

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. Dr. Pramod Deo, Chairperson
2. Shri R.Krishnamoorthy, Member
3. Shri S.Jayaraman, Member
4. Shri V.S.Verma, Member

Petition No 140/2008

In the matter of

Approval of revised capacity charges in respect of Faridabad Gas Power Station after accounting for the capital cost of switchyard transferred to NTPC from Power Grid Corporation of India Ltd.

And in the matter of

NTPC Ltd, New Delhi

.....Petitioner

Vs

Haryana Power Purchase Centre, Panchkula

.....Respondent

The following were present

1. Shri S.K.Mandal, NTPC
2. Shri D.G.Salpekar, NTPC
3. Ms. Alka Saigal, NTPC
4. Shri Atul Pasrija, HVPNL

ORDER

(DATE OF HEARING: 17.3.2009)

This petition has been filed by the petitioner, NTPC for approval of revised capacity charges in respect of Faridabad Gas Power Station (hereinafter referred to as "the generating station") after accounting for the capital cost of switchyard transferred from Power Grid Corporation of India Ltd (PGCIL).

2. Govt. of India vide letter No. 5/33/99-Th-2 dated 31.8.2000 approved the transfer of ownership and control of switchyard forming part of the Faridabad Transmission System (transmission system) and associated with the generating station, from PGCIL, to the petitioner. The assets included in the transmission system are:-

(a) 220 kV D/C Faridabad-Samaypur transmission line (Asset-I); and

(b) 220 kV D/C Faridabad- Palla transmission line (Asset-II).

3. PGCIL filed Petition No. 52/2007 under sub-section (3) of section 17 of the Electricity Act, 2003, seeking approval of the Commission for transfer of ownership of switchyard to the petitioner and for adjustment of the transmission charges after de-capitalisation on account of the said transfer. The effective date of transfer of switchyard was 1.9.2007. The petitioner who was a respondent in Petition No.52/2007 by its affidavit dated 8.2.2008, sought 'in principle' approval to approach the Commission for revision of capacity charges of the generating station from the date of transfer and for provisional billing of the additional capacity charges of the generating station, subject to adjustment after final determination of the revised capacity charges.

4. The Commission vide its order dated 18.6.2008 in Petition No. 52/2007 allowed de-capitalisation of Rs 3341.73 lakh on account of cost of the switchyard and determined the revised transmission charges for the years 2007-08 and 2008-09 for PGCIL. By the same order, the Commission permitted the petitioner

to recover provisional charges on account of switchyard transfer from PGCIL with effect from 1.9.2007, as under:

(Rs. in lakh)

	Asset-I		Asset-II	
	2007-08 (1.9.2007 to 31.3.2008)	2008-09	2007-08 (1.9.2007 to 31.3.2008)	2008-09
Depreciation	29.50	50.57	27.06	46.39
Interest on Loan	11.28	12.75	12.32	14.88
Return on Equity	89.74	153.83	73.29	125.65
Advance against Depreciation	0.00	0.00	7.99	32.93
Interest on Working Capital	2.47	7.76	3.92	10.53
O & M Expenses	36.90	65.80	92.25	164.50
Total	169.89	290.71	216.83	394.90

5. The Commission vide its order dated 18.6.2008 further directed the petitioner to file a separate petition for approval of the revised capacity charges for the generating station, after accounting for the capital cost of the switchyard transferred to it. The present petition has been filed by the petitioner in terms of the said order dated 18.6.2008.

6. The annual fixed charges of the generating station for the period 2004-09 were approved by the Commission vide its order dated 9.5.2006 in Petition No. 156/2004, considering the gross block of Rs.94090.60 lakh as on 1.4.2004 (inclusive of additional capitalization on works). Subsequently, the annual fixed charges were revised by order dated 12.11.2008 in Petition No. 23/2007 after accounting for additional capital expenditure for the period 2004-06, as under:

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	3799	3804	3795	3795	3795
Interest on Loan	3972	3671	3346	3033	2666
Return on Equity	6602	6608	6598	6598	6598
Advance against Depreciation	0	0	0	0	0
Interest on Working Capital	1244	1249	1254	1261	1265
O & M Expenses	3366	3500	3643	3785	3936
Total	18982	18832	18634	18471	18259

7. In the order dated 12.11.2008, the capital cost of the generating station was worked out as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Capital cost	94091	94833	94358	94358	94358

8. The Commission by its order dated 18.6.2008 in Petition No. 52/2007 while allowing de-capitalisation of an amount of Rs.3341.73 lakh from the date of transfer of the asset, that is, 1.9.2007, also allowed adjustment of cumulative depreciation amounting to Rs. 858.48 lakh, as on 31.8.2007, recovered by PGCIL. Thus, the net block of the transferred switchyard, including cost of land amounting to Rs 605.76 lakh, was worked out as Rs.2483.25 lakh as on 1.9.2007.

