

**Appellate Tribunal for Electricity**  
(Appellate Jurisdiction)

**Appeal No. 251 of 2014**

**Dated: 30<sup>th</sup> Sept, 2015**

**Present:** HON'BLE MR. JUSTICE SURENDRA KUMAR, JUDICIAL MEMBER  
HON'BLE MR. T MUNIKRISHNAIAH, TECHNICAL MEMBER

**In the Matter of:**

**NTPC Limited**  
**NTPC Bhawan, SCOPE Complex,**  
**7 Institutional Area, Lodhi Road,**  
**New Delhi-110003**

**... Appellant**

**Versus**

- 1) Central Electricity Regulatory Commission**  
**3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building,**  
**36, Janpath, New Delhi – 110001**
  
- 2) Madhya Pradesh Power Management Company Limited**  
**(MPPMCL)**  
**Shakti Bhawan, Vidyut Nagar,**  
**Jabalpur-482 008**
  
- 3) Maharashtra State Electricity Distribution Co. Ltd.**  
**(MSEDCL or Mahavitaran)**  
**Prakashgad, Plot No.G-9, 5<sup>th</sup> Floor,**  
**Bandra (East) Mumbai-400051**
  
- 4) Gujarat Urja Vikas Nigam Limited**  
**Bidyut Bhawan, Race Course**  
**Vadodara-390 007, Gujarat**
  
- 5) Chhattisgarh Power Distribution Company Limited**  
**(CSPDCL)**  
**PO Sundar Nagar,**  
**Danganiya, Raipur-492 913**

- 6) **Electricity Department,  
Govt of Goa, Vidyut Bhavan,  
Panaji, Goa-403001**
- 7) **Administration of Daman & Diu,  
Electricity Department,  
Daman-396 210**
- 8) **Administration of Dadar & Nagar Haveli,  
Electricity Department,  
U.T. Silvassa-396 230**

... Respondent(s)

Counsel for the Appellant(s) : Mr. M G Ramachandran  
Ms. Poorva Saigal  
Ms. Anushree Bardhan  
Ms. Ranjitha Ramachandran

Counsel for the Respondent(s): Mr. Rishal Donnel Singh  
(for R-2/MPPMCL)

## **J U D G M E N T**

### **PER HON'BLE MR. T MUNIKRISHNAIAH, TECHNICAL MEMBER**

1. The present appeal has been filed u/s 111 of the Electricity Act, 2003 by the Petitioner/Appellant NTPC against the Impugned Order dated 7.8.2014 passed by the Central Electricity Regulatory Commission (hereinafter called the Central Commission) in Petition No.182/GT/2013 wherein the Central Commission has revised the tariff applicable for the generation and supply of electricity by the Appellant, NTPC Limited (hereinafter referred to as 'NTPC' or

Appellant as the case may be) from its Vindhyachal Super Thermal Power Station, Stage 1 (1260 MW) for the tariff period from 1.4.2009 to 31.3.2014.

2. The Appellant/Petitioner NTPC is engaged in the business of generation and sale of electricity to various purchasers/beneficiaries in India. NTPC being a generating company owned and controlled by the Central Government is covered by clause (a) of sub-section (1) of Section 79 of the Electricity Act, 2003. The generation and sale of power by NTPC to the Respondents No.2 to 8 are regulated under the provisions of the Electricity Act by the Central Commission, the First Respondent.
3. In the Impugned Order dated 7.8.2014, the Central Commission has disallowed the following items under additional capital expenditure namely:
  - (a) Claim of Rs.21 Lakhs for energy management system (EMS Stage-I)
  - (b) Claim of Rs.1786 Lakhs for purchase of Generator Transformer;
  - (c) Claim of Rs.160 Lakhs on installation of Digital Voltage Regulator for Unit I and III.
  - (d) Claim of Rs.25 Lakhs on the replacement of PLCC system of VJ1 and VJ2 lines
4. The brief facts of the case are as under:

4.1 The Generating Stations of NPTC is the Vindhyachal Super Thermal Power Station, Stage I (1260 MW) (hereinafter called the “Vindhyachal Stage-I). The electricity generated from the Vindhyachal Stage-I is supplied to Respondents No.2 to 8 herein. The Vindhyachal Stage I with the total capacity of 1260 MW comprises of 6 units of 210 MW each. The date of commercial operation of different units of Vindhyachal Stage I are as under:

<u>Units</u>	<u>COD</u>
Unit-I	01.09.1988
Unit-II	01.01.1989
Unit-III	01.02.1990
Unit-IV	01.09.1990
Unit-V	01.04.1991
Unit-VI	01.02.1992

4.2 Petition No.227 of 2009 was filed by the Petitioner/Appellant for approval of the tariff for the Vindhychal Statge I for the tariff period 1.4.2009 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter called the Tariff Regulations, 2009).

4.3 The tariff of the Generating Station for the period from 1.4.2009 to 31.3.2014 was determined by the Central Commission vide its order dated 12.9.2012.

4.4 Aggrieved by certain other issues decided in the Order dated 12.9.2012, NTPC filed an Appeal bearing No.252 of 2012 before this

Tribunal on 31.10.2012. The said Appeal is pending before this Tribunal.

4.5 Subsequently, the Appellant/Petitioner filed Petition No.182/GT/2013 on 7.3.2013 for revision of the annual fixed charges for the Vindhyachal Stage I on the basis of actual capital expenditure incurred for the financial years 2009-10, 2010-11 and 2011-12 and the projected expenditure for the years 2012-13 and 2013-14 as per Tariff Regulations, 2009.

