

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.96/2007

Coram: 1. **Dr. Pramod Deo, Chairperson**
2. **Shri S.Jayaraman, Member**
3. **Shri M. Deena Dayalan, Member**

[Date of Hearing: 12.7.2011]
[Date of Order: 20.3.2012]

In the matter of

Revision of order dated 4.6.2009 in Petition No. 96/2007 in the light of the judgment of the Appellate Tribunal for Electricity dated 25.3.2011 in Appeal No.130/2009.

In the matter of

Approval of tariff in respect of Ratnagiri Gas and Power Private Ltd (RGPPL), for the period from 1.9.2007 to 31.3.2009.

And

In the matter of

1. Ratnagiri Gas and Power Private Ltd,
2. Maharashtra State Electricity Distribution Company Ltd ...**Petitioners**

Parties present:

1. Ms. Swapna Seshadri, Advocate, RGPPL
2. Shri Rohit Chhabra, RGPPL

ORDER

This petition was filed jointly by Ratnagiri Gas and Power Private Ltd (RGPPL) and Maharashtra State Electricity Distribution Company Ltd (MSEDCL), (hereinafter referred to as “the petitioner”) under Sections 62, and 79 (1) (a) of the Electricity Act, 2003 (the Act) for approval of generation tariff for 2150 MW Ratnagiri Gas and Power Project (hereinafter referred to as “the generating station”) for the period from 1.9.2007 to 31.3.2009. The Commission by its order dated 4.6.2009 in Petition No. 96/2007 determined the tariff of the generating station based on the



capital cost as under:

(₹ in lakh)

	2007-08		2008-09
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	
Block-II (as on date of commercial operation)	222024	222024	222024
Common Assets	124758	124758	124758
Block-III (as on date of commercial operation)	0	217268	217268
IDC on Block-II plus Common Assets (paid on actual)	5070	5070	5070
IDC on Block-III (paid on actual)	0	1526	1526
Less: Liabilities not paid	20	5648	22
Total	351832	564997	570624

2. The annual fixed charges approved by order dated 4.6.2009 was as under:

(₹ in lakh)

	2007-08		2008-09
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	
Depreciation	3933	10293	28825
Interest on Loan	2183	5632	16237
Return on Equity	2702	7070	19798
Advance against Depreciation	0	0	0
Interest on Working Capital	951	2,909	8,098
O & M Expenses	1298	4229	12194
Total	11066	30134	85152

3. Aggrieved by the said order, the petitioner filed Appeal No.130/2009 before the Appellate Tribunal for Electricity (hereinafter referred to as "the Tribunal") challenging the order of the Commission dated 4.6.2009 on the following issues:

- (i) *Non Relaxation of norms specified in the Tariff Regulations.*
- (ii) *Target Availability*
- (iii) *O&M Expenses*
- (iv) *Servicing of LNG terminal cost*
- (v) *Other issues (interest on loan, working capital, Heat rate for generation on Naphtha; etc.)*

4. The Tribunal by its judgment dated 25.3.2011 rejected the prayers of the petitioner as regards servicing of LNG terminal cost, the maintenance of liquid fuel stock in determining Working Capital, consideration of Heat rate of 2000 Kcal/kWh for generation on Naphtha, as in paragraph 3 (iv) and (v) above. However, no finding

was given by the Tribunal as regards the issue of computation of interest on loan. As regards the prayer of the petitioner at paragraph 3(i) to (iii) above, the Tribunal by its judgment dated 25.3.2011 disposed of the same in terms of its findings as under:

(a) Non Relaxation of norms specified in the Tariff Regulations

"18.1. The Regulations of the Central Commission and decisions of the Tribunal and the Supreme Court confer the judicial discretion to the Central Commission to exercise power to relax norms in exceptional case. However, while exercising the power to relax there should be sufficient reason to justify the relaxation and non-exercise of discretion would cause hardship and injustice to a party or lead to unjust result. It has also to be established by the party that the circumstances are not created due to act of omission or commission attributable to the party claiming the relaxation. Further, the reasons justifying relaxation have to be recorded in writing. After careful examination of the circumstances of the present case we have come to the conclusion that there is sufficient justification for the Central Commission to consider relaxation in norms in the initial years of operation of the Appellant's Power Plant to give it an opportunity to stabilize."

