CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Coram

1. Dr. Pramod Deo, Chairperson

2. Shri R.Krishnamoorthy, Member

3. Shri V.S.Verma, Member

Petition No. 11/2009

In the matter of

Approval of revised fixed charges for NLC TPS-II, Stage-I (630 MW) and Stage-II (840 MW) for the period from 1.4.2004 to 31.3.2009 after considering the impact of additional capital expenditure incurred during the period 2007-08 to 2008-09 and impact of year-wise lignite price for the period 2007-09 on energy charges and capacity charges.

And in the matter of

Neyveli Lignite Corporation Limited, Chennai

...Petitioner

- . VS
- 1. Tamil Nadu Electricity Board, Chennai
- 2. Karnataka State Power Purchase Co-ordinate Centre, Bangalore
- 3. Kerala State Electricity Board, Thiruvananthapuram
- 4. Pondicherry Electricity Department, Pondicherry
- 5. Transmission Corporation of Andhra Pradesh, Hyderabad ...Respondents

The following were present:

- 1. Shri N.A.K.Sarma, Advocate, NLC
- 2. Shri.R.Suresh, NLC
- 3. Shri. E.Gnanaprakasam, NLC
- 4. Shri.S.Soumyanarayanan, TNEB

ORDER (Date of Hearing: 15.9.2009)

This application has been made by NLC for revision of fixed charges after considering the impact of additional capital expenditure for the years 2007-08 and 2008-09 and the year-wise pooled lignite price for the period 2007-09 on energy charges and capacity charges in respect of of NLC TPS-II, Stage-I (630 MW) and Stage-II (840 MW) (hereinafter referred to as "the generating station") based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations").

2. The Commission, vide order dated 23.3.2009 directed the petitioner to amend the petition taking into account the audited figures of additional expenditure incurred up to 31.3.2009. The petitioner vide affidavit dated 27-6-2009 filed the amended petition providing details of the additional capital expenditure incurred during the period 1.4.2007 to 31.3.2009.

2. The generating station with a total capacity of 1470 MW consists of three generating units each with a capacity of 210 MW under Stage-I and four generating units each with a capacity of 210 MW under Stage-II. The dates of commercial operation of the units of the generating station of Stage-I and Stage-II are as under:

Stage-I (3X210 MW)		Stage-II (4x210 MW)		
Unit-I	29.9.1986	Unit-IV	25.1.1992	
Unit-II	8.5.1987	Unit-V	2.6.1992	
Unit-III	23.4.1988	Unit-VI	17.3.1993	
-	-	Unit-VII	9.4.1994	

3. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission by order dated 4.6.2008 in Petition No.118/2007 based on the gross block as under:

Stage-I

				(Rs. in	ı lakh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost as on 1 st April of the financial year	58251.13	58528.77	58964.84	60407.36	60407.36
Additional capitalization	277.64	436.07	1442.52	-	-
Undischarged liabilities as on 31 st March of the financial year	0	0	0	-	-
Capital cost as on 31 st March of the financial year	58528.77	58964.84	60407.36	60407.36	60407.36

Stage-II

				(Rs	. in lakh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost as on 1 st April of the financial year	118416.52	118577.88	118949.46	119534.24	119534.24
Additional capitalization	161.36	371.58	584.78	-	-
Undischarged liabilities as on 31 st March of the financial year	0	0	0	-	-
Capital cost as on 31 st March of the financial year	118577.88	118949.46	119534.24	119534.24	119534.24

4. The annual fixed charges approved by the Commission by order dated4.6.2008 for the period 2004-09 are as under:

Stage-I

g	(Rs in lakh)				ıkh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	0	0	0	0	0
Depreciation	825	864	983	1098	1098
Advance Against Depreciation	0	0	0	0	0
Return on Equity	1903	1835	1841	1800	1646
Interest on Working Capital	1723	1737	1754	1775	1785
O & M Expenses	6552	6817	7088	7371	7667
TOTAL	11002	11252	11666	12043	12196

Stage-II

(Rs in lakh)					akh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	0	0	0	0	0
Depreciation	1189	1205	1237	1259	1259
Advance Against Depreciation	0	0	0	0	0
Return on Equity	4095	3965	3861	3728	3551
Interest on Working Capital	2393	2414	2438	2467	2486
O & M Expenses	8736	9089	9450	9828	10223
TOTAL	16413	16673	16985	17281	17519

5. By the said order the Commission also worked out the energy charges at

121.00 paise/kWh, based on the pooled lignite transfer price of Rs.977/MT.

