

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 228/2009

**Coram: Shri S. Jayaraman, Member
Shri V.S Verma, Member
Shri M. Deena Dayalan, Member**

Date of Hearing: 11.10.2011

Date of Order: 15.6.2012

IN THE MATTER OF

Approval of tariff of Talcher Super Thermal Power Station, Stage-I (1000 MW) for the period from 1.4.2009 to 31.3.2014.

AND

IN THE MATTER OF

NTPC Ltd, New Delhi

...Petitioner

Vs

1. West Bengal State Electricity Board, Kolkata
2. Bihar State Electricity Board, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Ltd., Bhubaneswar
5. Damodar Valley Corporation, Kolkata
6. Power Department, Govt. of Sikkim, Gangtok
7. Tamil Nadu Electricity Board, Chennai
8. Electricity Department, Union Territory of Pondicherry, Pondicherry
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Power Development Department, Govt. of J&K, Srinagar
11. Power Department, Union Territory of Chandigarh, Chandigarh
12. Madhya Pradesh Power Trading Ltd., Jabalpur
13. Maharashtra State Electricity Distribution Company Ltd., Mumbai
14. Gujarat Urja Vikas Nigam Limited, Baroda
15. Electricity Department, Administration of Daman & Diu, Daman
16. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa
17. BSES Rajdhani Power Limited, New Delhi
18. BSES Yamuna Power Limited, Delhi
19. North Delhi Power Ltd, New Delhi

...Respondents

Parties Present:

1. Shri C.K. Mondol, NTPC
2. Shri Ajay Dua, NTPC
3. Shri K.P.Satpathy, NTPC
4. Shri Balaji Dubey, NTPC
5. Shri R.B.Sharma, Advocate, BSEB, GRIDCO, JSEB & BSES

ORDER

This petition has been filed by the petitioner, NTPC, for approval of tariff for Talcher Super Thermal Power Station, Stage-I (1000 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2009 to 31.3.2014, based on 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 1000 MW comprises of two units of 500 MW each and the dates of commercial operation of the said units are as under:

| | |
|---------|----------|
| Unit-I | 1.1.1997 |
| Unit-II | 1.7.1997 |

3. The tariff of the generating station for the period from 1.4.2004 to 31.3.2009 was determined by Commission's order dated 9.5.2006 in Petition No.144/2004. Subsequently, the Commission *vide* its order dated 20.1.2011 in Petition No.195/2009 revised the annual fixed charges of the generating station after considering the additional capital expenditure incurred during the period 2004-09. Thereafter, the Commission by its order dated 23.6.2011 in Petition No. 195/2009 revised the annual fixed charges for the generating station for the period 2004-09 determined by order dated 20.1.2011, after considering the Commission's order dated 1.6.2011 in Review Petition No.1/2011 (in Petition No.195/2009) and the directions contained in the judgment of the Appellate Tribunal for Electricity dated 13.6.2007 in Appeal Nos.139 to 142 etc of 2006, 10, 11 and 23/2007, subject to the final outcome of the Civil Appeals [C.A.Nos.5434/2007 to 5452/2007, 5622/2007, 4112-4113/2009, 6286 to 6288/2009 etc] pending before the Hon'ble Supreme Court. The annual fixed charges approved by order dated 23.6.2011 is as under:

| | (₹ in lakh) | | | | |
|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| Interest on loan | 6136.32 | 4836.93 | 3520.81 | 2397.06 | 1645.02 |
| Interest on Working Capital | 2009.08 | 2018.24 | 2029.01 | 2048.24 | 2074.33 |
| Depreciation | 8884.93 | 8883.91 | 8870.79 | 8874.84 | 8910.78 |
| Advance Against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Return on Equity | 17597.45 | 17596.24 | 17580.63 | 17585.45 | 17628.17 |
| O & M Expenses | 9360.00 | 9730.00 | 10120.00 | 10520.00 | 10950.00 |
| Total | 43987.78 | 43065.31 | 42121.24 | 41425.59 | 41208.30 |

4. Thereafter, the petitioner, in terms of the directions contained in the order dated 29.6.2010 in Petition No. 245/2009, filed amended petition vide affidavit dated 15.3.2011, taking into consideration the revised figures as per order of the Commission dated 20.1.2011 in Petition No.195/2009. Accordingly, the annual fixed charges for the period 2009-14 claimed by the petitioner are as under:

| | (₹ in lakh) | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 6120.00 | 6175.00 | 6276.00 | 6407.00 | 6523.00 |
| Interest on Loan | 928.00 | 238.00 | 102.00 | 58.00 | 67.00 |
| Return on Equity | 29639.00 | 29675.00 | 29762.00 | 29864.00 | 29946.00 |
| Interest on Working Capital | 4487.00 | 4516.00 | 4570.00 | 4618.00 | 4677.00 |
| O&M Expenses | 13000.00 | 13740.00 | 14530.00 | 15360.00 | 16240.00 |
| Cost of Secondary fuel oil | 1524.00 | 1524.00 | 1529.00 | 1524.00 | 1524.00 |
| Compensation Allowance | 150.00 | 150.00 | 150.00 | 250.00 | 350.00 |
| Special Allowance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 55849.00 | 56019.00 | 56919.00 | 58082.00 | 59327.00 |

5. Reply to the petition has been filed by BSEB, JSEB and GRIDCO (Respondent nos. 2, 3 and 4), TNEB (Respondent no. 7), UPPCL (Respondent no. 9), and MSEDCL (Respondent no. 13). The petitioner has filed its rejoinder to the said replies.

Capital Cost as on 1.4.2009

6. Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:

"7. Capital cost. (1) Capital cost for a project shall include: (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan- (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"

7. The capital cost as on 31.3.2009 approved vide Commission's order dated 20.1.2011 in Petition No.195/2009 is ₹253065.06 lakh. The petitioner vide its affidavit dated 11.7.2011 has furnished the value of capital cost and liabilities as on 1.4.2009 as per books in the Form-9A. These details of liabilities and capital cost have been reconciled with the information available with the Commission as under:

| | (₹ in lakh) | |
|---|----------------|------------------------------|
| | As per Form-9A | As per records of Commission |
| Capital cost as on 1.4.2009, as per books | 257540.15 | 257540.15 |
| Liabilities included above | 1501.18 | 1501.18 |

8. Further, out of total liabilities amounting to ₹1501.18 lakh included in the gross block as on 1.4.2009, the approved capital cost of ₹253065.06 lakh is inclusive of un-discharged liabilities amounting to ₹1469.52 lakh corresponding to allowed assets/works (₹365.45 lakh pertains to assets/works capitalized prior to 1.4.2004 and ₹1104.07 lakh pertains to period 2004-09). The remaining liabilities amounting to ₹31.66 lakh corresponds to disallowed assets.

9. The last proviso of Regulation 7 of the 2009 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.”

10. Accordingly, the capital cost as on 1.4.2009, after removal of un-discharged liabilities of ₹1469.52 lakh, works out to ₹251595.54 lakh on cash basis. The liabilities discharged, if any, by the petitioner, would be included in the capital base as part of additional capital expenditure, in the year of discharge.

