreciation considering the weighted average rate of depreciation of 5.1745% for the period from COD of Unit-I to COD of Unit-II, 5.19021% for the period from COD of Unit-II to 31.3.2013 and 5.17668% for the year 2013-14. However, as per Form-11 submitted by the petitioner, the weighted average rate of depreciation is 5.1702% as on COD of Unit-I, 5.1704% for the period from 1.4.2011 to 18.8.2012 and 5.1792% as on COD of Unit-II. The same has been considered for the purpose of tariff. Accordingly, depreciation has been calculated as given under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	**2011-12 (1.4.2011 to 31.3.2012)**	**2012-13 (1.4.2012 to 18.8.2012)**	**2012-13 (19.8.2012 to 31.3.2013)**	**2013-14**
Opening capital cost	261517.44	261517.44	261517.44	543325.68	546957.68
Add: Additional capital expenditure	0.00	0.00	0.00	3632.00	13800.00
Closing capital cost	261517.44	261517.44	261517.44	546957.68	560757.68
Average capital cost	261517.44	261517.44	261517.44	545141.68	553857.68
Rate of depreciation	5.1702%	5.1704%	5.1704%	5.1792%	5.1792%
Depreciation for the period	**5207.73**	**13521.54**	**5203.27**	**17369.21**	**28685.62**
Depreciation (*annualised*)	**13521.00**	**13521.54**	**13521.45**	**28234.19**	**28685.62**

Operation & Maintenance Expenses

132. The O&M Expenses norms for 600 MW units for coal based generating stations in terms of the 2009 Tariff Regulations is as follows:

(₹in lakh/MW/year)

2010-11	2011-12	2012-13	2012-13	2013-14
12.37	13.08	13.62	13.62	14.62

133. Based on the above, the O&M expenses claimed by the petitioner are as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	**2011-12 (1.4.2011 to 31.3.2012)**	**2012-13 (1.4.2012 to 18.8.2012)**	**2012-13 (19.8.2012 to 31.3.2013)**	**2013-14**
O&M Expenses (annualised)	7422.00	7848.00	8292.00	16584.00	17544.00

134. The respondents 1 to 6 have submitted that the PPA provides for a reduced O&M expenses and O&M escalation as compared to the provisions of the 2009 Tariff Regulations and the same is binding and enforceable against the petitioner. We do not accept the submissions of the petitioner for consideration of the PPA for grant of O&M expenses and accordingly proceed to consider the provisions of the 2009 Tariff Regulations. Based on this, the O&M expenses claimed by the petitioner based on the above norms are found to be in order and the same is allowed.

Normative Annual Plant Availability Factor (NAPAF)

135. The NAPAF of the generating station is considered as 85% for the period 1.4.2009 to 31.3.2014

Interest on Working Capital

136. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:

> *(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;*
>
> *(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.*
> *(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and*
>
> *(v) O&M expenses for one month.*

137. Clause (3) of Regulation 18 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

> *"Rate of interest on working capital shall be on normative basis and shall be considered as follows:*
>
> *(i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.*

(ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.

138. Working capital has been calculated considering the following elements:

Fuel Component and Energy charges in working capital

139. The petitioner has claimed for fuel component in working capital based on price and GCV of coal for preceding two months from COD of Unit-I (11.11.2010) i.e. July, 2010 and August, 2010 and for the preceding three months from COD of Unit-II i.e. May, 2012, June, 2012 and July 2012. The weighted average cost of oil has been claimed as ₹35661.93 /KL for the period 11.11.2010 to 31.3.2011, ₹41578.18/KL for the period 1.4.2011 to 30.9.2011, ₹44479.18/KL for the period from 1.10.2011 to 31.3.2012, ₹46189.85/KL for the period from 1.4.2012 to 18.8.2012, ₹46684.94/KL for the period from 19.8.2012 to 31.3.2013 and for the year 2013-14 and the weighted average of HFO (85%) and LDO (15%) for computation of secondary oil cost for Unit-I and for Units I and II (the generating station). The fuel component in working capital claimed is as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	**2011-12 (1.4.2011 to 30.9.2011)**	**2011-12 1.10.2011 to 31.3.2012**	**2012-13 (1.4.2012 to 18.8.2012)**	**2012-13 (19.8.2012 to 31.3.2013)**	**2013-14**
Cost of coal for 2 months	15061	17149	19341	19964	40755	40755
Cost of Secondary Fuel oil for 2 months	266	310	332	344	695	695
Cost of lime for 2 months	53	57	57	56	112	112