6. The first respondent TNEB has filed its reply.

Additional Capitalization

7. Regulation 18 of the 2004 regulations provides for considering the additional

capital expenditure for tariff purposes as under:

"(1) The following capital expenditure with in the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;
- *(ii)* Works deferred for execution;

(iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17:

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court: and

(v) On account of change in law.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation.

(2) Subject to the provisions of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after cut off date may be admitted by the commission, subject to prudence check:

- (i) Deferred liabilities relating to works/services with in the original scope of work;
- (ii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (iii) On account of change in law;
- (iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost; and
- (v) Deferred works relating to ash pond or ash handling system in the original scope of work.

(3) Any expenditure on minor items/assets like normal tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, fans, coolers, TV, washing machine, heat-convectors, carpets, mattresses etc. brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

Note

The list of items is illustrative and not exhaustive.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut off date.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original project cost, except such items as are listed in clause (3) of this regulation.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original project cost.

8. The year-wise details of the additional capital expenditure claimed by the

petitioner as per the books of accounts and certified by the auditors are as follows:

	(Rs. in lakh)			
Year	2007-08	2008-09	Total	
Stage-I	252.23	335.48	587.71	
Stage-II	339.06	2489.22	2828.28	
Total	591.29	2824.7	3415.99	

9. The reconciliation of additional capital expenditure as per books of accounts

vis-a-vis the additional capital expenditure claimed for the purpose of tariff are as

under:

SI.No.	Particulars	2007	7-08	(Rs.in 2008-09		
		Stage-I	Stage-II	Stage-I	Stage-II	
(a)	Opening Gross Block	60561.71	119507.41	60800.81	119828.95	
(b)	Addition	255.54	343.46	341.81	2494.2	
(c)	Deletion	16.44	21.92	61.77	44.37	
(d)	Closing Gross Block (a+b-c)	60800.81	119828.95	61080.85	122278.78	
(e)	Direct assets Depreciation Withdrawal	13.13	17.52	55.44	39.39	
(f)	Additional Capital Expenditure Claimed (b- c+e)	252.23	339.06	335.48	2489.22	

10. The Commission vide letter dated 23.07.2009 directed the petitioner to furnish the detailed categorization and consolidation of amount for each asset with proper justification for additional expenditure incurred under different clauses of Regulation 18 of the 2004 regulations. The petitioner by its affidavit dated 17.8.2009 has submitted the categorization in accordance with Regulation 18 of the 2004 regulations and other additional information of additional expenditure.

11. The category-wise break-up of the additional expenditure claimed by petitioner is as follows:

	r				(Rs.	in lakh)
		2007-08			2008-09	
Category	Stage I	Stage II	Total	Stage I	Stage II	Total
Liabilities to meet award of	0	0	0	0	0.07	0.07
arbitration or for compliance of the						
order or decree of a court-18(2)(ii)						
On account of change in law- 18(2) (iii)	0	0	0	0	0	0
Additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost-18(2)(iv)	189.61	252.81	442.42	212.68	2397.29	2609.98
TOTAL	189.61	252.81	442.42	212.68	2397.36	2610.04
Direct Assets-Deletion	16.44	21.92	38.36	34.02	23.55	57.58
Direct Assets- Depreciation withdrawal	13.13	17.52	30.65	31.21	21.20	52.41
Net Common Services	65.93	90.65	156.58	125.61	94.21	219.82
Additional capital expenditure claimed	252.23	339.06	591.29	335.49	2489.21	2824.70

12. After examining the asset-wise details and justification of additional capital expenditure claimed by the petitioner under various categories and by applying prudence check, the admissibility of additional capitalization for the years 2007-08 and 2008-09 is discussed in the subsequent paragraphs

