

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 332/2010

Coram:

**Shri V. S.Verma, Member
Shri M.Deena Dayalan, Member**

**Date of Hearing: 20.06.2013
Date of Order : 21.02.2014**

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 of Transmission Tariff for (1) Combined assets of LILO of Ramagundam–Khammam T/L at Warangal S/S, Neyveli - Pugalur –Madurai 400 kV D/C T/L, 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 S/S with associated bays, (2) Combined assets of LILO of Ramagundam – Khammam T/L at Warangal S/S, Neyveli - Pugalur –Madurai 400 kV D/C T/L, Udumalpet- Arasur 400 kV D/C line along with 400/220 kV Sub-station at Arasur and associated bays at Udumalpet, LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry S/S with associated bays, and 2 nos. of 50 MVAR line reactors at Pugalur 400/220 kV S/S along with associated bays at Pugalur, (3) Combined assets of 2x315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur S/S and 2 nos. 315 MVA ICTs along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S and (4) 2 nos. 400/230 kV 315 MVA ICTs along with associated bays and downstream equipment at 400/230 kV Puducherry sub-station under “Transmission System associated with Neyveli Lignite Corporation–II (NLC-II) Expansion Project” in Southern Region for the tariff block 2009-14

And

In the matter of:

Power Grid Corporation of India Ltd., Gurgaon

.....**Petitioner**

Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad



3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Goa, Panaji
6. Electricity Department, Govt. of Pondicherry, Pondicherry
7. Eastern Power Distribution Company of Andhra Pradesh Ltd., Visakhapatnam
8. Southern Power Distribution Company of Andhra Pradesh Ltd., Tirupati
9. Central Power Distribution Company of Andhra Pradesh Ltd., Hyderabad
10. Northern Power Distribution Company of Andhra Pradesh Ltd., Warrangal
11. Bangalore Electricity Supply Company Ltd., Bangalore
12. Gulbarga Electricity Supply Company Ltd., Gulbarga
13. Hubli Electricity Supply Company Ltd., Hubli
14. MESCOM Corporate office, Mangalore
15. Chamundeswari Electricity Supply Company Ltd., Mysore

Respondents

For Petitioner: Shri S.S. Raju, PGCIL
Shri Upendra Pande, PGCIL
Shri A.P. Padhi, PGCIL

For Respondent: None

ORDER

This petition has been filed for approval of transmission tariff for (1) Combined assets of LILO of Ramagundam– Khammam T/L at Warangal S/S, Neyveli - Pugalur –Madurai 400 kV D/C T/L, 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 S/S with associated bays, (2) Combined assets of LILO of Ramagundam – Khammam T/L at Warangal S/S, Neyveli - Pugalur –Madurai 400 kV D/C T/L, Udumalpet- Arasur 400 kV D/C line along with 400/220 kV Sub-station at Arasur and associated bays at Udumalpet, LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry S/S with associated bays, and 2 nos. of 50 MVAR line reactors at Pugalur 400/220 kV S/S along with associated bays at Pugalur, (3) Combined assets of 2x315 MVA Auto

Transformer & 400/220 kV Bays Equipments at Pugalur S/S and 2 nos. 315 MVA ICTs along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S and (4) 2 nos. 400/230 kV 315 MVA ICTs along with associated bays and downstream equipment at 400/230 kV Puducherry sub-station under "Transmission System associated with Neyveli Lignite Corporation-II (NLC-II) Expansion Project" (hereinafter "the transmission assets") in Southern Region 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 "the 2009 Tariff Regulations").

2. The investment approval and expenditure sanction for the transmission project was accorded by the Ministry of Power vide letter dated 11.1.2005 at an estimated cost of ₹ 69183 lakh including IDC of ₹ 4135 lakh (based on 2nd quarter, 2004 price level). Subsequently, approval for the Revised Cost Estimate for the project was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/RCE NLC-II, dated 22.3.2010 for a total cost of ₹ 96239 lakh including IDC of ₹ 10732 lakh (based on 3rd quarter 2009 price level). As per the investment approval, the project was scheduled to be completed in 35 months from the date of investment approval, i.e. by 1.1.2008.

3. The scope of work covered under "Transmission System associated with Neyveli Lignite Corporation-II (NLC-II) Expansion" project in Southern Region as per Memorandum dated 22.3.2010 is as follows:-

Transmission Lines:

- (a) 400 kV D/C line between Neyveli TS-II switchyard to Pugalur

- (b) Pugalur - Madurai 400 kV D/C line
- (c) Udamalpet- Arasur 400 kV D/C line
- (d) LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry
- (e) LILO of Ramagundum– Khammam 400 kV S/C line at Warangal

Sub-Stations:

- (a) Pugalur 400/220 kV Sub-station (New)
- (b) Warangal 400/220 kV Sub-station (New)
- (c) Arasur 400/220 kV Sub-station (New)
- (d) Puducherry 400/220 kV Sub-station (New)
- (e) Madurai 400/220 kV Sub-station (Extension)
- (f) Udumalpet 400/220 kV Sub-station (Extension).

4. Details of assets under “Transmission System associated with Neyveli Lignite Corporation–II (NLC-II) Expansion Project” are given hereunder:-

Sl. No.	Name of the assets	Actual DOCO	Reference
1	LILO of Ramagundum-Khammam T/L at Warangal S/S	1.8.2009	Covered under Petition No. 136/2010
2	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal sub-station	1.8.2009	
3	Neyveli- Pugalur- Madurai 400 kV D/C T/L	1.9.2009	
4	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station	1.9.2009	
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	Covered under the instant petition
6	315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station	1.8.2010	
7	315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1.9.2010	
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	

5. The following are the details of apportioned approved cost, cost as on date of commercial operation and estimated additional capital expenditure projected to be incurred for the assets as claimed by the petitioner in the original petition:-

(₹ in lakh)

Name of the Asset	Apportioned approved FR Cost	Apportioned approved Cost (RCE)	DOCO Cost	Proposed Exp.from Notional DOCO to 31.03.2011	Proposed Exp.from 01.04.2011 to 31.03.2012	Total Estimated Completion Cost
Combined Assets of Asset-1, Asset-3 & Asset-5 : LILO of Ramagundum-Khammam TL at Warangal S/S , Neyveli-Pagalur-Madurai TL ,Udumalpet-Arasur 400 kV D/C Line alongwith Substation at Arasur and associated bays at Udumalpet, LILO of Neyveli-Sriperumbudur 400 kV S/C line at Puducherry S/S with asosociated bays (DOCO:01.08.2010)	56621.30	75600.00	65667.92	4762.79	325.10	70755.81
Combined Assets of Asset-1, Asset-3, Asset-5 & Asset-9 : LILO of Ramagundum-Khammam TL at Warangal S/S , Neyveli-Pagalur-Madurai TL ,Udumalpet-Arasur 400 kV D/C Line alongwith Substation at Arasur and associated bays at Udumalpet, LILO of Neyveli-Sriperumbudur 400 kV S/C line at Puducherry S/S with asosociated bays and 2 nos of 50 MVAR line reactors at Pugulur S/S alongwith associated bays at Pugulur (DOCO:01.10.2010)	57251.30	77279.00	66915.61	4901.89	345.10	72162.60
Combined Assets of Asset-4, Asset-6 & Asset-7 :2x315 MVA Auto Transformer & 400/220 kV Bays Equipments at Pugalur S/S (DOCO:01.09.2009) and 2 nos 315 MVA ICTs alongwith associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S (DOCO: 01.08.2010)	5387.04	9096.00	8132.46	624.30	29.15	8785.91
Asset-8: 2 nos. of 400/230 kV 315 MVA ICTs alongwith associated bays and downstream equipment at 400/230 kV Puducherry Substation (DOCO:01.10.2010).	2836.00	4929.00	4802.87	65.04	10.00	4877.91

6. During hearing on 7.6.2011, the Commission directed the petitioner to submit separate CA certificate for both the assets from their respective dates of commercial operation along with segregation of additional capital

expenditure, if any, from 1.8.2010 to 31.8.2010 and 1.9.2010 to 31.3.2011, for 315 MVA ICT-I at Arasur sub-station. The petitioner, vide affidavit dated 20.8.2011, has submitted separate auditor certificates for ICT-I and ICT-II at Arasur sub-station from their respective dates of commercial operation along with segregation of additional capital expenditure to to 31.3.2011 for the 315 MVA ICT-I at Arasur sub-station. Accordingly, tariff has been worked out separately, taking into account the expenditure incurred on the basis of the auditor's certificates submitted along with affidavit dated 20.8.2011. Details of the capital costs, additional capital expenditure and estimated completion cost as per various Auditors certificates submitted by the Petitioner in respect of the above mentioned assets are as under:-

(₹ in lakh)

