# Appellate Tribunal for Electricity (Appellate Jurisdiction)

#### **APPEAL No. 91 OF 2011**

**Dated: 15<sup>th</sup> May, 2012** 

Present: Hon'ble Mr. P.S. Datta Judicial member

Hon'ble Mr. V J Talwar, Technical Member,

#### In the Matter Of

Haryana Power Generation Corporation Ltd. Urja Bhawan, C-7, Sector-6, Panchkula-134 109

.....Appellant

Versus

Haryana Electricity Regulatory Commission Bays No.33-36, Sector-4, Panchkula-134 109

Dhakshin Haryana Bijli Vitran Nigam Limited Vidyut Nagar, Hissar

Uttar Haryana Bijli Vitran Nigam Limited Vidyut Sadan, Sector-6, Panchkula-134 109

...Respondents

Counsel for the Appellant : Mr. Pradeep Dahiya

Mr. Vikas K. Gupta (Rep)

Counsel for the Respondent : Mr. Anand K. Ganesan for R-1

#### <u>JUDGMENT</u>

## PER MR. V. J. TALWAR, TECHNICAL MEMBER

- 1. Haryana Power Generation Corporation Limited has filed this Appeal against the impugned order dated 18.4.2011of the Haryana Electricity Regulatory Commission (Commission) approving the ARR and fixing the tariff for generation and sale of electricity to distribution licensee. The short facts are as follows:
  - (i) The Appellant, a Generating Company filed Generation Tariff Application on 23.11.2010 before the State Commission for the Financial Years 2011-12.
  - (ii) The State Commission called for clarifications and information from the Appellant.
  - (iii) Accordingly, on 15.2.2011, the Appellant submitted the said information and clarifications. In the meantime, the State Commission received some objections from the public.
  - (iv) Public hearing was held on 23.2.2011. Ultimately on 16.4.2010, the State Commission passed the impugned Tariff Order with some modifications to the tariff proposal submitted by the Appellant.
  - (v) Aggrieved by this order dated 16.4.2010 the Appellant has filed this Appeal.
- 2. In this Appeal following issues have been raised by the Appellant.

- (i) Plant Load Factor
- (ii) Auxiliary Consumption
- (iii) Station Heat Rate
- (iv) Transit Loss of Coal
- (v) Operation and Maintenance Expenses
- (vi) Return on Equity
- 3. It is noted that all the issues raised by the Appellant in the present appeal had also been challenged by the Appellant in Appeal No. 131 of 2011 filed against the tariff order passed by the State Commission for the tariff year 2010-11. It is also noted that the grounds for the challenge to the tariff order are almost identical to those raised in Appeal No. 131 of 2011. By judgment and order dated 01.03.2012 passed by this Tribunal, the said Appeal No. 131 of 2011 filed by the Appellant was dismissed being devoid of merits. However, we are of the view that each tariff order passed by the Commission stands on its own footing and has to be examined on its own merits.
- 4. With the above observations, let us examine each of the issues raised by the Appellant on merits. The first issue raised by the Appellant in the present appeal is related to **Plant Load Factor** for Panipat Thermal Power Station Unit No. 1 to 4.
- 5. The main contention of the Learned Counsel for the Appellant in regard to PLF for Unit 1-4 of Panipat TPS was that the State Commission has ignored the past performance of these units and fixed the target PLF which is not achievable. The State Commission has fixed target PLF for these units at 75% against the claim of 71%

- of the Appellant. The Appellant has also stated that there CERC has not fixed any norms for thermal units of 110MW capacity.
- 6. In the light of the above submissions, if we look to the impugned order, it is clear that the State Commission has in fact allowed substantial relaxation in respect of Plant Load Factor. The State Commission as against the norms of 80% for the Units No.1 to 4 of Panipat Thermal Power Station (PTPS), has allowed substantial relaxation and allowed the Plant Load Factor at 75% only after considering the past performance of these units. The reasons recorded by the State Commission in para 2.5.1 of the Impugned Order read as under:

### "2.5.1 Plant Load factor (PLF)

An analysis of the performance during FY 2010-11 (up to January, 2011) as reported by HPGCL reveals that PLF of PTPS Units 1-4 is 53.22% as against 68.38% during FY 2009-10 and last seven years best achieved of 72.45% (FY 2003-04). The PLF of PTPS unit-1 has been very low as this unit remained under shut down for about 6 months from March to August, 2010 due to starvation of turbine bearings. Thereafter this unit attained PLF of 91.16% during November, 2010. Thus there is no reason why this unit will not operate at a PLF of 80% and higher on a sustained basis. PTPS unit- 2 was shut down for annual overhauling on 25.10.2010 for 45 days. It has been reported that the blades of the turbine were found to be damaged and the shut down had to be extended up to 19.03.2011. It is expected that HPGCL would have carried out some of the works during the above shut down as recommended by M/S Evonik in their report on energy audit carried out April, 2010 and this unit is expected to perform as per the norms during FY 2011-12. HPGCL must have investigated the reasons that led to damage to turbines of PTPS units-1&2 resulting into very long forced shut downs.

HPGCL should share the same with the Commission and take all corrective measures so as to avoid recurrence of such events.

The Commission feels that PTPS units 3 & 4 which are 25 & 24 years old respectively need comprehensive renovation urgently, failing which their performance is going to become more and more uneconomical. Last year HPGCL indicated that these units are proposed to be refurbished with World Bank assistance, but no concrete schedule was given. HPGCL have now informed that R&M of unit No. 3&4 has been planned with World Bank Funds and shut down of these units is scheduled in FY 2013-14. As the R & M of these units has been over delayed, HPGCL must expedite the completion of pre shutdown activities so that the R&M of these units could be completed before the schedule indicated.

For FY 2010-11, the Commission approved PLF of 75% for PTPS units-1 to 4 as against HERC norm of 80%. However, due to long forced shut downs of PTPS units-1&2, the same is not likely to be achieved. During FY 2011-12, all the four PTPS units would be available for generation and PTPS units-1&2 are expected to perform much better after comprehensive overhauling. Therefore, overall PLF of at least 75% should be achievable on PTPS units-1 to 4. As the proposed annual maintenance shut down during FY 2011- 12 are only 15 days each on PTPS units-1 to 4, PLFs of PTPS units-1 to 4 are allowed at 75% for FY 2011-12 i.e at the same level as for FY 2010-11, as against HPGCL's filing of 71%. HPGCL is directed to ensure annual overhauling of the units as per the schedule the Commission so that the machines are in submitted to perfect working order and the forced outages are minimized."

7. Perusal of above findings of the State Commission would make it clear that the State Commission had in fact considered the past performance of these units and has relaxed Target PLF from 80% to 75%. Being not satisfied with that, the Appellant claims for further

- relaxation on four units. In fact, the Appellant has not provided any material to provide for such a further relaxation.
- 8. During proceedings it was informed that Energy Audits have been carried out for Unit 1 & 4 of Panipat TPS by various agencies such as CEA, NTPC, BEE and Evoniks. The Appellant was directed to submit the copies of reports of these Energy Audits along with the Action Taken Reports on the Recommendations made by these Energy Audits. The Appellant has submitted the following reports:
  - (a) Energy Audit carried out by CEA during 2004
  - (b) Energy Audit carried out by CEA during 2005
  - (c) Energy Audit carried out by CEA, GTZ and Evonik in 2008
  - (d) Energy Audit carried out by NTPC during 2007
  - (e) Energy Audit carried out by M/s Evonik in 2010
  - (f) Energy Audit carried out by BEE during 2011
- 9. Although as many as 6 energy audits have been carried out on the units by various reputed agencies, the Appellant has submitted only one Action Taken Report (ATR) on recommendations made by M/s Evoniks in 2010. Action Taken Reports on the recommendations made by other energy audits have not been submitted by the Appellant. Perusal of ATR submitted by the Appellant would reveal that while a few recommendations have been implemented, large number of others have been brushed aside as 'NOT FEASIBLE' without assigning any reason what so ever. As many as 6 energy audits have been carried out in 8 years by various reputed agencies and no creditable action appears to have been taken on the recommendations made by these agencies to improve performance of these units. Despite this the Appellant is claiming for

further relaxation in the norms fixed by the State Commission. The Appellant has to improve its performance and ensure that the units performed upto the norms.