11. The petitioner vide its affidavit dated 15.9.2011, has furnished the details of liabilities discharged during the period 2009-11. Out of the un-discharged liabilities deducted as on 1.4.2009, the petitioner has discharged an amount of ₹331.41 lakh (all pertaining to liabilities

corresponding to assets capitalized during 2004-09) during 2009-10 and ₹34.18 lakh (₹29.06 lakh pertains to liabilities corresponding to assets capitalized prior to 1.4.2004 and ₹5.12 lakh pertains to liabilities corresponding to assets capitalized during the period 2004-09) during 2010-11. Further, the petitioner has reversed liabilities amounting to ₹58.15 lakh (₹22.59 lakh pertains to liabilities corresponds to assets capitalized prior to 1.4.2004 and ₹35.56 lakh pertains to assets capitalized during 2004-09) during 2009-10 and ₹311.72 lakh (₹297.90 lakh pertains to liabilities corresponds to assets capitalized prior to 1.4.2004 and ₹13.82 lakh pertains to assets capitalized during 2004-09) during 2010-11. Accordingly, the liability discharged during 2009-10 and 2010-11 has been allowed during the respective years, as part of the additional capital expenditure allowed for the generating station.

Additional Capital Expenditure for 2009-14

12. Regulation 9 of the 2009 Tariff Regulations, as amended on 23.6.2011, provides as under:

“9. Additional Capitalization. (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;

(iv) 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, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff. (2) The capital expenditure 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-materialization of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.

(viii) Any undischarged 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.”

13. The actual/projected additional capital expenditure claimed by the petitioner is as under:

| | (₹ in lakh) | | | | | |
|--------------------------------|-------------|---------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | Total |
| Additional capital expenditure | 395.09 | 629.00 | 1837.00 | 1070.00 | 1240.00 | 5171.09 |

14. The cut-off date for the generating station had expired. Hence, the petitioner's claim for additional capital expenditure is required to be considered in terms of Regulation 9 (2) of the 2009 Tariff Regulations. Accordingly, we examine the submissions of the petitioner on the admissibility of additional capital expenditure for 2009-14 in the subsequent paragraphs.

Submissions of the petitioner

15. In its petition, the petitioner has submitted that the estimated capital expenditure claims are of the following nature:

- (i) The additional capital expenditure (as per Regulation 9 (1) and 9 (2) of the Tariff Regulations, 2009) as per the original scope of work of the generating station;
- (ii) The other additional capital expenditure in respect of the existing generating stations which have to be done on an on-going basis.

16. The petitioner has also submitted the following in support of its claim in the petition and in its affidavit dated 7.10.2009.

(a) In addition to the capital expenditure covered by Regulation 9 (1) and 9 (2) and 19 (e) of the 2009 Tariff Regulations, there will be capital expenditure of different nature which would be necessary for the efficient operation of the generating station within its life time. No generating station can operate on a sustainable basis to achieve the level of performance parameters specified by the Commission without incurring capital expenditure from time to time. The expenditure on such capital assets to be incurred by generating stations are therefore necessary for proper and effective working and therefore beneficial to the respondents. Over a long period of 25 years of the life of the stations, many a times the Original Equipment Manufacturer (OEM) stop providing spares & service and this necessitates the replacement of obsolete equipment's with new items, to ensure support from OEMs. Additional capital expenditure for this purpose had constantly been allowed by the Commission under the 2001 and 2004 tariff regulations. However, additional capital expenditure for successful and efficient operation of the generating station has not been included in Regulation 9 of 2009 Tariff Regulations. Accordingly, the petitioner has claimed additional capital expenditure on 'works considered necessary for the efficient operation of the generating stations' in addition to those specified under Regulation 9 (1) and (2) and 19 (e) of the 2009 Tariff Regulations.

(b) Regulations 7(1), 8 and 9 of 2009 Tariff Regulations pertain to the capital cost of new generating station commissioned after 1.4.2009 and do not cover the existing projects commissioned prior to 1.4.2009. Moreover, the term 'additional capital expenditure' defined in Regulation 3 (3) refers to the additional 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 Regulation 9. The scope and meaning of additional capitalization is not confined to Regulation 9 but subject to Regulation 9, which would mean that if additional capitalization is of the nature as referred to in Regulation 9, it would be read subject to the provisions of Regulation 9 and if the additional capitalization is not of the nature as referred to in Regulation 9, the provisions of Regulation 9 could not be applied. Regulation 9 has no application whatsoever to the existing projects and it does not limit the additional capitalisation in the case of existing projects.

(c) The last proviso to Regulation 7 is an independent provision dealing with the existing projects and additional capitalization for the existing projects is comprehensively covered by the said provision. In respect of the existing projects, the additional capital expenditure projected to be incurred from 1.4.2009 till 31.3.2014 and admitted by the Commission after prudence check would qualify to be capitalized, notwithstanding the fact that this expenditure is not covered under Regulation 9 (1) and (2).

(d) Regulation 19 (e) provides for a compensation allowance to meet the expenses of new assets of capital nature, including in the nature of minor assets and normative compensation allowance under Regulation 19 (e) has no relevance to the additional capitalization of a substantive nature incurred by the generating company from time to time. As the Regulations 9 (1) and (2) and 19 (e) do not exclude the additional capital expenditure of substantial nature in respect of the existing generating stations, the additional capital expenditure as projected by the

petitioner, to be incurred during the tariff period 2009-14 for the existing generating stations, may be considered and allowed by the Commission.

(e) The additional capital expenditure claimed is necessary and expedient for efficient operation of the generating station and is not incurred on account of any failure or default or any other act of omission or commission on the part of the petitioner. This expenditure is such which has to be necessarily incurred in the ordinary course of running of a generating station and for operating machines for the life span of 25 years.

17. The respondent, GRIDCO has objected to the claims of the petitioner and has submitted that the said expenditure claimed under Regulation 9(2) is permissible only when the expenditure is incurred and at the discretion of the Commission. Since, the petitioner has not incurred the said expenditure the claim for capitalization may be rejected. In response to this, the petitioner has submitted that the claim of the petitioner is in terms of the Regulation 7(1) (a) and the last proviso to Regulation 7(2) of the 2009 Tariff Regulations. According to the petitioner, since the last proviso provides for capital expenditure to be projected to be incurred as may be admitted by the Commission, the same is admissible

18. Similar submissions of the petitioner in its petitions for determination of tariff for 2009-14 have been considered and disposed of by the Commission by its orders dated 20.4.2012, 7.5.2012, 23.5.2012, 25.5.2012 in Petition No. 239/2009, 256/2009, 332/2009 and 279/2009 respectively, pertaining to the determination of tariff of generating stations of the petitioner for 2009-14 as under:

"16. We have considered the submissions of the petitioner. The following two issues arise for our consideration:

(a) Whether additional capitalization projected to be incurred after the cut-off date during period 2009-14 is admissible under Regulation 9(2) of the 2009 Tariff Regulations.

(b) Whether additional capital expenditure for successful and efficient operation of the thermal generating station including the gas power stations could be admissible under Regulation 9(2) of the 2009 Tariff Regulations.