Sl. No.	Name of the assets	Cost as on DOCO	Additional Capitalisation				Total Estimated Completion Cost	Reference
			DOCO to 31.3.2010	2010-11	2011-12	2012-13		
1	LILO of Ramagundum-Khammam T/L at Warangal S/S	3900.21	315.09	223.99	70.30	-	4509.59	Covered under Petition No. 136/2010
2	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal sub-station	4453.91	112.85	93.40	25.50	-	4685.66	
3	Neyveli- Pugalur- Madurai 400 kV D/C T/L	44292.80	1957.95	401.17	104.80	-	46756.72	
4	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station	4246.81	241.85	83.33	14.15	-	4586.14	
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	17474.91	-	1864.59	150.00	-	19489.50	Covered under present petition (CA certificate dated 18.8.2010)
6	315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV s/s	1894.63	-	-	156.11	-	2050.74	Covered under present petition (CA certificate dated 5.8.2011)
7	315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1925.92	-	-	141.11	15.00	2082.03	Covered under present petition (CA certificate dated 5.8.2011)
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)*	4802.87	-	65.04	10.00	-	4877.91	Covered under present petition (CA certificate dated 18.8.2010)
9	2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV sub-station along with associated bays at Pugalur s/s	1247.69	-	139.10	20.00	-	1406.79	Covered under present petition (CA certificate dated 18.8.2010)

*As per forms submitted by the petitioner

7. Transmission tariff in respect of the first four assets at S. Nos. 1 to 4 has been determined vide order dated 11.1.2012 in Petition No. 136/2010, and revised vide order dated 10.2.2014. In the present petition also, the petitioner has prayed for determination of transmission tariff for the subject cited assets which include the above stated assets from Petition No. 136/2010 except Asset at Sl. No.2 (2x315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal S/S). In the light of the above, the details of the assets for which tariff is being determined in this order, together with the period for which the tariff is being determined, are as under:-

Assets	Name of the assets	DOCO /Notional DOCO	Tariff Applicable Period
Assets-1,3 &5 (hereafter "Combined Asset-A")	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
Assets-1,3,5&9 (hereafter "Combined Asset-B")	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
Assets-4&6 (hereafter "Combined Asset-C")	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
Assets-4,6&7 (hereafter "Combined Asset-D")	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 (hereafter "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. Details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Combined Asset A	
	2010-11
Depreciation	2332.77
Interest on Loan	1477.14
Return on equity	2379.02
Interest on Working Capital	157.19
O & M Expenses	700.15
Total	7046.27

Combined Asset B					Combined Asset C
	2010-11	2011-12	2012-13	2013-14	2010-11
Depreciation	1784.36	3699.95	3708.45	3708.45	297.55
Interest on Loan	1142.02	2228.31	2016.50	1798.46	230.67
Return on equity	1818.89	3775.37	3784.42	3784.42	295.28
Interest on Working Capital	122.61	252.67	252.15	251.35	38.40
O & M Expenses	580.51	1227.48	1297.65	1371.69	457.97
Total	5448.39	11183.78	11059.17	10914.37	1319.87

Combined Asset D				
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	297.55	463.60	464.37	464.37
Interest on Loan	230.67	335.95	304.45	272.11
Return on equity	295.28	460.05	460.82	460.82
Interest on Working Capital	38.40	59.98	61.37	62.83
O & M Expenses	457.97	726.28	767.76	811.68
Total	1319.87	2045.86	2058.77	2071.81

Single Asset				
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	127.72	257.44	257.70	257.70
Interest on Loan	131.07	248.49	227.26	205.62
Return on equity	126.79	255.55	255.81	255.81
Interest on Working Capital	15.93	32.62	33.20	33.82
O & M Expenses	171.74	363.14	383.88	405.84
Total	573.25	1157.24	1157.85	1158.79

9. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(₹ in lakh)

Combined Asset A	
	2010-11
Maintenance Spares	157.53
O & M expenses	87.52
Receivables	1761.57
Total	2006.62
Rate of Interest	11.75%
Interest	157.19

Combined Asset B					Combined Asset C
	2010-11	2011-12	2012-13	2013-14	2010-11
Maintenance Spares	174.15	184.12	194.65	205.75	103.04
O & M expenses	96.75	102.29	108.14	114.31	57.25
Receivables	1816.13	1863.96	1843.20	1819.06	329.97
Total	2087.03	2150.37	2145.99	2139.12	490.26
Rate of Interest	11.75%	11.75%	11.75%	11.75%	11.75%
Interest	157.19	252.67	252.15	251.35	57.61

Combined Asset D				
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Maintenance Spares	103.04	108.94	115.16	121.75
O & M expenses	57.25	60.52	63.98	67.64
Receivables	329.97	340.98	343.13	345.30
Total	490.26	510.44	522.27	534.69
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	157.19	59.98	61.37	62.83

Single Asset				
	2010-11 (Pro-rata)	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	191.08	192.87	192.98	193.13
Total	271.22	277.60	282.55	287.83
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	15.93	32.62	33.20	33.82

10. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. None of the respondents has filed reply to the petition.

11. We have heard the representatives of the parties present at the hearing and perused the material on record. We proceed to dispose of the petition.

CAPITAL COST

Regulation 7 of the 2009 Tariff Regulations provides as under:-

“(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 fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
- (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
- (c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

12. Details of apportioned approved cost, cost as on date of commercial operation and the petition wherein tariff is being determined are as under:-

Asset	Capital Cost as on claimed by PGCIL	Details of petitions
Asset-1 (1.8.2009)	3900.21	136/2010
Asset-3 (1.9.2009)	44292.80	136/2010
Assets-5 (1.8.2010)	17474.91	Current petition
Combined Asset-A (Asset-1,3&5) (Notional DOCO:1.8.2010)	65667.92	Clubbed
Asset-9 (1.10.2010)	1247.69	Current petition
Combined Asset-B (Asset-1,3,5&9) (Notional DOCO:1.10.2010)	66915.61	Clubbed
Asset-4 (1.9.2009)	4246.81	136/2010
Asset-6 (1.8.2010)	1894.63	Current petition
Combined Asset-C (Asset-4&6) (Notional DOCO:1.8.2010)	6141.44	Clubbed
Asset-7 (1.9.2010)	1925.92	Current Petition
Combined Asset-D (Asset-4,6&7) (Notional DOCO:1.9.2010)	8067.36	Clubbed
Single Asset (1.10.2010)	4802.87	Current petition

Treatment of IDC and IEDC

13. As per investment approval dated 11.1.2005, the project was scheduled to be commissioned within 35 months from the date of investment approval. The time over-run in the commissioning of the assets mentioned in the instant petition are as follows:-

Asset No.	Name of the assets	Scheduled DOCO	Actual DOCO	Delay (in months)
1	LILO of Ramagundum-Khammam Transmission Line at Warangal S/S	1.1.2008	1.8.2009	19
2	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal sub-station	1.1.2008	1.8.2009	-
3	Neyveli- Pugalur- Madurai 400 kV D/C Transmission Line	1.1.2008	1.9.2009	20
4	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station	1.1.2008	1.9.2009	20

5	(a)	Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet	1.1.2008	1.8.2010	31
	(b)	LILO of Neyveli-Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays	1.1.2008	1.8.2010	31
6		315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV sub-station	1.1.2008	1.8.2010	31
7		315 MVA ICT-II along with associated bays and 220 kV downstream equipment at Arasur 400/220 kV S/S	1.1.2008	1.9.2010	32
8		2 Nos.315 MVA ICT's along with associated bays and 220 kV downstream equipment at Puducherry 400/220 kV sub-station	1.1.2008	1.10.2010	33
9		2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV sub-station along with associated bays at Pugalur sub-station	1.1.2008	1.10.2010	33

14. Asset-1 to Asset-4 have been covered in Petition No. 136/2010 and accordingly not being considered here. There is time over-run of 19-33 months in commissioning of various transmission elements of the project. As regards assets mentioned at S Nos.1 and 2, i.e., LILO of Ramagundam-Khammam Transmission line at Warangal Sub-station along with 2 nos. 315 MVA Auto Transformers, delay of thirteen months from January 2008 to January, 2009 was condoned vide Commission's order dated 11.1.2012 in Petition No. 136/2010 on the ground that the first Unit of NLC was commissioned in February, 2009. Detailed reasons in this regard have been recorded in para 14 of the above said order dated 11.1.2012. Delay from February, 2009 to July, 2009 was condoned by the Commission vide its order dated 9.5.2013 in Review Petition No. 7/RP/2012, based on the fact that APTRANSCO in the 9th and 10th SRPC meetings informed that Warangal

Sub-station along with LILO of Ramagundam- Khammam line would be ready by July, 2009 and accordingly the Assets-1 & 2 were commissioned on 1.8.2009. Detailed reasons in this regard have been recorded in para 17 of the order dated 9.5.2013 in Review Petition No. 7/RP/2012. Thus, the total delay of 19 months in commissioning of the Assets-1 and 2 has already been condoned.

15. Assets mentioned in S Nos. 3 and 4, i.e., Neyveli-Pugalur-Madurai 400 kV D/C Transmission Line along and 2 nos. 315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur Sub-station, delay of 13 months from January 2008 to January, 2009 was condoned by the Commission vide order dated 11.1.2012 in Petition No. 136/2010 on the ground that the first Unit of NLC was commissioned in February, 2009. Detailed reasons in this regard have been recorded in para 14 of the above said order dated 11.1.2012. However, further delay of seven months from February, 2009 to August, 2009 was not condoned in the above order as well as the order dated 9.5.2013 in Review Petition No. 7/RP/2012 for the reasons mentioned in para 18 of the above stated order dated 9.5.2013. Consequent revision order dated 10.2.2014 in Petition No. 136/2010 has been made, disallowing this delay of seven months.