140. Based on the operational norms allowed in para 169 of this order, the cost for fuel component in working capital has been computed based on Weighted Average Price & GCV of coal for the preceding two months from the COD of Unit-I and for the preceding three months from the COD of Unit-II (generating station). The price and GCV of secondary fuel oil (HFO) has been considered being the major secondary fuel oil as per the 2009 Tariff Regulations. The

fuel component in working capital, on annualized basis, allowed for the purpose of tariff is worked out as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Cost of coal for 2 months	17661.19	17709.58	17661.19	39741.85	39741.85
Cost of Secondary Fuel oil for 2 months	224.26	224.88	224.26	652.74	652.74
Cost of Lime for 2 months	50.02	50.16	50.02	100.04	100.04

Maintenance spares

141. The petitioner has claimed the following maintenance spares in the working capital:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Cost of maintenance spares(annualised)	1484.40	1569.60	1658.40	3316.80	3508.80

142. The 2009 Tariff Regulations provide for maintenance spares @ 20% of the operation and maintenance expenses as specified in Regulation 19. Accordingly, the maintenance spares claimed by the petitioner as above is allowed for the purpose of tariff**.**

Receivables

143. Receivables equivalent to two months of capacity charge and energy charge for sale of electricity has been calculated on normative plant availability factor.Accordingly, receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) as shown below:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Variable Charges -2 months	17711.21	17759.74	17711.21	39841.90	39841.90
Fixed Charges - 2 months	10498.17	10466.84	10416.96	23737.23	23668.98
Total	**28209.38**	**28226.58**	**28128.17**	**63579.13**	**63510.87**

O&M expenses for 1 month

144. O & M expenses for 1 month as claimed by the petitioner for the purpose of working capital are allowed as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
O & M for 1 month	618.50	654.00	691.00	1382.00	1462.00

145. Necessary computations in support of calculation of interest on working capital are as under:

(₹ in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Cost of coal for 2 months	17661.19	17709.58	17661.19	39741.85	39741.85
Cost of lime for 2 months	50.02	50.16	50.02	100.04	100.04
Cost of secondary fuel oil for 2 months	224.26	224.88	224.26	652.74	652.74
O&M Expenses	618.50	654.00	691.00	1382.00	1462.00
Maintenance spares	1484.40	1569.60	1658.40	3316.80	3508.80
Receivables	28209.38	28226.58	28128.17	63579.13	63510.87
Total working capital	**48247.75**	**48434.79**	**48413.05**	**108772.56**	**108976.31**
Rate of interest	11.000%	11.000%	11.000%	13.500%	13.500%
Interest on working capital	**5307.25**	**5327.83**	**5325.44**	**14684.30**	**14711.80**

Expenses on Secondary Fuel Oil Consumption:

146. Clause (1) of Regulation 20 of the 2009 Tariff Regulations provides as under:

> *"20. Expenses on secondary fuel oil consumption for coal-based and lignite-fired generating station. (1) Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause (iii) of regulation 26, in accordance with the following formula:*
>
> *SFC – Normative Specific Fuel Oil consumption in ml/kWh*
>
> *= SFC x LPSFi x NAPAF x 24 x NDY x IC x 10*
>
> *Where,*
>
> *LPSFi – Weighted Average Landed Price of Secondary Fuel in ₹/ml considered initially.*
>
> *NAPAF – Normative Annual Plant Availability Factor in percentage*
>
> *NDY – Number of days in a year IC - Installed Capacity in MW.*

147. The petitioner has claimed Secondary fuel oil cost as under:

(₹ in lakh)