17. As regards the first issue, it is noticed that the last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that in case of existing projects, capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding the un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year and the tariff period 2009-14, as may be admitted by the Commission, shall form the basis of determination of tariff. Thus, as per the last proviso projected additional capital expenditure to be incurred for the respective years of the tariff period 2009-14 shall be considered by the Commission while determining the tariff in respect of the existing project. The said proviso does not make any distinction between the additional capital expenditure projected to be incurred before the cut-off date and additional capital expenditure projected to be incurred after the cut-off date. It therefore follows that in case of existing projects, additional capital expenditure projected to be incurred after the cut-off date can be considered by the Commission for determination of tariff. Regulation 9 of the 2009 Tariff Regulations provides for the additional capital expenditure to be admissible during the year 2009-14. While Clause (1) of Regulation 9 deals with the expenditure incurred before the cutoff date, Clause (2) of the said regulation deals with the expenditure incurred after the cut-off date. However, Clause (2) of Regulation 9 provides that only expenditure incurred after the cut-off date shall be admissible. It thus emerges that while the additional capital expenditure can be claimed under last proviso to Regulation 7(2) on projection basis, the same is not admissible under Regulation 9(2), since the expenditure has not been incurred. It is a settled principle of law that the provisions of the Act or Regulations should be read harmoniously keeping in view the objective of the legislation. During the period 2004-09, the additional expenditure was being admitted after the same was incurred. However, the Commission decided to allow additional capital expenditure on projection basis during the period 2009-14. In this connection, reference is drawn to paragraphs 10.1.3 and 10.1.4 of the Statement of Reasons to the 2009 Tariff Regulations, wherein the concept of claiming additional capitalization on projection basis has been explained in the following terms:

"10.1.3 The Commission has carefully examined the issue again and is of the view that the generating companies/transmission licensees as well as the beneficiaries should appreciate the regulation in its proper perspective. Apart from meeting the intended objective of certainty of tariff and minimal retrospective adjustments, the procedure would have following additional advantages:

(a) From beneficiaries' perspective, they would be aware of the intended additional capitalization in advance and be able to voice their concern before the Commission about the reasonableness and necessity of additional capitalization before the actual expenditure is made by the generating companies/transmission licensees. As regards their concern about the expected expenditure being considered in capital base without putting assets to use, the Commission would like to clarify that anticipated expenditure would be considered only after it is found justified and reasonable with the expectation that asset would be put to use. In the absence of expenditure actually made, the same would be taken out from the capital cost at the time of truing up exercise with appropriate refund/adjustment with interest. Further, if the expenditure indeed materializes, the actual retrospective adjustment is expected to be bare minimum as a result of truing up exercise.

(b) From the prospective of the generating companies/transmission licensees, they would be assured of the expenditure to be admitted once accepted by the Commission in the capital cost before making the expenditure. Moreover, they would be more careful about the expenditure to be made as it would require to be justified before the Commission.

10.1.4 The Commission is of the view that the approach adopted with regard to consideration of the expenditure including additional capital expenditure projected to be incurred for the purpose of determination of capital cost is a win-win situation for all. The Commission has decided to retain the said provisions with regard to capital cost including projected additional capital expenditure in Regulations 7 and 9 of these regulations."

18. It thus emerges from the scheme of the 2009 Tariff Regulations that the additional capital expenditure projected to be incurred shall be considered while determining the tariff of the existing generating stations subject to truing-up at the end of the period. In the light of the above discussions,

the prayer of the petitioner for consideration of projected capital expenditure under Regulation 9(2) is allowed subject to prudence check.

19. As regards the second issue, it is noticed that as per the scheme of the 2009 Tariff Regulations, additional capital expenditure incurred or projected to be incurred prior to the cut-off date and the additional capital expenditure incurred after the cut-off date is admissible under Regulation 9(1) and 9(2) of the 2009 Tariff Regulations. We have relaxed the provisions of the Regulation 9(2) to allow the expenditure on projected basis to be incurred after the cut-off date. Regulation 9(2) provides for the different provisions for admissibility of the additional capital expenditure. In respect of the hydro generating stations, Regulation 9(iv) provides for expenditure which has become necessary for successful and efficient operation of the hydro generating stations and similar provisions have been made under Regulation 9(v) in respect of the transmission systems. In case of the thermal generating stations, Regulation 19(e) provides for compensation allowance. Regulation 19(e) of 2009 Tariff Regulations is extracted 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:

| Years of operation | Compensation Allowance (₹ in lakh/MW/year) |
|---------------------------|---|
| 0-10 | Nil |
| 11-15 | 0.15 |
| 16-20 | 0.35 |
| 21-25 | 0.65” |

20. It is evident from the provisions of Regulation 19(e) that the expenditure in case of coal based or lignite fired thermal generating stations is admissible to meet the expenses on new assets of capital nature including in the nature of minor assets. Correspondingly, no provision has been made to admit additional capital expenditure of capital nature for successful operation of the thermal generating station under Regulation 9(2) of the 2009 Tariff Regulations. On the other hand, clear provisions have been made for admitting the expenditure for efficient and successful operation of the hydro generating stations and transmission systems under certain conditions. The provisions of the Regulation 9(2) are clear and unambiguous in that the expenditure for successful and efficient operation of the thermal generating stations have not been provided since a normative compensation allowance has been provided under Regulation 19(e) of 2009 Tariff Regulations to meet the expenses on new assets of capital nature. In our view, last proviso to Regulation 7(2) cannot be considered as independent of Regulation 9 of 2009 Tariff Regulations. The "additional expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission" occurring in last proviso to Regulation 7(2) have to be considered and allowed in terms of provisions of Regulation 9(2) of 2009 Tariff Regulations. The Commission after taking into account the requirements of the gas based generating stations and coal based thermal generating stations has made specific provisions under Regulation 9(2)(vi) and (viii) through second amendment to the 2009 Tariff Regulations as under:

“(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-materialization of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.”

21. Thus, the Commission has consciously provided for the expenditure of specific nature under Regulation 9(2)(vi) and (vii) which are considered necessary for the successful and efficient operation of the coal based thermal generating station and gas based stations. In other words, additional capital expenditure for successful and efficient operation of the generating stations for reasons other than those provided for under Regulation 9(2) of 2009 Tariff Regulations is not permissible.

19. In line with the decisions of the Commission in the above said orders, the additional expenditure for this generating station for 2009-14 has been considered under Regulation 9(2) of the 2009 Tariff Regulations, as discussed in the succeeding paragraphs.

20. The category wise break-up details of the actual/projected additional capital expenditure claimed by the petitioner during 2009-14 vide affidavit dated 15.3.2011 is as under:

| Sl. No | Regulation | Actual/Projected Capital Expenditure | | | | | |
|-------------|---|--------------------------------------|-------------------|---------------|----------------|----------------|----------------|
| | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | |
| (₹ in lakh) | | | | | | | |
| A | Ash Dyke Works and associated works for Ash Handling System | | | | | | |
| i. | Raising of Ash Dyke Lagoon | 9(2)(iii) | 615.85 | 619.00 | 490.00 | 700.00 | 870.0 |
| ii. | Other Ash- Dyke Jobs (Earthen Bund) | 9(2)(iii) | 0.00 | 10.00 | 56.00 | 70.00 | 70.0 |
| iii. | Installation of 4 th slurry pump in existing series | 9(2)(iii) | 0.00 | 0.00 | 200.00 | 300.00 | 300.0 |
| | Total- Ash Handling System | | 615.85 | 629.00 | 746.00 | 1070.00 | 1240.0 |
| B | Others | | | | | | |
| i. | De-capitalization of 15 nos. condemned wagons and procurement of Wagon (24 nos.) as replacement | | (-) 212.97 | 0.00 | 1091.00 | 0.00 | 0.00 |
| ii. | De-capitalization of unserviceable vehicles | | (-) 5.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| iii. | De-capitalization of construction equipments | | (-) 2.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total-Others | | (-) 220.76 | 0.00 | 1091.00 | 0.00 | 0.00 |
| | Grand Total | | 395.09 | 629.00 | 1837.00 | 1070.00 | 1240.00 |

