

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 217/GT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri, A.K. Singhal, Member

Dr. M.K.Iyer, Member

Date of Hearing: 19.04.2016

Date of Order: 27.06.2016

In the matter of

Revision of tariff of Ramagundam Super Thermal Power Station, Stage-I & II (2100 MW) for the period from 1.4.2009 to 31.3.2014- Truing up of tariff determined by order dated 26.2.2014 in Petition No. 189/GT/2013.

And

In the matter of

NTPC Ltd
NTPC Bhawan,
Core-7, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003

...Petitioner

Vs

1. Transmission Corporation of Andhra Pradesh Ltd,
Vidyut Soudha, Khairatabad, Hyderabad-500082
2. Andhra Pradesh Eastern Power Distribution Company Ltd.
Sai Shakthi Bhavan
30-14-09, Near Saraswati Park
Visakhapatnam -530020 (AP)
3. Andhra Pradesh Southern Power Distribution Company Ltd.
H.No. 193-93(M) Upstairs
Renigunta Road
Tirupathi-517501(AP)
4. Andhra Pradesh Northern Power Distribution Company Ltd,
H.No. 1-1-504, Opp: NIT Petrol Pump
Chaitanyapuri,
Warangal-506 004(AP)
5. Andhra Pradesh Central Power Distribution Company Ltd,
Singareni Bhavan
Red Hills, Hyderabad (AP)



6. Tamil Nadu Generation & Distribution Corporation Ltd
144, Anna Salai
Chennai-600002

7. Power Company of Karnataka Ltd.(PCKL)
Kaveri Bhawan, K.G. Road
Bangalore-560009

8. Bangalore Electricity Supply Company Ltd.
Krishna Rajendra Circle
Bangalore-560009

9. Mangalore Electricity Supply Company Ltd.
Paradigm plaza, A.B. Shetty Circle
Mangalore-575001

10. Chamundeshwari Electricity Supply Corp. Ltd.
Corporate office, 927, L.J. Avenue,
New Kantharajours Road, Saraswati Puram
Mysore-570009

11. Gulbarga Electricity Supply Company Ltd.
Main road, Gulbarga, Karnataka,
Gulbarga-585102

12. Hubli Electricity Supply Company Ltd,
Corporate Office, P.B.Road,
Navanagar,
Hubli – 580025

13. Kerala State Electricity Board,
Vaidyuthi Bhavanam, Pattom
Thiruvananthapuram- 695004

14. Electricity Department,
Govt. of Puducherry,
137, NSC Bose Salai,
Puducherry-605001

15. Electricity Department,
Govt. of Goa,
Vidyut Bhavan, Panaji,
Goa-403001

....Respondents

Parties Present:

For Petitioner: Shri Ajay Dua, NTPC
Shri Nishant Gupta, NTPC
Shri Bhupinder Kumar, NTPC
Shri Rajeev Choudhary, NTPC
Shri V.K.Garg, NTPC
Shri Rohit Chhabra, NTPC

For Respondent: Shri S.Vallinayagam, Advocate, TANGEDCO



ORDER

This petition has been filed by the petitioner, NTPC, for revision of tariff of Ramagundam Super Thermal Power Station, Stage-I & II (2100 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014 after truing up exercise in terms of Regulation 6 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”).

2. The generating station with a capacity of 2100 MW comprises of six units, three units of 200 MW each and three units of 500 MW each. The dates of commercial operation of different units of the instant station are as under:

| Units | Dates of commercial operation |
|-------------------------------------|-------------------------------|
| Unit-I | 1.3.1984 |
| Unit-II | 1.11.1984 |
| Unit-III | 1.5.1985 |
| Unit-IV | 1.11.1988 |
| Unit-V | 1.9.1989 |
| Unit-VI / Generating Station | 1.4.1991 |

3. Petition No. 278/2009 was filed by the petitioner for determination of tariff of the generating station for the period from 1.4.2009 to 31.3.2014 and the Commission by its order dated 31.8.2012 had determined the annual fixed charges for the generating station. Thereafter, by order dated 26.2.2014 in Petition No. 189/GT/2013, the Commission revised the annual fixed charges of the generating station for the period 2009-14 after truing up exercise, based on the actual additional capital expenditure incurred for the period 2009-12 and the projected additional capital expenditure for the period 2012-14. The capital cost considered by the Commission for the purpose of revision of annual fixed charges for 2009-14 by order dated 26.2.2014 is as under:

| | (₹ in lakh) | | | | |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening Capital Cost | 229359.10 | 228205.86 | 226692.97 | 226852.90 | 233506.37 |
| Add: Additional capital expenditure | (-) 1153.24 | (-) 1512.89 | 159.93 | 6653.47 | 200.00 |
| Closing Capital Cost | 228205.86 | 226692.97 | 226852.90 | 233506.37 | 233706.37 |
| Average Capital Cost | 228782.48 | 227449.41 | 226772.94 | 230179.64 | 233606.37 |

4. Based on the above, the annual fixed charges for the generating station for 2009-14 determined by order dated 26.2.2014 in Petition No. 189/GT/2013 is as under:



| | (₹ in lakh) | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 0.00 | 0.00 | 51.46 | 1811.92 | 4624.22 |
| Interest on Loan | 129.77 | 131.45 | 140.04 | 256.21 | 218.93 |
| Return on Equity | 26779.77 | 26377.87 | 26029.01 | 26263.50 | 26499.36 |
| Interest on Working Capital | 10345.41 | 10458.29 | 10604.34 | 10739.90 | 10922.69 |
| O&M Expenses | 30420.00 | 32154.00 | 33999.00 | 35946.00 | 38004.00 |
| Cost of Secondary Fuel Oil | 3199.93 | 3199.93 | 3208.70 | 3199.93 | 3199.93 |
| Compensation Allowance | 935.00 | 955.00 | 975.00 | 975.00 | 975.00 |
| Special Allowance | 1000.00 | 2114.40 | 3353.02 | 3544.81 | 3747.57 |
| Total | 72809.88 | 75390.94 | 78360.56 | 82737.25 | 88191.64 |

5. Aggrieved by the said order dated 26.2.2014, the petitioner filed Appeal No.131/2014 before the Appellate Tribunal for Electricity (the Tribunal) challenging (i) the disallowance of ₹ 506 lakh in the projected expenditure for 2012-13 out of ₹684.70 lakh for Ash Pond management and the consideration of the projected expenditure of ₹178.57 lakh as approved in the order dated 31.8.2012 and (ii) the disallowance of the claim of the petitioner for Bus Reactor Package on the ground that the expenditure for modification or improvement of the generating station should be met from the Special allowance and/or Compensation Allowance. By judgment dated 29.5.2015, the Tribunal dismissed the said appeal and had confirmed the findings of the Commission in the said order.

6. The petitioner presently seeks revision of the annual fixed charges based on the actual additional capital expenditure incurred for the years 2009-10, 2010-11 and 2011-12 and the projected additional capital expenditure for the years 2012-13 and 2013-14 based on the latest estimates and the status of work, in accordance with clause (1) of Regulation 6 of the 2009 Tariff Regulations.

