CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 332/2010

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A. K. Singhal, Member Shri A. S. Bakshi, Member Dr. M. K. Iyer, Member

Date of Order : 03.09.2015

In the matter of:

Revision of the Commission's order dated 21.2.2014 in Petition No. 332/2010 in the light of the judgment of the Appellate Tribunal for Electricity dated 5.5.2015 in Appeal No. 129 of 2014

And in the matter of:

Power Grid Corporation of India Limited "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

.....Petitioner

Vs

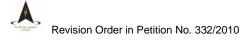
- 1. Karnataka Power Transmission Corporation Ltd. (KPTCL), Kaveri Bhawan, Bangalore-560 009
- Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO), Vidyut Soudha, Hyderabad-500 082
- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695 004
- 4. Tamilnadu Electricity Board (TNEB) NPKRR Maaligai, 800, Anna Salai, Chennai-600 002
- 5. Electricity Department Government of Goa



Vidyuti Bhawan, Panji, Goa-403001

- 6. Electricity Department, Government of Pondicherry, Pondicherry-605 001
- Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL), APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh
- Southern Power Distribution Company of Andhra Pradesh Ltd. (APSPDCL), Tirupati-517 501
- Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL), Corporate Office, Mint Compound, Hyderabad-500 063
- Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL), Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal-506 004
- Bangalore Electricity Supply Company Ltd. (BESCOM), Corporate Office, K. R. Circle, Bangalore-560 001
- 12. Gulbarga Electricity Supply Company Ltd. (GESCOM), Station Main Road, Gulbarga. Karnataka
- 13. Hubli Electricity Supply Company Ltd. (HESCOM), Navanagar, PB Road, Hubli, Karnataka
- 14. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore-575 001
- Chamundeswari Electricity Supply Corporation Ltd. (CESC), # 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore-570 009
 Respondents

2-1-2-1-0-1-0



<u>ORDER</u>

This order is being issued in compliance of the judgment of the Appellate Tribunal for Electricity dated 5.5.2015 in Appeal No. 129 of 2014.

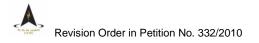
Background of the case

2. The petitioner, Power Grid Corporation of India Limited (PGCIL), filed Petition No. 332/2010, seeking transmission tariff for (i) combined assets of LILO of Ramagundum-Khammam transmission line at Warangal Sub-station, Nevveli-Pugalur-Madurai 400 kV DC transmission line, Udumalpet-Arasur 400 kV D/C line alongwith 400/220 kV Sub-station at Arasur and associated bays at Udumalpet, and LILO of Neyveli-Sriperumbudur 400 kV S/C line at Pondicherry Sub-station with associated bays for the period from 1.8.2010 to 30.9.2010, (ii) combined assets of LILO of Ramagundum-Khammam transmission line at Warangal Substation, Neyveli-Pugalur-Madurai 400 kV D/C transmission line, Udumalpet-Arasur 400 kV D/C line alongwith 400/220 kV substation at Arasur and associated bays at Udumalpet, LILO of Neyveli-Sriperumbudur 400 kV S/C line at Pondicherry Sub-station with associated bays and 2 Nos. of 50 MVAR line reactors at Pugalur 400/220 kV Sub-station alongwith associated bays at Pugalur for the period from 1.10.2010 to 31.3.2014, (iii) combined assets of 2x315 MVA auto transformer and 400/220 kV bays equipment at Pugalur Sub-station and 2 Nos. 315 MVA ICTs alongwith associated bays and 220 kV downstream equipment at Arasur 400/220 kV Sub-station for the period from 1.8.2010 to 31.3.2014, and (iv) 2 Nos. of 400/230 kV 315 MVA ICTs alongwith associated bays and downstream equipment at 400/230 kV Puducherry Sub-station for the period from DOCO to 31.3.2014 under "Transmission system associated with Neyveli Lignite Corporation-II (NLC-II) Expansion Project" in Southern Region for 2009-14 period, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 Tariff Regulations").