- 10. The very same issue was raised by the Appellant in Appeal No. 131 of 2011 and this Tribunal in its judgment and order dated 1.3.2012 had rejected the prayer of the Appellant.
- 11. In the circumstances, the present issue raised by the Appellant is fully covered by the above decision of this Tribunal and is therefore liable to dismissed.
- 12. The 2<sup>nd</sup> issue for our consideration is related **to auxiliary consumption.** The Appellant has submitted that the state Commission has reduced the auxiliary consumption for Panipat TPs unit no. 1 to 4 from 11.28% to 11%, for unit 5 from 9.4 % to 9%, for units 7-8 from 9% to 8%. For DCRTPS auxiliary consumption has been reduced from 9% to 8.5% and for RGTPS it has been reduced from 6.5% to 6%. A summary of the annual auxiliary power consumption proposed by HPGCL, HERC & CERC norms and HERC approval thereto are presented in the Table below:

Station	Appellant's	Commission's	CERC	Commission's
	proposal	Norms	Norms	Approval
Panipat Unit 1-4	11.28	11	9.5 - 12	11
Panipat Unit 5	9.4	9	8.5	9
Panipat Unit 6	9	9	8.5	9
Panipat Unit 7-8	9	9	8.5	8.5
DCRTPS Unit 1-2	9	9	8.5	8.5
RG TPS Unit 1-2	6.5	7.5	6	6

13. With regard to **Auxiliary Consumption**, the State Commission has followed its own regulations with respect to Panipat unit 1 to 6 with the following observations:

"The auxiliary power consumption (%) of PTPS units 1-4 achieved up to 01/11 during FY 2010-11 stands at 11.77% against the target of 11% fixed by HERC. On scrutiny of month wise auxiliary power consumption of these units, it is observed that PTPS unit-1 consumed extremely high auxiliary power (293.18%) during the month of 08/10 when unit-1 was recommissioned after repair of turbine bearings. Auxiliary power consumption of PTPS unit-2 has been consistently high (12.64% to 15.84%) except during 05/10 (10.03%). The auxiliary power consumption pattern at PTPS unit-3 has been 9.95% & 10.04% during 05/10 & 04/10 respectively and 11.33% 12.49% during other months. The auxiliary power consumption for PTPS unit-4 has been in the range of 10.86% to 12.03%.

The auxiliary power consumption (%) of PTPS units 5&6 achieved up to 01/11 during FY 2010-11 is very high at 10.82% and 10.22% respectively (increase of nearly 1% over the previous year) against the target of 9% fixed by HERC.

HPGCL has got carried out energy audit tests on PTPS units-2 to 6 during April, 2010 and that of PTPS unit- 1 during September, 2010. HPGCL is supposed to implement the recommendations contained in the energy audit reports so as to reduce the auxiliary consumption to the normative level. There have been 90 nos of forced outages on PTPS units- 1 to 4 and 54 nos of on PTPS units-5 & 6 up to October, 2010 during FY 2010-11which is a matter of serious concern and need to be controlled by HPGCL so as to reduce auxiliary power and secondary fuel oil consumption. In view of above discussion, the auxiliary power consumption target for PTPS units- 1 to 4 is fixed at 11% and that for PTPS units- 5 & 6 at 9% as per HERC norm."

14. With regard to Panipat Unit 7-8, DCRTPS, the State Commission has made the following observation while approving the auxiliary consumption of these units as per CERC norms.