21. Subsequently, the petitioner vide its affidavit dated 11.11.2011 has furnished the de-capitalization value of ₹109.21 lakh during the year 2010-11, for assets which have become unserviceable. In view of this, the actual/projected additional capital expenditure claimed during 2009-14 is revised as under:

| Sl. No | Regulation | Actual/Projected Capital Expenditure | | | | | |
|-------------|--|--------------------------------------|---------|---------|---------|---------|-------|
| | | 2009-10 (actual) | 2010-11 | 2011-12 | 2012-13 | 2013-14 | |
| (₹ in lakh) | | | | | | | |
| A | Ash Dyke Works and associated works for Ash Handling System | | | | | | |
| i. | Raising of Ash Dyke Lagoon | 9(2)(iii) | 615.85 | 619.00 | 490.00 | 700.00 | 870.0 |
| ii. | Other Ash- Dyke Jobs | 9(2)(iii) | 0.00 | 10.00 | 56.00 | 70.00 | 70.0 |

| | | | | | | | |
|-----------------------------------|--|-----------|-------------------|------------------|----------------|----------------|----------------|
| | (Earthen Bund) | | | | | | |
| iii. | Installation of 4 th slurry pump in existing series | 9(2)(iii) | 0.00 | 0.00 | 200.00 | 300.00 | 300.0 |
| Total- Ash Handling System | | | 615.85 | 629.00 | 746.00 | 1070.00 | 1240.0 |
| B Others | | | | | | | |
| i. | De-capitalization of 15 nos. condemned wagons and Procurement of Wagon (24 nos.) as replacement. | | (-) 212.97 | 0.00 | 1091.00 | 0.00 | 0.00 |
| ii. | De-capitalization of unserviceable vehicles | | (-) 5.24 | (-)109.21 | 0.00 | 0.00 | 0.00 |
| iii. | De-capitalization of construction Equipments | | (-) 2.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total-Others | | | (-) 220.76 | (-)109.21 | 1091.00 | 0.00 | 0.00 |
| Grand Total | | | 395.09 | 519.79 | 1837.00 | 1070.00 | 1240.00 |

22. M/s Chemfab Alkalis Ltd (CAL), an HT consumer of the respondent No.8, Electricity Department, Pondicherry has filed objections vide its letter dated 6.11.2009, in response to the public notice of the tariff petition issued by NTPC in the newspapers. In the said letter, M/s CAL has mainly objected to the tariff claimed by the petitioner, NTPC and has submitted that in consideration of the down trend in its performance the present industrial scenario at Pondicherry, the increase in tariff would further impact the entire state and the growth of the industries and therefore make its operations unviable. It has therefore prayed that the tariff revision sought for by the petitioner in the petition may be rejected. The submissions have been examined. It is observed that M/s CAL, the HT consumer has not raised any issues involving the components of tariff, which in his view would lead to an increase in tariff. A summary objection to the petition without any justification cannot form the basis for rejection of the claims of the petitioner. As the tariff of the generating station of the petitioner for 2009-14 is determined by the Commission in exercise of its power under Section 79(1)(a) of the Electricity Act, 2003 based on the 2009 Tariff Regulations, after prudence check, the submissions of the HT consumer is unfounded and hence not accepted.

23. After examining the asset-wise details and justification for additional capitalization claimed by the petitioner under various categories, the submissions of the respondents and by applying

prudence check, the admissibility of the additional capital expenditure is discussed in the subsequent paragraphs:

Ash Dyke Works and associated works for Ash Handling System - Regulation 9(2) (iii)

24. The petitioner has claimed actual expenditure of ₹615.85 lakh during 2009-10 towards raising of ash dyke lagoon and a projected expenditure of ₹629.00 lakh during 2010-11 (₹619.00 lakh for raising of ash dyke lagoon and Rs 10.00 lakh for other ash dyke jobs), ₹746.00 lakh during 2011-12 (₹490.00 lakh for raising of ash dyke lagoon, Rs 56.00 lakh for other ash dyke jobs and Rs 200.00 lakh for installation of 4th slurry pump), ₹1070.00 lakh during 2012-13 (₹700.00 lakh for raising of ash dyke lagoon, Rs 70.00 lakh for other ash dyke jobs and Rs 300.00 lakh for installation of 4th slurry pump) and ₹1240.00 lakh during 2013-14 (₹870.00 lakh for raising of ash dyke lagoon, Rs 70.00 lakh for other ash dyke jobs and Rs 300.00 lakh for installation of 4th slurry pump) which are within the original scope of work. The respondent, TNEB has submitted that as the additional capitalization is based on the notification of the Ministry of Environment & Forests, Government of India, dated 3.11.2009, for existing generating stations, the same should be considered under Regulation 9(2)(ii)-change in law and the Commission may review the same in respect of ash related works. The work relating to ash dyke raising and associated work of ash handling system form part of the original approved scope of works and are normally taken up in stages as and when required during the life of the generating station. Since the expenditure is specifically covered under Regulation 9(2)(iii) of the 2009 Tariff Regulations, we allow the expenditure claimed for 2009-14 for capitalization, under this head.

Others

25. The petitioner has claimed expenditure of ₹1091.00 lakh during 2011-12 towards the procurement of 24 nos. of Wagons as replacement against the de-capitalization of 23 nos. of damaged/condemned wagons viz, 1 No. in 2005-06, 7 Nos. in 2007-08 and 15 Nos. in 2009-10.

The regulation under which capitalization of the said expenditure for procurement of wagons, has not been furnished by the petitioner. The respondents, GRIDCO, JSEB and BSEB in their replies while pointing out that the petitioner has not been able to identify the relevant regulation under which the expenditure can be allowed has submitted that additional capitalization is permissible under Regulation 9 and 10 of the 2009 Tariff Regulations and once it fulfills the conditions of these regulations, the same can be admitted in the capital cost under Regulation 7 of the 2009 Tariff Regulations. Thus, it has been submitted that the expenditure for ₹1091.00 lakh may be rejected. In response, the petitioner has submitted that 24 wagons are being procured against damaged/condemned wagons, part of which was de-capitalized in books and also for tariff purposes during 2004-09. It has also submitted that against the de-capitalization during 2009-10, capitalization has been proposed during 2011-12 as replacement only. It has further stated that these wagons are required to maintain the coal requirement for the generating station and the Commission may allow the same. We have considered the submissions of the parties. There is no provision under Regulation 9(2) of the 2009 Tariff Regulations to consider the expenditure claimed by the petitioner for procurement of wagons against replacement of old wagons. The generating station is entitled for compensation allowance in terms of Regulations 19(e) of the 2009 Tariff Regulations to meet the expenses on new assets of capital nature including in the nature of minor assets. Accordingly, we are of the view that the expenditure for these assets of capital nature can be met from the compensation allowance admissible to the generating station. Hence, the claim of the petitioner under this head is not allowed. Since, the additional capital expenditure for procurement of new wagons have not been considered, the corresponding de-capitalization has also been ignored.

26. The petitioner has de-capitalized ₹5.24 lakh towards unserviceable vehicles and ₹2.55 lakh towards construction equipments during the year 2009-10. The petitioner *vide* its affidavit dated 11.11.2011 has submitted that assets amounting to ₹109.21 lakh (₹2.13 lakh for DCM Truck and ₹107.09 lakh during 2010-11 have been de-capitalized on becoming unserviceable.

Since, the assets are no longer in use and do not render any useful service to the generating station, the de-capitalization of the same has been allowed.