4.6 The annual fixed charges claimed by the Petitioner for the period 2009-14 in Petition No.182/GT/2013 are as under:

(Rs.in Lakhs)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	386.71	463.15	540.77	604.36	904.53
Interest on Loan	241.93	210.92	195.39	182.69	189.74
Return on Equity	17288.34	17128.59	16965.74	16988.01	17058.29
Interest on Working Capital	5916.33	5991.24	6085.79	6162.25	6257.33
O&M Expenses	22932.00	24242.40	25628.40	27102.60	28652.40
Secondary Fuel Oil Cost	2132.38	2132.38	2138.23	2132.38	2132.38
Compensation Allowance	567.00	630.00	756.00	819.00	819.00
Special Allowance	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>49464.69</b>	<b>50798.68</b>	<b>52310.30</b>	<b>53991.30</b>	<b>56013.67</b>

4.7 The Petitioner/Appellant seeks revision of annual fixed charges based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11, 2011-12 and 2013-14 and revised projected estimated expenditure for the years 2012-13 and 2013-14 in accordance with Clause 1 of Regulation-6 of the 2009 Tariff Regulations.

4.8 The Central Commission while approving the revision of annual fixed charges vide Impugned Order dated 7.8.2014 disallowed the following expenditure incurred on additional capital works namely:

- (a) Claim of Rs.21 Lakhs for energy management system (EMS Stage-I)
- (b) Claim of Rs.1786 Lakhs for purchase of Generator Transformer;
- (c) Claim of Rs.160 Lakhs on installation of Digital Voltage Regulators for Unit I and III.
- (d) Claim of Rs.25 Lakhs on the replacement of PLCC system of VJ1 and VJ2 lines

4.9 Aggrieved by the Order dated 7.8.2014 passed by the Central Commission, the Petitioner/Appellant has filed the present Appeal.

5. We have heard the arguments of Mr. M G Ramachandran, learned Counsel for the Appellant and Mr. Rishabh Donnel Singh, learned Counsel for Respondent No.2 (MPPMCL) and perused the Written Submissions filed by the rival parties.

6. After considering the contentions made by the rival parties, following issues arise for our consideration:

- (a) **Issue No.1: Whether the Central Commission is right in disallowing the additional capital expenditure of Rs.21 Lakhs while approving the revised capital expenditure and the same was considered in the tariff order dated 12.9.2012?**

(b) **Issue No.2:** Whether the Central Commission has erred in disallowing the claim of Rs.1786 Lakhs for purchase of Generator Transformer as a spare?

(c) **Issue No.3:** Whether the Central Commission is right in disallowing the claim of Rs.160 Lakhs on installation of Digital Voltage Regulators for Unit I and III in place of existing Voltage Regulators?

(d) **Issue No.4:** Whether the Central Commission is right in disallowing the claim of Rs.25 Lakhs on the replacement of PLCC system of VJ1 and VJ2 lines?

**Issue No.1:**

7. Issue No.1: The following are the submissions made by the learned Counsel for the Appellant with regard to Issue **No.1** regarding **disallowance of capital expenditure incurred on Energy Management System amount to Rs.21 Lakhs.**

7.1 that the capital expenditure on Energy Management System was considered and duly allowed by the Central Commission in the earlier order dated 12.09.2012 while determining the tariff for the period 1.4.2009 to 31.3.2014. The said decision cannot be modified in the true-up exercise. In its earlier order dated 12.9.2012, the Central Commission had duly recognized and allowed the capitalization of the Energy Management System as per Regulation 9(2)(ii) of the Tariff Regulations, 2009 under the head Change in law

to meet the statutory requirements of Bureau of Energy Efficiency Guidelines and Central Electricity Authority vide Notification dated 17.3.2006. In the Truing Up exercise, it is not then open for the Central Commission to take a different consideration.

- 7.2** that this Tribunal in various decisions has consistently held that in the true-up proceedings, it is not open to change the methodology or principle already decided by the Central Commission in the main Tariff Order. Accordingly, in the true up proceedings (Impugned Order dated 7.8.2014), it is not open for the Central Commission to change the methodology or principle already decided in the main Tariff Order.
- 7.3** that the Central Commission has disallowed the capital expenditure on Energy Management System on the ground that consequential reduction in the auxiliary consumption by reason of such installation is not being passed on to the beneficiaries.
- 7.4** that the Central Commission while disallowing the expenditure claimed has not considered the implications of Regulation 9 (2) (ii) of the Tariff Regulations, 2009 dealing with Change in Law. Regulations 9(2)(ii) doest not contain any other condition or qualification for the claim to be admissible under the head 'Change in law'. In the absence of any other qualification or condition contained in Regulation 9(2)(ii) of the Tariff Regulations, 2009, it is not open to the Central Commission to disallow the said expenditure on the grounds not provided for in the said Regulations, namely such as the



benefit of reduction in the auxiliary consumption not being passed on to the beneficiaries.

- 7.5** that the Central Commission is bound to implement the Regulation contained in the Tariff Regulations, 2009 and cannot enforce conditions in addition or in variation thereof except under the power to relax benefitting the applicant for tariff.
- 7.6** that the expenditure claimed for Energy Monitoring System as per the requirements of the Central Electricity Authority vide Notification dated 17.3.3006 was on account of the statutory mandate. Further, the Central Commission has not considered that as per the Bureau of Energy Efficiency guidelines implementing the provisions of Energy Conservation Act 2001, the installation of on line energy meters is mandated for energy audits as well as for energy conservation of various system/equipments.
- 7.7** that the facts and circumstances of the order dated 8.5.2014 passed by this Tribunal in Appeal No.173 of 2013 in the case of the Talcher Super Thermal Power Station, Stage II and relied on by the Central Commission are distinguishable from the facts of the present case.
- 7.8** that the Central Commission had disallowed the claim in respect of Energy Management System while approving the tariff for Talcher Station for the period 2009-14. In the present case, the Central Commission had allowed the capitalisation of the Energy Management System while approving the tariff in its order dated

12.9.2012 and subsequently has sought to disallow it while carrying out the mid term true-up.