3. The following assets have been commissioned under "Transmission System associated with NLC-II Expansion Project":-

SI. No.	Name of the assets	Actual DOCO	Reference
1	LILO of Ramagundum-Khammam Transmission Line at Warangal S/S	1.8.2009	Covered
2	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal sub-station	1.8.2009	under Petition
3	Neyveli- Pugalur- Madurai 400 kV D/C Transmission Line	1.9.2009	No.
4	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station	1.9.2009	136/2010
5	Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet and LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays.	1.8.2010	
6	315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station	1.8.2010	Covered under
7	315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1.9.2010	instant petition
8	2 Nos.315 MVA ICT's along with associated bays and 220 kV downstream equipment at Puducherry 400/220 kV sub-station	1.10.2010	
9	2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV sub- station along with associated bays at Pugalur sub-station	1.10.2010	

4. The transmission tariff in respect of Assets 1 to 4 was allowed by the Commission vide order dated 11.1.2012 in Petition No. 136/2010, and was revised vide order dated 10.2.2014. Transmission tariff of Assets 5 to 9 were allowed vide order dated 21.2.2014 in Petition No.332/2010.



5. In its order dated 21.2.2014 in Petition No.332/2010, the Commission disallowed Interest During Construction (IDC) amounting to ₹948.20 lakh and Incidental Expenses During Construction (IEDC) amounting to ₹647.60 lakh on the ground that the petitioner failed to submit proper explanation for the delay in executing the associated transmission assets. The relevant portion of the order is extracted below:-

"16. 2 nos. 50 MVAR line reactors at Pugalur 400/220 kV sub-station along with associated bays at Pugalur sub-station were put under commercial operation on 1.10.2010. However, 400 kV D/C Neyveli-Pugalur-Madurai Transmission Line as well as 2 nos. 315 MVA Auto Transformer and 400/220 kV bays equipment at Pugalur sub-station were put under commercial operation on 1.9.2009. Thus, there is 33 months' delay in the commissioning of 2 nos. of 50 MVAR line reactors at Pugalur 400/220 kV sub-station. The petitioner has submitted, vide affidavit dated 27.5.2011, that the switchable line reactors could not be commissioned along with the main Pugalur sub-station due to the manufacturing defects observed in the reactors during commissioning checks. Subsequently, the reactors were sent back to manufacturing works in December, 2009 and the same were received at site in August, 2010 upon completion of all the checks at factory. After completion of erection works, the reactors were commissioned in September, 2010 and put into commercial operation on 1.10.2010.

17. We are of the opinion that the delay in the commissioning of two reactors is a bilateral issue between the petitioner and the supplier and the petitioner is at liberty to claim liquidated damages from the supplier of the reactors. We are, therefore, not inclined to condone the delay of 33 months. Proportionate deductions are accordingly made in IDC and IEDC. Accordingly, the petitioner may also claim IDC and IEDC for 13 months' delay, from NLC In case the liquidated damages received from supplier is more than the actual IDC and IEDC, the excess shall be reimbursed to the beneficiaries.

18. In Udumalpet- Arasur 400 kV D/C line along with 400/220 kV sub-station at Arasur and 2 Nos. of 315 MVA ICTs at Arasur sub-station, the 400 kV D/C Udumalpet-Arasur line along with associated bays was commissioned on 1.8.2010, after a delay of 31 months. The petitioner has attributed the delay to litigations with land owner. The petitioner has submitted vide affidavit dated 8.4.2013 that a land owner in Coimbatur district challenged the construction of the transmission line tower by the petitioner. The District Magistrate, Coimbatur, passed an order dated 9.5.2007 overruling the objections of the land owner and directed the petitioner to proceed with the construction of the transmission line. The said order was challenged by the land owner before Madras High Court in Writ Petition No. 19676 of 2007. Vide order dated 4.4.2008, the Madras High Court directed the authority to examine further if any Porambok land is available for erecting the tower. Further, vide order dated 12.6.2009 in ROC No. 25311/2007/C3, the District Magistrate rejected the objections of land owner. However, vide writ Petition 11070/ 2009 the above order of District



Magistrate was challenged by the land owner and vide order dated 16.12.2009, stay was granted on the District Magistrate order dated 12.6.2009. High court of Madras finally dismissed the writ petition filed by land owner vide its order dated 22.6.2010 in Writ Petition No. 6353/2010. The petitioner has also enclosed copy of judgement dated 22.6.2010 in WP No, 6353 of 2010 of Madras High Court.