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 Coimbatour district challenged the construction of the transmission line tower by the petitioner. The District Magistrate, Coimbatour, 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.

21. In view of the foregoing, the over-all position regarding the time over-run is as under:-

Asset No.	Name of the assets	Actual DOCO	Delay (in months)	Delay condoned (in months)	Delay not condoned (in months)	Reference
1	LILO of Ramagundum-Khammam Transmission Line at Warangal S/S	1.8.2009	19	19	-	Details discussed in Petition No. 136/2010 and in also in 7/RP/2012
2	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Warangal sub-station	1.8.2009	-	-	-	
3	Neyveli- Pugalur- Madurai 400 kV D/C Transmission Line	1.9.2009	20	13	7	
4	2X315 MVA Auto Transformer & 400/220 kV Bays Equipment at Pugalur sub-station	1.9.2009	20	13	7	
5	(c) 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	22	9	Covered under present petition
	(d) 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	1.8.2010	31	22	9	
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	22	10	
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	

22. IDC and IEDC has been disallowed in respect of Assets 5, 6, 7, 8 and 9 as per details given hereunder:-

(₹ in lakh)

Asset 5							
	Details of IEDC & IDC for Asset-5 as a whole (As per CA Certificate dated 18.08.2010)		IEDC & IDC, in proportion of Equipment Cost in Form-5(c), for Asset-5(a) i.e. Udumalpet-Arasur line.		IEDC & IDC, in proportion of Equipment Cost in Form-5(c), for Asset-5(b) i.e. LILo of Neyveli-Sriperrumbudur 400 kV S/C line at Puducherry S/S.		Total IEDC & IDC disallowed for the Asset-5 as a whole.
	IEDC	IDC	IEDC	IDC	IEDC	IDC	
From Date of Investment Approval to 31.3.2010 (63 Months)	1174.01	1433.26	852.54	1040.80	321.47	392.46	
From 1.4.2010-31.7.2010 (4 Months)	126.80	240.96	92.08	174.98	34.72	65.98	
Total IDC and IEDC Claimed (67 Months)	1300.81	1674.22	944.61	1215.78	356.20	458.44	
Detail of IDC Disallowed			For 9 months		For 31 months		
For 5 months / 27 months			67.66	82.60	137.77	168.20	
For 4 months			92.08	174.98	34.72	65.98	
Total Disallowed IDC			159.74	257.58	172.50	234.18	824.00

Asset 6			
Detail of IDC and IEDC as per CA Certificate dated 5.8.2011			
	IEDC	IDC	Total
From Date of Investment Approval to 31.07.2010	141.96	181.71	323.67
Total IDC and IEDC Claimed (For 67 Months)	141.96	181.71	323.67
Detail of IDC Disallowed for 9 months			
Pro-rata for 9 Months	19.07	24.41	43.48
Total Disallowed IDC	19.07	24.41	43.48

Asset 7			
Detail of IDC and IEDC as per CA Certificate dated 5.8.2011			
	IEDC	IDC	Total
From Date of Investment Approval to 30.08.2010	145.96	191.49	337.45
Total IDC and IEDC Claimed (For 68 Months)	145.96	191.49	337.45
Detail of IDC Disallowed for 10 months			
Pro-rata for 10 Months	21.46	28.16	49.63
Total Disallowed IDC	21.46	28.16	49.63

(₹ in lakh)

Asset 8			
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			
Details 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
Details of IDC disallowed for 33 months			
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

Treatment for Initial Spares

23. Regulation 8 of 2009 Tariff Regulations provides for capitalization of initial spares as a percentage of the original project cost, subject to following ceiling norms:

Transmission line	0.75%
Transmission Sub-station	2.5%
Series compensation devices & HVDC Station	3.5%

For Transmission Lines and Substations, the initial spares claimed for all the assets taken together does not cross the ceiling norms. Hence, no adjustment on account of initial spares is required. Based on the detailed calculation of asset wise details, initial spares for the Project as a whole, are worked out as per details 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	51535.75	323.09	0.75%	387.00	-63.90
Sub-station	35863.26	816.48	2.50%	898.64	-82.15

Asset-wise details of initial spares worked out are enclosed in Annexure.

24. Capital cost consequent to the disallowance of time over-run is as under:-

(₹ in lakh)

Asset	Claimed Capital Cost as on DOCO	IEDC & IDC, Disallowed, if any	Capital Cost after disallowing IEDC/IDC as on DOCO	Expenditure during 2009-10	Capital Cost considered as on DOCO/ Notional DOCO	Petition reference
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=(c)+(d)	(f)
Asset-1 (1.8.2009)	3900.21	-	3900.21	315.09		136/2010
Asset-3 (1.9.2009)	44292.80	1289.60	43,003.20	1957.95		136/2010
Assets-5 (1.8.2010)	17474.91	824.00	16650.91	-		Current petition
Combined Asset-A (Asset-1,3&5) (Notional DOCO :1.8.2010)	65667.92	2113.60	63554.32	2273.04	65827.36	Clubbed
Asset-9 (1.10.2010)	1247.69	214.15	1033.54	-		Current petition
Combined Asset-B (Asset-1,3,5&9) (Notional DOCO :1.10.2010)	66915.61	2327.75	64587.6	2273.04	66860.90	Clubbed
Asset-4 (1.9.2009)	4246.81	160.61	4086.20	241.85		136/2010
Asset-6 (1.8.2010)	1894.63	43.48	1851.15	-		Current petition
Combined Asset-C (Asset-4&6) (Notional DOCO :1.8.2010)	6141.44	204.09	5937.35	241.85	6179.20	Clubbed
Asset-7 (1.9.2010)	1925.92	49.63	1876.30	-		Current Petition
Combined Asset-D (Asset-4,6&7) (Notional DOCO: 1.9.2010)	8067.36	253.72	7813.64	241.85	8055.49	Clubbed
Single Asset (1.10.2010)	4802.87	464.54	4338.33	-	4338.33	Current petition

25. In Asset-1 and Asset-5, the expenditure as on 31.3.2010 has been considered for expenditure as on date of commercial operation and entire additional capital expenditure has been considered after date of commercial operation 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 segregated additional capital expenditure details during 2010-11 at the time of truing up.

Additional capital expenditure

26. Clause 9(1) of the 2009 Tariff Regulations provides as under:-

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

- (i) Undischarged 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.”

27. Further, Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines cut-off date as under:-

“cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

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

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

29. The above claim of the petitioner falls within cut-off date. Hence, the same has been allowed.

Debt- equity ratio

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

“12. **Debt-Equity Ratio.** (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 utilised 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 modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

31. Details of debt-equity in respect of the assets comprising the transmission assets as on date of commercial operation are as under:-

(₹ in lakh)

Capital Cost as on date of commercial operation		
Combined Asset-A		
Particulars	Amount	%
Debt	46080.47	70.00
Equity	19746.89	30.00
Total	65827.36	100.00

Combined Asset- B		
Debt	46803.97	70.00
Equity	20056.93	30.00
Total	66860.90	100.00

Combined Asset- C		
Debt	4325.44	70.00
Equity	1853.76	30.00
Total	6179.20	100.00

Combined Asset- D		
Debt	5638.85	70.00
Equity	2416.65	30.00
Total	8055.50	100.00

Single Asset		
Debt	3036.85	70.00
Equity	1301.48	30.00
Total	4338.33	100.00

32. Details of debt equity ratio as on 31.3.2014 are as under:-

(₹ in lakh)

Capital Cost as on 31.3.2014		
Combined Asset-A		
Particulars	Amount	%
Debt	48050.87	70.00
Equity	20591.34	30.00
Total	68642.21	100.00

Combined Asset- B		
Debt	48885.73	70.00
Equity	20949.12	30.00
Total	69834.85	100.00

Combined Asset- C		
Debt	4502.95	70.00
Equity	1929.84	30.00
Total	6432.79	100.00

Combined Asset- D		
Debt	5925.64	70.00
Equity	2539.56	30.00
Total	8465.20	100.00

Single Asset		
Debt	3089.38	70.00
Equity	1323.99	30.00
Total	4413.37	100.00

Return on equity

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

“15. (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% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall 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 financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

34. The petitioner has claimed Return on Equity on pre-tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity at the rate of 17.481% in accordance with Regulation 15 of the 2009 Tariff Regulations. RoE allowed for the years 2010-11, 2011-12, 2012-13 and 2013-14 is given hereunder:-

(₹ in lakh)

Combined Asset A	
	2010-11
Opening Equity	19746.89
Addition due to additional capital expenditure	746.93
Closing Equity	20493.81
Average Equity	20120.35
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2008-09	11.330%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	2344.83

(₹ in lakh)

Combined Asset B					Combined Asset C
	2010-11	2011-12	2012-13	2013-14	2010-11
Opening Equity	20056.93	20845.59	20949.12	20949.12	1853.76
Addition due to additional capital expenditure	788.66	103.53	0.00	0.00	25.00
Closing Equity	20845.59	20949.12	20949.12	20949.12	1878.76
Average Equity	20451.26	20897.35	20949.12	20949.12	1866.26
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%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	1787.54	3653.07	3662.12	3662.12	217.49

(₹ in lakh)

Combined Asset D				
	2010-11	2011-12	2012-13	2013-14
Opening Equity	2416.65	2441.65	2535.06	2539.56
Addition due to additional capital expenditure	25.00	93.41	4.50	0.00
Closing Equity	2441.65	2535.06	2539.56	2539.56
Average Equity	2429.15	2488.35	2537.31	2539.56
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 Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	247.71	434.99	443.55	443.94

(₹ in lakh)

Single Asset				
	2010-11	2011-12	2012-13	2013-14
Opening Equity	1301.48	1320.99	1323.99	1323.99
Addition due to additional capital expenditure	19.51	3.00	0.00	0.00
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 Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	114.61	231.18	231.45	231.45

Interest on loan

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

“16. (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.”