7. Regulation 6 of the 2009 Tariff Regulations provides as under:

"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."



8. The annual fixed charges claimed by the petitioner in this petition are as under:

| | (₹ in lakh) | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 0.00 | 0.00 | 60.20 | 694.38 | 2593.20 |
| Interest on Loan | 129.77 | 131.45 | 141.07 | 213.64 | 240.88 |
| Return on Equity | 26779.77 | 26377.87 | 26030.91 | 26106.04 | 26873.67 |
| Interest on Working Capital | 10345.41 | 10458.30 | 10604.58 | 10712.44 | 10888.61 |
| O&M Expenses | 30420.00 | 32154.00 | 33999.00 | 35946.00 | 38004.00 |
| Cost of Secondary Fuel Oil | 3199.93 | 3199.93 | 3208.70 | 3199.93 | 3199.93 |
| Compensation Allowance | 935.00 | 955.00 | 975.00 | 975.00 | 975.00 |
| Special Allowance | 1000.00 | 2114.40 | 3353.02 | 3544.81 | 3747.57 |
| Total | 72809.87 | 75390.94 | 78372.47 | 81392.23 | 86522.87 |

9. This petition was heard along with Petition No. 292/GT/2014 filed by the petitioner for determination of tariff of the generating station for the period 2014-19 on 19.4.2016 and orders were reserved after directing the petitioner to file additional information. In compliance with the directions, the petitioner has filed the additional information with copy to the respondents. The respondents, TANGEDCO and KSEB have filed their replies in the matter. We now proceed to revise the annual fixed charges of this generating station as claimed in this petition after truing-up exercise based on the documents available on record as stated in the subsequent paragraphs. The tariff claimed for this generating station in Petition No. 292/GT/2014 for the period 2014-19 shall however be determined by a separate order.

Capital cost

10. The last proviso to Regulation 7 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”

11. The admitted capital cost as on 31.3.2009 in order dated 7.7.2011 in Petition No.142/2009 is ₹229482.22 lakh (inclusive of un-discharged liabilities amounting to ₹123.12 lakh. The annual fixed charges claimed in the petition is based on opening capital cost of ₹229359.10 lakh (after removal of un-discharged liabilities of ₹123.12 lakh as on 1.4.2009) as determined by Commission vide order dated 26.2.2014 in Petition No. 189/GT/2013. However, the petitioner in has claimed closing capital cost of ₹226908.17 lakh for the year 2011-12 which is higher than the admitted closing



capital cost of ₹226852.90 lakh as on 31.3.2012 by ₹55.27 lakh. This difference is on account of addition of ₹55.27 lakh in 2011-12 which was de-capitalized by the Commission in order dated 26.2.2014 in Petition No. 189/GT/2013. The opening capital cost of ₹229359.10 lakh (after removal of un-discharged liabilities of ₹123.12 lakh as on 1.4.2009) has been considered as on 1.4.2009 for the purpose of revision of tariff of the generating station.

Actual Additional Capital Expenditure during 2009-14

12. Regulation 9 of the 2009 Tariff Regulations, as amended on 21.6.2011 and 31.12.2012, provides as under:

*“9. **Additional Capitalisation.** (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (i) Un-discharged liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;*
- (iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) Change in law:*

Provided that the details of works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

(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*
- (v) 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.

- (vi) 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 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.

- (vii) 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.

- (viii) 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.”

13. The break-up of the additional capital expenditure allowed by the Commission in order dated 26.2.2014 in 189/GT/2013 is summarized as under:

| (₹ in lakh) | | | | | | | |
|-------------|--|----------------|----------------|----------------|---------------------|---------------------|----------------|
| Sl. No | Head of Work/Equipment | 2009-10 Actual | 2010-11 Actual | 2011-12 Actual | 2012-13 (Projected) | 2013-14 (Projected) | Total |
| A | Ash Handling System | | | | | | |
| 1 | Ash Pond | 0.00 | 0.00 | 420.24 | 178.57 | 0.00 | 598.81 |
| 2 | Raising of N1 Ash Pond | 0.00 | 0.00 | 0.00 | 0.00 | 200.00 | 200.00 |
| | Total Ash Pond | 0.00 | 0.00 | 420.24 | 178.57 | 200.00 | 798.81 |
| B | Dry Ash Extraction System (DAES) | | | | | | |
| i | DAES-M/S RITES | 0.00 | 0.00 | 0.00 | 507.00 | 0.00 | 507.00 |
| ii | DAES-M/S Driplex | 0.00 | 0.00 | 0.00 | 5700.00 | 0.00 | 5700.00 |
| iii | Decant line diversification | 0.00 | 0.00 | 0.00 | 39.90 | 0.00 | 39.90 |
| iv | Civil Works for evacuation of dry ash through Ash tanker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total Dry Ash Extraction System (DAES) | 0.00 | 0.00 | 0.00 | 6246.90 | 0.00 | 6246.90 |
| C | Other Capital Works | | | | | | |
| | Environmental | | | | | | |
| i | AAQMS | 88.99 | 0.00 | 0.00 | 0.00 | 0.00 | 88.99 |
| ii | Railway Wagons | 0.00 | 0.00 | 0.00 | 228.00 | 0.00 | 228.00 |
| ii | Township Metering | 69.79 | 0.00 | 0.00 | 0.00 | 0.00 | 69.79 |
| | Total (A+B+C) | 158.78 | 0.00 | 420.24 | 6653.47 | 200.00 | 7432.49 |
| D | New Claims | | | | | | |
| i | Weigh Bridge for stores & MGR | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ii | Bus Reactor package | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ii | Land Compensation. | 0.00 | 2.72 | 3.15 | 0.00 | 0.00 | 5.87 |
| iv | Sub-Total | 0.00 | 2.72 | 3.15 | 0.00 | 0.00 | 5.87 |



| | | | | | | | |
|----------|---|--------------------|--------------------|---------------|----------------|---------------|----------------|
| E | Total Additional Capital expenditure | 158.78 | 2.72 | 423.39 | 6653.47 | 200.00 | 7438.36 |
| F | Add: Exclusions not allowed | (-)1353.07 | (-) 1522.68 | (-) 269.70 | 0.00 | 0.00 | (-) 3145.45 |
| G | Total Additional Capital expenditure allowed (E+F) | (-) 1194.29 | (-) 1519.96 | 153.69 | 6653.47 | 200.00 | 4292.91 |
| H | Add: Discharges of liabilities | 41.05 | 7.07 | 6.24 | 0.00 | 0.00 | 54.36 |
| | Total additional capital expenditure allowed | (-) 1153.24 | (-) 1512.89 | 159.93 | 6653.47 | 200.00 | 4347.27 |

14. The break-up of the additional capital expenditure claimed by the petitioner in this petition is summarized as under:

(₹ in lakh)

| Sl. No. | Package Name | Actual additional capital expenditure | | | | | Total |
|----------|---|---------------------------------------|--------------------|---------------|----------------|----------------|----------------|
| | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | |
| A | Ash handling system | | | | | | |
| 1 | Ash Pond | 0.00 | 0.00 | 420.24 | 68.14 | 0.00 | 488.38 |
| 2 | Raising of N1 Ash Pond | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | Dry Ash Extraction system | | | | | | |
| 1 | DAES- M/S RITES | 0.00 | 0.00 | 0.00 | 0.00 | 506.90 | 506.90 |
| 2 | DAES- M/s Driplex | 0.00 | 0.00 | 0.00 | 1887.30 | 1870.98 | 3758.27 |
| 3 | Decant line diversification | 0.00 | 0.00 | 0.00 | 0.00 | 39.91 | 39.91 |
| C | Other Capital works (Environment) | | | | | | |
| 1 | AAQMS | 88.99 | 0.00 | 0.00 | 0.00 | 0.00 | 88.99 |
| 2 | Railway wagons | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | Township Metering | 69.79 | 0.00 | 0.00 | 0.00 | 0.00 | 69.79 |
| D | New Claims | | | | | | |
| 1 | Land Compensation | 0.00 | 2.72 | 3.15 | 0.00 | 0.00 | 5.87 |
| 2 | De-capitalization of land | 0.00 | 0.00 | 0.00 | 0.00 | (-) 4.16 | (-) 4.16 |
| 3 | De-capitalization of boundary wall | 0.00 | 0.00 | 0.00 | 0.00 | (-) 14.60 | (-) 14.60 |
| E | Grand Total (A to D) | 158.78 | 2.72 | 423.39 | 1955.44 | 2399.02 | 4939.35 |
| | Add: Exclusion not allowed | (-) 1353.07 | (-) 1522.68 | (-) 214.43 | 0.00 | 0.00 | (-) 3090.18 |
| | Discharge of liabilities | 41.05 | 7.07 | 6.24 | 12.47 | 79.98 | 146.81 |
| | Total additional capital expenditure allowed/claimed | (-) 1153.24 | (-) 1512.89 | 215.20 | 1967.91 | 2479.00 | 1995.97 |
| | Additional de-capitalization of assets from capital cost | 0.00 | 0.00 | 55.27 | 0.00 | 0.00 | |

15. It is observed from the above that the petitioner has claimed additional capital expenditure for the years 2009-10 and 2010-11 as allowed by the Commission in order dated 26.2.2014 in Petition No. 189/GT/2013. However, for the year 2011-12 the petitioner has claimed an amount of ₹215.20 lakh instead of an amount of ₹159.93 lakh allowed by the Commission in the said order dated 26.2.2014. The difference of ₹55.27 lakh (215.20-159.93) in the claim of petitioner for the year 2011-12 is on account of the fact that the petitioner has included the amount of ₹55.27 lakh



to the capital cost which was de-capitalized by the Commission in order dated 26.2.2014 in Petition No. 189/GT/2013 with the following observations:

“It is pertinent to mention that the claim of the petitioner for exclusion of de-capitalization of MBOA of Rs55.27 lakh (as per Annexure-D of the affidavit of petitioner dated 18.7.2013) for 2011-12 has been considered as de-capitalization during 2011-12 in this order. However, as the year of capitalization of this amount has been indicated by the petitioner as 1997-2009, the corresponding adjustment in repayment of loan and cumulative depreciation could not be made. In this regard, the petitioner is directed to furnish the year-wise details, for consideration of the same at the time of truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.”

16. The petitioner vide affidavit dated 4.8.2014 has submitted that apart from the items allowed in order dated 26.2.2014, it had claimed exclusion of ₹55.27 lakh on account of de-capitalization of MBOA (pertaining to period 1997-2009) in 2011-12 as the same was disallowed by the Commission earlier. It has pointed out that the Commission vide order dated 26.2.2014 has considered the same as part of capital cost and de-capitalized the same from the capital cost on the ground of non-availability of year-wise capitalization. The petitioner has further submitted that in terms of the directions of the Commission in order dated 26.2.2014, the petitioner has furnished the details of the year-wise capitalization of MBOA and it is clear that the Commission had not allowed these MBOA. The petitioner has stated that since these MBOA for ₹55.27 lakh has never been allowed by Commission, the same have been kept under exclusion for the purpose of tariff in Petition No. 189/GT/2013 and in the present petition. Accordingly, the petitioner has prayed for allowing the exclusion of de-capitalization of MBOAs. Keeping in view the submissions and on verification of the documents furnished by the petitioner, we allow the exclusion of de-capitalization of MBOA and accordingly revise the amount as ₹215.20 lakh instead of ₹159.93 lakh for the year 2011-12. We now examine the claim of the petitioner for actual capital expenditure during 2012-14 as under:

Ash Pond

17. The Commission in its order dated 26.2.2014 in Petition No.189/GT/2013 had allowed the projected expenditure of ₹178.57 lakh in 2012-13 for Ash Pond work under Regulation 9(2)(iii) of the 2009 Tariff Regulations. The petitioner in this petition has claimed actual expenditure of ₹68.14 lakh in 2012-13 under Regulation 9(2)(iii) of the 2009 Tariff Regulations. In justification of the same, the petitioner has submitted that out of the projected additional capital expenditure of



₹178.57 lakh for 2012-13 allowed in order dated 26.2.2014 only an amount of ₹68.14 lakh has been capitalized during the year 2012-13 because of the dynamic nature of work involving different activities and the balance work shall be capitalized in subsequent tariff period. In view of justification and considering the fact that the expenditure on Ash Dyke works for ₹178.57 lakh was allowed by the Commission after prudence check of the requirements, the capitalization of ₹68.14 lakh in 2012-13 out of this expenditure, has been allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations. As regards the balance claim during the tariff period 2014-19, the same will be considered in accordance with law based on the submissions of the petitioner.

Raising of N1 Ash Pond

18. The Commission in order dated 26.2.2014 in Petition No. 189/GT/2013 had allowed the projected expenditure of ₹200.00 lakh in 2013-14 for raising of N1 Ash Pond work. The petitioner in this petition has not capitalized any expenditure in 2013-14. In justification, the petitioner has submitted that the capacity enhancement work is on the verge of completion and the same shall be capitalized during next tariff period. The respondents KSEB and TANGEDCO have submitted that since the work has not been completed the petitioner may be directed to refund the excess claim made by the petitioner through tariff in 2013-14.

19. The matter has been considered. Considering the fact that the expenditure has not been incurred in 2013-14 and is expected to be capitalized only during the period 2014-19, no expenditure is allowed during the year 2013-14. However, the claim of the petitioner on this count during the tariff period 2014-19 will be considered in accordance with law based on the submissions of the petitioner.