19. Based on the above, we hold that there is justification for condoning the delay of 22 months for construction of Udumalpet- Arasur 400 kV D/C line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet, and also for condoning delay in respect of 2 nos. 315 MVA ICTs along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station because, before the execution of transmission line, ICTs cannot be charged at Arasur sub-station which is a new sub-station and the ICTs were to be charged along with transmission line.

20. As regards 31 months delay in the commissioning of LILO of Neyveli-Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays and 2 Nos. 315 MVA ICTs and 220 kV downstream equipment at Puducherry 400/220 kV sub-station, no justification has been submitted by the petitioner and we, therefore, do not condone the delay".

6. Aggrieved by the said order, the petitioner has filed an appeal i.e. Appeal

No. 129 of 2014 before the Appellate Tribunal for Electricity ("the Tribunal"). The

Tribunal in its judgment dated 5.5.2015 partly allowed the appeal. The Tribunal

condoned the total time over-run in case of Assets 5(a), 6 and 7 and directed to

allow IDC and IEDC and upheld the Commission's order disallowing the time

over-run in respect of Asset 5(b), 8 and 9. The relevant extract of the Tribunal's

judgment is as follows:-

"20.2 The learned Central Commission has not erred in disallowing the time over-run in respect of Assets 5(d), 8 and 9 for the reasons covered by us above while discussing and concluding Issue No.2. Therefore, Issue No.2 is decided against the appellant.

21. In view of the above discussions, the instant Appeal is partly allowed with regard to issue No.1 and the impugned order is accordingly set aside to the extent mentioned above. We hereby condone the total delay of 31/32 months in the commissioning of the Assets 5(C), 6 and 7 as claimed by the Appellant Petitioner. The Central Commission is accordingly directed to condone the balance total delay of 9/10 months pertaining to assets 5(C), 6 and 7. We direct the Central Commission to condone the delay and allow IDC and IEDC to the Appellant Petitioner accordingly. The Central Commission is directed to pass consequential orders within 03 months from the date of receipt of the copy of this judgment."

7. As per the directions of the Tribunal, the time over-run in case of Assets

5(a), 6 and 7 are condoned and IDC and IEDC are allowed. Accordingly, the



annual transmission charges from COD to 31.3.2014 have been revised in case of Assets 5(a), 6 and 7 by considering revised IDC and IEDC. The details of the assets for which tariff was determined in the order dated 21.2.2014, together with the period for which the tariff determined was applicable is given hereunder:-

Assets	Name of the assets	DOCO /Notional DOCO	Tariff Applicable Period
Combined Asset–A (Asset-1,3 &5)	Asset-1: LILO of Ramagundum-Khammam Transmission Line at Warangal S/S Asset-3: Neyveli- Pugalur- Madurai 400 kV D/C Transmission Line & Asset-5: Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet and LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays.	1.8.2010	1.8.2010 to 30.9.2010
Combined Asset-B (Asset- 1,3,5&9)	Asset-1: LILO of Ramagundum-Khammam Transmission Line at Warangal S/S Asset-3: Neyveli- Pugalur- Madurai 400 kV D/C Transmission Line & Asset-5: Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet and LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays. Asset-9: 2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV sub-station along with associated bays at Pugalur sub-station	1.10.2010	1.10.2010 to 31.3.2014
Combined Asset-C (Asset-4&6)	Asset-4: 2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station Asset-6: 315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station	1.8.2010	1.8.2010 to 31.8.2010
Combined Asset–D (Asset- 4,6&7)	Asset-4: 2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station Asset-6: 315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station Asset-7: 315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1.9.2010	1.9.2010 to 31.3.2014
Asset-8) (Single Asset)	Asset-8: 2 Nos.315 MVA ICT's along with associated bays and 220 kV downstream equipment at Puducherry 400/220 kV sub-station	1.10.2010	1.10.2010 to 31.3.2014

8. The details of time over-run and the time over-run condoned in the case of

instant assets are as follows:-



Asset No.	Name of the assets	Actual DOCO	Delay (in months)	Delay condoned (in months)	Delay not condoned (in months)
5	(a) Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet	1.8.2010	31	31	-
	(b) LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays	1.8.2010	31	-	31
6	315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub- station		31	31	-
7	315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1.9.2010	32	32	-
8	2 Nos.315 MVA ICT's along with associated bays and 220 kV downstream equipment at Puducherry 400/220 kV sub-station	1.10.2010	33	-	33
9	2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV sub-station along with associated bays at Pugalur sub-station	1.10.2010	33	-	33