**7.9** that in this regard, the Central Commission has not considered that a subsequent order of a Superior Court cannot be considered as a ground for re-opening or review of a matter that has attained finality.

**7.10** that the Appellant/Petitioner made the reference in this connection of the judgment dated 4.12.2007 of this Tribunal in the case of Karnataka Power Transmission Company Limited v Karnataka Electricity Regulatory Commission & Ors in Appeal No.100 of 2007 and the case of North Delhi Power Limited v Delhi Electricity Regulatory Commission, 2007 ELR (APTEL) 193:

(a) Karnataka Power Transmission Company Limited v Karnataka Electricity Regulatory Commission & Ors (Judgment dated 4.12.2007 in Appeal No.100 of 2007)

*“28.....It is made clear that truing-up stage is not an opportunity for the Commission to rethink de novo on the basic principles, premises and issues involved in the initial projections of revenue requirements of the licensee. We had occasion to deal with a similar situation in NDPL vs DERC, Appeal No.265 of 2006...”*

(b) North Delhi Power Limited v Delhi Electricity Regulatory Commission, 2007 ELR (APTEL) 193

*“47.....This is again rethinking on the subject of employee cost. The previous years account cannot be trued up on such rethinking. The Appellant on the other hand says that such allowances and costs could not have been de-linked as those who availed of VSS would have*

*been paid these allowances had they continued in the employment.”*

**8. Per Contra**, on this issue, the learned Counsel for R-2, M.P Power Management Company Limited, Jabalpur has submitted the following:

**8.1** that the Central Commission in its order dated 12.9.2012 in Petition No. 227 of 2009 has allowed the expenditure for Rs.25 lakhs during 2010-11 towards energy management system for all six units of generating stations in terms of the provisions of Energy Conservation Act, 2001 and guidelines specified by the Bureau of Energy Efficiency as follows:

*“24. the Petitioner has claimed expenditure for 25 lakhs during 2010-11 towards Energy Management System for all six units of the generating station in terms of the provisions of the Energy Conservation Act, 2001 and the guidelines specified by the Bureau of Energy Efficiency (BEE). In view of this, the expenditure is allowed to be capitalized.”*

However, this expenditures have been disallowed by the Central Commission vide its order dated 7.8.2014 in Petition No.182/GT/2013. The Central Commission has rightly observed and held that:

*“....The actual expenditure of Rs.21.00 lakh in 2009-10 for Energy Management System for Stage-1 has not been allowed considering the fact that the expenditure of such nature had earlier been disallowed by the Commission in its orders determining tariff of other generating stations of the Petitioner on the ground that the benefits of reduction in Auxiliary power consumption had not been passed onto the beneficiaries during 2009-14 and the same is required to be borne by the Petitioner.*

*The decision has been affirmed by the Appellate Tribunal or Electricity in its Judgment dated 8.5.2014 in Appeal No.173/2013. Accordingly, the Expenditure of Rs.21 lakhs Claimed for Energy Management System has not been allowed in present case.”*

- 8.2** that the Commission vide its order dated 28.5.2013 in Petition No.269 of 2009 relating to the determination of generation tariff or Talchar STPS stage-II for the period from 01.04.2009 to 31.03.2014 while rejecting the claim of the Petitioner of Rs.48 lakhs for Energy Monitoring System (EMS) has held that:

*“As regards Energy Monitoring System, it has been submitted that as per CEA notification dated 17.3.3006 all LT & HT equipments need to have separate meters to measure and monitor the energy consumption of various equipments and the delay is on account of shut down required for installation. We have considered the submissions. We are of the considered view that expenditure towards Energy Monitoring System cannot be allowed and should be borne by the Petitioner since the benefit of reduction in the auxiliary power consumption due to energy monitoring system is not passed on to the beneficiaries during the tariff period 2009-14. We order accordingly.”*

- 8.3** Aggrieved by the above order of the Central Commission, the NTPC has filed Appeal No.173 of 2013 before this Tribunal contesting that the Central Commission has erred in disallowing the above claim on the ground that the benefit in reduction in auxiliary power consumption due to Energy Monitoring System is not passed on to the beneficiaries. This Appeal was disposed off by this Tribunal vide its judgment and order dated 8<sup>th</sup> May, 2014.

**8.4** In view of above submissions, the above claim of the Energy Management System filed by the NTPC is devoid of merit and is liable to be dismissed in the interest of justice.

**9. Our Discussion and Conclusion on Issue No.1**

**9.1** The Petitioner/Appellant has claimed expenditure of Rs.25. Lakhs for the FY 2010-11 towards Energy Management System for all six units of Vindiyachal Super Thermal Station Stage-I in terms of the provisions of the Energy Conservation Act, 2001 and the guidelines specified by the Bureau of Energy Efficiency (B.E.E).