Dry Ash Extraction System- M/s RITES

20. The Commission in its order dated 26.2.2014 in Petition No. 189/GT/2013 had allowed the projected expenditure of ₹507.00 lakh in 2012-13 (shifted from 2011-12) towards Dry Ash Extraction System (DAES) work. The petitioner in this petition has claimed actual additional capital expenditure of ₹507.00 lakh in 2013-14 for the same work and has submitted that the units of the generating station have been running continuously and this work needed to be carried out while



units are in service requiring part isolations with careful execution. Since the projected expenditure had been allowed by the Commission in order dated 26.2.2014 for the reasons stated therein, the actual additional capital expenditure of ₹507.00 lakh claimed has been allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations by shifting from 2012-13 to 2013-14.

Dry Ash Extraction System- M/s Driplex

21. The Commission in its order dated 26.2.2014 in Petition No. 189/GT/2013 had allowed projected additional capital expenditure of ₹5700.00 lakh in 2012-13 for the said work. However, the petitioner has capitalized a total expenditure of ₹3758.27 lakh during 2012-14 (₹1887.30 lakh in 2012-13 and ₹1870.98 lakh in 2013-14) for DAES. In justification of the same, the petitioner has submitted that the units of the generating station have been running continuously and the work needs to be carried out while units are in service requiring part isolations with careful execution. It has also submitted that part isolations of the system with unit in service take extra time for execution of the work. Accordingly, it has submitted that part capitalization of this work was shifted to subsequent year (2013-14) and the balance work shall be completed in the next tariff period (2014-19). In consideration of the submissions of the petitioner and since the projected expenditure claimed had been approved by the Commission in order dated 26.2.2014 for the reasons stated therein, the total actual additional capital expenditure of ₹3758.27 lakh has been allowed under Regulation 9(2)(iii) of the 2009 Tariff Regulations. However, the balance claim of the petitioner on this count during the tariff period 2014-19 will be considered in accordance with law based on the submissions of the petitioner.

Decant line diversification

22. The Commission in its order dated 26.2.2014 in Petition No. 189/GT/2013 had allowed projected additional capital expenditure of ₹39.90 lakh in 2012-13 for Decant line diversification work. However, the petitioner in this petition has claimed actual additional capital expenditure of ₹39.90 lakh in 2013-14 for the said work and has submitted that the units of the generating station have been running continuously and the work needs to be carried out while units are in service requiring part isolations with careful execution. Considering the fact that the projected additional capital expenditure on this work had been approved by order dated 26.2.2014 for the reasons



stated therein, the actual additional capital expenditure of ₹39.90 lakh has been allowed in 2013-14 under Regulation 9(2)(iii) of the 2009 Tariff Regulations.

Ambient Air Quality management System (AAQMS)

23. The Commission in its orders dated 31.8.2012 in Petition No. 278/2012 and 26.2.2014 in Petition No. 189/GT/2013 had allowed the capitalization of ₹88.99 lakh in 2012-13 for AAQMS on the ground that the said work is mandatory to monitor ambient air quality in and around the generating station and is in line with the requirement of the Andhra Pradesh Pollution Control Board (APPCB). However, the petitioner in this petition has not claimed any expenditure for the said work for the years 2012-13 and 2013-14 respectively. In view of this, no expenditure on this count has been considered for the years 2012-13 and 2013-14.

Railway Wagons

24. The Commission in its order dated 26.2.2014 in Petition No. 189/GT/2013 had allowed the projected additional capital expenditure of ₹228.00 lakh in 2013-14 (shifted from 2011-12 to 2013-14) for procurement of Railway Wagons. However, the petitioner in this petition has not capitalized any expenditure for the said work during the year 2013-14 for procurement of Railway Wagons. In justification of the same, the petitioner has submitted that due to high gestation period of wagons and limited agencies involved in the supply of wagons, the same shall be capitalized during the next tariff period. In view of this, no expenditure on this count has been considered for the year 2013-14. However, the claim of the petitioner on this count during the tariff period 2014-19 will be considered in accordance with law based on the submissions of the petitioner.

De-capitalization

De-capitalization of land

25. The petitioner has de-capitalized an amount of ₹4.16 lakh towards land during the year 2013-14. In justification of the same, the petitioner has submitted that the land has been taken over by the Government of Andhra Pradesh and accordingly the amount has been de-capitalized. Since the asset is not in use, the de-capitalization of the amount of ₹4.16 lakh is allowed.



De-Capitalization of Boundary wall

26. The petitioner has de-capitalized an amount of ₹14.60 lakh towards Boundary wall during the year 2013-14. In justification of the same, the petitioner has submitted that the land has been taken over by the Government of Andhra Pradesh and accordingly the expenditure towards Boundary wall has been de-capitalized. Since the asset is not in use, the de-capitalization of the amount for ₹14.60 lakh is allowed.

27. The reconciliation of the actual capital expenditure with that of the books of accounts for the years 2012-13 and 2013-14 as submitted by the petitioner is as under:

| | | (₹ in lakh) | |
|---|--|----------------|----------------|
| | | 2012-13 | 2013-14 |
| 1 | Opening Gross Block of the year | 233097.69 | 237966.37 |
| 2 | Closing Gross Block of the year | 237966.37 | 250683.80 |
| 3 | Additional Capital Expenditure as per the books of accounts (2 -1) | 4868.68 | 12717.43 |
| 4 | Exclusion of additional capitalization | 2833.27 | 10318.40 |
| 5 | Net Additional Capital Expenditure including liability (3-4) | 2035.41 | 2399.03 |
| 6 | Un discharged Liability in (5) | 79.98 | 0.00 |
| 7 | Additional Capital Expenditure claimed on cash basis for the purpose of tariff (5-6) | 1955.44 | 2399.02 |
| 8 | Discharge of Un-discharged liability as on 31.3.2009 | 0.00 | 0.00 |
| 9 | Discharge of Un-discharged liability after 1.4.2009 | 12.47 | 79.98 |
| Total Additional capital expenditure claimed | | 1967.91 | 2479.00 |

28. It is observed from the above that the actual additional capital expenditure claimed by the petitioner is at variance with the additional capital expenditure as per books of accounts. This is on account of exclusion of certain expenditure in additional capital expenditure considered for the purpose of tariff. We consider the exclusions for the years 2012-13 and 2013-14 as under

Exclusions

29. The summary of exclusions claimed as per books of accounts for 2012-13 is as under:

| | | (₹ in lakh) | |
|----------|--|-------------|--|
| | | 2012-13 | |
| A | Items not claimed | | The petitioner has submitted that the total amount of ₹ 453.51 lakh for Item Nos 1 to 7 were not allowed and hence kept under exclusions |
| 1 | Network System for Energy Monitoring System | 3.57 | |
| 2 | Supply of BEML model BD355 Bull Dozer | 202.21 | |
| 3 | Supply of BEML model BD14 W Wheel Dozer | 121.63 | |
| 4 | Renovation of 0.5 Class 400 KV CVT's (Net) | 25.99 | |
| 5 | R&M of STG-I Chlorinator Streams for PTP with a capacity of 40 Kg/Hr | 42.48 | |
| 6 | R&M of STG-I UCR AC system VAM | 56.27 | |
| 7 | Balance Sewerage system Civil works | 1.16 | |
| 8 | Loan ERV | 8.47 | |



| | | | |
|----|--|------------|--|
| 9 | Capitalization of Spares | 2971.00 | |
| 10 | De-capitalization of Spares (admitted items) | (-) 80.25 | |
| 11 | De-capitalization of MBOA (admitted items) | (-) 135.18 | |
| 12 | De-capitalization of Spares (non-Admitted items) | (-) 268.16 | |
| 13 | De-capitalization of MBOA (Non-admitted items) | (-) 87.17 | |
| 14 | Liability Reversal of Township metering | (-) 28.76 | |

Exclusion under Item Nos 1 to 7

30. The petitioner has submitted that an amount of ₹453.31 lakh on account of various items (i.e. Network system for EMS, Supply of Bull Dozer, Wheel Dozer, R&M works etc.) have been disallowed in 2012-13 in terms of the provisions of the tariff regulations and hence considered under exclusion. In view of this, the exclusion of the said amount is allowed.