	2010-11 11.11.2010 to 31.3.2011	2011-12 1.4.2011 to 31.3.2012	2012-13		2013-14
			1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Cost of secondary fuel oil	613.65	931.32	996.30	794.10	2566.17

148. The cost of secondary fuel oil as worked out below on annualized basis has been allowed for tariff:

(₹in lakh)

	2010-11 11.11.2010 to 31.3.2011	2011-12 1.4.2011 to 31.3.2012	2012-13		2013-14
			1.4.2012 to 18.8.2012	19.8.2012 to 31.3.2013	
Cost of secondary fuel oil	1345.58	1349.26	1345.58	3916.43	3916.43

149. The cost of secondary fuel oil arrived at as above shall be subject to fuel price adjustment at the end of each year of tariff period in terms of the proviso to Regulation 20(2) as per the following formula*:*

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi)

Where, LPSFy = The weighted average landed price of secondary fuel oil for the year in ₹/ml

Annual Fixed charges for 2009-14

150. The annual fixed charges allowed for the generating station for the period 2009-14 are summarized as under:

(₹in lakh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Return on Equity	12032.67	12044.48	12044.48	25932.94	26439.61
Interest on Loan	23360.50	22709.93	21972.83	53071.49	50716.39
Depreciation	13521.00	13521.54	13521.45	28234.19	28685.62
Interest on Working Capital	5307.25	5327.83	5325.44	14684.30	14711.80
O&M Expenses	7422.00	7848.00	8292.00	16584.00	17544.00
Cost of secondary fuel oil	1345.58	1349.26	1345.58	3916.43	3916.43
Total	**62989.00**	**62801.04**	**62501.76**	**142423.36**	**142013.86**

Note: *(i) All figures are on annualized basis.(ii) All the figures under each head have been rounded. (ii) The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns*.

151. The annual fixed charges allowed as above shall be calculated *pro rata* considering the bases as shown below:

	2010-11 (11.11.2010 to 31.3.2011)	2011-12	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
No of days in year	365	366	365	365	365
No. of days for which tariff is to be calculated	140.583	366	140.458	224.542	365

Operational Norms

152. The petitioner has prayed for considering the following Operational norms:

Gross Station Heat-Rate	2400 kcal/kwh
Auxiliary Power Consumption	7.50%
Coal transit and handling losses	1.6%

153. We now consider the submissions of the parties below:

Gross Station Heat Rate

154. As per the PPA dated 26.12.2005, the "Tariff Heat Rate" has been defined as follows:

> "Tariff Heat Rate" means the amount of fuel energy required in kilocalories per kWh of net generation and for the Unit, shall equal to:
>
> 2450 kcal/kWh for during stabilization period
> 2400 kcal/kWh at all times thereafter."

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 has 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.

158. Energy Charges as defined in the PPA , is as under:

"*Energy charges for each Billing month shall be the sum of recoverable cost of Primary fuel, Secondary fuel and lime and shall be payable as determined by the Commission from time to time and subject to the following :*

Energy charges in ₹ is the product of rate of energy charges in ₹ Per kWh and the Principal Buyers dispatch requirement plus Auxiliary Consumption for the month in kWh corresponding to scheduled generation.

Rate of Energy Charges:

$$REC = \frac{100\{P_p \times (Q_p)_n + P_s \times (Q_s)_n\}}{(100 - (Aux_n))} + (\text{lime cost}) \text{ ₹/Kwh}$$

Where,

P_p= Price of Primary fuel in ₹ /Kg computed on the basis of weighted average of delivered cost of Primary fuel as detailed in Clause 4.7.

$(Q_p)_n$= Quantity of primary fuel required for generation of one kWh of Electricity at generator terminals in Kg., and shall be computed on the basis of Tariff Heat Rate (less heat contributed by secondary fuel oil) and Gross calorific value of coal as received at the Plant boundary.

P_p = Price of Secondary fuel oil ₹ / ml.

$(Q_s)_n$= Normative quantity of Secondary fuel oil in ml / kWh as per norms stipulated by the Commission from time to time.