27. Based on the above discussions, the additional capital expenditure allowed for 2009-14, is as under:

(₹ in lakh)

| Sl. No | Regulation | Actual/Projected Capital Expenditure | | | | | |
|-----------------------------------|---|--------------------------------------|-----------------|-------------------|---------------|----------------|----------------|
| | | 2009-10 (actual) | 2010-11 | 2011-12 | 2012-13 | 2013-14 | |
| A | Ash Dyke Works and associated works for Ash handling system | | | | | | |
| i. | Raising of Ash Dyke Lagoon | 9(2)(iii) | 615.85 | 619.00 | 490.00 | 700.00 | 870.00 |
| ii. | Other Ash Dyke Jobs (Earthen bund) | 9(2)(iii) | 0.00 | 10.00 | 56.00 | 70.00 | 70.00 |
| iii. | Installation of 4 th slurry pump in existing series | 9(2)(iii) | 0.00 | 0.00 | 200.00 | 300.00 | 300.00 |
| Total- Ash Handling System | | | 615.85 | 629.00 | 746.00 | 1070.00 | 1240.00 |
| B | Others | | | | | | |
| i. | De-capitalization of 15 nos. condemned wagons and procurement of wagon (24 nos) as replacement. | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ii. | De-capitalization of unserviceable vehicles | | (-) 5.24 | (-)109.21 | 0.00 | 0.00 | 0.00 |
| iii. | De-capitalization of construction equipments | | (-) 2.55 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Others | | | (-) 7.79 | (-) 109.21 | 0.00 | 0.00 | 0.00 |
| Grand Total | | | 608.06 | 519.79 | 746.00 | 1070.00 | 1240.00 |

28. The de-capitalisation of ₹109.21 lakh during 2010-11 furnished by the petitioner vide affidavit dated 11.11.2011 form the scrap value of the assets which have become unserviceable and the same has been considered as aforesaid, for the purpose of tariff. However, the gross value of all the assets de-capitalised would be taken into account at the time of truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

29. Taking into consideration the liabilities discharged during 2009-11, the additional capital expenditure allowed for the purpose of tariff for 2009-14, is as under:

| | (₹ in lakh) | | | | |
|---|---------------|---------------|---------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Additional capital expenditure allowed | 608.06 | 519.79 | 746.00 | 1070.00 | 1240.00 |
| Add: Liabilities discharged | 331.41 | 34.18 | 0.00 | 0.00 | 0.00 |
| Net Additional capital expenditure allowed | 939.47 | 553.97 | 746.00 | 1070.00 | 1240.00 |

Capital Cost for 2009-14

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

| | (₹ in lakh) | | | | |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening Capital cost | 251595.54 | 252535.01 | 253088.98 | 253834.98 | 254904.98 |
| Additional capital expenditure | 939.47 | 553.97 | 746.00 | 1070.00 | 1240.00 |
| Closing Capital cost | 252535.01 | 253088.98 | 253834.98 | 254904.98 | 256144.98 |
| Average Capital cost | 252065.28 | 252811.99 | 253461.98 | 254369.98 | 255524.98 |

31. The capital cost allowed above is subject to truing-up in terms of the provisions contained in Regulation 6 of the 2009 Tariff regulations.

Debt- Equity Ratio

32. Regulation 12 of the 2009 Tariff Regulations provides as under:

“(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

33. The gross loan and equity amounting to ₹126899.83 lakh and ₹126165.23 lakh respectively, as on 31.3.2009 approved vide order dated 23.6.2011 in Petition No.195/2009,

has been considered as gross loan and equity as on 1.4.2009. However, un-discharged liabilities amounting to ₹1469.52 lakh deducted from the capital cost as on 1.4.2009 has been adjusted to debt and equity ratio of 50:50 for liabilities pertaining to period prior to 1.4.2004 and 70:30 for liabilities pertaining to period 2004-09. As such, the gross normative loan and equity as on 1.4.2009 is revised to ₹125944.26 lakh and ₹125651.29 lakh, respectively. Further, the additional expenditure as above has been allocated in the debt-equity ratio of 70:30. The same is subject to truing-up in terms of the provisions contained in Regulation 6 of the 2009 Tariff Regulations.

Return on Equity

34. Regulation 15 of the 2009 Tariff Regulations provides as under:

“(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation.

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II.

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

35. The Return on equity has been worked out @23.481% per annum on the normative equity after accounting for additional capitalization as under:

| | (₹ in lakh) | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Notional Equity- Opening | 125651.29 | 125933.13 | 126099.32 | 126323.12 | 126644.12 |
| Addition of Equity due to Additional capital expenditure | 281.84 | 166.19 | 223.80 | 321.00 | 372.00 |
| Normative Equity-Closing | 125933.13 | 126099.32 | 126323.12 | 126644.12 | 127016.12 |
| Average Normative Equity | 125792.21 | 126016.22 | 126211.22 | 126483.62 | 126830.12 |
| Return on Equity (Base Rate) | 15.500% | 15.500% | 15.500% | 15.500% | 15.500% |
| Tax Rate for the year 2008-09 | 33.990% | 33.990% | 33.990% | 33.990% | 33.990% |
| Rate of Return on Equity (Pre Tax) | 23.481% | 23.481% | 23.481% | 23.481% | 23.481% |
| Return on Equity(Pre Tax)-(annualised) | 29537.27 | 29589.87 | 29635.66 | 29699.62 | 29780.98 |

Interest on loan

36. Regulation 16 of the 2009 Tariff Regulations provides as under:

(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

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

(a) The gross normative loan of ₹125944.26 lakh as on 1.4.2009 has been considered.

(b) Cumulative repayment as on 31.3.2009 works out to ₹118184.98 lakh as per order dated 23.6.2011 in Petition No.195/2009. The same has been considered as cumulative repayment as on 1.4.2009. However, after taking in to account the proportionate adjustment (taking into account the liability and debt position as on 1.4.2004 along with additions during the tariff period 2004-09) to the cumulative repayment on account of un-discharged liabilities deducted from the capital cost as on 1.4.2009, the cumulative repayment as on 1.4.2009 is revised as ₹117398.65 lakh.

(c) Accordingly, the net normative opening loan as on 1.4.2009 works out to ₹8545.61 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 period 2009-14. Further, proportionate adjustment has been made to the repayments corresponding to the discharge/reversal of liabilities considered during the respective years on account of cumulative repayment adjusted as on 1.4.2009.

(f) The petitioner has considered originally contracted GOI loans as actual loan portfolio for the purpose of calculating weighted average rate of interest. However, these GOI loans were refinanced with Bonds earlier. Accordingly, in line with the first proviso to Regulation 16(5) of the 2009 Tariff Regulations, the weighted average rate of interest has been calculated applying the actual loan portfolio existing as on 1.4.2009, for the generating station and is enclosed as Annexure-I to this order.

