



Briefly stated the facts are as follows:

2. The appellant generates electricity at its various plants and sells it to State utilities at the tariff fixed by the CERC. On March 26, 2001, the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2001 (for short Regulations) were notified by the CERC. These Regulations inter alia provide the method for working out allowable operation and maintenance expenses and the escalation factor thereupon. The Commission with a view to look into the question of revision of O&M expenses from 2001-02 to 2003-04 initiated suo moto proceedings being petition No.196/2004.
3. The CERC circulated its draft order dated January 4 2005 dealing with adjustment of O&M expenses based on actual escalation factor for the deviation beyond the limit prescribed by Regulation 2.7 (d) (iv) of the Regulations. In the draft order, the Commission specified the inflation rates for the years 2000-01 to 2003-04. These were based on computation arrived by the staff of the CERC. The draft order was circulated by the Commission to the Central utilities, namely, Neyveli Lignite Corporation (NLC), National Thermal Power Corporation (NTPC), National Hydro Electric Corporation (NHPC), Power Grid Corporation of India Ltd (PGCIL) and the various State utilities. Though the concerned utilities including the appellant filed their responses to the draft order, they did not question the inflation rates indicated therein. However, it was the stand of the appellant that under Regulation 2.7 (d) (iv) of the Regulations, the revision of O&M expenses be undertaken on normative 6% escalation factor based on actual escalation between 4.8% and 7.2%. In case the deviation goes beyond 4.8% or 7.2%, as the case may be, it is required to be adjusted on the basis of actual escalation factor. By way of illustration it was

submitted that in case the actual escalation factor was 8%, adjustment ought to be made for the deviation of 0.8% (8% - 7.2%).

4. The CERC by its order dated February 28 2005 held to the effect that where the escalation factor is not within the prescribed band, O&M expenses be calculated by working out **“the actual escalation factor and not the marginal adjusted escalation factor”**. Consequently, the CERC directed that the O&M charges for the period between April 1, 2001 and March 31, 2004 be worked out by the central sector utilities by applying the following actual escalation rates for the years 2000-01 to 2003-04 as computed by its staff :-

	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>
Thermal Power Generating Stations	4.45	3.49	2.70	4.62

5. Not satisfied with the order passed by the CERC, the appellant preferred a review petition before it. The CERC, however not finding any error apparent on the face of the record rejected the review petition by its order dated June 7, 2005.
6. Aggrieved by the orders of the CERC dated February 28, 2005 and June 7, 2005, the appellant has preferred the instant appeal.
7. The only question involved in the instant appeal relates to the interpretation of clause 2.7(d)(iv) of the Regulations of 2001. In order to appreciate the

controversy, it will be necessary to set out clause 2.7(d) of the Regulations 2001 in its entirety. Clause 2.7(d) reads as under:

2.7(d) Operational and Maintenance expenses including insurance

- i. Operation and Maintenance expenses including insurance (hereinafter referred to as O&M expenses) for the existing stations of NTPC and NLC which have been in operation for 5 years or more in the base year 1999-2000, shall be derived on the basis of actual O&M expenses, excluding abnormal O&M expenses, if any, for the year 1995-96 to 1999-2000 duly certified by the statutory auditors.

The average of actual O&M expenses for the year 1995-96 to 1999-2000 considered as O&M expenses for the year 1997-98 shall be escalated twice at the rate of 10% per annum to arrive at O&M expenses for the base year 1999-2000, as given below:

$$BO\&M2000i = AVO\&Mi \times (1.10)^2$$

Where  $BO\&M2000i$  = Base level O&M expenses for 1999-2000 for  $i$ th generation station

$AVO\&Mi$  = Average O&M expenses from 1995-96 to 1999-2000 for the  $i$ th generation station.

The Base O&M expenses for the year 1999-2000 shall be further escalated at the rate of 6% per annum to arrive at permissible O&M expenses for the relevant year.

- ii. In the case of new thermal stations of NTPC and NLC which have not been in existence for a period of five years, the Base O&M expenses shall be fixed at 2.5% of the actual capital cost as approved by the Authority or an appropriate Independent agency, as the case may be, in the year of

commissioning and shall be escalated at the rate of 10% per annum for subsequent years, to arrive at O&M expenses for the base year 1999-2000 level. Thereafter the Base O&M expenses shall be further escalated at the rate of 6% per annum to arrive at permissible O&M expenses for the relevant year.

- iii. For plants commissioned during the tariff period (2001-02 to 2003-04), the Base O&M expenses shall be fixed at 2.5% of actual capital cost as approved by the Authority or an appropriate Independent agency as the case may be, in the year of commissioning and shall be subject to an annual escalation of 6% per annum from the subsequent year.
- iv. The escalation factor of 6% per annum shall be used to revise the base figure of O&M expenses. A deviation of the escalation factor computed from the actual inflation data that lies within 20% of the above notified escalation factor of 6% (which works out of be 1.2 %age points on either side of 6%) shall be absorbed by the utilities / beneficiaries. In other words if the escalation factor computed from the observed data lies in the range of 4.8 to 7.2%, this variation should be absorbed by the utilities. Any deviations beyond this limit shall be adjusted on the basis of the actual escalation factor arrived at by applying a weighted price index of CPI for industrial workers (CPI\_IW) and an index of select components of WPI (WPIOM) as per formula given in note below clause (v) herein, for which the utility shall approach the Commission with a petition.