Aux_n = Auxiliary Consumption as percentage of gross generation (7.5%)

Line cost shall be computed at the consumption rate of 0.0106 tons per tonne of coal consumed considering the landed cost of lime at the Plant Boundary.

159. Clauses 5 and 6 of Regulation 21of the 2009 Tariff Regulations provides for computation of Energy Charge for thermal generating stations as under:

"5. The Energy Charge shall cover the primary fuel cost and limestone consumption cost (where applicable), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment). Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in ₹ / kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

6. Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal place in accordance with the following formula:

(a) for coal based and lignite fired stations

ECR = {(GHR –SFC x CVSF) x LPPF / CVPF +LC x LPL}X 100/(100-AUX)}

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh

LPL= Weighted average landed price of limestone in Rupees per kg.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

SFC = Specific fuel oil consumption, in ml per kWh.

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.

Auxiliary Energy Consumption

162. The petitioner has claimed Auxiliary Energy Consumption of 7.5% as per PPA which include jetty, coal handling arrangements, sea water pumping and condenser cooling and seawater arrangements for sweet water requirements for boilers and provision of flue gas de-sulphurisers for plant as part of the auxiliary consumption. The respondents 1 to 6 have submitted that inclusion of jetty consumption as a part of auxiliary consumption is incorrect as the same is located at a distance place and not supplied electricity by the petitioner as auxiliary consumption. The respondents have submitted that the auxiliary consumption for the generating station needs to be considered in terms of the 2009 Tariff Regulations which is 6% and the same is consistent with the provisions of EPC contract which specifies the auxiliary consumption of less than 6.5% for the generating stations including FGD and coal handling plant for 400 MW. The respondent, PSPCL has submitted that Auxiliary Energy Consumption of 7.5% or the norms specified by the Commission, whichever is lower, may be considered.

163. The petitioner has furnished the actual Auxiliary Energy Consumption for Unit-I based on the auxiliary system/facilities for power plant which is about 7.84%. The norms under the

2009 Tariff Regulations were specified based on the actual Auxiliary Power Consumption of different thermal generating stations of NTPC for 500 MW size plants for the period 2003-04 to 2007-08, wherein additional features like FGD, Coal Jetty and de-salination plant were not provided. Based on the submissions of the petitioner vide its affidavit dated 27.7.2012, the Auxiliary Power Consumption for Unit-I due to additional features such as Sea Water Pump House, R.O. Plan, FGD system and External CHP is worked out to 0.58% and for the other two Units the same has been considered to 1.16%. Thus, against the Auxiliary Power Consumption norm specified by the Commission under the 2009 Tariff Regulations, the increase in Auxiliary Power Consumption due to additional facilities works out to 1.20% (approx). In view of this, in relaxation of the norms specified under the 2009 Tariff Regulations, the Auxiliary Power Consumption of 7.2% (6.00 +1.20) is allowed for the generating station.

Coal transit and handling losses

164. The petitioner has submitted that the generating station is the first thermal station using 100% imported coal in the country. It has also submitted that the Commission has allowed 0.8% transit loss for non-pit head stations under Regulation 21(7) of the 2009 Tariff Regulations considering a single handling at the pit head for loading in the railway wagons and unloading at site. The petitioner has further submitted that the imported coal is handled twice before it is received at the project site, once for unloading and stacking at discharge port and again at the time of loading in the Railway Wagons and unloading at site.

165. The petitioner has submitted that the Commission may allow increased percentage of handling loss taking into account the number of times coal is handled before it is received at site. The petitioner has prayed that handling and transit loss of 1.6% of the quantity handled may be allowed for this station considering the number of times it is handled before receipt at site.

166. The details of the additional coal handling activities are listed below:

(i) Loading at Load Port
(ii) Unloading and stacking at the Discharge Port
(iii) Loading on to Railway Wagons at the Discharge Port; and
(iv) Unloading at the plant.