38. The calculations for Interest on loan is as under:

| | (₹ in lakh) | | | | |
|---|-------------|-----------|-----------|-----------|-----------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Gross Opening Loan | 125944.26 | 126601.88 | 126989.66 | 127511.86 | 128260.86 |
| Cumulative Repayment of Loan up to previous year | 117398.65 | 123805.75 | 126989.66 | 127511.86 | 128260.86 |
| Net Loan Opening | 8545.61 | 2796.13 | 0.00 | 0.00 | 0.00 |
| Addition due to Additional capitalisation | 657.63 | 387.78 | 522.20 | 749.00 | 868.00 |
| Repayment of loan during the year | 6197.31 | 3022.36 | 522.20 | 749.00 | 868.00 |
| Add: Repayment adjustment on discharge/reversals corresponding to un-discharged liabilities deducted as on 1.4.2009 | 5.45 | 1.49 | 0.00 | 0.00 | 0.00 |
| Less: Repayment adjustment on account of de capitalization | 215.25 | 163.04 | 0.00 | 0.00 | 0.00 |
| Net Repayment | 6407.11 | 3183.91 | 522.20 | 749.00 | 868.00 |

| | | | | | |
|---|---------------|---------------|-------------|-------------|-------------|
| Net Loan Closing | 2796.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Loan | 5670.87 | 1398.07 | 0.00 | 0.00 | 0.00 |
| Weighted Average Rate of Interest on Loan | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| Interest on Loan | 543.27 | 133.93 | 0.00 | 0.00 | 0.00 |

Depreciation

39. Regulation 17 of the 2009 Tariff Regulations provides as under:

“(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under longterm power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system.

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation including Advance against Depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

40. The cumulative depreciation as on 31.3.2009 as per order dated 23.6.2011 in Petition No.195/2009 works out to ₹144080.15 lakh. Further, proportionate adjustment has been made to this cumulative depreciation on account of un-discharged liabilities deducted as on 1.4.2009. Accordingly, the revised cumulative depreciation as on 1.4.2009 works out to ₹143243.49 lakh. Further, the value of freehold land amounting to ₹3458.00 lakh as considered in order dated 23.6.2011 has been retained for the purpose of calculating depreciable value. Accordingly, the balance depreciable value (before providing depreciation) for the year 2009-10 works out to ₹80503.06 lakh. Since, as on 1.4.2009 the station is more than 12 years old from the effective

date of commercial operation of the generating station i.e 1.7.1997, the depreciation has been calculated applying spreading over of the balance depreciable value starting from the period 2009-10. Further, proportionate adjustment has been made to the cumulative depreciation corresponding to discharge/reversal of liabilities considered during the respective years on account of cumulative depreciation adjusted as on 1.4.2009 and proportionate adjustment has been made taking into account the de-capitalized assets/works during the period. Accordingly, depreciation is calculated as under:

| | (₹ in lakh) | | | | |
|---|----------------|----------------|----------------|----------------|----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Opening capital cost | 251595.54 | 252535.01 | 253088.98 | 253834.98 | 254904.98 |
| Closing capital cost | 252535.01 | 253088.98 | 253834.98 | 254904.98 | 256144.98 |
| Average capital cost | 252065.28 | 252811.99 | 253461.98 | 254369.98 | 255524.98 |
| Depreciable value @ 90% | 223746.55 | 224418.60 | 225003.58 | 225820.78 | 226860.28 |
| Remaining useful life at the beginning of the year | 12.99 | 11.99 | 10.99 | 9.99 | 8.99 |
| Balance depreciable value | 80503.06 | 74762.20 | 68916.79 | 63463.12 | 58149.96 |
| Depreciation (annualized) | 6197.31 | 6235.38 | 6270.86 | 6352.67 | 6468.29 |
| Cumulative depreciation at the end | 149440.80 | 155891.78 | 162357.66 | 168710.33 | 175178.62 |
| Less: Cumulative depreciation reduction on account of discharge/reversal of un-discharged liabilities deducted as on 1.4.2009 | 221.79 | 196.93 | 0.00 | 0.00 | 0.00 |
| Less: Cumulative depreciation reduction due to de-capitalization | 6.20 | 1.92 | 0.00 | 0.00 | 0.00 |
| Cumulative depreciation (at the end of the period) | 149656.40 | 156086.80 | 162357.66 | 168710.33 | 175178.62 |

O & M Expenses

41. Clause (a) of Regulation 19 of the 2009 Tariff Regulations provides the following O&M expense norms for 500 MW coal based and lignite fired generating stations as under:

| | (₹ in lakh/MW) | | | | |
|-------------------------------|----------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O&M expenses for 500 MW units | 13.00 | 13.74 | 14.54 | 15.36 | 16.24 |

42. Based on the above norms, the year wise O&M expenses claimed by the petitioner is as under:

| | (₹ in lakh) | | | | |
|--------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O&M expenses | 13000 | 13740 | 14530 | 15360 | 16240 |

43. Based on the above norms, the operation & maintenance expenses claimed by the petitioner are in order and hence allowed.

Normative Annual Plant Availability Factor (NAPAF)

44. The NAPAF of the generating station is considered as 85% for the period 1.4.2009 to 31.3.2014.

Interest on Working Capital

45. Regulation 18(1)(a) of the 2009 Tariff Regulations provides that the working capital for coal based generating stations shall cover:

(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;

(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.

(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and

(v) O&M expenses for one month.

46. Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended on 21.6.2011 provides as under:

"Rate of interest on working capital shall be on normative basis and shall be considered as follows:

(i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.

(ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.

47. Working capital has been calculated considering the following elements:

Fuel Components in working capital

48. The cost for fuel component in working capital, based on price and GCV of coal & secondary fuel oil (HFO) procured and burnt for the preceding three months from January, 2009 to March, 2009 is as under:

| | (₹ in lakh) | | | | |
|---------------------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal for 1.5 months | 10002 | 10002 | 10030 | 10002 | 10002 |
| Cost of secondary fuel oil - 2 months | 254 | 254 | 255 | 254 | 254 |

Maintenance Spares in working capital

49. The petitioner has claimed the following maintenance spares in the working capital, as under:

| | (₹ in lakh) | | | | |
|----------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of maintenance spares | 2630 | 2778 | 2936 | 3122 | 3318 |

50. The 2009 Tariff Regulations provides for maintenance spares @ 20% of the operation and maintenance expenses as specified in Regulation 19. Accordingly, the maintenance spares allowed for the purpose of tariff is as under:

| | (₹ in lakh) | | | | |
|----------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of maintenance spares | 2600 | 2748 | 2906 | 3072 | 3248 |

Receivables

51. Receivables have been worked out on the basis of two months of fixed and energy charges (based on primary fuel only) on normative plant availability factors as under:

| | (₹ in lakh) | | | | |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Variable Charges -2 months | 13336.50 | 13336.50 | 13373.04 | 13336.50 | 13336.50 |
| Fixed Charges - 2 months | 9237.55 | 9313.60 | 9445.78 | 9631.65 | 9837.10 |
| Total | 22574.04 | 22650.10 | 22818.81 | 22968.15 | 23173.60 |

O&M Expenses

52. O & M expenses for 1 month claimed by the petitioner for the purpose of working capital are as under:

| | (₹ in lakh) | | | | |
|-------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O & M for 1 month | 1096 | 1158 | 1223 | 1301 | 1383 |

53. The petitioner has claimed O & M expenses for working capital by including one month expenditure of compensatory allowance. Clause (e) of Regulation 19 of the 2009 Tariff Regulations states that “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”. Therefore, the above claim of petitioner is not admissible. However, based on O&M expense norms, the O&M expenses (1 month) considered for working capital are as under:

| | (₹ in lakh) | | | | |
|-------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| O & M for 1 month | 1083.33 | 1145.00 | 1210.83 | 1280.00 | 1353.33 |