**9.2** The Central Commission has duly considered the expenditure of Rs.25 Lakhs while finalising Tariff Order dated 12.9.2012 in Petition No.227/2009 regarding expenditure on Energy Management System. The relevant extracts of the Order is quoted below:

***“Energy Management System for Stage-I***

*24. The Petitioner has claimed expenditure for Rs.25.00 Lakh during 2010-11 towards Energy Management System for all six units of the generating station in terms of the provisions of the Energy Conservation Act, 2001 and the guidelines specified by the Bureau of Energy Efficiency (BEE). In view of this, the expenditure is allowed to be capitalized.”*

**9.3** The Commission subsequently disallowed the actual expenditure of Rs.21 Lakhs incurred by the Appellant/Petitioner in the Impugned Order dated 7.8.2014 in Petition No.182/GT/2014 during the Financial

Year 2010-11 on Energy Management System. The relevant portion of the Order is quoted below:

***“Environment System***

*“17.....The actual expenditure of Rs.21.00 lakh in 2009-10 for Energy Management System for Stage-I has not been allowed considering the fact that the expenditure of such nature had earlier been disallowed by the Commission in its orders determining tariff of other generating stations of the Petitioner on the ground that the benefits of reduction in Auxiliary Power Consumption had not been passed on to the beneficiaries during 2009-14 and the same is required to be borne by the Petitioner. This decision has been affirmed by the Appellate Tribunal for Electricity in its judgment dated 8.5.2014 in Appeal No.173/2013. Accordingly, the expenditure of Rs.21.00 lakh claimed for Energy Management System has not been allowed in the present case”.*

- 9.4** The Counsel for the Appellant/Petitioner has strenuously refuted for the disallowance of the actual additional capital expenditure while Truing-Up of the Capital Expenditure of the Generating Station. Further, the Counsel for the Appellant states that this Tribunal held that in the True-Up proceedings, it is not open to choose the methodology or principle already decided by the Commission in the main tariff order. Reference in this connection has been made to the decision of this Tribunal in Karnataka Power Transmission Company Vs Karnataka Electricity Regulatory Commission and Ors in Appeal No.100 of 2007 dated 4.12.2007 and North Delhi Power Limited Vs Delhi Electricity Regulatory Commission, 2007 ELR (APTEL) 193.

**9.5** Let us discuss the relevant Regulations of the Tariff Regulations, 2009 of the Central Commission:

**“Section 3 (3) Additional Capitalisation**

*‘Additional capitalisation’ means the capital expenditure incurred or projected to be incurred, after the date of commercial operation of the project and admitted by the Commission after prudence check, subject to provisions of Regulation 9.*

**“Section 3 (9) Change in Law:**

*‘Change in Law’ means occurrence of any of the following events:*

- (i) The enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law; or*
- (ii) Change in interpretation of any law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation; or*
- (iii) Change by any competent statutory authority, in any consent, approval or license available or obtained for the project.”*

**9.6** Regulation 7 read with the distinction of the term additional capitalisation entails that the expenditure incurred or projected to be incurred after the date of commercial operation qualifies to be the additional capital expenditure as part of the capital cost for the purpose of determination of Tariff on the condition that the expenditure will be admitted after prudence check by the Commission

and subject to Regulation 9 of the Central Commission 2009 Tariff Regulations.

9.7 Regulation 9(1) deals with the expenditure incurred by a Generator after the commercial date of operation and up to the cut off date subject to the prudence check. Hence this part of the Regulation does not apply in the present case.

9.8 Regulation 9(2) deals with the capital expenditure incurred after the cut off date be admitted by the Commission, subject to the prudence check.

9.9 Regulation 9(2) is quoted as below:

*“(2) The capital expenditure incurred or projected to be incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:*

*(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*

*(ii) Change in law;*

*(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;*

*(iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including*



*due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and*

*(iv) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:*

*Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.*

*(v) In case of gas/liquid fuel based open/combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation*

*from its COD and Order in Petition No. 182/GT/2013 Page 5 of 25 the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient operation of the stations.*

*Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.*

*(vi) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.*

*(vii) Any un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.*

*(ix) Expenditure on account of creation of infrastructure for supply of reliable power to rural households within a radius of five kilometers of the power station if, the generating company does not*

*intend to meet such expenditure as part of its Corporate Social Responsibility”.*

**9.10** Regulation 9 (1) of the Tariff Regulations, 2009 provides for capitalization of the expenditure incurred or projected to be incurred after the date of commercial operation but before the cut-off date, whereas Regulation 9 (2) makes provision for capitalization of expenditure incurred or projected to be incurred after the cut-off date. Under sub Regulation (2), capitalization of the expenditure incurred after the ‘cut-off date’ is to be allowed on exercise of prudence check by the Central Commission. Regulation 9 is exhaustive on the question of capitalization of the additional expenditure incurred after the date of commercial operation of the project and capitalization of any expenditure after that date (COD) but not falling within the ambit of Regulation 9 cannot be allowed. In other words, the expenditure dehors Regulation 9 cannot be included in the capital cost for the purpose of tariff.

**9.11** The Appellant/Petitioner relied on the Regulation 9 (2) (ii) i.e. Change in Law and stated that the Commission allowed under this Regulation the expenditure incurred on Energy Management System and disallowed during the process of prudence check and while approving the final Tariff Order.

**9.12** Let us examine Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 which is quoted below:

***“6. Truing up of Capital Expenditure and Tariff.***

*(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.*

*Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff.*

**9.13** Thus, the Regulation provides that at the time of truing-up exercise the capital expenditure including additional capital expenditures has to be admitted by the Commission after prudence check. This clearly shows that the Central Commission is empowered to review, revisit and modify its earlier decision taken in the Tariff Order dated 12.9.2012. Accordingly, the Central Commission disallowed the expenditure incurred on Energy Management System.