(b) Target Availability

"18.2.....We, therefore, direct the Central Commission to consider relaxation of Target Availability excluding the forced outage of the Gas Turbine and Steam Turbine due to compressor distress in Blocks II & III and defect in High Pressure Control Valve in steam turbine of Block III for the periods mentioned in para 13.3 above. However, the relaxation in Target Availability made during 1.9.2007 to 31.3.2009 will be subject to the condition that in future the Appellant shall share the incentive in excess of 85% availability with the R-2 and other beneficiaries of the project till the relaxation made during the period 2007-09 is made good. Accordingly, the Central Commission is directed to devise the appropriate provision for sharing of incentive on the lines of its order dated 18.8.2010."

(c) O&M Expenses

"18.3.....We notice that besides Comprehensive Maintenance contract another reason for allowing relaxed O&M norms is 'F' class Machine as mentioned in order dated 11.1.2010 in Petition No. 109 of 2009. In view of the circumstances of the case and use of 'F' class machine there is sufficient justification for the Central Commission to relax norms for O&M. The Appellant may not be deprived of the relaxed norms merely because it has taken some time to sign Comprehensive Maintenance Contract with OEM which may be due to prevailing circumstances of forced outage of the units for prolonged periods during the period 2007-09. Accordingly, the Central Commission is directed to consider relaxation of norms for O&M for the period 1.9.2007 to 31.3.2009, keeping in view of the proportionately higher norms adopted in the 2009 Regulations and relaxation allowed subsequently for Appellant's plant and Sugen."

5. Based on the above findings, the Tribunal remanded the matter to the Commission to re-determine the norms in exercise of the power to relax and re-determine the tariff accordingly, after hearing all parties. The relevant portion of the judgment dated 25.3.2011 is extracted as under:

"19. In view of above we allow the Appeal partly in respect of the Target Availability and the Operation & Maintenance expenditure and remand the matter to the Central Commission to re-determine the norms in respect of these factors only in exercise of its power to relax and re-determine the tariff accordingly after hearing all parties who were heard by the Central Commission in Petition No. 96 of 2007. In respect of the other issues, we confirm the impugned order. No order as to costs."

6. In compliance with the above directions, the matter was heard on 12.5.2011 and the petitioner was directed to file its submissions on the issue of relaxation of Target Availability and O&M expenses, on affidavit, with copy to the respondents. Accordingly, the petitioner vide its affidavit dated 8.6.2011 filed its submissions on the said issues and the matter was finally heard on 12.7.2011.

7. The petitioner in its affidavit dated 8.6.2011 has prayed that the judgment of the Tribunal be implemented and tariff of the generating station for the period 1.9.2007 to 31.3.2009 be determined by relaxation of norms for Target Availability and O&M expenses. In addition to this, the petitioner has submitted that it is entitled for interest on loan on accrual basis, in view of the agreed financial restructuring, as claimed in the said appeal, even though no findings has been given on this issue in the said judgment by the Tribunal.

8. Keeping in view the directions of the Tribunal in its judgment and the submissions of the petitioner, we dispose of the issues as stated in the subsequent paragraphs.

Target Availability

9. The petitioner in its affidavit dated 30.4.2009 had submitted that the actual Target Availability was 70.20% for 2007-08 and 34.26% for 2008-09. The Commission vide its order dated 4.6.2009 had fixed the Target Availability as 80% for the generating station for the period from 1.9.2007 to 31.3.2009. The petitioner while praying for relaxation of the Target Availability norms before the Tribunal in Appeal No.130/2009 had submitted by its affidavit dated 14.7.2009 as under:

"Z. During the course of the operation of the Ratnagiri project, one of the Gas Turbines (GTs) forming part of Block-II failed on 19.1.2008 as a result of compressor distress. Again, the Steam Turbine forming part of Block-III was shut down from 18.6.2008 to 1.10.2008 due to unusual failure of a Stelite seal in HP control valve leading to turbine diaphragm damage. This resulted in complete outage of Block-III. Again, on 8.11.2008 one of the GT of Block-III failed as a result of compressor distress. Further in another GT 3B, cracks in compressor blades were found which resulted in the outage of Block-III from 19.11.2008 to 16.3.2009.