36. In keeping with the provisions of Regulation 16, the petitioner's entitlement to interest on loan has been worked out on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest on actual loan have been considered as per the petition to work out the weighted average rate of interest;

(b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14;

- (c) For loans with floating interest rates, rates of interest as on 1.4.2009/DOCO have been considered;
- (d) Repayment for ADB III loans have been calculated as per the supporting documents attached with the petition.
- (e) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.
- (f) Exchange rates, in case of foreign loans, as on drawal dates has been taken into account for the calculation.

37. There are differences in the weighted average rates of interest as claimed by the petitioner and as allowed in this order. Reasons for the deviations are as under:-

- (a) Asset-1 and Asset-3 are two independent assets with different dates of commercial operation which are flowing from Petition No. 136/2010. The petitioner has inadvertently considered same Exchange Rate for the two independent assets whereas different Exchange Rates need to be considered.
- (b) Interest rates for ADB-III loan for the Assets flowing from Petition No. 136/2010 have been considered as per that petition in these calculations. Petitioner has considered different interest rates.
- (c) In case of Combined Asset-A, the petitioner has inadvertently considered one additional repayment for 2010-11. This has cumulative effect on opening and closing balances of other years.
- (d) As Combined Asset-B includes Combined Asset-A, the above points are applicable to Combined Asset-B also.

(e) The petitioner has submitted separate CA certificates for the two assets of Combined Asset-D (Asset-6 and Asset-7). Two different Exchange Rates for ADB-III loan have been indicated corresponding to the two dates of commercial operation. These have now been considered in these calculations.

(f) Again, in Combined Asset-D, the petitioner vide affidavit dated 20.8.2011 has indicated reduced capital cost vis-à-vis the one submitted in the petition and the actual loan also has reduced. Accordingly, the weighted average interest rate has been considered.

38. Detailed calculation of the weighted average rate of interest has been given in Annexures 1 to 5 to this order.

39. Details of the interest on loan worked on the above basis is as under:-

(₹ in lakh)

Combined Asset A	
	2010-11
Gross Normative Loan	46080.47
Cumulative Repayment upto Previous Year	2346.37
Net Loan-Opening	43734.10
Addition due to additional capital expenditure	1742.83
Repayment during the year	2297.98
Net Loan-Closing	43178.94
Average Loan	43456.52
Weighted Average Rate of Interest on Loan	5.5385%
Interest	1604.56

Combined Asset B					Combined Asset C
	2010-11	2011-12	2012-13	2013-14	2010-11
Gross Normative Loan	46803.97	48644.16	48885.73	48885.73	4325.44
Cumulative Repayment upto Previous Year	2920.87	4673.48	8251.93	11838.88	206.66
Net Loan-Opening	43883.10	43970.68	40633.80	37046.85	4118.78
Addition due to additional capital expenditure	1840.20	241.57	0.00	0.00	58.33
Repayment during the year	1752.61	3578.45	3586.95	3586.95	219.18
Net Loan-Closing	43970.68	40633.80	37046.85	33459.89	3957.93
Average Loan	43926.89	42302.24	38840.32	35253.37	4038.36
Weighted Average Rate of Interest on Loan	5.6128%	5.5813%	5.4822%	5.3314%	5.6788%
Interest	1232.76	2361.02	2129.32	1879.48	152.89

(₹ in lakh)

Combined Asset D				
	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	5638.85	5697.18	5915.14	5925.64
Cumulative Repayment upto Previous Year	234.06	483.70	922.09	1369.11
Net Loan-Opening	5404.79	5213.48	4993.05	4556.53
Addition due to additional capital expenditure	58.33	217.96	10.50	0.00
Repayment during the year	249.64	438.39	447.02	447.41
Net Loan-Closing	5213.48	4993.05	4556.53	4109.12
Average Loan	5309.14	5103.27	4774.79	4332.82
Weighted Average Rate of Interest on Loan	6.1978%	6.1734%	6.1055%	6.0205%
Interest	191.95	315.05	291.53	260.86

Single Asset				
	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	3036.85	3082.38	3089.38	3089.38
Cumulative Repayment upto Previous Year	0.00	104.36	315.06	526.01
Net Loan-Opening	3036.85	2978.01	2774.32	2563.37
Addition due to additional capital expenditure	45.53	7.00	0.00	0.00
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 Interest on Loan	7.8940%	7.8772%	7.8354%	7.7806%
Interest	118.70	226.56	209.12	191.24

DEPRECIATION

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

“17. (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.

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xxxx

(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 as admitted by the Commission up to 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.”

41. The assets were put on commercial operation during the period from 1.8.2009 to 1.10.2010. Accordingly, these assets will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations, as per details given hereunder:-

(₹ in lakh)

Combined Asset A	
	2010-11
Opening Gross Block	65827.36
Addition during 2009-14	2489.75
Closing Gross Block	68317.11
Average Gross Block	67072.23
Rate of Depreciation	5.1392%
Depreciable Value	59510.97
Remaining Depreciable Value	57164.60
Depreciation	2297.98

	Combined Asset B				Combined Asset C
	2010-11	2011-12	2012-13	2013-14	2010-11
Opening Gross Block	66860.90	69489.75	69834.85	69834.85	6179.20
Addition during 2009-14	2628.85	345.10	0.00	0.00	83.33
Closing Gross Block	69489.75	69834.85	69834.85	69834.85	6262.53
Average Gross Block	68175.32	69662.30	69834.85	69834.85	6220.87
Rate of Depreciation	5.1415%	5.1369%	5.1363%	5.1363%	5.2849%
Depreciable Value of Combined Assets	60503.75	61842.03	61997.33	61997.33	5598.78
Remaining Depreciable Value	57582.88	57168.55	53745.40	50158.44	5392.12
Depreciation	1752.61	3578.45	3586.95	3586.95	219.18

(₹ in lakh)

Combined Asset D				
	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	8055.50	8138.83	8450.20	8465.20
Addition during 2009-14	83.33	311.37	15.00	0.00
Closing Gross Block	8138.83	8450.20	8465.20	8465.20
Average Gross Block	8097.16	8294.51	8457.70	8465.20
Rate of Depreciation	5.2852%	5.2853%	5.2854%	5.2853%
Depreciable Value	7287.45	7465.06	7611.93	7618.68
Remaining Depreciable Value	7053.39	6981.36	6689.84	6249.57
Depreciation	249.64	438.39	447.02	447.41

Single Asset				
	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

Operation & maintenance expenses

42. Clause (g) of regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and transmission line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

Elements	2009-10	2010-11	2011-12	2012-13	2013-14
Norms for AC lines (₹ lakh/ Km)					
S/C (Twin & Triple Conductor)	0.358	0.378	0.400	0.423	0.447
D/C (Twin & Triple Conductor)	0.627	0.663	0.701	0.741	0.783
Norms for sub-station (₹ lakh/per bay)					
220 kV	36.68	38.78	41.00	43.34	45.82
400 kV	52.40	55.40	58.57	61.92	65.46

43. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which is allowed as per details given overleaf:-

(₹ in lakh)