Loan ERV

31. The petitioner has excluded an amount of ₹8.47 lakh in 2012-13 on account of FERV. As the petitioner bills FERV directly on the beneficiaries, the exclusion of FERV is in order and allowed.

Capitalization of Spares

32. The petitioner has procured spares amounting to ₹2971.00 lakh in 2012-13. As capitalization of spares after the cut-off date of the generating station are not allowed for the purpose of tariff and they form part of the O&M expenses as and when consumed, the petitioner has excluded the said amount. Accordingly, the exclusion of the said amount under this head is in order and allowed.

De-capitalization of Spares (admitted items)

33. The petitioner has de-capitalized capital spares amounting to (-) ₹80.25 lakh in 2012-13 in books of accounts on these spares becoming unserviceable. The petitioner has sought exclusion of de-capitalization of these spares for purpose of tariff. These spares which form part of the capital cost allowed in tariff are being taken out from the capital cost and on becoming unserviceable. In view of this, the exclusion sought for de-capitalization of spares for (-) ₹80.25 lakh in 2012-13 is not acceptable and has not been allowed.



De-capitalization of Miscellaneous Bought out Assets (MBOA) (admitted items)

34. The petitioner has de-capitalized Miscellaneous Bought Out Assets (MBOA) amounting to (-) ₹ 135.18 lakh in 2012-13 in the books of accounts on these assets becoming unserviceable. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that the amount of (-) ₹135.18 lakh pertains to MBOA which were part of the capital cost of the generating station for the purpose of tariff. Hence, the exclusion on account of de-capitalization of these spares is not justifiable and has not been allowed for the purpose of tariff.

De-capitalization of Spares (Non-admitted items)

35. The petitioner has de-capitalized capital spares amounting to (-) ₹268.16 lakh in 2012-13 in books of accounts on these spares becoming unserviceable. The petitioner has sought exclusion of de-capitalization of these spares for purpose of tariff. As these spares which were disallowed for capitalization by the Commission and do not form part of capital cost of this generating station, the exclusion of de-capitalization of these spares is in order and allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) (Non-admitted items)

36. The petitioner has de-capitalized MBOA items amounting to (-) ₹87.17 lakh in 2012-13 in books of accounts. The petitioner has sought exclusion of the de-capitalization of these spares for purpose of tariff. As these spares were disallowed for capitalization by the Commission and do not form part of capital cost of this generating station, the exclusion of de-capitalization of these spares is in order and allowed.

Liability Reversal-Township Metering

37. The petitioner has excluded an amount of (-) ₹28.76 lakh in 2012-13 on account of reversal of liability against the work of Township Metering. The petitioner has submitted that this liability has already been excluded from capital cost and hence the reversal has been kept under exclusion. In view of this, the exclusion is allowed.

38. The summary of exclusions claimed as per books of accounts for 2013-14 is as under:



(₹ in lakh)

| | | 2013-14 | |
|----|---|-----------------|---|
| 1 | New Canteen Building | 242.03 | The petitioner has submitted that the total amount of ₹1005.69 lakh for Item Nos.1 to 6 were not admitted by order dated 31.8.2012 and order dated 26.2.2014. |
| 2 | Internal Electrification of new canteen building | 17.34 | |
| 3 | 400 KV Bus reactor package | 484.04 | |
| 4 | Circuit Breaker- 400 KV bay | 224.73 | |
| 5 | Weigh Bridge | 20.99 | |
| 6 | Electric Pitless Weigh Bridge | 16.56 | |
| 7 | Empty Anhydrous Ammonia Gas Cylinder | 27.02 | The petitioner has submitted that the total amount of ₹1198.31 lakh for Item Nos. 7 to 20 were not allowed under the tariff regulations and hence kept under exclusion. |
| 8 | Sup of sintex cylindrical vertical open top drums | 2.64 | |
| 9 | Ammonia Dozing system for flue gas conditioning | 8.20 | |
| 10 | Air Conditioning System | 419.50 | |
| 11 | Solar Panel for Permanent Store | 26.55 | |
| 12 | Supp, Erection & installation of light pipes- Permanent Store | 3.72 | |
| 13 | Installation of light pipe lines at service building | 1.95 | |
| 14 | Lift Renovated (R&M work) | 45.25 | |
| 15 | Cap of Sleepers | 253.19 | |
| 16 | Gear Box for conveyors (R&M work) | 20.96 | |
| 17 | Erection & Commissioning of 03 stream 150 Kg/hr Chlorinator | 0.39 | |
| 18 | Up gradation of ESP Stage2 (R&M package) | 331.24 | |
| 19 | 400 KV & 220 KV Lightning Arrestors (R&M work) | 47.22 | |
| 20 | EMS for APC monitoring | 10.48 | |
| 21 | Loan FERV | 3.88 | |
| 22 | Capitalization of Spares | 10409.47 | |
| 23 | De capitalization of Spares (Admitted items) | (-) 354.70 | |
| 24 | Decap of MBOA (Admitted items) | (-) 190.75 | |
| 25 | Decap (Admitted items) | (-) 2.65 | |
| 26 | De capitalization of Spares (Non-Admitted items) | (-) 1756.80 | |
| 27 | Decap of MBOA (Non-Admitted items) | (-) 10.56 | |
| 28 | Inter Unit Transfer of H2 Drives from Simhadri | 16.52 | |
| 29 | Re-grouping of assets Bulldozer- Plant & Machinery | (-) 202.21 | |
| 30 | Re-grouping of assets Bulldozer- Construction Equipment | 202.21 | |
| 31 | Total Exclusion claimed | 10318.40 | |

Exclusion under Item Nos 1 to 6

39. The petitioner has submitted that an amount of ₹1005.69 lakh in 2013-14 on account of various items (i.e. New canteen building, Internal electrification, Bus reactor package, circuit breaker, Weigh Bridge etc) were not admitted by Commission vide its orders dated 31.8.2012 and 26.2.2014 respectively and accordingly, the said amount has been kept under exclusion. In view of this, the exclusion of the amount (for item no1 to 6) is in order and allowed.