13. On prudence check, it is observed that the petitioner has claimed certain amounts under the head 'asset-depreciation withdrawal' on deleted assets. These amounts relate to the cumulative depreciation recovered on deleted assets which has been added to the gross value in the respective years to arrive at the net additions. As per practice, as soon as the value of un-serviceable assets is removed from the gross block, the depreciation recovered on un-serviceable assets is also deducted from cumulative depreciation recovered. Hence, the depreciation recovered on the un-serviceable assets has been taken out from the cumulative depreciation recovered to arrive at the opening net block in the respective year. The cumulative depreciation of assets deleted cannot be allowed to be capitalized as the assets de-capitalized formed part of the capital cost. However, the amount of cumulative depreciation of assets deleted has been deducted from the cumulative depreciation recovered, for the purpose of determination of tariff.

14. It is observed that the petitioner has claimed additional capital expenditure for the year 2007-08, stage-wise, based on the installed capacity of the generating station but for the year 2008-09, the petitioner has not furnished any information as to the methodology of allocation. As such, it has been decided to consider the stage-wise allocation of additional capital expenditure for the years 2007-08 and 2008-09 on the basis of installed capacity of the generating station for the purpose of tariff.

Liabilities to meet award of arbitration or for compliance of the order or decree of a court -Regulation 18 (2) (ii)

15. The petitioner has claimed an amount of Rs.0.07 lakh for the year 2008-09 in respect of Stage-II of the generating station under this category, towards installation of noise level meters in compliance with pollution control norms. As the expenditure

9

incurred is towards compliance with statutory norms, the same is allowed. It is observed that the petitioner has categorized the expenditure of Rs.0.07 lakh for the year 2007-08 under sub-clause (iv) of clause (2) of Regulation 18 of the 2004 regulations, in respect of balance payments made towards compensation for the displaced land owners in terms of the decision of the Lok Adalat. As the expenditure incurred is on account of an order of authority/court, the amount of Rs 0.07 lakh has been allowed under this head and excluded from the assets claimed under sub-clause (iv) of clause (2) of Regulation 18. The additional capital expenditure allowed stage-wise, based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	0.03	0.00
Stage-II	0.04	0.07
Total	0.07	0.07

On account of change in law -Regulation 18 (2) (iii)

16. Though the petitioner has not calmed any amount under this category, it is observed that the petitioner has claimed an amount of Rs.2.45 lakh for the year 2007-08 for construction of rest shed for workmen for ash handling operation as per TN Factories Rules, 1950 and Rs.2130.97 lakh for the year 2008-09 for installation of fly ash handling system as per MoEF Notification dated 14.9.2009. Since the above expenditure incurred is on account of changes in law, the same has been considered under this head and allowed. Accordingly, the said amounts have been excluded under sub-clause (iv) of clause (2) of Regulation 18. The additional capital

expenditure allowed stage-wise,	, based on installed capacity,	is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	1.05	913.27
Stage-II	1.40	1217.70
Total	2.45	2130.97

Expenditure on works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost -Regulation 18 (2) (iv)

17. The petitioner has claimed an amount of Rs.442.42 lakh (Rs.189.61 lakh for Stage-I and Rs.252.81 lakh for Stage-II) and Rs.2609.98 lakh (Rs.212.68 lakh for Stage-I and Rs.2397.29 lakh for Stage-II) for the years 2007-08 and 2008-09 respectively, under this category. Out of this claim, an amount of Rs.2.52 lakh (Rs.0.07 lakh + Rs.2.45 lakh) for the year 2007-08 and Rs.2130.97 lakh for the year 2008-09 has been allowed under the categories mentioned in paras 15 and 16 above. An expenditure of Rs.206.90 lakh and Rs.342.11 lakh for the years 2007-08 and 2008-09 respectively pertaining to replaced assets, have been considered under Note 2 below clause(2) of Regulation 18 and the said amounts excluded from this head. Similarly, the expenditure of Rs.3.77 lakh for the year 2007-08 for procurement of assets like printer, portable welding machine, atta kneading machine, LPG stove, domestic RO plant, bicycles and electronic weighing machine, etc utilized in the canteen/administrative building and Rs 4.30 lakh for the year 2008-09 for procurement of assets like air condition machine, refrigerator, tools and