Combined assets of LILO of Ramagundum-Khammam Transmission Line at Warangal S/S (DOCO: 1.8.2009), Neyveli-Pugalur-Madurai 400 kV D/C TL (DOCO:1.9.2009), Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV sub-station at Arasur and associated bays at Udumalpet (DOCO: 1.8.2010), LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry sub-station with associated bays (DOCO: 1.8.2010) (Notional DOCO of Combined Asset-I: 1.8.2010)					
Element	2009-10	2010-11 (Pro-rata for 2 months i.e. from 1.8.2010 to 30.9.2010)	2011-12	2012-13	2013-14
123.643 km D/C Pugalur -Madurai Transmission Line (Notional DOCO:01.08.2010)		13.66	Nil	Nil	Nil
198.047 km D/C Neyveli Pugalur Transmission Line (Notional DOCO:01.08.2010)		21.88	Nil	Nil	Nil
1.624 km S/C Neyveli-Pugalur Transmission Line (Notional DOCO:01.08.2010)		0.10	Nil	Nil	Nil
13.619 km D/C LILO of Ramagundam-Khammam Transmission Line at Warangal Sub-station (Notional DOCO:01.08.2010)		1.50	Nil	Nil	Nil
0.558 km S/C LILO of Ramagundam-Khammam Transmission Line at Warangal Sub-station (Notional DOCO:01.08.2010)		0.04	Nil	Nil	Nil
65.116 km D/C Udumalpet- Arasur 400 kV D/C line (Notional DOCO:01.08.2010)		7.19	Nil	Nil	Nil
12.543 km LILO of Neyveli-Sriperumbudur at Puducherry (Notional DOCO:01.08.2010)		1.39	Nil	Nil	Nil
2 No's 400 kV Bays at Neyveli (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Madurai (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Pugalur (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Warangal (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Arasur (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Udumalpet (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
2 No's 400 kV Bays at Puducherry (Notional DOCO:01.08.2010)		18.47	Nil	Nil	Nil
Total O&M for Combined Asset-A		175.05	Nil	Nil	Nil
Combined Asset-A of instant petition is linked with Asset-I & III of Petition No. 136/2010. Thus, from 1.8.2009 to 1.8.2010, O&M Expenses have been allowed vide order dated 11.1.2012 in Petition No. 136/2010 for LILO of Ramagundum-Khammam Transmission Line and Neyveli-Pugalur-Madurai 400 kV D/C Transmission Line. Combined Asset-A is clubbed with Combined Asset-B. The notional DOCO of Asset-II is 1.10.2010 . Thus, O&M for Combined Asset-A in the instant petition is calculated from notional DOCO i.e. 1.8.2010 to 30.9.2010. Thus, the O&M in Combined Asset-A is given from 1.8.2010 to 30.9.2010, i.e. for two months and for further period it is given in Combined Asset-B.					

(₹ in lakh)

Combined assets of LILO of Ramagundum-Khammam Transmission Line at Warangal S/S (DOCO: 01.08.2009), Neyveli-Pugalur-Madurai 400 kV DC TL (DOCO:01.09.2009), Udumalpet- Arasur 400 kV D/C Line along with 400/220 kV substation at Arasur and associated bays at Udumalpet (DOCO:01.08.2010), LILO of Neyveli- Sriperumbudur 400 kV S/C line at Puducherry S/S with associated bays (DOCO: 01.08.2010) and 2 Nos. of 50 MVAR line Reactors at Pugalur 400/220 kV S/S along with associated bays at Pugalur S/S. (Notional DOCO of Combined Asset-II: 1.10.2010)					
Element		2010-11 (Pro-rata for 6 months)	2011-12	2012-13	2013-14
123.643 km D/C Pugalur Madurai Transmission Line (Notional DOCO:01.10.2010)		40.99	86.67	91.62	96.81
198.047 km D/C Neyveli Pugalur Transmission Line (Notional DOCO:01.10.2010)		65.65	138.83	146.75	155.07
1.624 km S/C Neyveli Pugalur Transmission Line (Notional DOCO:01.10.2010)		0.31	0.65	0.69	0.73
13.619 km D/C LILO of Ramagundam Khammam Transmission Line at Warangal Sub-station (Notional DOCO:01.10.2010)		4.51	9.55	10.09	10.66
0.558 km S/C LILO of Ramagundam Khammam Transmission Line at Warangal Sub-station (Notional DOCO:01.10.2010)		0.11	0.22	0.24	0.25
65.116 km D/C Udumalpet- Arasur 400 kV D/C line (Notional DOCO:01.10.2010)		21.59	45.65	48.25	50.99
12.543 km LILO of Neyveli-Sriperumbudur at Puducherry (Notional DOCO:01.10.2010)		4.16	8.79	9.29	9.82
2 No's 400 kV Line Reactor Bays at Neyveli (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Neyveli (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Madurai (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Pugalur (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Warangal (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Arasur (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Udumalpet(Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
2 No's 400 kV Bays at Puducherry (Notional DOCO:01.10.2010)		55.40	117.14	123.84	130.92
Total O&M for Combined Asset-B		580.51	1227.48	1299.65	1371.69

(₹ in lakh)

Combined assets of 2x315 MVA Auto Transformer & 400/220kV Bays Equipment at Pugalur S/S (DOCO: 01.09.2009), 315 MVA ICT-I along with associated bays and 220kV downstream equipment at Arasur S/S (DOCO: 1.8.2010), and 315 MVA ICT-II along with associated bays and 220kV downstream equipment at Arasur S/S (DOCO: 1.9.2010)					
Element		2010-11	2011-12	2012-13	2013-14
9 No's 220 kV Bays at Arasur and Pugalur (DOCO:01.08.2010)		232.68 (Pro-rata for 8 months)			
3 No's 220 kV Bays at Arasur , Palladam and Karmadai (DOCO:01.09.2010)		67.86 (Pro-rata for 7 months)	492.00	520.08	549.84
3 No's 400 kV Bays at Arasur and Pugalur (DOCO:01.08.2010)		110.8 (Pro-rata for 8 months)	234.28	247.68	261.84
1 No 400 kV Bay at Arasaur (DOCO:01.09.2010)		32.32 (Pro-rata for 7 months)			
Total O&M for Combined Asset- C and D		443.66	726.28	767.76	811.68
Combined Asset-C and D of instant petition is linked with Asset-IV of Petition 136/2010. Thus, the order in Petition No.136/2010 is already been issued by the Commission. Thus, from 1.9.2009 to 1.8.2010, the O&M expenses are given vide Order in Petition No. 136/2010 for Asset of 2x315 MVA Auto Transformer & 400/220kV Bays Equipment at Pugalur S/S (DOCO: 01.09.2009). Thus, O&M for Combined Asset-C and D in the instant petition is calculated from DOCO i.e. 1.8.2010 to 31.3.2014 and from 1.9.2010 to 31.3.2014 respectively.					

(₹ in lakh)

2 nos. of 400/230kV 315 MVA ICTs along with associated bays and downstream equipment at 400/230kV Puducherry substation (DOCO of Asset-8: 1.10.2010)					
Element		2010-11	2011-12	2012-13	2013-14
6 No's 220 kV Bays at Puducherry, Thondamantham , Bahoor and Villianur		116.34	246.00	260.04	274.92
2 No's 400 kV Bays at Puducherry		55.40	117.14	123.84	130.92
Total O&M for Asset-8 (Single Asset)		171.74	363.14	383.88	405.84

44. The petitioner has submitted that O & M expenditure for the period 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O & M charges for the tariff period 2009-14. The petitioner has submitted that it would approach the Commission for

suitable revision in the norms for O & M expenditure in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

45. While specifying the norms for Operation and Maintenance Expenses, the Commission has in the 2009 Tariff Regulations already factored 50% on account of pay revision of the employees of PSUs after extensive consultation with the stakeholders. At this stage there does not seem to be any justification for deviating from the norms. However, in case the petitioner separately approaches the Commission by making an appropriate application, the same shall be dealt with in accordance with law.

Interest on working capital

46. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18 (1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months' fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses as part of the working capital from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses

Regulation 18 (1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of interest on working capital

In view of the Second Amendment dated 21.6.2011, in the 2009 Tariff Regulations, interest rate of 11.00% (SBI Base Rate 7.50% as on 1.7.2010 plus 350 bps) has been considered for calculating interest on working capital.

47. Necessary computations in support of interest on working capital are given hereunder:-

(₹ in lakh)		
Combined Asset A		
	2010-11	Pro-rata for 2 months
Maintenance Spares	157.55	39.39
O & M expenses	87.53	21.88
Receivables	1773.91	443.48
Total	2,018.98	504.74
Rate of Interest	11.75%	11.75%
Interest	148.06	37.01

(₹ in lakh)

Combined Asset B					Combined Asset C	
	2010-11	2011-12	2012-13	2013-14	2010-11	Tariff for August 2010
Maintenance Spares	174.15	184.12	194.95	205.75	77.28	9.66
O & M expenses	96.75	102.29	108.30	114.31	42.94	5.37
Receivables	1822.86	1842.36	1818.57	1788.70	239.86	29.98
Total	2093.77	2128.78	2121.82	2108.76	360.08	45.01
Rate of Interest	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%
Interest	115.16	234.17	233.40	231.96	26.41	3.30

Combined Asset D				
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	103.04	108.94	115.16	121.75
O & M expenses	57.25	60.52	63.98	67.64
Receivables	320.24	328.24	334.39	336.97
Total	480.53	497.71	513.53	526.36
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	30.83	54.75	56.49	57.90

Single Asset				
	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
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

48. The transmission charges being allowed for the transmission assets are summarized below:-

(₹ in lakh)

Combined Asset A		
	2010-11	Pro-rata for 2 months
Depreciation	2297.98	574.50
Interest on Loan	1604.56	401.14
Return on equity	2344.83	586.21
Interest on Working Capital	148.06	37.01
O & M Expenses	700.20	175.05
Total	7095.62	1773.91

(₹ in lakh)

Combined Asset B					Combined Asset C	
	2010-11	2011-12	2012-13	2013-14	2010-11	Tariff for August 2010
Depreciation	1752.61	3578.45	3586.95	3586.95	219.18	27.40
Interest on Loan	1232.76	2361.02	2129.32	1879.48	152.89	19.11
Return on equity	1787.54	3653.07	3662.12	3662.12	217.49	27.19
Interest on Working Capital	115.16	234.17	233.40	231.96	26.41	3.30
O & M Expenses	580.51	1227.48	1299.65	1371.69	343.48	42.94
Total	5468.58	11054.19	10911.44	10732.21	959.45	119.93

Combined Asset D				
	2010-11	2011-12	2012-13	2013-14
Depreciation	249.64	438.39	447.02	447.41
Interest on Loan	191.95	315.05	291.53	260.86
Return on equity	247.71	434.99	443.55	443.94
Interest on Working Capital	30.83	54.75	56.49	57.90
O & M Expenses	400.73	726.28	767.76	811.68
Total	1120.85	1969.45	2006.34	2021.79

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

Filing fee and publication expenses

49. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

Licence fee

50. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with licence fees had not been captured and the licence fee may be allowed to be recovered separately from the respondents.

51. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax

52. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. We consider petitioner's prayer premature and accordingly this prayer is rejected.

Sharing of transmission charges

53. As regards the sharing of the transmission charges, we direct that prior to 1.7.2011, the transmission charges shall be shared with the respondents in accordance with Regulation 33 of the 2009 Tariff Regulations. From 1.7.2011 onwards, the charges shall be shared in accordance with Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010.

54. This order disposes of Petition No. 332/2010.

Sd/-

(M.Deena Dayalan)
Member

Sd/-

(V.S. Verma)
Member

Annexure 1

	Name of the Company:	PGCIL			
	Name of the Tr. System:	Combined Asset-A: Asset-1: LILO of 400 kV Ramagundam-Khammam line along with associated bays and equipments (DOCO:01.08.2009)(Covered under P.No.136/2010), Asset-3: 400 kV Neyveli-Pugulur-Madurai D/C Line along with associated bays and equipment (DOCO:01.09.2009) (Covered under P.No.136/2010) AND Asset-5: Udumalpet-Arasur line along with S/S at Arasur and associated bays at Udumalpet & LILO of Neyveli-Sriperrumbudur 400 kV S/C line at Puducherry S/S with associated bays. (DOCO:01.08.2010)(Covered under instant petition).			
	Notional DOCO:	01.08.2010			
	Petition No.:	332/2010			
	Tariff setting Period:	2009-14			
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	ABD III (Exchange Rate @ 48.77)				
	Gross loan opening	1950.80	1950.80	1950.80	1950.80
	Cumulative Repayment upto DOCO/previous year	60.28	92.66	162.31	239.17
	Net Loan-Opening	1890.52	1858.14	1788.49	1711.63
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	32.38	69.64	76.86	84.66
	Net Loan-Closing	1858.14	1788.49	1711.63	1626.97
	Average Loan	1874.33	1823.32	1750.06	1669.30
	Rate of Interest	2.72%	2.72%	2.72%	2.72%
	Interest	50.89	49.50	47.51	45.32
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
2	ABD III (Exchange Rate @ 49.29)				
	Gross loan opening	22426.95	22426.95	22426.95	22426.95
	Cumulative Repayment upto DOCO/previous year	692.99	1065.28	1865.92	2749.54
	Net Loan-Opening	21733.96	21361.67	20561.03	19677.41
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	372.29	800.64	883.62	973.33
	Net Loan-Closing	21361.67	20561.03	19677.41	18704.08
	Average Loan	21547.81	20961.35	20119.22	19190.74
	Rate of Interest	2.72%	2.72%	2.72%	2.72%
	Interest	585.02	569.10	546.24	521.03
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			

3	Bond XXII				
	Gross loan opening	2340.00	2340.00	2340.00	2340.00
	Cumulative Repayment upto DOCO/previous year	0.00	195.00	390.00	585.00
	Net Loan-Opening	2340.00	2145.00	1950.00	1755.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	195.00	195.00	195.00	195.00
	Net Loan-Closing	2145.00	1950.00	1755.00	1560.00
	Average Loan	2242.50	2047.50	1852.50	1657.50
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	194.65	177.72	160.80	143.87
	Rep Schedule	12 annual Instalments from 07.12.2010			
4	Bond XXVI				
	Gross loan opening	3560.00	3560.00	3560.00	3560.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	296.67	593.33
	Net Loan-Opening	3560.00	3560.00	3263.33	2966.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	296.67	296.67	296.67
	Net Loan-Closing	3560.00	3263.33	2966.67	2670.00
	Average Loan	3560.00	3411.67	3115.00	2818.33
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	331.08	317.29	289.70	262.11
	Rep Schedule	12 annual Instalments from 07.03.2012			
5	Bond XXI				
	Gross loan opening	1090.00	1090.00	1090.00	1090.00
	Cumulative Repayment upto DOCO/previous year	0.00	90.83	181.67	272.50
	Net Loan-Opening	1090.00	999.17	908.33	817.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	90.83	90.83	90.83	90.83
	Net Loan-Closing	999.17	908.33	817.50	726.67
	Average Loan	1044.58	953.75	862.92	772.08
	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	91.19	83.26	75.33	67.40
	Rep Schedule	12 annual Instalments from 11.10.2010			
6	Bond XXV				
	Gross loan opening	7030.00	7030.00	7030.00	7030.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	585.83	1171.67
	Net Loan-Opening	7030.00	7030.00	6444.17	5858.33
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	585.83	585.83	585.83
	Net Loan-Closing	7030.00	6444.17	5858.33	5272.50
	Average Loan	7030.00	6737.08	6151.25	5565.42
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	710.03	680.45	621.28	562.11
	Rep Schedule	12 annual Instalments from 12.06.2011			

7	Bond XXVIII				
	Gross loan opening	487.00	487.00	487.00	487.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	40.58
	Net Loan-Opening	487.00	487.00	487.00	446.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	40.58	40.58
	Net Loan-Closing	487.00	487.00	446.42	405.83
	Average Loan	487.00	487.00	466.71	426.13
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	45.44	45.44	43.54	39.76
	Rep Schedule	12 equal installments w.e.f. 15.12.2012			
8	Bond XIX				
	Gross loan opening	720.00	720.00	720.00	720.00
	Cumulative Repayment upto DOCO/previous year	60.00	60.00	120.00	180.00
	Net Loan-Opening	660.00	660.00	600.00	540.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	60.00	60.00	60.00
	Net Loan-Closing	660.00	600.00	540.00	480.00
	Average Loan	660.00	630.00	570.00	510.00
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	61.05	58.28	52.73	47.18
	Rep Schedule	12 annual Instalments from 24.07.2010			
9	Bond XXIV				
	Gross loan opening	1300.00	1300.00	1300.00	1300.00
	Cumulative Repayment upto DOCO/previous year	0.00	108.33	216.67	325.00
	Net Loan-Opening	1300.00	1191.67	1083.33	975.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	108.33	108.33	108.33	108.33
	Net Loan-Closing	1191.67	1083.33	975.00	866.67
	Average Loan	1245.83	1137.50	1029.17	920.83
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	123.96	113.18	102.40	91.62
	Rep Schedule	12 annual Instalments from 26.03.2011			
10	Bond XXXIII				
	Gross loan opening	176.00	176.00	176.00	176.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	176.00	176.00	176.00	176.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	176.00	176.00	176.00	176.00
	Average Loan	176.00	176.00	176.00	176.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	15.21	15.21	15.21	15.21
	Rep Schedule	12 annual installments from 08.07.2014			

11	Bond XXXI				
	Gross loan opening	40.00	40.00	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	40.00	40.00	40.00	40.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	3.33
	Net Loan-Closing	40.00	40.00	40.00	36.67
	Average Loan	40.00	40.00	40.00	38.33
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	3.56	3.56	3.56	3.41
	Rep Schedule	12 annual Instalments from 25.02.2014			
12	Bond XXXII				
	Gross loan opening	1759.60	1759.60	1759.60	1759.60
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	1759.60	1759.60	1759.60	1759.60
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	146.63
	Net Loan-Closing	1759.60	1759.60	1759.60	1612.97
	Average Loan	1759.60	1759.60	1759.60	1686.28
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	155.55	155.55	155.55	149.07
	Rep Schedule	12 annual Instalments from 29.03.2014			
13	Bond XXX				
	Gross loan opening	760.00	760.00	760.00	760.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	760.00	760.00	760.00	760.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	63.33
	Net Loan-Closing	760.00	760.00	760.00	696.67
	Average Loan	760.00	760.00	760.00	728.33
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	66.88	66.88	66.88	64.09
	Rep Schedule	12 annual Instalments from 29.09.2013			

14	ADB III (Ex Rate @ 46.69)				
	Gross loan opening	2307.42	2307.42	2307.42	2307.42
	Cumulative Repayment upto DOCO/previous year	71.30	109.60	191.98	282.89
	Net Loan-Opening	2236.12	2197.82	2115.44	2024.53
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	38.30	82.37	90.91	100.14
	Net Loan-Closing	2197.82	2115.44	2024.53	1924.39
	Average Loan	2216.97	2156.63	2069.99	1974.46
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	38.13	37.09	35.60	33.96
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
	Total Loan				
	Gross loan opening	45947.77	45947.77	45947.77	45947.77
	Cumulative Repayment upto DOCO/previous year	884.57	1721.71	4011.04	6439.69
	Net Loan-Opening	45063.20	44226.06	41936.73	39508.08
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	837.14	2289.33	2428.65	2748.69
	Net Loan-Closing	44226.06	41936.73	39508.08	36759.40
	Average Loan	44644.63	43081.39	40722.41	38133.74
	Rate of Interest	5.5385%	5.5070%	5.4425%	5.3657%
	Interest	2472.64	2372.50	2216.32	2046.13