**9.14** Further, this Tribunal upheld and affirmed in its judgment dated 8.5.2014 in **Appeal No.173 of 2014:**

“24.....  
(i) .....  
(ii) .....  
(iii) .....

25.....As regards Energy Monitoring System, it has been submitted that as per CEA Notification dated 17.03.2006 all LT & HT equipments need to have separate meters to measure and monitor the energy consumption of various equipments and the delay is on account of shut down required for installation. We have considered the submissions. We are of the considered view that expenditure towards Energy Monitoring System cannot be allowed and should be borne by the Petitioner since the benefit of reduction in the auxiliary power consumption due to energy monitoring system is not passed on to the beneficiaries during the tariff period 2009-14. We order accordingly”.

**9.15** The Energy Management System is nothing but Energy Audit. In terms of the provisions of the Energy Conservation Act, 2001 and as per the guidelines of Bureau of Energy Efficiency, it implemented various schemes to save energy like replacement of incandescent (Filament) bulbs with CFL and LED bulbs and star rated domestic appliances etc. There is a slogan that **“A unit of Energy saved is equivalent to two units of Energy Generated”**. Thus, by saving the energy, the installation of additional generating stations can be prevented to meet the growing demand and thereby saving the fossil fuels like coal, oil, gas etc., This will help the environment free from pollution.

**9.16** Similarly, in the instant case, as per the guidelines of B.E.E the Appellant/Petitioner implemented energy saving methods to reduce the auxiliary consumption. Accordingly, the Appellant has installed Energy Meters for all the six units of Vindhyachal Generating Station

near the Auxiliary equipment which are drawing power. Thereby the Appellant/Petitioner benefitted saving in power consumption towards auxiliary consumption of the Generating Plant. Thereby, the Appellant is benefitted two fold, one by getting more generated power (Power Generated-Auxiliary Consumption) to sale and thereby incurring extra revenue.

**9.17** The Central Commission has stated in the Impugned Order that the benefit of energy management system had not been passed on to the consumers in the tariff order for the year 2009-14 and hence the expenditure on Energy Management System was disallowed by the Central Commission in the Order dated 7.8.2014 and directed that the expenditure has to be borne by the Appellant/Petitioner.

**9.18** The assets such as energy meters, capacitors and other mechanical parts utilised for reducing the auxiliary consumption are assets, smaller in nature and hence the expenditure on energy management system can be met through compensatory allowance granted by the Central Commission in the order dated 12.9.2012 under Regulation 19(e) of Tariff Regulations, 2009.

**9.19** We feel that the consumers are deprived of the benefit of Energy Management System in the tariff order for the FY 2009-14 and action taken by the Commission disallowing the actual expenditure incurred on Energy Management System during the FY 2010-11 of Rs.21.00 Lakhs on the ground that the benefit of reduction of auxiliary

consumption had not been passed on to the consumers and the same is required to be met by the Petitioner is quite legal and proper.

**9.20 In view of the above discussions, the action of the Central Commission in disallowing the additional capital expenditure on Energy Management System in the Impugned Order dated 7.8.2014 is affirmed.**

**9.21 This issue is decided against the Appellant/Petitioner.**

**Issue No.2:**

**9.22 Issue No.2** relates to **disallowance of capital expenditure on Generator Transformer amounting to Rs.1786 lakhs.** On this issue, the learned Counsel for the Appellants submits as under:

**9.23** that the Central Commission has disallowed the expenditure claimed on the capitalisation of the Generator Transformer on the ground that the same would be covered by Compensation Allowance Further, the Appellant/Petitioner stated that the Generator Transformer is a major equipment in the working of the Generating Station, the failure of which would lead to substantial loss in generation. In the circumstances, a Generator Transformer cannot be construed to be a minor asset, or assets of regular nature, the expenditure for which can be said to be covered under Regulation 19 (e) of the Tariff Regulations, 2009 providing for Compensation Allowance.

**9.24** that the Generator Transformer is essential for the functioning of the generating station to ensure uninterrupted and reliable power supply

to the beneficiaries. In the event of any problem in the transformer which is in operation, there would be an immediate need to replace the transformer to sustain the operation of the generating station. In the circumstances, the availability of spare generating transformer to replace the eventuality of the generating transformer in the operation becoming out of order cannot be covered by the Compensatory Allowance under Regulation 19 (e) of the Tariff Regulations, 2009.

**9.25** that the transformers such as those installed by the NTPC are to be considered part of a transmission system equipment within the meaning of Regulation 3(40) of the Tariff Regulations, 2009. In this case, the transformer has been installed by a generating company and not by a Transmission licensee or CTU or STU. Admittedly, the transformer wherever installed by the Power grid Corporation of India (CTU) is allowable for capitalization under Regulation 9(2) (V) as additional capital expenditure. Accordingly, the Generator Transformer installed by the generating company which serves the purpose of stepping up the generation voltage and matching the same with the transmission system voltage should also be allowed to be capitalized as addition capital expenditure under Regulation 9(2)(V) of the Tariff Regulations, 2009.

**10. Per Contra**, the learned Counsel for the Respondent has submitted the following:

**10.1** That the Central Commission has not committed any illegality or perversity in disallowing the additional capital expenditure on



purchase of generator transformer during tariff period 2009-14 on the ground that the new generator transformer will only be used as a spare.