Treatment for IEDC & IDC

9. Details of disallowed IDC and IEDC are as follows:-



Asset 5

ASSELD					
					(₹ in lakh)
Particulars	whole (As per CA Certificate dated 18.8.2010)		IEDC & proportion Equipmen Form-5(c), Asset-5(b) LILO of Sriperrum 400 kV S/0 Pondicher	n of t Cost in for i.e. Neyveli- budur C line at	
	IEDC	IDC	IEDC	IDC	
From Date of Investment Approval to 31.3.2010 (63	1174.01	1433.26	321.47	392.46	
Months)					
From 1.4.2010-31.7.2010 (4 Months)	126.80	240.96	34.72	65.98	
Total IDC and IEDC Claimed (67 months)	1300.81	1674.22	356.20	458.44	Total IEDC &
Detail of IDC Disallowed [As	per ATE Ord	der dated	For 31 m	nonths	IDC
5.5.2015]				disallowed for	
27 months for Asset-5b			137.77	168.20	the Asset-5 as
4 months for Asset-5b			34.72	65.98	a whole.
Total	Disallowed ID	DC & IEDC	172.50	234.18	406.68

Asset-8

(₹ in lakh)

Detail of IDC and IEDC as per CA Certificate dated 18.8.2010						
	IEDC	IDC	Total			
From Date of Investment Approval to 31.3.2010 (For 63 Months)	332.84	406.34	739.18			
From 1.4.2010-30.9.2010 (For 6 Months)	45.46	102.29	147.75			
Total IDC and IEDC Claimed (For 69 Months)	378.30	508.63	886.93			
Detail of IEDC and IDC Disallowed for 33	months					
From January' 2008 to March' 2010 (for 27 months)	142.65	174.15	316.79			
From April' 2010 to September' 2010 (for 6 months)	45.46	102.29	147.75			
Total Disallowed IDC (for 33 months)	188.11	276.44	464.54			



Asset-9:

(₹ in lakh)

Detail of IDC and IEDC as per CA Certificate dated 18.8.2010						
	IEDC	IDC	Total			
From Date of Investment Approval to 31.3.2010 (For 63 months)	153.44	187.32	340.76			
From 1.4.2010-30.9.2010 (For 6 months)	20.96	47.15	68.11			
Total IDC and IEDC Claimed (For 69 months)	174.40	234.47	408.87			
Detail of IDC Disallowed for 33 mon	ths					
From February '2009 to March' 2010 (For 27 months)	65.76	80.28	146.04			
From April' 2010 to September' 2010 (For 6 months)	20.96	47.15	68.11			
Total Disallowed IDC (For 33 months)	86.72	127.43	214.15			

For Assets 5(a), 6 and 7 as total time-over run has been condoned, there is no disallowed IDC and IEDC.

Treatment for Initial Spares

10. The petitioner has commissioned all the elements under the transmission system. In order to verify the expenditure against initial spares, the initial spares for the assets covered in Petition No. 136/2010 have also been considered along with the instant assets. For working out the initial spares, the respective allowable expenditures corresponding to transmission lines and sub-stations have been added up and thereafter the worked out spares cost has been compared with the claim. Sub-station spares include the expenditure against land, building, civil works and PLCC.

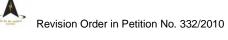
11. The initial spares claimed by the petitioner for transmission lines and substations fall within the limits specified in the 2009 Tariff Regulations, hence no adjustment of initial spares is required. The initial spares for the project are given overleaf:-

					(₹ in lakh)
Particulars	Cost as on cut-off date	Initial Spares claimed	Ceiling Limit as per clause 8	work out	Excess/ Shortfall
Transmission Line	51781.57	323.09	0.75%	388.85	-65.76
Sub-Station	36127.86	823.59	2.50%	905.24	-81.65