Name of the Company:	PGCIL				
Name of the Tr. System:	Combined Asset-B: Asset-1: LILO of 400 kV Ramagundam-Khammam line along with associated bays and equipments (DOCO:01.08.2009)(Covered under P.No.136/2010), Asset-3: 400 kV Neyveli-Pugulur-Madurai D/C Line along with associated bays and equipment (DOCO:01.09.2009) (Covered under P.No.136/2010), Asset-5: Udumalpet-Arasur line along with S/S at Arasur and associated bays at Udumalpet & LILO of Neyveli-Sriperrumbudur 400 kV S/C line at Pondicherry S/S with associated bays. (DOCO:01.08.2010)(Covered under instant petition) AND Asset-9: 2 nos of 50 MVAR line reactor at Pugulur S/S along with associated bays at Pugulur (DOCO:01.10.2010)(Covered under instant petition).				
Notional DOCO:	01.10.2010				
Petition No.:	332/2010				
Tariff setting Period:	2009-14				
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN (₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	ABD III (Exchange Rate @ 48.77)				
	Gross loan opening	1950.80	1950.80	1950.80	1950.80
	Cumulative Repayment upto DOCO/previous year	60.28	92.66	162.31	162.31
	Net Loan-Opening	1890.52	1858.14	1788.49	1788.49
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	32.38	69.64	0.00	0.00
	Net Loan-Closing	1858.14	1788.49	1788.49	1788.49
	Average Loan	1874.33	1823.32	1788.49	1788.49
	Rate of Interest	2.72%	2.72%	2.72%	2.72%
	Interest	50.89	49.50	48.56	48.56
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
		635.91			
2	ABD III (Exchange Rate @ 49.29)				
	Gross loan opening	22426.95	22426.95	22426.95	22426.95
	Cumulative Repayment upto DOCO/previous year	692.99	1065.28	1865.92	1865.92
	Net Loan-Opening	21733.96	21361.67	20561.03	20561.03
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	372.29	800.64	0.00	0.00
	Net Loan-Closing	21361.67	20561.03	20561.03	20561.03
	Average Loan	21547.81	20961.35	20561.03	20561.03
	Rate of Interest	2.72%	2.72%	2.72%	2.72%
	Interest	585.02	569.10	558.23	558.23
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			

3	Bond XXII				
	Gross loan opening	2430.00	2430.00	2430.00	2430.00
	Cumulative Repayment upto DOCO/previous year	0.00	202.50	405.00	607.50
	Net Loan-Opening	2430.00	2227.50	2025.00	1822.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	202.50	202.50	202.50	202.50
	Net Loan-Closing	2227.50	2025.00	1822.50	1620.00
	Average Loan	2328.75	2126.25	1923.75	1721.25
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	202.14	184.56	166.98	149.40
	Rep Schedule	12 annual Instalments from 07.12.2010			
4	Bond XXVI				
	Gross loan opening	3700.00	3700.00	3700.00	3700.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	308.33	616.67
	Net Loan-Opening	3700.00	3700.00	3391.67	3083.33
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	308.33	308.33	308.33
	Net Loan-Closing	3700.00	3391.67	3083.33	2775.00
	Average Loan	3700.00	3545.83	3237.50	2929.17
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	344.10	329.76	301.09	272.41
	Rep Schedule	12 annual Instalments from 07.03.2012			
5	Bond XXI				
	Gross loan opening	1148.00	1148.00	1148.00	1148.00
	Cumulative Repayment upto DOCO/previous year	0.00	95.67	191.33	287.00
	Net Loan-Opening	1148.00	1052.33	956.67	861.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	95.67	95.67	95.67	95.67
	Net Loan-Closing	1052.33	956.67	861.00	765.33
	Average Loan	1100.17	1004.50	908.83	813.17
	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	96.04	87.69	79.34	70.99
	Rep Schedule	12 annual Instalments from 11.10.2010			
6	Bond XXV				
	Gross loan opening	7344.00	7344.00	7344.00	7344.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	612.00	1224.00
	Net Loan-Opening	7344.00	7344.00	6732.00	6120.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	612.00	612.00	612.00
	Net Loan-Closing	7344.00	6732.00	6120.00	5508.00
	Average Loan	7344.00	7038.00	6426.00	5814.00
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	741.74	710.84	649.03	587.21
	Rep Schedule	12 annual Instalments from 12.06.2011			

7	Bond XXVIII				
	Gross loan opening	523.00	523.00	523.00	523.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	43.58
	Net Loan-Opening	523.00	523.00	523.00	479.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	43.58	43.58
	Net Loan-Closing	523.00	523.00	479.42	435.83
	Average Loan	523.00	523.00	501.21	457.63
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	48.80	48.80	46.76	42.70
	Rep Schedule	12 equal installments w.e.f. 15.12.2012			
8	Bond XIX				
	Gross loan opening	751.00	751.00	751.00	751.00
	Cumulative Repayment upto DOCO/previous year	60.00	60.00	122.58	185.17
	Net Loan-Opening	691.00	691.00	628.42	565.83
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	62.58	62.58	62.58
	Net Loan-Closing	691.00	628.42	565.83	503.25
	Average Loan	691.00	659.71	597.13	534.54
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	63.92	61.02	55.23	49.45
	Rep Schedule	12 annual Instalments from 24.07.2010			
9	Bond XXIV				
	Gross loan opening	1355.00	1355.00	1355.00	1355.00
	Cumulative Repayment upto DOCO/previous year	0.00	112.92	225.83	338.75
	Net Loan-Opening	1355.00	1242.08	1129.17	1016.25
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	112.92	112.92	112.92	112.92
	Net Loan-Closing	1242.08	1129.17	1016.25	903.33
	Average Loan	1298.54	1185.63	1072.71	959.79
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	129.20	117.97	106.73	95.50
	Rep Schedule	12 annual Instalments from 26.03.2011			
10	Bond XXXIII				
	Gross loan opening	176.00	176.00	176.00	176.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	176.00	176.00	176.00	176.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	176.00	176.00	176.00	176.00
	Average Loan	176.00	176.00	176.00	176.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	15.21	15.21	15.21	15.21
	Rep Schedule	12 annual installments from 08.07.2014			

11	Bond XXXI				
	Gross loan opening	46.00	46.00	46.00	46.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	46.00	46.00	46.00	46.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	3.83
	Net Loan-Closing	46.00	46.00	46.00	42.17
	Average Loan	46.00	46.00	46.00	44.08
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	4.09	4.09	4.09	3.92
	Rep Schedule	12 annual Instalments from 25.02.2014			
12	Bond XXXII				
	Gross loan opening	1830.00	1830.00	1830.00	1830.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	1830.00	1830.00	1830.00	1830.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	152.50
	Net Loan-Closing	1830.00	1830.00	1830.00	1677.50
	Average Loan	1830.00	1830.00	1830.00	1753.75
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	161.77	161.77	161.77	155.03
	Rep Schedule	12 annual Instalments from 29.03.2014			
13	Bond XXX				
	Gross loan opening	833.00	833.00	833.00	833.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	833.00	833.00	833.00	833.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	69.42
	Net Loan-Closing	833.00	833.00	833.00	763.58
	Average Loan	833.00	833.00	833.00	798.29
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	73.30	73.30	73.30	70.25
	Rep Schedule	12 annual Instalments from 29.09.2013			

14	ADB III Asset-3(Ex Rate @ 46.69)				
	Gross loan opening	2307.42	2307.42	2307.42	2307.42
	Cumulative Repayment upto DOCO/previous year	71.30	109.60	191.98	232.13
	Net Loan-Opening	2236.12	2197.82	2115.44	2075.29
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	38.30	82.37	40.15	40.15
	Net Loan-Closing	2197.82	2115.44	2075.29	2035.14
	Average Loan	2216.97	2156.63	2095.37	2055.22
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	38.13	37.09	36.04	35.35
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
	Total Loan				
	Gross loan opening	46821.17	46821.17	46821.17	46821.17
	Cumulative Repayment upto DOCO/previous year	884.57	1738.63	4085.29	5563.02
	Net Loan-Opening	45936.60	45082.54	42735.88	41258.15
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	854.06	2346.66	1477.73	1703.48
	Net Loan-Closing	45082.54	42735.88	41258.15	39554.67
	Average Loan	45509.57	43909.21	41997.01	40406.41
	Rate of Interest	5.6128%	5.5813%	5.4822%	5.3314%
	Interest	2554.36	2450.71	2302.37	2154.21