AA. In view of the above, Block-I and Block-III have not functioned during the periods mentioned below:

(i) **Block-II** – One GT 2A failed on 19.1.2008 as a result of compressor distress and has not been restored till date. As a result of the above, there has been no generation by use of GT-2A and correspondingly, the full use of steam turbine forming part of Block-II.

(ii) **Block-III** – On 18.6.2008 one steam Turbine of Block-III required shutdown on account of the defects in High Pressure control valve and remained out of order till 1.10.2008. This resulted in complete outage of Block III from 18.06.2008 to 01.10.2008. On 8.11.2008 one Gas Turbine GT-3A of Block-III failed on account of compressor distress and the same was not available till date. On 19.11.2008 certain cracks were found in the Compressor Blades pertaining to the other Gas Turbine GT-3B of Block III and remained out of order till 16.3.2009."

10. Based on the submissions of the petitioner on 14.7.2009, the Tribunal in its judgment had observed that while computing the relaxed Target Availability, the generation loss suffered by the petitioner due to forced outages during 2007-08 and 2008-09 should be excluded.

11. The matter has been examined. As stated, the actual PLF submitted by the petitioner vide its affidavit dated 30.4.2009 is 70.20% during 2007-08 and 34.26% during 2008-09. The date of commercial operation of Block-II and Block-III was 1.9.2007 and 21.11.2007 respectively. Accordingly, instead of computing the PLF of the generating station from 1.9.2007 to 31.3.2008, we had, in our order computed the PLF of Block-II as 71.13% for the period from 1.9.2007 to 20.11.2007 and the PLF of Block-II and Block-III as 62.91% from 21.11.2007 to 31.3.2008. Based on this, the actual availability of Block-II and Block II & III together was segregated during 2007-09 as under.

	2007-08		2008-09
	From 1.9.2007 to 20.11.2007	From 21.11.2007 to 31.3.2008	
Block-II	71.13%	-	
Block-II & III		62.91%	34.26%

12. Accordingly, the generation loss percentage due to forced outage, to the gross generation at 100% availability, is worked out as under:

	Period	Percentage of availability loss due to forced outage (%)
Block-II	From 1.9.2007 to 20.11.2007	0%
Block-II & III	From 21.11.2007 to 31.3.2008	13.64%
Block-II & III	From 1.4.2008 to 31.3.2009	57.47%

13. The Target Availability specified by the Commission under the 2004 Tariff Regulations was 80%. This accounts for 20% Availability loss due to planned outage, fuel shortage, grid constraints, forced outage etc. But in the instant case, the units of the generating station were in operation and have generated electricity during the year 2007-08 and 2008-09, till the unit/block was forced to shut down due to various failures such as compressor distress, cracks in compressor blades, defects in high pressure control valve etc. During the year 2007-08, Block-II had operated from the date of commercial operation (i.e 1.9.2007) to 20.11.2007 without any generation loss due to forced shut down. Accordingly, the normative Target Availability considered for the period from 1.9.2007 to 20.11.2007 is 80%.

14. The date of commercial operation of the Block-III was 21.11.2007 and accordingly, Blocks-II and III (combined) were under commercial operation during the period from 21.11.2007 to 31.3.2008. The generation loss due to forced outage during the period from 21.11.2007 to 31.3.2008 was 13.64%. Even if the balance percentage $(20\% - 13.64) = 6.36\%$ is considered for planned outage etc., the normative Target Availability of 80% appears reasonable for the period from 21.11.2007 to 31.3.2008.

15. In view of the continuous forced shut down of Gas Turbines (GTs) and Steam Turbines (STs) during 2008-09, there was no scope for the petitioner for any planned shutdown, as the forced outage was 57.47% (approx). Accordingly, the energy generated by the station during the year 2008-09, excluding the generation loss due to

forced outage could be taken as the 'Availability' in line with the observations of the Tribunal, for specifying the relaxed normative Target Availability. Therefore, the generation loss of 57.47% due to forced outage of Block-II and Block-III has been considered for reduction from the generation at 100% availability during the year 2008-09. Thus, the normative target availability during the period from 1.4.2008 to 31.3.2009 works out to 42.53% (100-57.47).