Capital cost

12. The revised capital cost as on the date of commercial operations is given hereunder:-

						(₹ in lakh)
Asset	Claimed	IEDC &	Capital Cost	Expendi	Capital	Petition
	Capital	IDC,	after	ture	Cost	reference
	Cost as	Disallowe	disallowing	during	considere	
	on DOCO	d, if any	IEDC/IDC as	2009-10	d as on DOCO	
	(a)	(b)	on DOCO (c)=(a)-(b)	(d)	(e)=(c)+(d)	(f)
Asset-1	3900.21	- (0)	3900.21	315.09		Order dated
(1.8.2009)	0000.21		0000.21	010.00		11.1.2012 in
(Petition No.
						136/2010
Asset-3	44292.80	1289.60	43,003.20	1957.95		Order dated
(1.9.2009)						11.1.2012 in
						Petition No.
						136/2010
Assets-5	17474.91	406.68	17068.23	-		Current
(1.8.2010)						petition
Combined Asset–A	65667.92	1696.28	63971.64	2273.04	66244.68	Clubbed
(Asset-1,3&5)						
(Notional						
DOCO						
:1.8.2010)						
Asset-9	1247.69	214.15	1033.54	-		Current
(1.10.2010)						petition
Combined	66915.61	1910.43	65005.18	2273.04	67278.22	Clubbed
Asset-B						
(Asset- 1,3,5&9)						
(Notional						
DOCO						
:1.10.2010)						
Asset-4	4246.81	160.61	4086.20	241.85		136/2010
(1 <u>.9.2009)</u>						



Asset-6 (1.8.2010)	1894.63	0.00	1894.63	-		Current petition
Combined Asset-C (Asset-4&6) (Notional DOCO :1.8.2010)	6141.44	160.61	5980.83	241.85	6222.68	Clubbed
Asset-7 (1.9.2010)	1925.92	0.00	1925.92	-		Current Petition
Combined Asset–D (Asset-4,6&7) (Notional DOCO: 1.9.2010)	8067.36	160.61	7906.75	241.85	8148.60	Clubbed
Asset-8 (1.10.2010)	4802.87	464.54	4338.33	-	4338.33	Current petition

13. In case of Assets 1 and 5, the expenditure as on 31.3.2010 has been considered for expenditure as on COD and entire additional capital expenditure has been considered after COD of these assets. This has been done because of non-availability of segregated additional capital expenditure figures during 2010-11. We direct the petitioner to furnish details of segregated additional capital expenditure during the year 2010-11 at the time of truing up.

Additional capital expenditure

14. Details of the additional capital expenditure claimed by the petitioner are as under:-

				(₹ in lakh)
Particulars	Additional Capital Expenditure			
	2010-11	2011-12	2012-13	2013-14
Combined Asset–A (Asset-1,3&5) (Notional COD:1.8.2010)	2489.75	325.10	0.00	0.00
Combined Asset-B (Asset-1,3,5&9)	2628.85	345.10	0.00	0.00
(Notional COD :1.10.2010)				
Combined Asset-C (Asset-4&6) (Notional COD :1.8.2010)	83.33	170.26	0.00	0.00
Combined Asset–D (Asset-4,6&7) (Notional COD: 1.9.2010)	83.33	311.37	15.00	0.00
Asset-8 (1.10.2010)	65.04	10.00	0.00	0.00

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The additional capital expenditure claimed for the above assets falls within the cut-

off date. Hence, the same has been considered for the purpose of tariff calculation.

Debt- Equity ratio

15. Details of revised opening debt-equity of assets considered for the purpose

of tariff calculation as on the date of commercial operation are given hereunder:-

Combined Asset–A (Asset-1,3&5)	Amount	%
(Notional DOCO: 1.8.2010)		
Debt	46372.61	70.00
Equity	19872.07	30.00
Total	66244.68	100.00
Combined Asset-B (Asset-	Amount	%
1,3,5&9) (Notional DOCO: 1.10.2010)		
Debt	47096.11	70.00
Equity	20182.12	30.00
Total	67278.22	100.00
Combined Asset-C (Asset-4&6) (Notional DOCO :1.8.2010)	Amount	%
Debt	4355.88	70.00
Equity	1866.80	30.00
Total	6222.68	100.00
Combined Asset–D (Asset-4,6&7)	Amount	%
(Notional DOCO: 1.9.2010)		
Debt	5704.02	70.00
Equity	2444.58	30.00
Total	8148.60	100.00
Asset-8 (1.10.2010)	Amount	%
Debt	3036.85	70.00
Equity	1301.48	30.00
Total	4338.33	100.00