Exclusion under Item Nos 7 to 20

40. The petitioner has submitted that an amount of ₹1198.29 lakh in 2013-14 on account of various items (i.e. Empty Anhydrous Ammonia Gas cylinders, Ammonia Dosing system for flue gas conditioning, Air conditioning system, Solar panel, Installation of light pipe lines, Gear box, Up gradation of ESP etc.) were disallowed under the tariff regulations and has been kept under exclusion. In view of this, the exclusion of the amount (for item no 7 to 20) is in order and allowed.

Loan ERV

41. The petitioner has excluded an amount of ₹3.88 lakh in 2013-14 on account of FERV. As the petitioner bills FERV directly on the beneficiaries, the exclusion of FERV is in order and allowed.

Capitalization of Spares

42. The petitioner has procured spares amounting to ₹10409.47 lakh in 2013-14. As capitalization of spares after the cut-off date of the generating station are not allowed for the purpose of tariff and they form part of the O&M expenses as and when consumed, the petitioner has excluded the said amount. Accordingly, exclusion of the said amount under this head is in order and allowed.

De-capitalization of Spares (admitted items)

43. The petitioner has de-capitalized capital spares amounting to (-) ₹354.70 lakh in 2013-14 in books of accounts on these spares becoming unserviceable. The petitioner has sought exclusion of de-capitalization of these spares for purpose of tariff. These spares which form part of the capital cost allowed in tariff are being taken out from the capital cost and on becoming unserviceable. In view of this, the exclusion sought for de-capitalization of spares for (-) ₹354.70 lakh in 2013-14 is not acceptable and has not been allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) (admitted items)

44. The petitioner has de-capitalized Miscellaneous Bought Out Assets (MBOA) amounting to (-) ₹190.75 lakh in 2013-14 in the books of accounts on these assets becoming unserviceable. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that the amount of (-) ₹190.75 lakh pertains to MBOA which were part of the capital cost of the generating station for the



purpose of tariff. Hence, the exclusion on account of de-capitalization of these spares is not justifiable and has not been allowed for the purpose of tariff.

De-capitalization (admitted items)

45. The petitioner has de-capitalized amount for (-) ₹2.65 lakh in 2013-14. The petitioner has sought exclusion of de-capitalization of the amount for purpose of tariff. These spares which form part of the capital cost allowed in tariff are being taken out from the capital cost on these spares becoming unserviceable. In view of this, the exclusion sought for de-capitalization of spares for the said amount is not acceptable and has not been allowed.

De-capitalization of Spares (Non-admitted items)

46. The petitioner has de-capitalized capital spares amounting to (-) ₹1756.80 lakh in 2013-14 in books of accounts on these spares becoming unserviceable. The petitioner has sought exclusion of de-capitalization of these spares for purpose of tariff. As these spares were not claimed by the petitioner for capitalization during the tariff period 2004-09 and 2009-14 in respect of this generating station and hence do not form part of the capital cost of this generating station, the exclusion of de-capitalization of these spares is in order and allowed.

De-capitalization of Miscellaneous Bought out Assets (MBOA) (Non-admitted items)

47. The petitioner has de-capitalized MBOA items amounting to (-) ₹10.56 lakh in 2013-14 in books of accounts. The petitioner has sought exclusion of the de-capitalization of these spares for purpose of tariff. As these spares were disallowed for capitalization by the Commission and do not form part of capital cost of this generating station, the exclusion of de-capitalization of these spares is in order and allowed.

Inter-Unit Transfer

48. An amount of ₹16.52 lakh for 2013-14 has been excluded under this head on account of Inter Unit Transfer of H2 Driers from Simhadri TPS (another generating station of the petitioner). These are temporary inter-unit transfers. The Commission while dealing with petitions for additional capitalization in respect of other generating stations of the petitioner, had decided that both



positive and negative entries arising out of inter unit-transfers of temporary nature shall be ignored for the purpose of tariff. In consideration of the same, the exclusion of the amount of (-) ₹16.52 lakh during 2013-14 on account of inter-unit transfer of equipment on temporary basis is in order and has been allowed.

Regrouping of assets

49. The petitioner has excluded amounts of (-) ₹202.21 lakh in 2013-14 for Bull Dozer (BEML) Plant & Machinery and ₹202.21 lakh on account of Bull Dozer (BEML), Construction equipment. The petitioner has submitted that it is only regrouping the classification of assets from Plant & Machinery to Construction equipment. In view of this, the exclusion is allowed.

50. Based on the above, the summary of exclusions allowed and not allowed for the purpose of tariff is summarized as under:

| (₹ in lakh) | | | | |
|-------------------|--|----------------|-----------------|----------------|
| EXCLUSIONS | | | | |
| | Description | 2012-13 | 2013-14 | Remarks |
| 1 | Items not claimed | 453.31 | 1198.31 | Allowed |
| 2 | Items disallowed by Commission | -- | 1005.69 | Allowed |
| 3 | Loan ERV | 8.47 | 3.88 | Allowed |
| 4 | Capitalization of Spares | 2971.00 | 10409.47 | Allowed |
| 5 | De-capitalization of Spares (Admitted items) | (-) 80.25 | (-) 354.70 | Not allowed |
| 6 | De-capitalization of MBOA (Admitted items) | (-) 135.18 | (-) 190.75 | Not allowed |
| 7 | De-capitalization (Admitted items) | - | (-) 2.65 | Not allowed |
| 8 | De-capitalization of Spares (Non-Admitted items) | (-) 268.16 | (-) 1756.80 | Allowed |
| 9 | De-capitalization of MBOA (Non-Admitted items) | (-) 87.17 | (-) 10.56 | Allowed |
| 10 | Liability Reversal of Township Metering | (-) 28.76 | -- | Allowed |
| 11 | Inter Unit Transfer of H2 drives | -- | 16.52 | Allowed |
| | Regrouping of assets | -- | (-) 202.21 | Allowed |
| | Regrouping of assets | - | 202.21 | |
| 13 | Total Exclusions claimed (A) | 2833.26 | 10323.71 | |
| 14 | Exclusions allowed (B) | 3048.69 | 10866.51 | |
| 15 | Exclusions not allowed (B-A) | 215.43 | 548.10 | |