16. Based on the above discussions, the relaxed Target Availability allowed in terms of the observations of the Tribunal is as under:

	Period	Actual Availability (%)	Normative Target Availability allowed (%)
Block-II	From 1.9.2007 to 20.11.2007	71.13	80.00
Block-II & III	From 21.11.2007 to 31.3.2008	62.91	80.00
Block-II & III	From 1.4.2008 to 31.3.2009	34.26	42.53

17. The relaxation allowed during 2008-09 would however be subject to the condition that the petitioner is entitled to avail incentive only beyond the availability of 85% and the incentive available should be shared with the respondent/beneficiaries in the ratio of 50:50, till such time the shortfall in availability from the 80% availability during the year 2008-09 was made good. In addition to this, the petitioner's entitlement to avail incentive for shortfall in availability from the 80% availability during the years 2009-10 and 2010-11 would be governed by our observations in order dated 18.8.2010 in Petition No. 283/2009. The relevant portion of the order is extracted as under:

".....Further, relaxation in the NAPAF as allowed above, is subject to the condition that the generating station shall be entitled to incentive corresponding to 50% of the availability in excess of 85% till such time the shortfall in availability from the 80% availability during the years 2009-10 and 2010-11 is made good. We would also like to make it clear that relaxation in NAPAF is a onetime dispensation and no further request for relaxation shall be entertained and consequences of any shortfall in performance shall be borne by the Petitioner."

O&M expenses

18. The Commission by its order dated 4.6.2009 had allowed O&M expenses in accordance with the provisions of the 2004 Tariff Regulations. In Appeal No.130/2009, the petitioner had submitted that the O&M expense norms under the 2004 Tariff Regulations were based on historical data of the generating stations of the petitioner not having advance F class machines. According to the petitioner, the maintenance cost of 9 FA class machine used in the generating station is higher compared to the norms laid down in the 2004 Tariff Regulations. The petitioner had submitted that O&M cost as per actual should be allowed except where there was any evidence of any imprudent act attributable to the petitioner.

19. By order dated 18.8.2010 in Petition No. 283/2009, we had relaxed the O&M norms in respect of the generating station for the period 2009-14, by invoking the provisions of Regulations 44 of the 2009 regulations. However, for relaxation of O&M norms for the period 2007-09, appropriate data in this regard is not available. Further, as stated by the petitioner during the determination of tariff for the period 2009-14, no comprehensive maintenance agreement was in existence with the Original Equipment Manufacturer (OEM) during 2007-09. Under these situations, we have no other alternative except to allow the actual O&M expenses for the years 2007-08 and 2008-09, after deducting the cost for refurbishment.

20. The actual O&M expenses claimed by the petitioner for the years 2007-08 and 2008-09 are as under:

	<i>(₹ in lakh)</i>	
	2007-08	2008-09
O&M Expenses	2263.00	26801.00

21. The O&M expenses claimed for 2008-09 is inclusive of ₹5000.00 lakh incurred towards repair of damaged machines for the restoration of generation capacity of the machines after refurbishment. Being an expenditure of capital nature, it appears that the same is included in the capital cost of the project. Accordingly, the expenditure of

₹5000.00 lakh has not been considered in the actual O& M expenses allowed to the generating station. Accordingly, the revised O&M expenses allowed in respect of generating station for the period from 2007-09 is as under:

	(₹ in lakh)	
	2007-08	2008-09
O&M Expenses	2263.00	21801.00

22. The O&M expenses allowed for the year 2007-08 has been bifurcated based on the number of days in relevant period as under.