54. 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 as under:

| | (₹ in lakh) | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Cost of coal for 1.1/2 months | 10002.37 | 10002.37 | 10029.78 | 10002.37 | 10002.37 |
| Cost of secondary fuel oil for 2 months | 254.08 | 254.08 | 254.78 | 254.08 | 254.08 |
| O&M Expenses- 1 month | 1083.33 | 1145.00 | 1210.83 | 1280.00 | 1353.33 |
| Maintenance spares | 2600.00 | 2748.00 | 2906.00 | 3072.00 | 3248.00 |
| Receivables- 2 months | 22574.04 | 22650.10 | 22818.81 | 22968.15 | 23173.60 |
| Total working capital | 36513.83 | 36799.55 | 37220.20 | 37576.60 | 38031.39 |
| Rate of interest | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest on working capital | 4472.94 | 4507.95 | 4559.47 | 4603.13 | 4658.84 |

Compensation Allowance

55. Regulation 19 (e) of the 2009 Tariff Regulations provides for payment of compensation allowance as under:

“19 (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:

| Years of operation | Compensation Allowance (₹ in lakh/MW/year) |
|--------------------|---|
| 0-10 | Nil |
| 11-15 | 0.15 |
| 16-20 | 0.35 |
| 21-25 | 0.65 |

56. The petitioner has claimed compensation allowance, unit-wise, to meet expenses on new assets of capital nature including in the nature of minor assets as follows:

| | (₹ in lakh) | | | | |
|------------------------|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Compensation allowance | 150.00 | 150.00 | 150.00 | 250.00 | 350.00 |

57. The petitioner's claim for ₹1050.00 lakh as Compensation allowance for the units which have not completed 25 years in terms of Regulation 19 (e) of the 2009 Tariff Regulations is found to be in order and hence allowed.

Annual Fixed charges for 2009-14

58. The annual fixed charges for the period 2009-14 in respect of the generating station is summarized as under:

| | (₹ in lakh) | | | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 6197.31 | 6235.38 | 6270.86 | 6352.67 | 6468.29 |
| Interest on Loan | 543.27 | 133.93 | 0.00 | 0.00 | 0.00 |
| Return on Equity | 29537.27 | 29589.87 | 29635.66 | 29699.62 | 29780.98 |
| Interest on Working Capital | 4472.94 | 4507.95 | 4559.47 | 4603.13 | 4658.84 |
| O&M Expenses | 13000.00 | 13740.00 | 14530.00 | 15360.00 | 16240.00 |
| Cost of secondary fuel oil | 1524.49 | 1524.49 | 1528.67 | 1524.49 | 1524.49 |
| Compensation allowance | 150.00 | 150.00 | 150.00 | 250.00 | 350.00 |
| Total | 55425.28 | 55881.62 | 56674.66 | 57789.91 | 59022.61 |

Note: (i) All figures are on annualized basis.

(ii) All the figures under each head have been rounded. (ii) 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.

59. The recovery of the annual fixed charges shall be subject to truing up, in terms of Regulation 6 of the 2009 Tariff Regulations.

Energy Charge Rate (ECR)

60. Sub-clause (b) of clause (6) of Regulation 21 of the 2009 Tariff Regulations provides as under:

“Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic metre, as applicable.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

61. The petitioner has claimed an Energy Charge Rate (ECR) of 114.94 paisa/kWh based on the weighted average price, GCV of fuel procured and burnt for the preceding three months of January, February and March 2009. The calculation for ECR are based on the price & GCV of coal and oil for the preceding three months i.e. January, February and March 2009 is considered. The energy charge rate (ECR) of 114.937 paisa/kWh, is considered for the purpose of tariff. The relevant calculations in this regard are as follows:

| | Unit | 2009-10, 2010-11, 2012-13 & 2013-14 | 2011-12 (leap year) |
|--------------------------------|-----------|-------------------------------------|---------------------|
| Capacity | MW | (2x500) MW | (2x500) MW |
| Gross Station Heat Rate | Kcal/kWh | 2425 | 2425 |
| Aux. Energy Consumption | % | 6.50 | 6.50 |
| Weighted average GCV of oil | Kcal/l | 9510 | 9510 |
| Weighted average GCV of coal | Kcal/kg | 3045.33 | 3045.33 |
| Weighted average price of oil | Rs/Kl | 20473.96 | 20473.96 |
| Weighted average price of coal | Rs/MT | 1354.88 | 1354.88 |
| Rate of energy charge ex-bus | Paise/kWh | 114.937 | 114.937 |

62. The petitioner shall be entitled to compute the energy charges in accordance with Regulation 21 (6)(a) of the 2009 Tariff Regulations.

63. The learned counsel for the respondents, GRIDCO, JSEB and BSEB has submitted that the petitioner has claimed huge amounts as Energy Charge from the beneficiaries owing to coal import causing huge loss to beneficiaries. He also submitted that import of coal being a normal feature, the Commission may consider framing guidelines on this count to protect the interest of the beneficiaries. The learned counsel also prayed that the petitioner may be directed to share information with the beneficiaries as regards the import of coal, price, GCV of coal etc. In response, the petitioner has submitted that the claims for tariff including energy/variable charges are claimed from beneficiaries based on the 2009 Tariff Regulations and the tariff orders issued by the Commission. The details for computation of energy charges are given along with the bills

as required under Regulation 21 of the 2009 Tariff Regulations. The petitioner has also submitted that the issue of coal shortage and the steps to enhance power generation has been discussed at length and in this regard the Government of India has directed the power utilities to import coal to augment coal shortage. The petitioner has further submitted that the issue of import of coal was discussed in various forums which included the respondents and the petitioner has been providing the details of coal with break-up of domestic coal, e-auction and imported coal to the beneficiaries in the format agreed to in the ERC forum. The submissions have been examined. In terms of Regulation 21(5) of the 2009 Tariff Regulations, the Energy charges covering the primary fuel cost and limestone consumption cost (where applicable) shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiaries during the calendar month on ex-power plant basis, at the energy charge of the month (with fuel and limestone price adjustment). It is noticed that the petitioner, in support of its claim for monthly FPA has been submitting documents to the respondents certifying that the FPA figures are as per quarterly audited accounts. As regards the submission of the details of coal, including imported coal, the petitioner has submitted that the said details are being submitted to the respondents, in terms of the format agreed to in the ERPC forum. Taking note of the requirement to provide requisite details regarding use of fuel, the Commission by public notice dated 13.6.2012 has proposed amendments to Regulation 21 of the 2009 Tariff Regulations wherein, the generators have been enjoined to provide details of parameters of GCV and price of fuel (i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG or liquid fuel) and blending ratio of imported and domestic coal, proportion of e-auction coal etc. with details of the variation in energy charges billed to the beneficiaries along with each bill/ supplementary bills. This, according to us, would adequately address the grievances of the respondents / beneficiaries. The learned counsel for the respondent, BRPL has submitted that the power supply made by petitioner to its housing colonies is to be accounted for and accordingly adjusted, as the entire power belongs to the beneficiaries to the extent of their

respective shares. He also submitted that the undue benefit derived by the petitioner on this count is not in consonance with the provisions of Section 61(d) of the Act. In response, the petitioner has submitted that in terms of the definition of 'generating station' under Section 2(30) of the Act, colony consumption constitutes part of Auxiliary consumption and no undue benefit is derived out of this by the petitioner. It has also submitted that all costs for generation of electricity including costs associated with housing colony of the operating staff are recovered through tariff determined by the Commission and no benefit is derived by the petitioner as alleged by the respondents. It is noticed from the Electricity (Removal of Difficulty) Fourth order, dated 8.6.2005 issued by the Central Government that the supply of electricity by a generating company to the housing colonies or township housing the operating staff of the generating station will be deemed to be an integral part of its activity of generating electricity and the generating company shall not be required to obtain license under the Act for supply of electricity. Thus, the supply of electricity to the housing colony or township housing the operating staff of the generating station being an integral part of generation of electricity, shall form part of the auxiliary consumption of the generating station. Since auxiliary consumption of electricity is allowed on normative basis as per the 2009 Tariff Regulations, the consumption of electricity by the housing colony within the said norms cannot be termed as undue benefits derived by the generating company.