167. It is observed that the generating station is a Non- Pit head station as per agreement with ESCOMs of Karnataka. However, it is noticed that the distance from the coal jetty at port to the plant site is about 30 km and hence transit loss of 1.6 % cannot be considered. However, considering the fact that the generating station is a non-pit head station, the normative transit & handling losses of 0.8% is allowed for the purpose of tariff. We consider this to be sufficient to nullify the losses, if any, that would occur in loading and multiple unloading at discharge port and at the plant site.

Limestone Consumption

168. The provisions of the 2009 Tariff Regulations specify the norms for Lime stone consumption in respect of lignite based generating stations for CFBC Boilers of NLC as follows:

(i) Barsingsar – 0.056 kg/kWh
(ii) NLC TPS-II (Expansion) -0.046 kg/kWh

169. The petitioner has considered lime stone consumption as 0.004 kg/kWh which is less than the norms specified for lignite based stations. In the absence of any specified norms under the 2009 Tariff Regulations for lime stone consumption for 100% imported coal, the lime stone consumption as 0.004 kg/kWh claimed by the petitioner has been considered for the purpose of tariff.

170. Based on the above discussions, the operational norms allowed to this generating station are summarized as under**:**

Gross Station Heat-Rate (kcal/kWh)	2340.59
Auxiliary Power Consumption (%)	7.20%
Coal transit and handling losses (%)	0.8%
Limestone consumption(kWh)	0.004/kWh

Energy Charge Rate (ECR)

171. The Energy Charge Rate (ECR) claimed by the petitioner is as follows:

(Paise/kWh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 30.9.2011)	2011-12 1.10.2011 to 31.3.2012	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Energy Charge Rate (Ex-bus)	219.43	249.12	280.87	290.67	296.67	296.67

172. The ECR worked out on the basis of Weighted Average Price & GCV of coal for the preceding two months from the COD of Unit-I and for the preceding three months from COD of Unit II (i.e. generating station) is as under:

(Paise/kWh)

	2010-11 (11.11.2010 to 31.3.2011)	2011-12 (1.4.2011 to 31.3.2012)	2012-13 (1.4.2012 to 18.8.2012)	2012-13 (19.8.2012 to 31.3.2013)	2013-14
Energy Charge Rate (ex-bus)	256.317	256.317	256.317	288.296	288.296

173. The petitioner shall be entitled to compute and recover the annual fixed charges as approved by the Commission in this order on monthly basis in accordance with Regulation 21 (2) (a) of the 2009 Tariff Regulations. Energy charge rate on month to month basis shall be computed in accordance with Regulation 21 (6) (a) and Energy Charges shall be computed in accordance with Regulation 21 (5) of the 2009 Tariff Regulations.

Application fee and the publication expenses

174. The petitioner has sought approval for the reimbursement of fees amounting to ₹4063600/- for the period from 11.11.2010 to 31.3.2013 towards filing the petition. The petitioner by its affidavit dated 31.12.2011 has also filed affidavit of proof of publication of notice in newspapers as per Regulation 3(8) of the CERC (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004.

175. In terms of Regulation 42 of the 2009 Tariff Regulations and based on our decision contained in order dated 11.1.2010 in Petition No.109/2009, the expenses towards filing of tariff

application and the expenses incurred on publication of notices are to be reimbursed. Accordingly, the expenses for ₹4063600/- incurred by the petitioner for petition filing fees for the period from 11.11.2010 to 31.3.2013 and the filing fees deposited for 2013-14 along with the expenses incurred for publication of notices in connection with the present petition shall be directly recovered from the beneficiaries, on *pro rata* basis on production of documentary proof.

176. The petitioner is already billing the respondents on provisional basis in accordance with the interim order dated 8.2.2013 of the Tribunal I.A. No. 38 of 2013 (in Appeal No. 18 of 2013). The provisional billing of tariff shall be adjusted against the tariff determined through this order and is subject to the final decision of the Tribunal in Appeal No.18/2013.

177. The annual fixed charges approved above is subject to truing up in terms of Regulation 6 of the 2009 Tariff Regulations.

178. This disposes of Petition No.160/GT/2012.

Sd/-
[M.DEENA DAYALAN]
MEMBER

Sd/-
[V.S.VERMA]
MEMBER