"The auxiliary power consumption (%) at PTPS units 7&8 up to 01/11 during FY 2010-11has been 9.06% and 8.99% respectively against the target of 9% fixed by HERC and the minimum monthly consumption at PTPS unit-7 & 8 has been 8.52% (11/10) & 8.53% (01/11) respectively. The auxiliary power consumption of DCRTPS units 1&2 up to 01/10 during FY 2010-11 has been achieved at 9.35% and 10.71% respectively against the target of 9% fixed by HERC and the minimum monthly consumption at DCRTPS units-1 &2 has been 8.68% & 8.67% respectively during January, 2011. There have been 62 nos of forced outages on PTPS units- 7 & 8 and 42 forced outages on DCRTPS units- 1 & 2 up to October, 2010 during FY 2010-11which is a matter of serious concern and need to be controlled by HPGCL so as to reduce auxiliary power and secondary fuel oil consumption. In view of steady performance of these units, the auxiliary power consumption target for PTPS units-7&8 and DCR TPS units-1&2 is fixed as 8.5% in line with CERC regulation, dated 19-01-2009."

15. From the above it is observed that the State Commission has followed the norms established by the Central Commission in 2009 in preference to its own norms notified in December 2008. However, the reasons given by the State Commission in preferring CERC norms does not appear to be convincing. Here, we would like to reiterate our observations made in Appeal no. 131 of 2011which read as under:

"Bare reading of section 61 would elucidate that the State Commissions have been mandated to frame Regulations for fixing tariff under Section 62 of the Act and while doing so i.e. while framing such regulations, State Commissions are required to be guided by the principles laid down in by the Central Commission, National Electricity Policy, Tariff Policy

etc. It also provide that while framing the regulations the State Commissions shall ensure that generation, transmission and distribution are conducted on commercial principles; factors which would encourage competition and safe guard consumer's interest. Once the State Commission has framed and notified the requisite Regulations after meeting the requirement of prior publication under Section 181(3), it is bound by such Regulations while fixing Tariff under Section 62 of the Act and the Central Commission's Regulations have no relevance in such cases. However, the State Commission may follow the Central Commission's Regulations on certain aspects which had not been addressed in the State Commission's own Regulations. The Haryana Electricity Regulatory Commission has framed Terms and Conditions for determination of tariff for generation in the year 2008 and the State Commission is required to fix tariff as per these Regulations."

- 16. Therefore, the State Commission ought to have allowed auxiliary consumption in accordance with its own Tariff Regulations, 2008 in respect of Panipat TPS unit 7-8 and DCR TPS unit 1-2. We order accordingly.
- 17. In respect of Rajiv Gandhi Thermal Power Plant Units 1 and 2, the said units of 660 MW capacity and are of new technology. The norms applicable to those units are to be same as that of generating Stations of more than 500 MW with Natural Draft Cooling Tower. The said units were expected to be commissioned during last quarter of the year 2010. For the above technology, there were no particular Regulations framed by the State Commission as the same were not envisaged at the time of framing of Regulations in the year 2008. The Central Commission Regulations 2009 provide 6% Auxiliary consumption for these units. Since State Commission did not make any provision with regard to these high capacity units fitted with new

- technology, it has adopted Central Commission Regulations of 6% against the claim of 6.5% made by the Appellant.
- 18. Next issue is related to **Station Heat Rate**. The Appellant has challenged the determination of Station Heat Rate by the State Commission on the ground that the State Commission has not allowed the Station Heat Rate at a level which is achievable by the Appellant. A summary of the Station Heat Rate proposed by the Appellant, State Commission's & CERC norms and State Commission's approval thereto are presented in the Table below:

Station	Appellant's	Commission's	CERC	Commission's
	proposal	Norms	Norms	Approval
Panipat Unit 1-4	3200	2750	2500	3050
Panipat Unit 5-6	2800	2500	2500	2500
Panipat Unit 7-8	2500	2500	2500	2500
DCRTPS Unit 1-2	2500	2500	2343	2343
RG TPS Unit 1-2	2425	2450	2386	2386