- v. The escalation of yearly expenses from the published data for the tariff period shall be computed as follows:

$$0.4 \times \text{INFL}_{\text{CPI}} + 0.6 \times \text{INFK}_{\text{WPIOM}}$$

Where

$\text{INFL}_{\text{CPI}}$  = Annual Average Inflation in CPI\_IW

$\text{INFL}_{\text{WPIOM}}$  = Annual Average Inflation in WPIOM

Where as CPI\_IW is directly published by the Government, WPIOM shall be computed from disaggregated data on wholesale prices published by Ministry of Industry.

8. From a reading of Regulation 2.7(d)(iv), it is apparent that in case of new thermal stations of NTPC and NLC which have been in existence for less than a period of five years, the base O&M expenses are to be fixed at 2.5% of the actual approved capital cost in the year of commissioning and are required to be escalated @ 10% per annum for subsequent years to arrive at O&M expenses for the base year 1999-2000 level. Thereafter, the base O&M expenses are to be further escalated @ 6% per annum to come to permissible O&M expenses for the relevant year. In so far as the plants commissioned during the tariff period 2001-02 to 2003-04 are concerned, the base O&M expenses are to be fixed at 2.5% of the actual approved capital cost in the year of commissioning and it shall be subject to an annual escalation of 6% per annum from the subsequent year.
9. It is also clear that O&M expenses for the NTPC and NLC stations which were in operation for five years and more from the base year of 1999 - 2000 are to be computed on the basis of actual O&M expenses excluding freakish O&M expenses, if any, for the years 1995-96 to

1999-2000. The average of actual O&M expenses for the years 1995-96 to 1999-2000 considered as O&M expenses for the year 1997-98 are required to be escalated twice @ 10% per annum for reaching O&M expenses for the base year 1999-2000 as per the formula specified therein. The base O&M expenses for the year 1999-2000 are to be further escalated @ 6% to arrive at permissible O&M expenses for the relevant year.

10. It also needs to be pointed out that as per Regulation 27(d)(iv) of the Regulations 2001, the escalation factor of 6% per annum is to be utilized to revise the base figure of O&M expenses. In the event of a deviation of the escalation factor calculated on the basis of actual inflation data that rests within 20% of the aforesaid notified escalation factor of 6%, which works out to be 1.2 %age points on both sides of 6%, is to be absorbed by the utilities/ beneficiaries. This means that where the escalation factor computed from the observed data lies within the limits of 4.8% to 7.2%, the variation is to be absorbed by the utilities/ beneficiaries. Any deviation beyond this limit is to be adjusted on the basis of **actual escalation factor** arrived at by applying weighted price index of CPI for industrial workers and an index of select components of WPI as per formula given in the note below clause (v) for which purpose the utilities are required to approach the Commission with a petition.
11. In Regulation 2.7(d)(iv), the words "**actual escalation factor**" are the key words. According to the Regulation 2.7 (d) (iv), when the escalation factor lies between 4.8 % and 7.2 %, the escalation is to be absorbed by the utilities/ beneficiaries but where the deviation goes beyond the terminal

limits, the same are to be worked out by applying the actual escalation factor.

12. CERC, in order to demonstrate the actual working of the interpretation placed by it on Regulation 2.7(d)(iv) made the following calculations in its order dated February 28, 2005:-

Description	Normalised O&M Expenses	O&M Charges			
		1999-2000	2000-01	2001-02	2002-03
Escalation rate considered as per Notification %		6.00	6.00	6.00	6.00
O&M Charges (Rs.)	100.00	106.00	112.36	119.10	126.25
Actual Escalation rate(%)		4.45	3.49	2.70	4.62
O&M charges worked out taking actual escalation rates (Rs.)	100.00	104.45*	108.10	111.01	116.14
Benefit to be passed on to the beneficiaries (Rs.)			4.26	8.09	10.11
Total Benefit		<b>22.46</b>			

13. The aforesaid calculations reveal that the CERC did not attach any importance to the deviation beyond the range of 4.8% to 7.2%. It did not work out the deviations at all. Deviations beyond the terminal limits of 4.8% to 7.2% were required to be adjusted on the basis of the actual escalation factor. In Regulation 2.7(d)(iv), the words “**any deviation beyond this limit shall be adjusted on the basis of actual escalation factor**” are very significant and must be given effect to. The word “adjust” used in the Regulation means to accommodate. CERC has not accommodated the deviation at all. In fact, the CERC ought to have deducted the actual deviation from the limit of 4.8%. In order to give effect to the real meaning of the Regulation 2.7(d)(iv), the CERC should have



made the calculations in the following manner in respect of say for the year 2000-2001:-

$$\begin{aligned} & "6X - 0.35X \\ & = X (6-0.35) = 5.65 X \end{aligned}$$

{Where

*X = Signifies normalized O&M expenses for the year 2000-2001;*

*4.45 is the actual escalation factor;*

*4.8 is the terminal limit;*

*0.35 has been arrived at by deducting 4.45 from 4.8; and*

**all figures represent percentages**}.

14. Similar treatment has also to be given in the event of the actual escalation factor going beyond 7.2%. In case the aforesaid construction is not given to the Regulation 2.7(d)(iv), the words "**any deviation beyond the limit shall be adjusted on the basis of actual escalation factor**" shall be rendered otiose. Each word of the Regulation has to be taken into account and no word is to be considered as surplus.
15. In this view of the matter, we allow the appeal and set aside the impugned orders dated February 28, 2005 and June 7, 2005 of the CERC. The adjustment for the year 2001-2004 shall be made by the appellant in line with the aforesaid exemplar.

**(Justice Anil Dev Singh)**  
**Chairperson**

**(Mr. A.A. Khan)**  
**Technical Member**

Dated: 03.01.2006