51. There is no change in the additional Capital Expenditure for the year 2009-10 and 2010-11 as allowed by the Commission in the order dated 26.02.2014 in Petition No. 189/GT/2013. For the period 2011-12, the petitioner's claim for ₹251.20 lakh has been considered as additional capital expenditure for the year 2011-12 for the purpose of tariff for the reason stated in para 16 of this



order. Accordingly, the additional capital expenditure considered and allowed for the period 2011-14 is as under:

| Sl. No. | Package Name | (₹ in lakh) | | |
|----------|---|---------------------------------------|----------------|----------------|
| | | Actual additional capital expenditure | | |
| | | 2011-12 | 2012-13 | 2013-14 |
| A | Ash Handling System | | | |
| 1 | Ash Pond | 420.24 | 68.14 | 0.00 |
| 2 | Raising of N1 Ash Pond | 0.00 | 0.00 | 0.00 |
| B | Dry Ash Extraction System | | | |
| 1 | DAES- M/S RITES | 0.00 | 0.00 | 506.90 |
| 2 | DAES- M/S Driplex | 0.00 | 1887.30 | 1870.98 |
| 3 | Decant line diversification | 0.00 | 0.00 | 39.91 |
| C | Other Capital Works (Environmental) | | | |
| 1 | AAQMS | 0.00 | 0.00 | 0.00 |
| 2 | Railway wagons | 0.00 | 0.00 | 0.00 |
| 3 | Township Metering | 0.00 | 0.00 | 0.00 |
| D | New Claims | | | |
| 1 | Land Compensation | 3.15 | 0.00 | 0.00 |
| 2 | De-capitalization of land | 0.00 | 0.00 | (-) 4.16 |
| 3 | De-capitalization of Boundary wall | 0.00 | 0.00 | (-) 14.60 |
| E | Grand Total (A to D) | 423.39 | 1955.44 | 2399.02 |
| | Add: exclusion not allowed | (-) 214.43 | (-) 215.43 | (-) 548.10 |
| | Discharge of liabilities | 6.24 | 12.47 | 79.98 |
| | Total additional capital expenditure allowed | 215.20 | 1752.48 | 1930.91 |

52. Accordingly, the capital cost considered for the purpose of tariff for the period 2009-14 is as under:

| | (₹ in lakh) | | | | |
|--|------------------|------------------|------------------|------------------|------------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening Capital cost | 229359.10 | 228205.86 | 226692.97 | *226886.46 | 228638.94 |
| Additional capital expenditure allowed | (-) 1153.24 | (-) 1512.89 | 215.20 | 1752.48 | 1930.91 |
| Closing Capital cost | 228205.86 | 226692.97 | 226908.17 | 228638.94 | 230569.84 |
| Average Capital cost | 228782.48 | 227449.41 | 226800.57 | 227762.70 | 229604.39 |

* Net of un-serviceable asset amounting to ₹21.71 lakh.

Debt-Equity Ratio

53. Accordingly, gross loan and equity amounting to ₹115137.45 lakh and ₹114221.65 lakh, respectively as considered in order dated 26.2.2014 in Petition No.189/GT/2013 has been retained as on 1.4.2009. Further, the admitted additional capital expenditure and un-serviceable assets amounting to ₹21.71 lakh de-capitalized as on 1.4.2012 has been allocated in the debt-equity ratio of 70:30.



Return on Equity

54. Return on equity has been worked out as under:

| | (₹ in lakh) | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Notional Equity- Opening | 114221.65 | 113875.68 | 113421.81 | *113479.86 | 114005.60 |
| Addition of Equity due to additional capital expenditure | (-) 345.97 | (-) 453.87 | 64.56 | 525.74 | 579.27 |
| Normative Equity-Closing | 113875.68 | 113421.81 | 113486.37 | 114005.60 | 114584.88 |
| Average Normative Equity | 114048.67 | 113648.75 | 113454.09 | 113742.73 | 114295.24 |
| Return on Equity (Base Rate) | 15.500% | 15.500% | 15.500% | 15.500% | 15.500% |
| Tax Rate for the year 2008-09 | 33.990% | 33.218% | 32.445% | 32.445% | 33.990% |
| Rate of Return on Equity (Pre Tax) | 23.481% | 23.210% | 22.944% | 22.944% | 23.481% |
| Return on Equity (Pre Tax)- (annualised) | 26779.77 | 26377.87 | 26030.91 | 26097.13 | 26837.67 |

* Net of ₹6.51 lakh corresponding to un-serviceable asset amounting to ₹21.71 lakh

Interest on loan

55. Interest on loan has been worked out as under:

- (a) The gross normative loan of ₹115137.45 lakh has been considered as on 1.4.2009.
- (b) Cumulative repayment as on 31.3.2009 amounting to ₹113337.44 lakh as considered in order dated 26.2.2014 in Petition No. 189/GT/2013 has been considered as on 1.4.2009.
- (c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹1800.01 lakh.
- (d) Addition to normative loan on account of additional capital expenditure approved above has been considered.
- (e) Depreciation allowed has been considered as repayment of normative loan during the respective year of the tariff period 2009-14. Further, proportionate adjustment has been made to the repayments corresponding to discharges and reversal of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009. Also repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.
- (f) In line with the provisions of the regulation stated above, the weighted average rate of interest has been calculated by applying the actual loan portfolio existing as on 1.4.2009 along with subsequent additions during the period 2009-14, if any, for the generating station. In case of loans carrying floating rate of interest the rate of interest as provided by the petitioner has been considered for the purpose of tariff.

56. The necessary calculation for interest on loan is as under:



| | (₹ in lakh) | | | | |
|---|-------------------|--------------------|-------------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Gross opening loan | 115137.45 | 114330.18 | 113271.16 | *113406.60 | 114633.34 |
| Cumulative repayment of loan upto previous year | 113337.44 | 112410.79 | 111346.18 | *111229.45 | 111696.24 |
| Net Loan Opening | 1800.01 | 1919.38 | 1924.97 | 2177.15 | 2937.10 |
| Addition due to Additional capitalisation | (-) 807.27 | (-) 1059.02 | 150.64 | 1226.74 | 1351.63 |
| Repayment of loan during the year | 0.00 | 0.00 | 48.13 | 617.59 | 2396.41 |
| Less: Repayment adjustment on account of de-capitalization | 947.15 | 1065.88 | 150.10 | 150.80 | 396.80 |
| Add: Repayment adjustment on account of discharges / reversals corresponding to un-discharged liabilities deducted as on 1.4.2009 | 20.51 | 1.26 | 0.44 | 0.00 | 0.00 |
| Net Repayment | (-) 926.65 | (-) 1064.61 | (-) 101.53 | 466.79 | 1999.61 |
| Net Loan Closing | 1919.38 | 1924.97 | 2177.15 | 2937.10 | 2289.12 |
| Average Loan | 1859.70 | 1922.18 | 2051.06 | 2557.12 | 2613.11 |
| Weighted Average Rate of Interest on Loan | 6.978% | 6.839% | 6.898% | 8.523% | 9.930% |
| Interest on Loan | 129.77 | 131.45 | 141.49 | 217.94 | 259.47 |

* Net of ₹15.20 lakh corresponding to un-serviceable asset amounting to ₹21.71 lakh.

Depreciation

57. The cumulative depreciation amounting to ₹203913.11 lakh (after adjusting ₹109.46 lakh towards un-discharged liabilities deducted as on 1.4.2009) was considered as on 1.4.2009 in order dated 26.2.2014. However, after rectifying for linkage error contained in the computation of adjustment to cumulative depreciation towards un-discharged liabilities deducted as on 1.4.2009 the cumulative depreciation as on 1.4.2009 works out to ₹203911.83 lakh (after adjusting ₹110.74 lakh towards un-discharged liabilities deducted as on 1.4.2009). Further the value of freehold land as on 1.4.2009 along with additions during the tariff period 2009-14 has been considered for the purpose of calculating depreciable value. Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to 'nil'. As stated in order dated 26.2.2014, depreciation has been calculated applying spreading over of the balance depreciable value and for this purpose balance useful life of 4.85 years as on 1.4.2009 as stated in order dated 26.2.2014 has been retained for the purpose of tariff. Further, proportionate adjustment has been made to the cumulative depreciation corresponding to discharges and/or reversal of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009. Also cumulative depreciation has been adjusted for de-caps considered during tariff period 2009-14.