9. The petitioner has claimed that the capital base of the generating station for the period 1.9.2007 to 31.3.2009 should be revised after considering the gross value of Rs.3341.73 lakh of the transferred switchyard instead of the net value. The petitioner relied upon para 2.8 of the Commission's order dated 21.12.2000 in Petition No. 4/2000 and order dated 28.6.2002 in Petition No.

77/2001, that the capital base can be reduced to the extent of loan repayment and the tariff should be worked out on the basis of the original cost of the assets.

10. In the past, transfer of assets between public sector utilities was effected on the gross block under the orders of Govt of India, with a measure to add the depreciation recovered on the transferred asset till the date of transfer, to the cumulative depreciation of the generating station, to ensure that the generating stations to which the assets were transferred recovered only the net value of the assets after transfer. It is also pertinent to mention that the transfer of transmission assets to PGCIL, on its formation, under the directions of the Central Government, was on the gross block along with adjustment of cumulative depreciation. Accordingly, we consider it appropriate to consider the gross block of the switchyard transferred amounting to Rs.3341.73 lakh, on the date of transfer, that is, 1.9.2007. At the same time, the cumulative depreciation of the generating station has been revised by adjusting the amount of Rs.858.48 lakh which represents the depreciation recovered by PGCIL up to the date of transfer. This shall ensure recovery of only the net value by the petitioner by way of depreciation in tariff pursuant to the transfer of asset. Further, the cumulative repayment of the generating station till 1.9.2007 shall also be adjusted upwards by Rs. Rs.858.48 lakh. This adjustment is required to ensure that the extra loan to be serviced by the respondent gets restricted to the net block of the transferred asset less the equity calculated on the gross block in accordance with the specified debt-equity ratio. The interest of the respondent would thus be safeguarded with the above adjustments.

Capital cost

11. As stated above, the capital cost of the generating station was Rs.94090.60 lakh as on 1.4.2004 (inclusive of additional capitalization on works), which was revised to Rs. 94358.38 lakh, as on 31.8.2007, as per order dated 12.11.2008. Considering the gross value of the switchyard transferred as on 1.9.2007, the capital cost works out to Rs.97700.11 lakh, as on date of transfer. This has been considered as opening capital cost as on 1.9.2007 for the purposes of revision of tariff for the period from 1.9.2007 to 31.3.2009, as under:

Year	2004-05	2005-06	2006-07	(Rs in lakh)		2008-09
				2007-08 (1.4.2007 to 31.8.2007)	2007-08 (1.9.2007 to 31.3.2008)	
Capital cost	94091	94833	94358	94358	97700.11	97700.11

Debt-equity ratio

12. The petitioner in its affidavit dated 6.4.2009 has stated that no loan has been drawn for takeover of the switchyard, but had drawn on 28.3.2008, SBI Term Loan-IV amounting to Rs.1700 lakh and had allocated against the expenditure of the switchyard. The switchyard was originally funded by PGCIL in the debt-equity ratio of 36.25:63.75 (Asset-I) and 44.53:55.47 (Asset-II). The petitioner has submitted that since it had not taken over the corresponding loans of PGCIL, it should be allowed the debt-equity ratio of 50:50 for the transferred switchyard.

13. The net gross block of the switchyard after adjustment of the cumulative depreciation works out to Rs 2483.25 lakh. After reduction of the net value from

the actual loan of Rs.1700 lakh drawn by the petitioner, the balance amount of Rs.783.25 lakh has been considered as additional equity in the books of account of the petitioner. In terms of sub-clause (c) of clause (1) of Regulation 20 of the 2004 regulations, equity has been restricted to the actual equity employed by the petitioner. Accordingly, additional notional loan and equity of the generating station as on 1.9.2007, on account of the transfer of asset, works out as under:

(Rs in lakh)	
Notional Loan	2558.48
Notional Equity	783.25

Return on equity

14. Return on equity has been worked out @14% per annum on the normative equity after accounting for transfer of assets as under:

(Rs in lakh)			
Period	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Equity	47126	47909	47909
Addition of Equity due to additional capital expenditure	0	0	0
Total	47126	47909	47909
Average equity	47126	47909	47909
Return on Equity @ 14%	2758	3903	6707

Target Availability

15. The target availability of the generating station considered for the period 1.4.2004 to 31.3.2009 is 80 %.

Interest on loan

16. Interest on loan has been worked out as mentioned below:

- (a) The outstanding normative loan of Rs.34923 lakh as on 1.4.2007 as per tariff order dated 12.11.2008 has been considered. Normative repayment of loan during the period 1.4.2007 to 31.8.2007 has been worked out based on actual loans considered in order dated 9.5.2006/12.11.2008. Actual loans have been bifurcated based on terms and conditions of loan.
- (b) The outstanding normative loan on 1.9.2007 works out to Rs.35037 lakh after addition of notional loan and considering the upfront cumulative depreciation of Rs.858.48 lakh on the transferred assets, as repayment.
- (c) Normative repayment of loan considered is equal to the admissible depreciation for the year or normative repayment, whichever is higher. This is however, subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No.5434/2007 and other related appeals preferred by the Commission.
- (d) Weighted average interest rate has been worked out based on loans as considered in order dated 9.5.2006/12.11.2008 along with loan of Rs.1700 lakh taken for the transferred asset in the year 2008-09.