tackles, poori machine, etc. has been disallowed in terms of clause (3) of Regulation 18, being minor assets. Also, the expenditure of Rs 9.50 lakh for the year 2007-08 on account of initial spares procured after the cut-off date and Rs 0.41 lakh for the year 2008-09 for enhancing aesthetic value has not been allowed. In view of the above, and after applying prudence check, an amount of Rs.133.04 lakh and Rs.132.18 lakh for the years 2007-08 and 2008-09 respectively, has been allowed. Accordingly, the additional capital expenditure allowed stage-wise, based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	57.02	56.65
Stage-II	76.02	75.53
Total	133.04	132.18

Expenditure on replaced assets -Regulation 18 (2) Note-2

18. As discussed above, the expenditure of Rs.206.90 lakh and Rs.342.11 lakh, during the year 2007-08 and 2008-09 for replacing old and unserviceable assets like breakers, transformers, filter machine, battery charger, etc has been allowed under this head. The date of commercial operation of stage-I and stage-II of the generating station is 23.4.1988 and 9.4.1994, respectively and the gross value of old assets replaced and the cumulative depreciation recovered has not been furnished by the petitioner. As such, the gross value of old assets replaced have been considered as 1/10th of the value of new replaced assets and the same has

been assumed to be depreciated by 90%. The gross value of the old assets replaced considered as assumed deletion, has been worked out as Rs. 20.69 lakh and Rs.34.21 lakh for the years 2007-08 and 2008-09 respectively. Also, the cumulative depreciation recovered against old assets replaced has been calculated as Rs.18.62 lakh and Rs.30.79 lakh for the years 2007-08 and 2008-09 respectively. Accordingly, the additional capital expenditure allocated stage-wise, based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	88.67	146.62
Stage-II	118.23	195.49
Total	206.90	342.11

19. The gross value of the old assets replaced, considered as assumed deletion, allowed stage-wise, based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	8.87	14.66
Stage-II	11.82	19.55
Total	20.69	34.21

20. The cumulative depreciation recovered against the old assets replaced, allowed stage-wise, based on installed capacity, is as under :

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	7.89	13.20
Stage-II	10.64	17.59
Total	18.62	30.79

Direct Assets deletion

21. The petitioner has de-capitalized an amount of Rs. 38.35 lakh and Rs.57.58 lakh for the years 2007-08 and 2008-09, respectively and the same is allowed. Accordingly, the additional capital expenditure allocated stage-wise, based on installed capacity, is as under:

	(Rs. in lakh)	
Year	2007-08	2008-09
Stage-I	16.44	24.68
Stage-II	21.92	32.90
Total	38.35	57.58

Direct Assets depreciation withdrawal on deleted assets

22. The petitioner has claimed Rs. 30.65 lakh and Rs.52.41 lakh for the years 2007-08 and 2008-09 respectively, under this head. As stated above, the 'depreciation withdrawal' on deleted assets have not been allowed to be capitalized. However, the amount of cumulative depreciation of assets deleted has been deducted from the cumulative depreciation recovered, for the purpose of tariff. As such, the additional capital expenditure disallowed under this head, allocated stagewise, based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	13.13	31.21
Stage-II	17.52	21.20
Total	30.65	52.41

Net common assets/services

23. The petitioner has claimed Rs.156.58 lakh and Rs.219.82 lakh for the years 2007-08 and 2008-09 respectively towards proportionate allocation of the expenditure incurred on common services. The petitioner has stated that it is integrated utility, consisting of production units of mines and power stations and in order to augment the production units, the service units like the centralized material management, services, township administration, corporate office, hospital and regional offices are functioning and the asset additions are apportioned to the service units.