**10.2** that the Generating Station has been granted compensatory allowance of Rs.5591.04 lakhs in terms of Regulation 19(e) of 2009 Tariff Regulations by the Commission's order dated 12.9.2012 in order to meet the expenses of capital nature of assets including minor assets. In view of this, the claim of the Petitioner for Rs.886 lakhs and Rs.900 lakhs for the year 2010-11 and 2013-14 respectively towards claim for the generator transformer should not be allowed.

## **11. Our Discussion and Conclusion on Issue No.2**

11.1 The Petitioner/Appellant claimed actual expenditure of Rs. 886.00 Lakhs in 2010-11 for purchase of Generator Transformer and also projected expenditure of Rs.900.00 Lakhs for the year 2013-14 towards spare Generator Transformer. Thus, the Appellant claimed total additional capital expenditure of Rs.1786.00 Lakhs towards Generator Transformer.

11.2 The Central Commission in the Impugned Order dated 7.8.2014 disallowed the total expenditure of Rs.1786.00 lakhs towards Generator Transformer on the ground that the Appellant is directed to incur the above expenditure under compensatory allowance of Rs.3591.04 lakhs granted to the Appellant.

- 11.3 The Counsel for the Appellant submitted that the Generator Transformer is an essential item in the Generating Section and further stated that in the event of failure of the same, it will lead to shut down of the plant and thereby the Generation of the plant is affected and hence keeping a Generator Transformer as spare will serve useful purpose. Further, when the Generator Transformer of Unit IV is failed on 16.10.2011, due to availability of spare transformer procured during 2010-11 was kept in place of the failed transformer thereby save the long outage.
- 11.4 The contention of the Appellant/Petitioner is lucrative but spending huge capital expenditure on the Generator Transformer as a spare will lead to increase in capital cost of the project and thereby the cost of Generation will increase. This leads to burden to the consumers at large.
- 11.5 We feel that purchasing of spare generator transformer for each generating station is not advisable as it leads to increasing the capital expenditure of the Generating Station and it leads thereby higher generation cost and finally the consumers are burdened with higher tariff.
- 11.6 Thus, the Central Commission in the Impugned Order has legally and correctly disallowed the expenditure on the same GT and the relevant portion of the order is quoted below:

*“22. We have examined the submissions of the Petitioner. It is observed that the Generating Station has been granted*

*Compensation Allowance of Rs.3591.04 lakh in terms of Regulation 19(e) of the 2009 Tariff Regulations by Commission's order dated 12.9.2012 in order to meet the expenses of capital nature of assets including minor assets. In view of this, the claim of the Petitioner for Rs.886.00 lakh and Rs.900.00 lakh for the years 2010-11 and 2013-14 respectively has not been allowed".*

11.7 Further, this Tribunal in its judgment dated 8.5.2014 in Appeal No.173 of 2014 relating to the determination of generation tariff for Talcher Super Thermal Power Station (STPS), Stage –II for the period from 1.4.2009 to 31.3.2014 affirmed the decision of the Central Commission regarding disallowance of capital expenditure towards purchase of spare Generator Transformer. The relevant portion of the our judgment is quoted below:

*"22. This Appellate Tribunal while interpreting the Regulation 9 of the Tariff Regulations, 2009 in its judgment dated 11th April, 2014 in Appeal No. 188 of 2013 titled NTPC Limited Vs. Central Electricity Regulatory Commission & Ors., held as under:*

*"The Appellant cannot legally question or challenge the interpretation of Regulation 7 & 9 of the Tariff Regulations, 2009 which has already been settled or answered by this Appellate Tribunal vide judgment dated 27.01.2014 in Appeal No. 44 of 2013. This Tribunal in its judgment dated 27.01.2014 has clearly observed that additional capitalization has to be allowed only according to Regulation 9 of Tariff Regulations, 2009 which will apply to both existing and new power projects. We*

*also affirm the same view of this Tribunal as recorded in our judgment dated 27.01.2014 in Appeal No. 44 of 2012”.*

*23. In view of the above discussions, we observe that the learned Central Commission has rightly disallowed the capital expenditure on purchase of generator transformer during FY 2009-14 on just and legal ground that the damaged generator transformer was replaced by the spare generator transformer which was already available at the generating station of the appellant and the expenditure on the spare transformer had already been considered in the capital cost for FY 2002-03. The learned Central Commission has correctly and legally interpreted and given effect to the Regulations 7 & 9 of Tariff Regulations, 2009. We agree to the findings recorded by the learned Central Commission in the impugned order. Accordingly, issue nos. (i), (iv) & (v) are decided against the appellant”.*

11.8 We suggest that the Appellant/Petitioner, NTPC is a big organisation having a number of Generating Stations and hence they can maintain a “Rolling Stock of Generator Transformers” for all the Generating Stations. The Rolling Stock of Transformers can be kept at centrally located places conveniently nearer to the Generating Stations. Whenever, the Generator Transformer fails, the Generator Transformer can be drawn from the Rolling Stock and the failed Transformers can be replaced immediately and thereby loss of generation can be minimised. For example, the distribution Companies in the Country maintain certain percentage of Rolling

Stock of power transformers and Distribution Transformers depends upon their total number of Transformers and kept ready at Central places, and whenever a transformer fails, the failed transformer is easily replaced by drawing from the Rolling Stock. This will lead to quick replacement of failed Transformer and thereby consumers under a particular Distribution transfer will be relieved from prolonged outage of power supply.

11.9 Thus, the Appellant/Petitioner can purchase spare Generator Transformers and the total cost of the expenditure towards purchase of Generating Transformers can be divided to all the Generating Stations, in-stead of burdening one Generating Station and thereby the capital expenditure of the Generating Station can be reduced. Thus, the sharing of additional capital cost towards purchase of Generator Transformer will be reduced and thereby the cost of power generation will be reduced and this will lead to lower tariff.