19. From the above table it can be seen that the State Commission has relaxed the norms in respect of Panipat TPS unit 1-4. It has followed the station heat rate specified in its Tariff Regulations 2008 in respect of other units at Panipat TPS. However, for DCR TPS and RGTPS the State Commission has followed the norms specified in Central Commission's Tariff Regulations, 2009. The findings of the State Commission in the impugned order on station heat rate are as under:

## "2.5.4 Station Heat Rate (Kcal/kWh)

The station heat rate is one of the most important parameters which reflect on the efficiency of a thermal power station. All out

efforts, therefore, ought to be made to operate the thermal stations at station heat rate as close to the design heat rate as possible.

The station heat rate (Kcal/kWh) of PTPS units 1-4 achieved up to 01/11 during FY 2010-11 stands at 3363 against the target of 3100 fixed by HERC. On scrutiny of month wise station heat rate at these units up to 01/11 during FY 2010-11, it is observed that unit-1 of PTPS has achieved station heat rate of 3001 & 2804 Kcal/kWh respectively during 09/10 &10/10 when it was re-commissioned after repair of turbine bearings. The station heat rates at PTPS units 2 to 4 up to 01/11 vary between 3112 to 3660 Kcal/kWh. If the recommendations contained in energy audit reports of PTPS units-1 to 4 are implemented by HPGCL, there is considerable scope for reduction in station heat rate and bringing the same within 10% of the design station heat rate i.e 2750 Kcal/kWh. It is expected that during overhauling of PTPS units-1&2 availed in FY 2010-11, some of the works as per the recommendations of M/S Evonik based on energy audit studies would have been completed. It is, therefore, expected that PTPS units-1&2 would perform better and PLF of 75% would be achievable on PTPSunits-1to4 during FY 2011-12. Accordingly, the Commission approves the station heat rates for PTPS units-1 to 4 at 3050 Kcal/kWh for FY 2011-12.

The station heat rate (Kcal/kWh) of PTPS units 5&6 achieved up to 01/11 during FY 2010-11 stands at 2779 and 2675 respectively in the range of 2541 to 2795 against the target of 2600 fixed by HERC. If the recommendations contained in energy audit reports of PTPS units- 5 & 6 are implemented by HPGCL, there is considerable scope for reduction in station heat rate of these units which could be brought down within 10% of design heat rate. There have been a large number of trippings at these units due to flame failure and furnace disturbance during FY2010-11.. The station heat rate of 2500 Kcal/kWh for these units during FY 2011-12 is considered

achievable by avoiding such trippings through proper supervision and control of coal flow and other operational parameters 38 and also by implementing short term recommendations of energy audit reports. Therefore, the Commission approves the station heat rates for PTPS units-5&6 at 2500 Kcal/kWh in line with HERC / CERC norms for 210 MW units.

The station heat rate (Kcal/kWh) at PTPS units-7 & 8 up to 01/11 during FY 2010-11 has been achieved at 2603 in the range of 2448 to 2705 against the target of 2450 fixed by HERC. PTPS units-7 & 8 achieved the best annual station heat rates of 2452 & 2446 Kcal/kWh respectively during FY 2008-09. The PTPS Unit 7& 8 are of newer vintage as compared to PTPS (Units-1-6). Accordingly, the Commission decides to fix the station heat rates for PTPS units-7&8 at 2500 Kcal/kWh.

The station heat rate (Kcal/kWh) of DCRTPS units 1&2 up to 01/11 during FY 2010-11 has been achieved at 2466 and 2483 in the range of 2290 to 2927 against the target of 2368 fixed by HERC. As intimated by HPGCL, the design turbine heat rate & boiler efficiency of these units are 1916.6 Kcal/kWh & 87.1% respectively. The design station heat rate of these units works out to 2200.46 Kcal/kWh and the normative station heat rate as per CERC regulation, dated 19-01-09 would be 2200.46 x 1.065 = 2343 Kcal/kWh. Therefore station heat rates for DCRTPS units-1& 2 are fixed as 2343 Kcal/kWh.