24. Out of the expenditure of Rs.824.09 lakh incurred on Common assets for the year 2007-08, the expenditure of Rs.2.12 lakh for B.T.Roads, is in the nature of O&M expenses and hence not allowed. An amount of Rs.14.32 lakh for 'furniture and equipments, Rs.38.82 lakh for office equipments, Rs.19.55 lakh for 'assets costing less than Rs.5000' and Rs.58.55 lakh for depreciation withdrawal on deletion of Common assets has not been allowed, as the petitioner has not submitted asset-wise details. However, the petitioner is at liberty to approach the Commission in future along with asset-wise details which shall be considered as per law. As discussed above, the 'depreciation withdrawal' on deleted assets, amounting to Rs.58.55 lakh, has not been allowed to be capitalized. However, the amount of cumulative depreciation of assets deleted has been deducted from the

15

cumulative depreciation recovered, for the purpose of tariff. The same methodology has been considered in respect of the additional capital expenditure claim for the year 2008-09. The details of the additional capital expenditure claimed and allowed in respect of common assets is as under:

	Rs.in lakh	
DESCRITPION OF ASSET	CLAIMED	ALLOWED
BUILDINGS	107.09	107.09
B.T.ROADS,	2.12	0.00
PLANT AND MACHINERY	75.50	75.50
FURNITURE & EQUIPMENTS	14.32	0.00
ELECTRICAL INSTALLATION	360.62	360.62
WATER SUPPLY LINES	29.33	29.33
STORM WATER DRAINAGE	4.78	4.78
VEHICLES	79.78	79.78
OFFICE EQUIPMENT	13.79	0.00
LAB. EQUIPMENT	20.25	20.25
MEDICAL EQUIPMENT	52.57	52.57
FIRE FIGHTING EQUIPMENT	1.74	1.74
OFFICE EQUIPMENT	25.03	0.00
ASSET COSTING LESSTHAN Rs. 5000	19.55	0.00
APPLICATION SOFT WARE	32.93	32.93
Less : Deletion of Common Assets	73.84	73.84
Add: Depreciation withdrawal	58.55	0.00
NET VALUE OF COMMON ASSET ADDITIONS	824.09	690.73

Allocation of the Common assets for 2007-08		Rs in lakh	
TPS-I @ 12%	98.89	82.	89
TPS-I EXPANSION @ 3%	24.72	20.	72
TPS-II STAGE-I @ 8%	65.93	55.	26
TPS-II STAGE-II @ 11%	90.65	75.	98

Adjustment in Cumulative depreciation in respect of depreciation withdrawl on deletion of Common assets for 2007-08

	(Rs in lakh)
Allocation/year	2007-08
TPS I @ 12%	7.03
TPS I Expansion@ 3%	1.76
TPS II STAGE I @ 8%	4.68
TPS II STAGE II @ 11%	6.44

Allocation of admitted Common asset addition during the year 2008-09:

	Rs.in lakh	
DESCRITPTION OF ASSETS	CLAIMED	ALLOWED
BUILDINGS	110.86	110.86
B.T.ROADS	50.61	0.00
PLANT AND MACHINERY	309.94	309.94
FURNITURE & EQUIPMENTS	349.28	0.00
ELECTRICAL INSTALLATION	52.17	52.17
WATER SUPPLY LINES	1.13	1.13
FIRE FIGHTING EQUIPMENT	3.90	3.90
OFFICE EQUIPMENT	140.73	0.00
LAB. EQUIPMENT	24.68	24.68
MEDICAL EQUIPMENT	81.66	81.66
EQUIPMENT EDUCATION	0.70	0.70
FIRE FIGHTING EQUIPMENT	32.75	32.75
FIXED ASSETS MISC	3.73	3.73
Less : Deletion of Common assets	249.78	249.78
Add: Depreciation withdrawal	218.19	0.00
NET VALUE OF COMMON ASSET ADDITIONS	1130.55	371.74

Allocation of admitted Common assets during the year 2008-09:

	(Rs in lakh)	
ALLOCATION	Claimed	Allowed
TPS I @ 12.4341%	140.57	46.22
TPS I EXPN @ 3.2969%	37.27	12.26
TPS II STAGE I @ 11.1108%	125.61	41.30
TPS II STAGE II @ 8.3331%	94.21	30.98

Adjustment in Cumulative depreciation in respect of depreciation withdrawal on deletion of Common assets for 2008-09

ALLOCATION	(Rs in lakh)
TPS I @ 12.4341%	27.13
TPS I Expansion @ 3.2969%	7.19
TPS II STAGE I @ 11.1108%	24.24
TPS II STAGE II @ 8.3331%	18.18