(₹ in lakh)

16. Details of revised debt-equity of the assets as on 31.3.2014 are given overleaf:-



	(₹ in lakh)			
Combined Asset–A (Asset-1,3&5) (Notional COD:1.8.2010)	Amount	%		
Debt	48343.01	70.00		
Equity	20716.52	30.00		
Total	69059.53	100.00		
Combined Asset-B (Asset-1,3,5&9) (Notional COD: 1.10.2010)	Amount	%		
Debt	49177.87	70.00		
Equity	21074.30	30.00		
Total	70252.17	100.00		
Combined Asset-C (Asset-4&6) (Notional COD :1.8.2010)	Amount	%		
Debt	4533.39	70.00		
Equity	1942.88	30.00		
Total	6476.27	100.00		
Combined Asset–D (Asset-4,6&7) (Notional COD: 1.9.2010)	Amount	%		
Debt	5990.81	70.00		
Equity	2567.49	30.00		
Total	8558.30	100.00		
Asset-8 (1.10.2010)	Amount	%		
Debt	3089.38	70.00		
Equity	1323.99	30.00		
Total	4413.37	100.00		

Return on Equity (RoE)

17. The revised return on equity in respect of transmission assets is as per

details given overleaf:-

				(₹	t in lakh)		
Particulars	Combined Asset-A	Combined Asset-B					
	2010-11 (pro-rata)	2010-11	2011-12	2012-13	2013-14		
Opening Equity	19872.07	20182.12	20970.77	21074.30	21074.30		
Addition due to Additional Capitalisation	746.93	788.66	103.53	0.00	0.00		
Closing Equity	20618.99	20970.77	21074.30	21074.30	21074.30		
Average Equity	20245.53	20576.44	21022.54	21074.30	21074.30		
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%		
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%	11.330%	11.330%		
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%		
Return on Equity (Pre Tax)	2359.41	1798.48	3674.95	3684.00	3684.00		



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				(₹ in lakh))
Particulars	Combined Asset-C	Combined Asset-D			
	2010-11	2010-11	2011-12	2012-13	2013-14
Opening Equity	1866.80	2444.58	2469.58	2562.99	2567.49
Addition due to Additional	25.00	25.00	93.41	4.50	0.00
Capitalisation					
Closing Equity	1891.80	2469.58	2562.99	2567.49	2567.49
Average Equity	1879.30	2457.08	2516.28	2565.24	2567.49
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%	11.330%
(MAT)					
Rate of Return on Equity (Pre	17.481%	17.481%	17.481%	17.481%	17.481%
Tax)					
Return on Equity (Pre Tax)	219.01	250.55	439.87	448.43	448.82

(₹ in lakh)

Single Asset-8								
	2010-11	2011-12	2012-13	2013-14				
Opening Equity	1301.48	1320.99	1323.99	1323.99				
Addition due to additional	19.51	3.00	0.00	0.00				
capital expenditure								
Closing Equity	1320.99	1323.99	1323.99	1323.99				
Average Equity	1311.24	1322.49	1323.99	1323.99				
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%				
Tax rate for the year 2008-09	11.330%	11.330	11.330%	11.330%				
		%						
Rate of Return on Equity (Pre	17.481%	17.481	17.481%	17.481%				
Tax)		%						
Return on Equity (Pre Tax)	114.61	231.18	231.45	231.45				

Interest on Loan

18. The revised interest on loan in respect of the transmission assets is as follows:-

					(₹ in lakh)	
Particulars	Combined Asset-A	Combined Asset-B				
	2010-11	2010-11	2011-12	2012-13	2013-14	
	(pro-rata)					
Gross Normative Loan	46372.61	47096.11	48936.30	49177.87	49177.87	
Cumulative Repayment upto Previous Year	2346.37	2924.44	4687.76	8287.64	11896.02	
Net Loan-Opening	44026.24	44171.67	44248.54	40890.23	37281.85	
Addition due to Additional	1742.83	1840.20	241.57	0.00	0.00	