	(₹ in lakh)	
	2007-08	2007-08
	1.9.2007-20.11.2007	21.11.2007-31.3.2008
O&M Expenses	861.00	1402.00

Interest on Loan

23. One more issue raised by the petitioner is the prayer for allowing interest on loan on accrual basis, in view of the financial restructuring whereby unpaid interest was deemed funded from the year 2009-10. The Commission by its order dated 4.6.2009 after applying the weighted average rate of interest had allowed interest on loan for 2007-09 as under:

	(₹ in lakh)		
	2007-08	2007-08	2008-09
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	
Gross normative loan	264639	424977	429209
Cumulative repayment upto previous year/period	0	3933	14227
Net loan-opening	264639	421044	414982
Repayment during the year/period	3933	10293	28825
Net loan-closing	260706	410750	386157
Average loan	262673	415897	400570
Weighted average rate of interest on loan	3.7548%	3.7548%	4.0534%
Interest on loan	2183	5632	16237

24. As regard interest on loan, the petitioner in Appeal No.130/2009 had submitted as under:

"8 (i) (5). restricting interest on loan to Rs. 78.15 crores and Rs. 162.37 crores during FY 2007-08 & FY 2008-09 respectively in place of Rs. 201.14 crores and Rs. 214.42 crores respectively actually paid and claimed by the Appellant (in view of financial restructuring whereby unpaid interest was deemed funded from FY 2009-10 onwards) even though the interest on loan on accrual basis works out to Rs. 238.31 crore & 496.70 crore respectively as shown and explained below:

	(₹ in lakh)	
	2007-08 (1.9.2007-31.3.2008)	2008-09
Average loan amount stated in the Appellant petition/affidavit	535697	528997
Total interest on accrued basis	23831	49670
Annual weighted average rate of interest	9.39%	9.39%
Interest actually paid and claimed under the Appellant petition (which is less than actual interest accrued)	20114	21442
Allowed by Central Commission	7815	16237

The interest on loan allowed by the Central Commission is much less than the claimed amount by the Appellant as the Central Commission has considered the weighted average rate of interest based on the actual interest paid vis-a-vis nominal average loan as claimed by the Appellant instead of being based on the nominal interest accrued vis-à-vis nominal average loan and has further proportionately reduced the actual interest by removing the capital cost of LNG block."

25. On the question of calculation of interest on loan, the Commission in its reply dated 30.10.2009 in the said appeal had clarified as under:

It is submitted that the Appellant in the appeal has indicated the loan as pertaining to the period 1.9.2007 to 31.3.2008 whereas in its affidavit dated 30.4.2009 in Petition No. 96/2007, the same amounts were shown for the financial year 2007-08. Accordingly, the weighted average rate of interest was calculated for the entire year instead of 7 months. If the loan is considered for the period 1.9.2007 to 31.3.2008, the interest on loan component for the year 2007-08 for the purpose of tariff will be required to be modified

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It is submitted that subject to the confirmation of the Appellant that the loan pertained to the period 1.9.2007 to 31.3.2008 and not to the entire financial year 2007-08, the Appellant will be allowed interest on loan of Rs. 13428 lakh (Rs. 3751 lakh + Rs. 9677 lakh) as against Rs.7815 lakh (Rs. 2183 lakh + Rs. 5632 lakh) during 2007-08. It is submitted that interest on loan on account of the IDC reset for repayment in 2009-10 will be reimbursed in tariff during the tariff period 2009-10.

26. However, no finding was given by the Tribunal on the question of computation of interest on loan, in its judgment dated 25.3.2011.

27. During the hearing on 12.7.2011, the learned counsel for the petitioner submitted before the Commission that though the Tribunal had not given its findings on the issue of interest on loan, the Commission has the inherent power to consider and rectify the same in the interest of justice. He also submitted that the errors in the calculation of interest on loan be rectified in the interest of justice. In support of this, reliance was placed by the learned counsel on some of the decisions of the Hon'ble Supreme Court and the High Courts of Orissa and Calcutta.

28. Subsequently, the petitioner by its affidavit dated 7.12.2011 has submitted as under:

"It is submitted that during the period 2007-08 and 2008-09 the financial restructuring of the petitioner company was under process and its books of accounts were under the process of finalization. The books of accounts for the financial year 2008-09 were finalized and adopted by Board of Directors of the Company on 30.09.2009 and the same was filed before Registrar of the Companies on 22.10.2009.

It is submitted that, in compliance of the direction of the Hon'ble Commission, the petitioner has submitted an affidavit on 30.04.2009. The affidavit contained the required information as directed by Hon'ble Commission inter-alia on "Interest on Loan". Since, the books of accounts were still in the process of finalization, the petitioner has inadvertently submitted erroneous calculation of weighted interest on loan. From the facts mentioned above it is amply clear that the error was unintentional.