58. Necessary calculations in support of depreciation are as shown below:

| | (₹ in lakh) | | | | |
|---|------------------|------------------|------------------|------------------|------------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Average Capital Cost | 228782.48 | 227449.41 | 226800.57 | 227762.70 | 229604.39 |
| Depreciable value @ 90% | 203528.63 | 202327.65 | 201741.05 | 202605.54 | 204264.94 |
| Remaining useful life at the beginning of the year | 4.85 | 3.85 | 2.85 | 1.85 | 0.85 |
| Balance depreciable value | 0.00 | 0.00 | 137.18 | 1142.53 | 2396.41 |
| Depreciation (annualized) | 0.00 | 0.00 | 48.13 | 617.59 | 2396.41 |
| Cumulative depreciation at the end | 203911.83 | 202971.97 | 201652.00 | *202061.19 | 204264.94 |
| Less: Cumulative depreciation adjustment on account of de-capitalization | 976.80 | 1370.41 | 189.61 | 192.67 | 498.92 |
| Add: Cumulative depreciation adjusted on account of discharges out of un-discharged liabilities deducted as on 1.4.2009 | 36.93 | 2.31 | 0.62 | 0.00 | 0.00 |
| Cumulative depreciation (at the end of the period) | 202971.97 | 201603.86 | 201463.01 | 201868.53 | 203766.01 |

* Net of ₹19.40 lakh corresponding to un-serviceable asset amounting to ₹21.71 lakh.

O&M Expenses

59. O&M expenses as considered in order dated 26.2.2014 in Petition No. 189/GT2013 as stated below has been considered.

| (₹ in lakh) | | | | |
|-------------|----------|----------|----------|----------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 30420.00 | 32154.00 | 33999.00 | 35946.00 | 38004.00 |

Cost of Secondary Fuel

60. The cost of secondary Fuel as allowed in order dated 26.2.2014 in Petition No. 189/GT2013 as stated below has been considered.

| (₹ in lakh) | | | | |
|-------------|---------|---------|---------|---------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 3199.93 | 3199.93 | 3208.70 | 3199.93 | 3199.93 |

Interest on Working Capital

61. Cost of coal for 1.5 months and cost of secondary fuel for two months as considered in order dated 26.2.2014 in Petition No. 189/GT2013 as stated below, has been considered.

| (₹ in lakh) | | | | | |
|---------------------------------------|----------|----------|----------|----------|----------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal – 1.5 months | 27070.74 | 27070.74 | 27144.90 | 27070.74 | 27070.74 |
| Cost of secondary fuel oil – 2 months | 533.32 | 533.32 | 534.78 | 533.32 | 533.32 |



62. Maintenance spares as considered in order dated 26.2.2014 in Petition No. 189/GT2013 as stated below, has been considered.

| (₹ in lakh) | | | | |
|-------------|---------|---------|---------|---------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 6084.00 | 6430.80 | 6799.80 | 7189.20 | 7600.80 |

63. Receivables have been worked out on the basis of two months of fixed and energy charges as under:

| (₹ in lakh) | | | | | |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Variable Charges-2 months | 36094.31 | 36094.31 | 36193.20 | 36094.31 | 36094.31 |
| Fixed Charges- 2 months | 12134.98 | 12565.16 | 13060.10 | 13551.52 | 14384.03 |
| Total | 48229.29 | 48659.47 | 49253.30 | 49645.84 | 50478.35 |

64. O&M expenses for 1 month for the purpose of working capital as allowed in order dated 26.2.2014 in Petition No. 189/GT2013 has been considered.

| (₹ in lakh) | | | | |
|-------------|---------|---------|---------|---------|
| 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 2535.00 | 2679.50 | 2833.25 | 2995.50 | 3167.00 |

65. SBI PLR of 12.25% has been considered in the computation of the interest on working capital. Necessary computations in support of calculation of interest on working capital are given as under:

| (₹ in lakh) | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal – 1.5 months | 27070.74 | 27070.74 | 27144.90 | 27070.74 | 27070.74 |
| Cost of secondary fuel oil – Two months | 533.32 | 533.32 | 534.78 | 533.32 | 533.32 |
| Maintenance Spares | 6084.00 | 6430.80 | 6799.80 | 7189.20 | 7600.80 |
| Receivables – Two months | 48229.29 | 48659.47 | 49253.30 | 49645.84 | 50478.35 |
| O&M expenses – One month | 2535.00 | 2679.50 | 2833.25 | 2995.50 | 3167.00 |
| Total Working Capital | 84452.35 | 85373.83 | 86566.03 | 87434.59 | 88850.21 |
| Rate of Interest | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest on Working Capital | 10345.41 | 10458.29 | 10604.34 | 10710.74 | 10884.15 |

66. Compensation Allowance and Special Allowance as allowed in order dated 26.2.2014 in Petition No. 189/GT2014 has been considered.

Annual Fixed Charges for 2009-14

67. Based on the above, the annual fixed charges for the period 2009-14 allowed in respect of the generating station is summarized as under:



| | (₹ in lakh) | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 0.00 | 0.00 | 48.13 | 617.59 | 2396.41 |
| Interest on Loan | 129.77 | 131.45 | 141.49 | 217.94 | 259.47 |
| Return on Equity | 26779.77 | 26377.87 | 26030.91 | 26097.13 | 26837.67 |
| Interest on Working Capital | 10345.41 | 10458.29 | 10604.34 | 10710.74 | 10884.15 |
| O&M Expenses | 30420.00 | 32154.00 | 33999.00 | 35946.00 | 38004.00 |
| Cost of Secondary Fuel Oil | 3199.93 | 3199.93 | 3208.70 | 3199.93 | 3199.93 |
| Compensation Allowance | 935.00 | 955.00 | 975.00 | 975.00 | 975.00 |
| Special Allowance | 1000.00 | 2114.40 | 3353.02 | 3544.81 | 3747.57 |
| Total | 72809.88 | 75390.95 | 78360.58 | 81309.13 | 86304.20 |

Note: (i) All figures are on annualized basis. (ii) All the figures under each head have been rounded. (iii) The figure in total column in each year is also rounded. Because of rounding of each figure the total may not be arithmetic sum of individual items in columns

68. The difference in the annual fixed charges determined by order dated 26.2.2014 and those determined by this order shall be adjusted in accordance with Regulation 6 (6) of the 2009 Tariff Regulations.

69. Petition No. 217/GT/2014 is disposed of in terms of the above.

-Sd/-
[Dr. M.K.Iyer]
Member

-Sd/-
[A.K.Singhal]
Member

-Sd/-
[Gireesh B.Pradhan]
Chairperson