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Capitalisation					
Repayment during the year	2312.27	1763.32	3599.88	3608.38	3608.38
Net Loan-Closing	43456.80	44248.54	40890.23	37281.85	33673.47
Average Loan	43741.52	44210.10	42569.38	39086.04	35477.66
Weighted Average Rate of	5.5385%	5.6128%	5.5813%	5.4822%	5.3314%
Interest on Loan					
Interest	1615.08	1240.71	2375.93	2142.79	1891.44

					(₹ in lakh)
Particulars	Combined Asset-C		Combine	ed Asset-D	
	2010-11	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	4355.88	5704.02	5762.35	5980.31	5990.81
Cumulative Repayment upto Previous Year	206.66	234.25	486.76	930.07	1382.01
Net Loan-Opening	4149.22	5469.77	5275.59	5050.24	4608.80
Addition due to Additional Capitalisation	58.33	58.33	217.96	10.50	0.00
Repayment during the year	220.71	252.51	443.31	451.94	452.34
Net Loan-Closing	3986.84	5275.59	5050.24	4608.80	4156.46
Average Loan	4068.03	5372.68	5162.91	4829.52	4382.63
Weighted Average Rate of Interest on Loan	5.6788%	6.1978%	6.1734%	6.1055%	6.0205%
Interest	154.01	194.24	318.73	294.87	263.85

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Single Asset -8								
	2010-11	2011-12	2012-13	2013-14				
Gross Normative Loan	3036.85	3082.38	3089.38	3089.38				
Cumulative Repayment upto	0.00	104.36	315.06	526.01				
Previous Year								
Net Loan-Opening	3036.85	2978.01	2774.32	2563.37				
Addition due to additional capital	45.53	7.00	0.00	0.00				
expenditure								
Repayment during the year	104.36	210.69	210.96	210.96				
Net Loan-Closing	2978.01	2774.32	2563.37	2352.41				
Average Loan	3007.43	2876.17	2668.84	2457.89				
Weighted Average Rate of	7.8940%	7.8772	7.8354%	7.7806				
Interest on Loan		%		%				
Interest	118.70	226.56	209.12	191.24				



Depreciation

19. Details of revised depreciation in respect of the transmission assets is as per

details given hereunder:-

					(₹ in lakh)
Particulars	Combined		Combine	d Asset-B	
	Asset-A				
	2010-11	2010-11	2011-12	2012-13	2013-14
	(Pro-rata)				
Opening Gross Block	66244.68	67278.22	69907.07	70252.17	70252.17
Addition during 2009-14	2489.75	2628.85	345.10	0.00	0.00
due to Projected Additional					
Capitalisation					
Closing Gross Block	68734.43	69907.07	70252.17	70252.17	70252.17
Average Gross Block	67489.56	68592.65	70079.62	70252.17	70252.17
Rate of Depreciation	5.1392%	5.1414%	5.1368%	5.1363%	5.1363%
Depreciable Value	59886.56	60879.34	62217.62	62372.92	62372.92
Remaining Depreciable	57540.19	57954.91	57529.86	54085.28	50476.90
Value					
Depreciation	2312.27	1763.32	3599.88	3608.38	3608.38

					(₹ in lakh)	
Particulars	Combined Asset-C	Combined Asset-D				
	2010-11	2010-11	2011-12	2012-13	2013-14	
Opening Gross Block	6222.68	8148.60	8231.93	8543.30	8558.30	
Addition during 2009-14	83.33	83.33	311.37	15.00	0.00	
due to Projected						
Additional Capitalisation						
Closing Gross Block	6306.01	8231.93	8543.30	8558.30	8558.30	
Average Gross Block	6264.35	8190.27	8387.62	8550.80	8558.30	
Rate of Depreciation	5.2850%	5.2852%	5.2853%	5.2854%	5.2854%	
Depreciable Value	5637.91	7371.24	7548.85	7695.72	7702.47	
Remaining Depreciable	5431.25	7136.99	7062.09	6765.65	6320.46	
Value						
Depreciation	220.71	252.51	443.31	451.94	452.34	
· ·					(₹ in la	
		Single A	Asset-8			

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	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	4338.33	4403.37	4413.37	4413.37
Addition during 2009-14	65.04	10.00	0.00	0.00
Closing Gross Block	4403.37	4413.37	4413.37	4413.37
Average Gross Block	4370.85	4408.37	4413.37	4413.37
Rate of Depreciation	4.7754	4.7794	4.7799%	4.7799
	%	%		%
Depreciable Value	3933.76	3967.53	3972.03	3972.03
Remaining Depreciable Value	3933.76	3863.17	3656.98	3446.02
Depreciation	104.36	210.69	210.96	210.96