25. As such, the additional capital expenditure allowed under common assets,

after allocation stage-wise based on installed capacity, is as under:

		(Rs. in lakh)
Year	2007-08	2008-09
Stage-I	55.26	41.30
Stage-II	75.98	30.98
Total	131.24	72.28

Additional capital expenditure before un-discharged liabilities

26. Based on the above discussion, the additional capital expenditure, before

adjustment of un-discharged liabilities, claimed and allowed is as under:

2007-08

	2007-00					(Rs.in lakh)	
			CLAIMED			ALLOWE	D
SI.	Category	Stage I	Stage I Stage II Total S		Stage I	Stage II	Total
1	Addition						
	18(2)(ii)				0.03	0.04	0.07
	18(2)(iii)				1.05	1.40	2.45
	18(2)(iv)	189.61	252.81	442.42	57.02	76.02	133.04
	18(2) & Note 2				88.67	118.23	206.90
	TOTAL	189.61	252.81	442.42	146.77	195.70	342.47
2	Direct Assets-Deletion	16.44	21.92	38.36	16.44	21.92	38.35
3	Assumed Deletion				8.87	11.82	20.69
4	Direct Assets- Depreciation withdrawal	13.13	17.52	30.65	0.00	0.00	0.00
5	Net Common services	65.93	90.65	156.58	55.26	75.98	131.24
6	Total additional capital expenditure claimed / allowed before undischarged liability. (1-2-3+4+5)	252.23	339.06	591.29	176.73	237.94	414.66

2008-09

						(Rs.in lakh)	
		CLAIME	D		ALLOWED		
SI.	Category	Stage I	Stage II	Total	Stage I	Stage II	Total
1	Addition						
	18(2)(ii)		0.07	0.07		0.07	0.07
	18(2)(iii)				913.27	1217.70	2130.97
	18(2)(iv)	212.68	2397.29	2609.98	56.65	75.53	132.18
	18(2) & Note 2				146.62	195.49	342.11
	TOTAL	212.68	2397.36	2610.04	1116.54	1488.79	2605.34
2	Direct Assets-Deletion	34.02	23.55	57.58	24.68	32.90	57.58
3	Assumed Deletion				14.66	19.55	34.21
4	Direct Assets-	31.21	21.20	52.41	0.00	0.00	0.00
	Depreciation withdrawl						
5	Net Common services	125.61	94.21	219.82	41.30	30.98	72.28
6	Total additional capital	335.49	2489.21	2824.70	1118.51	1467.32	2585.83
	expenditure claimed /						
	allowed before						
	undischarged liability						

19

(1-2-3-1-5)			
(1-2-3+4+5)			

Undischarged liabilities

27. The petitioner has submitted vide affidavit dated 27.6.2009 that the additional capitalization claimed during the years 2007-08 and 2008-09 have actually been paid in the same year and hence do not include any undischarged liability.

Capital Cost

28. Based on the discussions in foregoing paragraphs, the capital cost considered for the year 2007-2009, is as under:

Stage-I

(Rs. in lakh)

SI.	Particulars	2007-08	2008-09
1	Opening Capital cost as on 1 st April of the financial year	60407.72	60584.45
2	Additional capitalization allowed	176.73	1118.51
3	Capital cost as on 31 st March of the financial year	60584.45	61702.96

Stage-II

(Rs. in lakh)

SI.	Particulars		2007-08	2008-09
1	Opening Capital cost as on 1 st			
	April of the financial year		119534.24	119772.18
2	Additional allowed	capitalization	237.94	1467.32

3	Capital cost as on 31 st March		
	of the financial year	119772.18	121239.50

Debt-Equity Ratio

29. Regulation 20 of the 2004 regulations, provides as under:

(1) In case of the existing generating stations, debt-equity ratio considered by the Commission for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 1.4.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing generating stations where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 18, equity in the additional capitalization to be considered shall be,-(a) 30% of the additional capital expenditure admitted by the Commission; or (b) equity approved by the competent authority in the financial package, for additional capitalization; or (c) actual equity employed, Whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

(2) In case of the generating stations for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:

Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff: Provided further that the Commission may in appropriate cases consider equity higher than 30% for determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public.