As intimated by HPGCL, the design turbine heat rate & boiler efficiency of RGTPS units-1&2 are 1954 Kcal/kWh & 87.2% respectively. The design station heat rate of these units works out to 2240.83 Kcal/kWh and the normative station heat rate as per CERC regulation, dated 19-01-09 would be 2240.83 x 1.065 = 2386 Kcal/kWh. Therefore station heat rates for RGTPS units-1& 2 are fixed as 2386 Kcal/kWh.

- 20. It is noted that the State Commission has evaluated the station heat rates for DCR TPS and RG TPS from designed heat rate multiplying it with deterioration factor of 1.065 prescribed in Central Commission's Tariff Regulations, 2009 without giving any reasons for deviation from its own 2008 Regulations. We feel this is not a correct approach. State Commission ought to have followed its own Regulations or should have given detailed reasons for any deviation from these Regulations. Under the circumstances, we direct the State Commission to allow station heat rate with respect to DCR TPS and RG TPC in accordance with the provisions of its own Tariff Regulations, 2008.
- 21. Next issue is relating to **Coal Transit Loss.** This issue of coal transit loss allowed by the State commission and challenged by the Appellant in the present appeal is also covered by the decision of this Tribunal in Appeal No. 131 of 2011. The facts and the grounds raised by the Appellant in the present Appeal are exactly similar as in Appeal no. 131 of 2011. The Tribunal in its judgment and order in Appeal 131 of 2011 has held as under:
  - "23. With regard to **Transit Loss of Coal**, it is contended by the Appellant that the State Commission has allowed only 1% of transit loss of coal as against the claim of the Appellant on actual basis. The Appellant has claimed the coal transit loss of 1.5% before the State Commission. The normative loss level to be allowed is only 0.8% both in terms of the State Commission as well as the Regulations of the Central Commission. As against the normative loss of 0.8% the State Commission has relaxed the norms and allowed 1% as coal transit loss to the

benefit of the Appellant. Therefore, the Appellant cannot claim for a greater benefit than allowed by the State Commission.

- 24. As a matter of fact, the very same issue had been raised by the Appellant in the previous Appeals in Appeal No.42 and 43 of 2008 dated 31.7.2009 and Appeal No.72 and 141 of 2009 dated 26.4.2010 and the same has been decided. The relevant observations made by this Tribunal in Appeal No.42 and 43 of 2008 dated 31.7.2009 is as under:
  - "21. Prima facie, the argument of the appellant that it has not control over the coal transportation losses as other agencies such as Railways, Coal companies are involved appears to be attractive. However on analysis, it needs to be borne in mind that the tariff of the appellant is determined on a cost plus basis. Every item of the cost, other than those which are statutory levies, that is to be recovered from the consumers would require 11 of 24Appeal No. 42 & 43 of 2008 scrutiny at some stage. If we accept that coal transportation losses be allowed at levels sought for by the appellant, on the premise that such losses are not within the control of the appellant, we are effectively agreeing that such costs are beyond scrutiny by the State Commission or rather beyond scrutiny by any agency. How will the consumer participate in the due diligence process to determine the justness of such losses. The consumer does not have resources to approach the Railways and Coal companies directly for determination of the justness of the losses incurred. It is only the appellant who is in a position to take up the matter with the Railways and the Coal Companies for more efficient transportation of coal. If need be, it has all options to take up the matter at highest level as advised by the State Commission also.
  - 22. In view of the above, we do not agree with the contention of the Appellant in this Regard."
- 25. Similarly in Appeal No.72 and 141 of 2009 dated 26.4.2010 similar findings have been given following the earlier decision in Appeal No.42 and 43 of 2008 dated 31.7.2009. The relevant observations are as follows:

"14. On going through the State Commission's order impugned we feel that the State Commission has given appropriate reasons for fixing the transit loss at the rates mentioned above. Admittedly the State Commission had repeatedly directed the Appellant to take up the issue of coal loss at the highest level so as to bring down the loss level in coal transit. The State Commission had also directed the Appellant to follow loss level trajectory for reduction in coal transit loss to bring it down to a level of 1% but admittedly no steps have been taken by the Appellant for bringing down the loss level. It is noticed from the order impugned that the loss level allowed by the State Commission in this matter is much higher than the transit loss level determined by the Central Commission in its tariff regulation 2009. This issue SSR has already been dealt with by the Tribunal in Appeals No. 42 of 2009 and Appeals No. 43 of 2009 filed by the Appellant in its judgment dated 31.07.2009. According to the Tribunal, the tariff of the Appellant is determined on cost plus basis and every item of cost other than those which are statutory levies, has to be recovered from the consumer. In this matter, the Appellant has not shown anything to indicate that some steps were taken to reduce the coal loss in transit. The State Commission has repeatedly directed the Appellant to take up the matter of transit loss of coal at higher levels and take all possible steps including consultations with other power houses in the region who have successfully brought down their coal transit loss to reduce it to the acceptable level. The above direction has not also been complied with by the Appellant. In view of what is stated above, there is no merit in the present claim also."

- 26. Therefore, the claim of the Appellant for a higher Coal Transit Loss cannot be entertained."
- 22. In the circumstances, the claim of the Appellant for a higher coal transit loss cannot be entertained. The issue is decided against the Appellant.
- 23. The next issue is **Return on Equity.** According to the Appellant, the State Commission has allowed only 14% return on equity as against

the 15.50% pre-tax and with grossed up return on equity at 19.38% claimed by the Appellant for all its plants in view of the Central Commission Regulations. The State Commission, in the present case has followed the Regulations of the State Commission. The Regulations of the State Commission provide for the Return on Equity at the rate of 14%. The facts and the grounds raised by the Appellant in the present Appeal are exactly same as in Appeal no. 131 of 2011. The Tribunal in its judgment and order in Appeal 131 of 2011 has held as under:

"31. The next issue is **Return on Equity.** According to the Appellant, the State Commission has allowed only 14% return on equity as against the 15.50% pre-tax and with grossed up return on equity at 19.38% claimed by the Appellant for all its plants in view of the Central Commission Regulations. The State Commission, in the present case has followed the Regulations of the State Commission. The Regulations of the State Commission provide for the Return on Equity at the rate of 14%. Let us now refer to Regulations 16 (iii) of the Regulations which is as under:

## "(iii) Return on Equity

Return on equity shall be computed on the equity base determined in accordance with regulation 15 @ 14% per annum.

Provided that equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing."

32. While dealing with this issue, the Tribunal in Appeal No.72 and 141 of 2009 has directed that the Return on Equity ought to be allowed only in terms of the Regulations of the State

Commission. The relevant observation giving such direction is as follows:

- "21. We note that relaxation in norms has been allowed by the State Commission due to several valid reasons as enumerated in the impugned order. Fourteen percent Return on Equity is as per norms. If this is arbitrarily reduced to 10%, then the effect of allowing relaxed norms would get defeated. Once the State Commission had concluded that the norms need to be relaxed due to several factors such as vintage of the plants and the renovation and modernization etc., there was no reason to lower the Return on Equity and negate the relaxation allowed. In our view, 14% Return on Equity is justified. We order accordingly."
- 33. So, in terms of the above, the State Commission has correctly followed the Regulations as well as the directions issued by the Tribunal and has accordingly allowed Return on Equity at the rate of 14%. Therefore, the Appellant cannot claim for higher Return on equity more than what is prescribed in the Regulations of the State Commission. Thus, this contention also would fail."
- 24. Accordingly, this issue is also decided against the Appellant.
- 25. Last issue raised by the Appellant in this Appeal is related to Operation and Maintenance expenses. The grievance of the Appellant is the State Commission has reduced O&M expenses for Panipat Unit 1-4 and unit 5-6. The findings of the State Commission in regard to O&M expenditure in the impugned order are reproduced below:

"The Commission observes from the annual accounts submitted by the petitioner that the expenses in FY 2009-10 on account of repair and maintenance was Rs. 1625.073 million, employee Cost was Rs. 2750.671 million and Administration & Other Expenses were to the tune of Rs. 182.615 million. Hence

the O&M expenses for HPGCL as a whole for 2009-10 work out to Rs. 4558.359 million. Considering the fact that the installed generation capacity of HPGCL in FY 2009-10 was 3230.5 MW the average O&M cost per MW works out Rs.1.411 million. As against this HPGCL has claimed Rs. 6597.83 million i.e. Rs. 2.042 Million/MW i.e. an increase of about 45% over actual per MW expenses for 2009-10. Ideally, the petitioner should have provided the details of actual O&M expenses separately for all the generating Units under their control instead of apportioning the composite amount reflected in their annual accounts.

The Commission is of the considered view that adequate amount of O&M expenses is essential for deriving optimum efficiency from the plant and machinery. Hence, in the absence of updated HERC generation tariff regulations, CERC norms for unit size of 200 MW & above have been adopted for FY 2011-12. For the remaining generating stations of lower than 200 MW capacity, where CERC norm does not exist, the basis of estimating O&M expenses is the O&M expenses allowed by the Commission in FY 2009-10 escalated by 5.72% per annum to arrive at O&M expenses to be allowed in FY 2011-12. The escalation factor considered is as per CERC notification. Accordingly, the Commission allows O&M expenses @ Rs. 2.94 million / MW for PTPS (1-4), Rs. 2.034 million / MW for PTPS (5 to 8), Rs. 1.788 million / MW for DCRTPS and Rs. 1.308 million /MW for RGTPS (1&2). "."

26. It is noticed that the State Commission has allowed the O&M expenses on actual basis subject to prudence check for previous years. However, the Appellant claimed even higher O&M expenses. The approach adopted by the State Commission is in line with the judgment of this Tribunal in Appeal No.72 and 141 of 2009 and also in Appeal no. 131 of 2011. Accordingly, we do not find any infirmity with the same.

## 27. Summary of our Findings:

- a) The issues related to Plant Load Factor, Coal loss on Transit, Return on Equity and higher Operation and Maintenance expenditure raised by the Appellant in the present Appeal are fully covered by the decision of this Tribunal in Appeal no. 131 of 2011 and is therefore liable to dismissed.
- b) The State Commission ought to have allowed auxiliary consumption in accordance with its own Tariff Regulations, 2008 in respect of Panipat TPS unit 7-8 and DCR TPS unit 1-2. We order accordingly.
- It is noted that the State Commission has evaluated the c) station heat rates for DCR TPS and RG TPS from designed heat rate multiplying it with deterioration factor of 1.065 prescribed in Central Commission's Tariff Regulations, 2009 without giving any reasons for deviation from its own 2008 Regulations. We feel, this is not a correct approach. State Commission ought to have followed its own Regulations or should have given detailed reasons for any deviation from these Regulations. Under the circumstances, we direct the State Commission to allow station heat rate with respect to DCR TPS and RG TPC in provisions of its own accordance with the Regulations, 2008.

28. In view of the above finding, the Appeal is allowed in part to the extent, as indicated in paragraphs 16 and 20 and as summarised in (b) and (c) of the penultimate paragraph of this judgment. The Commission will now pass consequential Order in the light of this judgment. However, there is no order as to costs.

(V.J. Talwar) Technical Member (Justice P. S. Datta)
Judicial member

Dated: 15<sup>th</sup> May, 2012

Reportable/Not Reportable