Interest on working capital

20. The revised interest on working capital in respect of transmission assets is

given hereunder:-

					(₹ in	lakh)
Particulars	Combine	d Asset-A		Combine	d Asset-B	
	2010-11	Pro-rata for 2 months	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	157.55	39.39	174.15	184.12	194.95	205.75
O & M expenses	87.53	21.88	96.75	102.29	108.30	114.31
Receivables	1783.94	445.98	1832.91	1852.25	1828.21	1798.08
Total	2029.01	507.25	2103.82	2138.66	2131.46	2118.15
Interest	148.79	37.20	115.71	235.25	234.46	233.00
Rate of Interest	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%

(₹ in lakh)

Particulars	Combine	ed Asset-C	Combined Asset-D			
	2010-11	1.8.2010 to 31.8.2010	1.9.2010 to 31.3.2011	2011-12	2012-13	2013-14
Maintenance Spares	77.28	9.66	103.04	108.94	115.16	121.75
O & M expenses	42.94	5.37	57.25	60.52	63.98	67.64
Receivables	240.92	30.12	322.58	330.53	336.62	339.14
Total	361.14	45.14	482.87	500.00	515.77	528.53
Interest	26.48	3.31	30.98	55.00	56.73	58.14
Rate of Interest	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%

(₹ in lakh)

Single Asset-8								
2010-11 2011-12 2012-13 2013-14								
Maintenance Spares	51.52	54.47	57.58	60.88				
O & M expenses	28.62	30.26	31.99	33.82				
Receivables	174.47	176.72	177.46	178.25				

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Total	254.62	261.46	267.03	272.95
Rate of Interest	11.00%	11.00%	11.00%	11.00%
Interest	14.00	28.76	29.37	30.02

Transmission charges

21. The revised transmission charges in respect of transmission assets are as follows:-

Particulars	Combine	d Asset-A		ed Asset-B	(₹ in lakh)	
	2010-11	Pro-rata for 2 months	2010-11	2011-12	2012-13	2013-14
Depreciation	2312.27	578.07	1763.32	3599.88	3608.38	3608.38
Interest on Loan	1615.08	403.77	1240.71	2375.93	2142.79	1891.44
Return on equity	2359.41	589.85	1798.48	3674.95	3684.00	3684.00
Interest on Working Capital	148.79	37.20	115.71	235.25	234.46	233.00
O & M Expenses	700.20	175.05	580.51	1227.48	1299.65	1371.69
Total	7135.76	1783.94	5498.74	11113.4 9	10969.28	10788.51

(₹ in lakh)

Particulars	Combined Asset-C		Combined Asset-D			
	2010-11	1.8.2010 to	1.9.2010 to	2011-12	2012-13	2013-14
		31.8.2010	31.3.2011			
Depreciation	220.71	27.59	252.51	443.31	451.94	452.34
Interest on Loan	154.01	19.25	194.24	318.73	294.87	263.85
Return on equity	219.01	27.38	250.55	439.87	448.43	448.82
Interest on Working Capital	26.48	3.31	30.98	55.00	56.73	58.14
	0.40.40	10.01	400 70	700.00		
O & M Expenses	343.48	42.94	400.73	726.28	767.76	811.68
Total	963.70	120.46	1129.02	1983.19	2019.73	2034.83
	(₹ in lakh)					

Single Asset-8								
2010-11 2011-12 2012-13 2013-14								
Depreciation	104.36	210.69	210.96	210.96				
Interest on Loan	118.70	226.56	209.12	191.24				



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Return on equity	114.61	231.18	231.45	231.45
Interest on Working	14.00	28.76	29.37	30.02
Capital				
O & M Expenses	171.74	363.14	383.88	405.84
Total	523.42	1060.34	1064.77	1069.51

22. All other terms contained in order dated 21.2.2014 in Petition No. 332/2010 remains unaltered.

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Member

(Dr. M. K. Iyer)

(A.S. Bakshi) Member

-sd-

(A. K. Singhal) Member

-sd-

(Gireesh B. Pradhan) Chairperson

-sd-