Application fee and the publication expenses

64. The petitioner has sought approval for the reimbursement of fees of ₹20,00,000/- each deposited for the years 2009-10 and 2010-11 towards filing the petition and towards expenses incurred for publication of notices in connection with the petition. The petitioner by its affidavit dated 8.12.2009 has submitted that an expenditure of ₹8,52,491/- has been incurred by it for publication of notices in the newspapers.

65. In terms of Regulation 42 of the 2009 Tariff Regulations and based on our decision contained in order dated 11.1.2010 in Petition No.109/2009, the expenses towards filing of tariff

application and the expenses incurred on publication of notices are to be reimbursed. Accordingly, the expenses incurred by the petitioner for petition filing fees for the years 2010-11 and 2011-12 and for publication of notices in connection with the present petition shall be directly recovered from the beneficiaries, on *pro rata* basis. The filing fees in respect of the balance years would be recoverable as and when paid by the petitioner in terms of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012.

Expenditure incurred for implementation of scheme for provision of supply of electricity in 5 km area around Central Power plants.

66. The petitioner has submitted that in terms of the notification dated 27.4.2010 of the Government of India of a scheme for provision of supply of electricity in 5 km area around Central Power plants, the petitioner is required to create infrastructure for supply of reliable power to the rural households of the villages within a radius of 5 km of existing and new power stations and as per the scheme, the Appropriate Commission shall consider the expenditure incurred for implementation of such scheme for the purpose of determining tariff of the generating station. The petitioner has submitted that DPR for implementation of the scheme is under preparation and it was not possible to estimate the projected expenditure at this stage. The petitioner has further submitted that it would approach the Commission for consideration of the cost incurred in implementation of this scheme for tariff purpose thereafter. The petitioner is at liberty to approach the Commission through an appropriate application, which would be considered in accordance with law.

Recovery of additional cost due to increase in water charges over and above the O&M expenses.

67. The petitioner has submitted that there has been manifold increase in the water charges levied by the State Governments /State Government agencies and the O&M expense norms for 2009-14 notified by the Commission cannot cover any abnormal/unnatural increase in any cost component which is beyond the control of the utility. The petitioner has further submitted that

the additional cost incurred in respect of the increase in water charges over and above the O&M expenses be permitted to be billed and recovered additionally from the beneficiaries. We notice that the petitioner has filed Petition No.121/2011 claiming the same relief and the matter has been heard on 13.10.2011. Accordingly, the relief prayed for in this petition would be governed by the final decision to be taken by the Commission in Petition No. 121/2011.

68. In addition to the above, the petitioner is entitled to recover other taxes etc., levied by statutory authorities in accordance with the 2009 Tariff Regulations, as applicable.

69. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 6.7.2011. The provisional billing of tariff shall be adjusted in terms of the proviso to Regulation 5(3) of the 2009 Tariff Regulations as amended on 21.6.2011.

70. This order disposes of Petition No.228/2009.

Sd/-
[M.DEENA DAYALAN]
MEMBER

Sd/-
[V.S.VERMA]
MEMBER

Sd/-
[S.JAYARAMAN]
MEMBER

Annexure-I

Calculation of Weighted Average Rate of Interest on Loan

(₹ in lakh)

| Sl. no. | Name of loan | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---------|--|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
| 1 | Gol 14% Total (Refinanced with 9.55 Bonds) | Net opening loan | 1,125.90 | 1,000.80 | 875.70 | 750.60 | 625.50 |
| | | Add: Addition during the period | - | - | - | - | - |
| | | Less: Repayment during the period | 125.10 | 125.10 | 125.10 | 125.10 | 125.10 |
| | | Net Closing Loan | 1,000.80 | 875.70 | 750.60 | 625.50 | 500.40 |
| | | Average Loan | 1,063.35 | 938.25 | 813.15 | 688.05 | 562.95 |
| | | Rate of Interest | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| | | Interest | 101.87 | 89.88 | 77.90 | 65.92 | 53.93 |
| 2 | Gol 15% Total (Refinanced with 9.55 Bonds) | Net opening loan | 776.70 | 690.40 | 604.10 | 517.80 | 431.50 |
| | | Add: Addition during the period | - | - | - | - | - |
| | | Less: Repayment during the period | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 |
| | | Net Closing Loan | 690.40 | 604.10 | 517.80 | 431.50 | 345.20 |
| | | Average Loan | 733.55 | 647.25 | 560.95 | 474.65 | 388.35 |
| | | Rate of Interest | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| | | Interest | 70.27 | 62.01 | 53.74 | 45.47 | 37.20 |
| 3 | Gol 16% Total (Refinanced with 9.55 Bonds) | Net opening loan | 21,238.20 | 18,878.40 | 16,518.60 | 14,158.80 | 11,799.00 |
| | | Add: Addition during the period | - | - | - | - | - |
| | | Less: Repayment during the period | 2,359.80 | 2,359.80 | 2,359.80 | 2,359.80 | 2,359.80 |
| | | Net Closing Loan | 18,878.40 | 16,518.60 | 14,158.80 | 11,799.00 | 9,439.20 |
| | | Average Loan | 20,058.30 | 17,698.50 | 15,338.70 | 12,978.90 | 10,619.10 |
| | | Rate of Interest | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| | | Interest | 1,921.59 | 1,695.52 | 1,469.45 | 1,243.38 | 1,017.31 |
| 4 | Gol 17% Total (Refinanced with 9.55 Bonds) | Net opening loan | 14,483.70 | 12,874.40 | 11,265.10 | 9,655.80 | 8,046.50 |
| | | Add: Addition during the period | - | - | - | - | - |
| | | Less: Repayment during the period | 1,609.30 | 1,609.30 | 1,609.30 | 1,609.30 | 1,609.30 |
| | | Net Closing Loan | 12,874.40 | 11,265.10 | 9,655.80 | 8,046.50 | 6,437.20 |
| | | Average Loan | 13,679.05 | 12,069.75 | 10,460.45 | 8,851.15 | 7,241.85 |
| | | Rate of Interest | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| | | Interest | 1,310.45 | 1,156.28 | 1,002.11 | 847.94 | 693.77 |
| 5 | Gross Total | Net opening loan | 37,624.50 | 33,444.00 | 29,263.50 | 25,083.00 | 20,902.50 |
| | | Add: Addition during the period | - | - | - | - | - |
| | | Less: Repayment during the period | 4,180.50 | 4,180.50 | 4,180.50 | 4,180.50 | 4,180.50 |
| | | Net Closing Loan | 33,444.00 | 29,263.50 | 25,083.00 | 20,902.50 | 16,722.00 |
| | | Average Loan | 35,534.25 | 31,353.75 | 27,173.25 | 22,992.75 | 18,812.25 |
| | | Rate of Interest | 9.5800% | 9.5800% | 9.5800% | 9.5800% | 9.5800% |
| | | Interest | 3,404.18 | 3,003.69 | 2,603.20 | 2,202.71 | 1,802.21 |