Further, it is submitted that Hon'ble Commission has recognized this error as Learned Counsel of Hon'ble Commission vide affidavit dated 30.10.2009 at Para 28 and 29 filed before Hon'ble Tribunal while dealing with issue of "Interest on Loan" inter-alia has submitted as under:

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The petitioner further submits that it would suffer substantial loss and prejudice if the above errors are not rectified. Therefore, the petitioner prays that in the interest of justice Hon'ble Commission may take on record these submissions and allow the tariff duly incorporating the facts mentioned herein above."

29. Keeping in view the submissions made by the parties in Appeal No.130/2009 and the revised submissions made by the petitioner vide its affidavit dated 7.12.2011, the prayer of the petitioner to revise the computations for interest on loan, is accepted. Accordingly, after scrutiny of the details submitted by the petitioner, the calculation for interest on loan has been revised as discussed in the subsequent paragraphs.

30. The revised calculations for weighted average rate of interest on actual loans based on balance sheet for 2008-09 read with notes to accounts are as under:

	<i>(in ₹)</i>		
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	2008-09
Net loan-opening	299989.76	235706.24	535696.00
Repayment during the period	0.00	0.00	13330.69
Net Loan-closing	299989.76	235706.24	522365.31
Average loan	299989.76	235706.24	529030.65
Interest for period	16442.94	7382.54	49673.58
Annualized Interest	28187.89	22147.63	49673.58
Weighted Average Rate of interest on actual loan	9.3963%	9.3963%	9.3895%

31. Based on the above weighted average rate of interest, the interest on loan allowed during the period 2007-09 is as under:

	(₹ in lakh)		
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	2008-09
Gross Normative loan	264639	424977	429209
Cumulative repayment up to previous year/period	0	3933	14227
Net loan-opening	264639	421044	414982
Repayment during the year/period	3933	10293	28825
Net Loan-closing	260706	410750	386157
Average loan	262673	415897	400570
Weighted Average Rate of interest on loan	9.3963%	9.3963%	9.3895%
Interest on loan	5462	14094	37612

Interest on working capital

32. Consequent upon revision of O&M expenses, interest on loan for the period from 1.9.2007 to 31.3.2009 and Target Availability during 2008-09, the interest on working capital allowed by order dated 4.6.2009 stands revised as under:

	(₹ in lakh)		
	1.9.2007 to 20.11.2007	21.11.2007 to 31.3.2008	2008-09
Days in the Period/Year	81	132	365
Fuel Cost	1576	5135	7549
O & M expenses	72	117	1817
Spares	779	2038	5706
Receivables- 2 months	5479	16247	34149
Total Working Capital	7905	23536	49221
Interest Rate-SBI PLR	12.75%	12.75%	12.75%
Total Interest on Working Capital	1008	3001	6276

33. Based on the above, the annual fixed charges in respect of the generating station for the period from 2007-09 are revised as under:

	(₹ in lakh)		
	2007-08 1.9.2007 to 20.11.2007	2007-08 21.11.2007 to 31.3.2008	2008-09
Depreciation	3933	10293	28825
Interest on Loan	5462	14094	37612
Return on Equity	2702	7070	19798
Advance Against Depreciation	0	0	0
Interest on Working Capital	1008	3001	6276
O & M Expenses	861	1402	21801
Total	13966	35861	114312

34. Considering the background under which the annual fixed charges have been revised by this order, we are of the view that the respondent/beneficiaries should not be burdened with interest, on the differential amount. Accordingly, we direct that the petitioner shall recover the difference in tariff determined by order dated 4.6.2009 and the tariff determined by this order from the beneficiaries in six equal monthly installments, *albeit* without interest.

35. In compliance with the directions of the Tribunal, Petition No. 96/2007 is disposed of in terms of the above.

Sd/-
(M. DEENA DAYALAN)
MEMBER

Sd/-
(S.JAYARAMAN)
MEMBER

Sd/-
(DR. PRAMOD DEO)
CHAIRPERSON