(3) In case of the generating stations for which investment approval is accorded on or after 1.4.2004, debt and equity in the ratio of 70:30 shall be considered for determination of tariff:

Provided that where equity actually employed is more than 30%, equity in excess of 30% shall be treated as notional loan:

Provided further that where deployment of equity is less than 30%, the actual debt and equity shall be considered for determination of tariff.

(4) The debt and equity amount arrived at in accordance with above clause (1), (2) or (3), as the case may be, shall be used for calculation of interest on loan, return on equity,

advance against depreciation and foreign exchange rate variation."

30. The Commission has adopted NFA method in case of the generating stations of the petitoner. As such, actual source of funding has been considered for calculating debt-equity ratio as on the date of commercial operation. Further, debt-equity ratio loses its relevance once the repayment is allowed on actual basis. Regulation 18 of the 2004 regulations applies to the cases where tariff is determined by following Gross Fixed Assets approach. The petitioner has submitted that the entire additional expenditure incurred has been funded out of equity. Accordingly, 100% equity has been considered for funding the additional capitalization.

Return on Equity

31. Clause (iii) of Regulation 21 of the 2004 regulations, stipulates that Return on equity shall be computed on the equity base determined in accordance with regulation 20 @ 14% per annum. It is provided that equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

32. Accordingly, the return on equity has been worked out @14% per annum on the normative average equity, as under:

22

Stage-I

	(Rs in lakh)		
Equity	2007-08	2008-09	
Opening Balance	13403	12495	
Closing Balance	12495	12449	
Average	12949	12472	
Rate of Return on Equity	14%	14%	
Return on Equity	1813	1746	

Stage-II

(Rs in lak		(Rs in lakh)
Equity	2007-08	2008-09
Opening Balance	27255	26260
Closing Balance	26260	26444
Average	26758	26352
Rate of Return on Equity	14%	14%
Return on Equity	3746	3689

Depreciation

33. Sub-clause (a) of clause (ii) of Regulation 21 of the 2004 regulations stipulates that for the purpose of tariff, depreciation shall be computed in the following manner, namely:

(i) The value base for the purpose of depreciation shall be the historical cost of the asset.

(ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations.

The residual life of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalization on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission. (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

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

34. As per order dated 4.6.2008 in Petition No.118/2007 for the tariff period 2004-09, the cumulative depreciation of Rs.47005.51 lakh and Rs.92279.75 lakh for Stage-I and Stage-II, respectively, recovered in tariff up to 31.3.2007, has been considered. As the loans in respect of the generating station have been fully repaid in 2000-01, the balance depreciation to be recovered has been spread over the balance useful life of the generating station. The balance useful life has been taken as 6 years for Stage-I and 12 years for Stage-II as on 1.4.2007, considering useful life of 25 years from the date of commercial operation of the respective stage of the generating station. Further, cost of land additions in the additional capitalization and the cumulative depreciation on deleted assets in the respective period have been considered for calculation of depreciation. Cumulative depreciation on deleted assets during the year has been deducted from the cumulative depreciation recovered in the respective period. The necessary details are given hereunder:

(a) Cost of Land

			(Rs in lakh)				
Additio	As on 1 st Apri the financ year						
Period	Stage-I	Stage-II	Stage-I	Stage-II			
2007-08	0	0	862.68	218.41			
Additions during 2007-08	0.03	0.04	862.71	218.45			
Additions during 2008-09	0	0	862.71	218.45			

(b) Cumulative depreciation on deleted assets

		(Rs in lakh)				
	Period	2	2007-08		008-09	
		Stage I	Stage II	Stage I	Stage II	
1	Depreciation withdrawl – Direct assets	13.13	17.52	31.21	21.20	
2	Depreciation withdrawl – Common assets	4.68	6.44	24.24	18.18	
3	Depreciation withdrawl – Assumed deletion	7.98	10.64	13.20	17.59	
	TOTAL(1+2+3)	25.79	34.60	68.65	56.97	

35. The depreciation to be recovered each year from 1.4.2007 for the generating

station is as under:

Stage-I

(Rs in lakh)			
Year	2007-08	2008-09	
Remaining asset life as on 1st April of the financial year	6	5	
Depreciation value @ 90%	53670	54253	
Cumulative Depreciation recovered up to the financial year	47005	48090	
Balance Depreciation to be recovered	6666	6163	

I	Depreciation recovered in tariff	1111	1233	
			1255	

Stage-II

	(Rs in la	ikh)
Year	2007-08	2008-09
Remaining asset life as on 1st April of the financial year	12	11
Depreciation value @ 90%	107491	108259
Cumulative Depreciation recovered up to the financial year	92279	93512
Balance Depreciation to be recovered	15213	14747
Depreciation recovered in tariff	1268	1341

Advance Against Depreciation

36. Sub-clause (b) of clause (ii) of Regulation 21 of the 2004 regulations stipulates that for the purpose of tariff, depreciation shall be computed in the following manner, namely:

"In addition to allowable depreciation, the generating company shall be entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 21 (i) subject to a ceiling of 1/10th of loan amount as per regulation 20 minus depreciation as per schedule.

Provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year;

Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year".

37. Since loan has been fully repaid, the petitioner is not entitled to Advance

Against Depreciation.

O&M Expenses

38. O&M expenses as considered in order dated 4.6.2008 have been considered.

Interest on Working Capital

39. For the purpose of calculation of working capital, the operating parameters including the price of fuel components considered in the order dated 4.6.2008 has been kept unaltered. However, the amount of receivables has been recalculated. The necessary revised calculations of interest on working capital are as under:

Stage-I:

			(Rs. in lakh)
	Particulars	2007-08	2008-09
1	Lignite Stock for 1 1/2 month (MT)	5466	5451
2	Oil stock for 2 month (KL)	245	244
3	O & M expenses for 1 month	614	639
4	Spares	1450	1537
5	Receivables- 2 months	9545	9585
6	Total working capital	17320	17456
7	Rate of Interest	10.25%	10.25%
8	Total Interest on Working Capital	1775	1789

Stage-II:

			(Rs. in lakh)
	Particulars	2007-08	2008-09
1	Lignite Stock for 1 1/2 month (MT)	7288	7268
2	Oil stock for 2 month (KL)	327	326

3	O & M expenses for 1 month	819	852
4	Spares	2706	2868
5	Receivables- 2 months	12929	12974
6	Total working capital	24069	24288
7	Rate of Interest	10.25%	10.25%
8	Total Interest on Working Capital	2467	2490

Annual Fixed Charges

40. The revised annual fixed charges on the above basis in respect of the generating station for the period from 1.4.2007 to 31.3.2009 are summarized as under:

Stage-I:

			(Rs. in lakh)
	Particulars	2007-08	2008-09
1	Interest on Loan	0	0
2	Interest on Working Capital	1775	1789
3	Depreciation	1111	1233
4	Advance Against Depreciation	0	0
5	Return on Equity	1813	1746
6	O & M Expenses	7371	7667
	TOTAL	12070	12435

Stage-II:

			(Rs. in lakh)
	Particulars	2007-08	2008-09
1	Interest on Loan	0	0
2	Interest on Working Capital	2467	2490
3	Depreciation	1268	1341
4	Advance Against Depreciation	0	0
5	Return on Equity	3746	3689
6	O & M Expenses	9828	10223
	TOTAL	17309	17742

Target Availability

41. As stated in the order dated 4.6.2008, target availability of 75% has been

considered for recovery of full fixed charges and computation of fuel element in the working capital.

Energy/Variable Charge

42. The petitioner has not claimed any change in the energy charges on account of additional capital expenditure. Hence, the energy charges as allowed in order dated 4.6.2008 in Petition No. 118/2007 remain unaltered.

43. The petitioner shall claim the difference between the fixed charges approved vide order dated 4.6.2008 in Petition No. 118/2007 and those approved now, to the beneficiaries in three equal monthly installments.

44. Petition No.11/2009 stands disposed of in terms of the above.

Sd/- Sd/-(V.S.VERMA) (R.KRISHNAMOORTHY) MEMBER MEMBER

Sd/-(DR.PRAMOD DEO) CHAIRPERSON

New Delhi dated the 30th December, 2009