11.10 In view of the above discussions, the action of the Central Commission in **disallowing the additional capital expenditure of Rs.1786 Lakhs towards purchase of Generator Transformer as a spare is affirmed and the issue is decided against the Appellant/Petitioner.**

**Issue No.3:**

**12.** Issue No.3 relates to disallowance of capital expenditure on installation of Digital Voltage Regulators amounting to Rs.160 Lakhs.

**13.** On this issue, the learned Counsel for the Appellants submits the following:

**13.1** that the Central Commission disallowed the expenditure claimed by NTPC in respect of the Digital Voltage Regulators on the ground that the same would be covered under Compensation Allowance. The Central Commission did not consider that the expenditure against Digital Voltage Regulators for Units No.1 & No.3 have been claimed by the Generator under Regulation 9(2) (ii) i.e. 'Change in Law' in line with CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 wherein the following has been provided:

*“Part-II*

*The units at a generating station.....*

*(b) shall have the Automatic Voltage Regulator (AVR). Generators of 100 MW rating and above shall have Automatic Voltage Regulator with digital control and two separate channels having independent inputs and automatic changeover; and*

*.....”*

**13.2** that accordingly, Unit No.1 and Unit No.3 of the station which were having an Automatic Voltage Regulator with a single channel were required to be replaced with the double channel Automatic Voltage Regulator system as per the CEA Regulations quoted above. There is therefore, a change in law.

**13.3** that the Central Commission did not take into consideration the fact that for a generating station of 1260 MW capacity, it is necessary to

have a strong reliable generator excitation system for all units as per norms, to have similar kind of response from all units AVR's to control the reactive power and that the Digital Voltage Regulators are instrumental to the entire process.

**14. Per contra**, the learned Counsel for the Respondent made the following plea in support of its claim:

**14.1** that the Appellant NTPC has also contested the disallowance of the capital expenditure on DVR. In this connection the Central Commission vide its order dated 7.8.2014 has held as under:

*“We have examined the submissions of the Petitioner. It is observed that the generating station had been granted Compensation allowance of 3591.04 lakhs in order dated 12.9.2012 in terms of Regulation 19(e) of the 2009 Tariff Regulations in order to meet the expenses of capital nature of assets including minor assets. In view of this, the claim of the Petitioner for 80.00 Lakh each for 2012-13 and 2013-14 has not been allowed.”*

**15. Our Discussion and Conclusion on Issue No.3**

**15.1** The Central Electricity Authority (Technical Standards for Connectivity of the Grid) Regulations, 2007 suggested that the Generators above 100 MW capacity shall have Automatic Voltage Regulators with two separate channels having independent inputs and Automatic Change over.

**15.2** The existing voltage Regulators installed for the excitation system of Unit I and III of the Generating Stations are very old and the

equipment became obsolete (USSR make Voltage Regulators). The excitation system is crucial part of the Generating system and hence the Central Electricity Authority suggested that the existing Voltage Regulators of the Excitation System for Generators 100 MW Capacity and above needs to be replaced with latest Technical Equipment i.e. Digital Voltage Regulators. Accordingly, the Appellant/Petitioner spent an amount of Rs.160 Lakhs for the replacement of Digital Voltage Regulators.

**15.3** Let us discuss the relevant Regulation of the Central Electricity Regulatory Commission Tariff Regulations, 2009. Regulation 19 (e) of the Tariff Regulations, 2009 reads as under:

*“(e) In case of coal based or lignite fired thermal generating station, a separate compensation allowance unit wise shall be admissible to meet expenses on new assets of capital nature including in the nature of minor assets, in the following manner from the year following the year of completion of 10, 15 or 20 years of useful life:*

<i>Years of Operation</i>	<i>Compensation Allowance (Rs.Lakh/MW/Year)</i>
<i>0-10</i>	<i>Nil</i>
<i>11-15</i>	<i>0.15</i>
<i>16-20</i>	<i>0.35</i>
<i>21-25</i>	<i>0.65</i>

**15.4** The Appellant/Petitioner submits that the expenditure was done for replacement of existing Voltage Regulator as suggested by the CEA and hence it is capital in nature and falls under Regulation 9 (2) (ii),



because the existing equipment became outdated and the excitation system of the Generator is a crucial part and hence expenditure was incurred towards latest technology voltage regulators i.e. Digital Voltage Regulators.

**15.5** The Regulation 19 (e) provides for efficient operation of the Generating Station, a separate Compensation Allowance unit wise is admissible to meet expenses on new assets of capital in nature.

**15.6** The Regulation 19 (e) of Tariff Regulations, 2009 also provides to the Generators to meet the expenditure for replacement of obsolete assets depends upon the year of operation and compensation allowance (Rs Lakh/MW/Year). In the instant case, the existing voltage Regulators are very old and USSR make and hence there is a possibility of failure and which may lead to failure of excitation system of the generator and hence it needs replacement.

**15.7** The Digital Voltage Regulators is a new asset in capital in nature and as per Regulation 19(e) of the Tariff Regulations, 2009; Appellant/Petitioner can meet the expenditure under Compensation Allowance as Rs.3594.04 Lakhs granted in the order dated 12.9.2012.

**15.8** Thus, the decision of the Central Commission in disallowing the additional expenditure on Digital Voltage Regulators in the Impugned Order dated 7.8.2014 is affirmed.