17. Interest on loan has been computed as under:

(Rs in lakh)

Period	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Gross Opening loan	47233	49791	49791
Cumulative Repayment of loan upto previous year including accumulated depreciation	12309	14754	17041
Net loan opening after addition	34923	35037	32750
Addition of loan due to additional capital expenditure	0.00	0.00	0.00
Repayment of loan during the year	1586	2287	4820
Net loan closing	33337	32750	27931
Average loan	34130	33894	30340
Weighted average Rate of Interest on loan	9.1318%	9.2367%	9.3957%
Interest on loan	1303	1822	2851

Depreciation

18. Depreciation based on the weighted average rate of depreciation of 4.02% as admitted in order dated 12.11.2008 has been considered for revision of tariff. The necessary calculations of depreciation are as under:

(Rs in lakh)

Period	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Depreciation @ 4.02%			
90% Depreciable Value	77383	79845	79845
Balance Depreciable	50418	51294	48149
Balance useful life			
Depreciation	1586	2287	3929

Advance Against Depreciation

19. Advance Against Depreciation has been worked out after accounting for the cost of the transferred asset in terms of sub-clause (b) of clause (1) of Regulation 21 of the 2004 regulations. Therefore, the petitioner is not entitled to Advance Against Depreciation as shown hereunder:

(Rs in lakh)

Advance against Depreciation	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
1/10th of Gross Loan(s)	4723	4979	4979
Repayment of the Loan	1586	2287	4820
Minimum of the above	1586	2287	4820
Depreciation during the year	1586	2287	3929
(A) Difference	0	0	891
Cumulative Repayment of the Loan	14754	17041	21861
Cumulative Depreciation	28551	31696	35625
(B) Difference	0	0	0
Advance against Depreciation Minimum of (A) and (B)	0	0	0

O&M Expenses

20. The petitioner has submitted that the transfer of switchyard from PGCIL has resulted in additional expenditure towards operation and maintenance of the additional equipment and a further under recovery of O&M expenses. The petitioner has therefore prayed that it be allowed additional O&M expenses in accordance with Regulation 56 of the 2004 regulations.

21. The respondent has objected to the claim of the petitioner and has submitted that the additional O&M expenses due to the transfer of switchyard should not be linked to the previous net O&M expenses.

22. The normative O&M expenses were finalized by the Commission through the transparent process of hearing the views of all the stakeholders and were based on the data furnished by the concerned utilities for different components of O&M. Further, an escalation of 4% per year was inbuilt in the normative O&M

expenses specified by the Commission. The norms pertaining to O&M expenses for combined cycle gas-based generating stations were specified by the Commission considering a capital cost of Rs.3 crore/MW and these norms were without exception. As a result of switchyard cost being included in the capital cost of the generating stations, we feel that there is no justification to allow additional O&M expenses on account of transfer of switchyard to the petitioner. In view of this, O&M expenses allowed in order dated 12.11.2008 *ibid* have been considered.

Interest on Working Capital

23. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 12.11.2008 *ibid* have been kept unchanged. The “receivables” component of the working capital has been revised for the reason of revision of return on equity, interest on loan, etc. The necessary details in support of the revised calculation of interest on working capital are as under:

(Rs in lakh)

	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Fuel Cost	1038	1445	2475
Naptha stock	91	126	216
O & M expenses	132	184	328
Spares	522	727	1324
Receivables- 2 months	3368	4714	8067
Total Working Capital	5150	7196	12410
Rate of Interest	10.25%	10.25%	10.25%
Interest on Working Capital	528	738	1272

Revised Fixed Charges

24. The revised fixed charges for the years 2007-08 and 2008-09 allowed in this order are summed up as below:

(Rs in lakh)

Annual Fixed Charges	2007-08		2008-09
	1.4.2007 to 31.8.2007	1.9.2007 to 31.3.2008	
Depreciation	1586	2287	3929
Interest on Loan	1303	1822	2851
Return on Equity	2758	3903	6707
Advance against Depreciation	0	0	0
Interest on Working Capital	528	738	1272
O & M Expenses	1582	2203	3936
Total	7757	10952	18695

25. The difference between the tariff approved by order dated 18.6.2008 *ibid* (para 4 above refers) provisionally and the final tariff approved now shall be settled by the parties by 31.7.2009.

26. In addition to the above, other charges like income tax, cess levied by statutory authority, other taxes shall also be adjusted accordingly.

26. This order disposes of Petition. No 140/2008

Sd/-
(V.S.VERMA)
MEMBER

Sd/-
(S.JAYARAMAN)
MEMBER

Sd/-
(R.KRISHNAMOORTHY)
MEMBER

Sd/-
(DR. PRAMOD DEO)
CHAIRPERSON

New Delhi dated the 9th day of June, 2009