**15.9 Accordingly, this issue is decided against the Appellant.**

**Issue No.4:**

**16. Issue No.4 relates to disallowance of capital expenditure on the replacement of power line carrier communication system of VJ1 and VJ2 lines amounting to Rs.25 lakhs.**

16.1 Learned Counsel for the Appellant has made following submissions in support of its plea.

16.2 That the capital expenditure on the Power Line Carrier Communication (PLCC) System was claimed by NTPC under 'Change in Law' as provided in Regulation 9(2) (ii) of the Tariff Regulations, 2009 and therefore had to be considered under the said provision unaffected by any of the other provisions of the Tariff Regulations, 2009 including Regulation 19 (e). There is no qualification or reservation contained in Regulation 9(2) (ii) of the Tariff Regulations, 2009 dealing with the 'Changes in Law'. It is therefore, incorrect on the part of the Central Commission to have disallowed the said claim on grounds that it is covered by Compensatory Allowance contained in regulation 19 (e) (e) of the Tariff Regulations, 2009.

16.3 that the Expenditure incurred on the replacement of the Power Line Carrier Communication (PLCC) system in the VJ1 and VJ2 lines of the Vindhyachal Stage 1 was on account of the requirement of Power grid Corporation of India Ltd (CTU). As per the CTU, the existing PLCC has become obsolete and since no support was

available from the Original Equipment Manufacturer, the PLCC at the generating station end (Vindhychal end) of VJ1 and VJ2 lines was required to be change din line with the Jabalpur end, for effective communication.

16.4 The PLCC system is an asset associated to transmission system/network and wherever this system has been installed by the Power grid Corporation of India Ltd (CTU), the same is allowable for capitalization under Regulation 9(2) (v) as Additional Capital Expenditure. Accordingly, the PLCC installed by the Generating Company serving the purpose in consonance with the requirement of the Grid functioning on the same line, should also be allowed to be capitalized as additional capital expenditure under Regulation 9(2) (V) of the Tariff Regulations, 2009.

**17. Per Contra**, the following submissions have been made by learned Counsel for the Respondent on this issue.

**17.1** that the NTPC has also contested the disallowance of the capital expenditure on PLCC system. In this connection the Central Commission vide its order dated 7.8.2014 has held as under:

*“We have examined the submissions of the Petitioner. It is observed that the generating Station had been granted Compensation allowance of 3591.04 lakh in order dated 12.9.2012 in terms of Regulation 19(e) of the 2009 Tariff Regulations in order to meet the expenses of capital nature of assets including minor assets. In view of this, the claim of the Petitioner for 24.00 lakhs has not been allowed.”*

**17.2** that this Appeal filed by the NTPC is devoid of merit and is liable to be dismissed in the interest of justice. All the issues contested by NTPC have already been dealt by this tribunal in Appeal No.173 of 2013 and it has been held that learned Commission has not committed any illegality and perversity in disallowing the additional capital expenditure claimed by the Appellant.

**18. Our Discussion and Conclusion on Issue No.4**

18.1 That the Appellant/Petitioner has claimed an expenditure of Rs.25.00 lakh during 2011-12 for replacement of PLCC system of VJ1 and VJ2 lines near the generation station. Further, the Appellant/Petitioner has stated that the expenditure was incurred due to the requirement of power Grid Corporation of India Limited.

18.2 The Petitioner has submitted that the existing PLCC system of VJ-1 and VJ2 was obsolete and no support is available from the OEM and hence the existing PLCC system of VJ1 and VJ2 lines on the Vindyachal Generating Station end has to be replaced.

18.3 In view of the above, the Power Grid Corporation of India Limited requested the Petitioner/Appellant to replace the PLCC system provided to lines VJ-1 and VJ-2 at their cost. Accordingly, the Petitioner has claimed the actual expenditure of Rs.25 lakhs during the FY 2011-12 for replacement of PLCC system of VJ-1 and VJ2 lines at the Generating Stations.

- 18.4 The Regulation 19 (e) of Tariff Regulations, 2009 clearly specifies that the Generator can meet the expenditure towards purchase of new assets of capital nature including in the nature of minor assets under Regulation 19 (e) of Tariff Regulations, 2009.
- 18.5 Accordingly, the Central Commission, in the Impugned Order disallowed the additional capital expenditure towards replacement of PLCC system and directed the Appellant to meet the expenses of capital nature of assets including the minor assets in terms of Regulation 19(e) of 2009 Tariff Regulations under Compensation Allowance of Rs.3591.04 lakhs in the order dated 12.9.2012.
- 18.6 We feel that the decision of the Central Commission in disallowing the additional capital expenditure of Rs.25 Lakhs spent on replacement of existing PLCC system of VJ-1 and VJ-2 lines is justifiable and we uphold the decision of the Central Commission.
- 18.7 Accordingly, the issue No.4 is decided against the Appellant/Petitioner.**

### **ORDER**

- 19.** We feel that the Central Commission has not committed any illegality or perversity in disallowing the additional capital expenditure spent on Energy Management System, purchase of Generator Transformer as a spare, expenditure incurred towards replacement of existing Voltage Regulators of Unit-I and Unit-III by Digital Voltage Regulators

and expenditure incurred towards replacement of PLCC system of VJ-1 and VJ-2 lines.

20. Thus, the Impugned Order dated 7.8.2014 is affirmed and the Appeal is hereby dismissed.
21. There is no order as to costs.
22. Pronounced in the Open Court on this **30th day of September, 2015.**

( T Munikrishnaiah )  
Technical Member

( Justice Surendra Kumar )  
Judicial Member

Dated, the 30<sup>th</sup> Sept, 2015.



**REPORTABLE / ~~NON-REPORTABLE~~**