Annexure 3

	Name of the Company:	PGCIL			
	Name of the Tr. System:	Combined Asset-C: Asset-4 -: 2x315 MVA Auto Transformer & downstream system at Pugalur Stage-I (DOCO:01.09.2009) (Covered under P.No.136/2010) and Asset-6 : 1 X 315 MVA ICT-I along with associated bays and 220 kV downstream equipment at Arasur S/S (DOCO:01.08.2010)(Covered under instant petition).			
	Notional DOCO:	01.08.2010			
	Petition No.:	332/2010			
	Tariff setting Period:	2009-14			
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	ADB III Asset-1(Ex Rate @ 49.29)				
	Gross loan opening	1972.59	1972.59	1972.59	1972.59
	Cumulative Repayment upto DOCO/previous year	60.95	93.70	164.12	241.84
	Net Loan-Opening	1911.63	1878.89	1808.47	1730.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	32.74	70.42	77.72	85.61
	Net Loan-Closing	1878.89	1808.47	1730.75	1645.14
	Average Loan	1895.26	1843.68	1769.61	1687.94
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	32.60	31.71	30.44	29.03
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
2	ADB III Asset-2(Ex Rate @ 46.69)				
	Gross loan opening	233.45	233.45	233.45	233.45
	Cumulative Repayment upto DOCO/previous year	7.21	11.09	19.42	28.62
	Net Loan-Opening	226.24	222.36	214.03	204.83
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	3.88	8.33	9.20	10.13
	Net Loan-Closing	222.36	214.03	204.83	194.70
	Average Loan	224.30	218.19	209.43	199.76
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	3.86	3.75	3.60	3.44
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			

3	Bond XXII				
	Gross loan opening	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	8.33	16.67	25.00
	Net Loan-Opening	100.00	91.67	83.33	75.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	8.33	8.33	8.33	8.33
	Net Loan-Closing	91.67	83.33	75.00	66.67
	Average Loan	95.83	87.50	79.17	70.83
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	8.32	7.60	6.87	6.15
	Rep Schedule	12 annual Instalments from 07.12.2010			
4	Bond XXVI				
	Gross loan opening	150.00	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	12.50	25.00
	Net Loan-Opening	150.00	150.00	137.50	125.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	12.50	12.50	12.50
	Net Loan-Closing	150.00	137.50	125.00	112.50
	Average Loan	150.00	143.75	131.25	118.75
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	13.95	13.37	12.21	11.04
	Rep Schedule	12 annual Instalments from 07.03.2012			
5	Bond XXI				
	Gross loan opening	65.00	65.00	65.00	65.00
	Cumulative Repayment upto DOCO/previous year	0.00	5.42	10.83	16.25
	Net Loan-Opening	65.00	59.58	54.17	48.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	5.42	5.42	5.42	5.42
	Net Loan-Closing	59.58	54.17	48.75	43.33
	Average Loan	62.29	56.88	51.46	46.04
	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	5.44	4.97	4.49	4.02
	Rep Schedule	12 annual Instalments from 11.10.2010			
6	Bond XXV				
	Gross loan opening	1330.00	1330.00	1330.00	1330.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	110.83	221.67
	Net Loan-Opening	1330.00	1330.00	1219.17	1108.33
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	110.83	110.83	110.83
	Net Loan-Closing	1330.00	1219.17	1108.33	997.50
	Average Loan	1330.00	1274.58	1163.75	1052.92
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	134.33	128.73	117.54	106.34
	Rep Schedule	12 annual Instalments from 12.06.2011			

7	Bond XXVIII				
	Gross loan opening	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	4.17
	Net Loan-Opening	50.00	50.00	50.00	45.83
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.17	4.17
	Net Loan-Closing	50.00	50.00	45.83	41.67
	Average Loan	50.00	50.00	47.92	43.75
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	4.67	4.67	4.47	4.08
	Rep Schedule	12 equal installments w.e.f. 15.12.2012			
8	Bond XIX				
	Gross loan opening	35.00	35.00	35.00	35.00
	Cumulative Repayment upto DOCO/previous year	2.92	2.92	5.83	8.75
	Net Loan-Opening	32.08	32.08	29.17	26.25
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	2.92	2.92	2.92
	Net Loan-Closing	32.08	29.17	26.25	23.33
	Average Loan	32.08	30.63	27.71	24.79
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	2.97	2.83	2.56	2.29
	Rep Schedule	12 annual Instalments from 24.07.2010			
9	Bond XXIV				
	Gross loan opening	55.00	55.00	55.00	55.00
	Cumulative Repayment upto DOCO/previous year	0.00	4.58	9.17	13.75
	Net Loan-Opening	55.00	50.42	45.83	41.25
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	4.58	4.58	4.58	4.58
	Net Loan-Closing	50.42	45.83	41.25	36.67
	Average Loan	52.71	48.13	43.54	38.96
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	5.24	4.79	4.33	3.88
	Rep Schedule	12 annual Instalments from 26.03.2011			

1 0	Bond XXXIII				
	Gross loan opening	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	10.00	10.00	10.00	10.00
	Average Loan	10.00	10.00	10.00	10.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	0.86	0.86	0.86	0.86
	Rep Schedule	12 annual installments from 08.07.2014			
1 1	Bond XXXI				
	Gross loan opening	5.00	5.00	5.00	5.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	5.00	5.00	5.00	5.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.42
	Net Loan-Closing	5.00	5.00	5.00	4.58
	Average Loan	5.00	5.00	5.00	4.79
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	0.45	0.45	0.45	0.43
	Rep Schedule	12 annual Instalments from 25.02.2014			
1 2	Bond XXXII				
	Gross loan opening	207.70	207.70	207.70	207.70
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	207.70	207.70	207.70	207.70
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	17.31
	Net Loan-Closing	207.70	207.70	207.70	190.39
	Average Loan	207.70	207.70	207.70	199.05
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	18.36	18.36	18.36	17.60
	Rep Schedule	12 annual Instalments from 29.03.2014			

1	Bond XXX				
3					
	Gross loan opening	85.00	85.00	85.00	85.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	85.00	85.00	85.00	85.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	7.08
	Net Loan-Closing	85.00	85.00	85.00	77.92
	Average Loan	85.00	85.00	85.00	81.46
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	7.48	7.48	7.48	7.17
	Rep Schedule	12 annual Instalments from 29.09.2013			
	Total Loan				
	Gross loan opening	4298.74	4298.74	4298.74	4298.74
	Cumulative Repayment upto DOCO/previous year	71.08	126.04	349.38	585.04
	Net Loan-Opening	4227.65	4172.70	3949.36	3713.69
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	54.95	223.34	235.67	269.30
	Net Loan-Closing	4172.70	3949.36	3713.69	3444.39
	Average Loan	4200.18	4061.03	3831.53	3579.04
	Rate of Interest	5.6788%	5.6528%	5.5765%	5.4856%
	Interest	238.52	229.56	213.66	196.33

Annexure 4

	Name of the Company:	PGCIL			
	Name of the Tr. System:	Combined Asset-D: Asset-4 -: 2x315 MVA Auto Transformer & downstream system at Pugalur Stage-I (DOCO:01.09.2009) (Covered under P.No.136/2010), Asset-6 : 1 X 315 MVA ICT-I alongwith associated bays and 220 kV downstream equipment at Arasur S/S (DOCO:01.08.2010)(Covered under present petition) AND Asset-7 : 315 MVA ICT-II alongwith associated bays and 220 kV downstream equipment at Arasur S/S (DOCO:01.09.2010) (Covered under instant petition).			
	Notional DOCO:	01.09.2010			
	Petition No.:	332/2010			
	Tarrif setting Period:	2009-14			
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	ADB III Asset-5(Ex Rate @ 49.29)				
	Gross loan opening	1972.59	1972.59	1972.59	1972.59
	Cumulative Repayment upto DOCO/previous year	60.95	93.70	164.12	241.84
	Net Loan-Opening	1911.63	1878.89	1808.47	1730.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	32.74	70.42	77.72	85.61
	Net Loan-Closing	1878.89	1808.47	1730.75	1645.14
	Average Loan	1895.26	1843.68	1769.61	1687.94
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	32.60	31.71	30.44	29.03
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
2	ADB III Asset-6(a) (Ex Rate @ 46.69)				
	Gross loan opening	233.45	233.45	233.45	233.45
	Cumulative Repayment upto DOCO/previous year	7.21	11.09	19.42	28.62
	Net Loan-Opening	226.24	222.36	214.03	204.83
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	3.88	8.33	9.20	10.13
	Net Loan-Closing	222.36	214.03	204.83	194.70
	Average Loan	224.30	218.19	209.43	199.76
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	3.86	3.75	3.60	3.44
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			

3	Bond XXII				
	Gross loan opening	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	16.67	33.33	50.00
	Net Loan-Opening	200.00	183.33	166.67	150.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	16.67	16.67	16.67	16.67
	Net Loan-Closing	183.33	166.67	150.00	133.33
	Average Loan	191.67	175.00	158.33	141.67
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	16.64	15.19	13.74	12.30
	Rep Schedule	12 annual Instalments from 07.12.2010			
4	Bond XXVI				
	Gross loan opening	300.00	300.00	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	25.00	50.00
	Net Loan-Opening	300.00	300.00	275.00	250.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	25.00	25.00	25.00
	Net Loan-Closing	300.00	275.00	250.00	225.00
	Average Loan	300.00	287.50	262.50	237.50
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	27.90	26.74	24.41	22.09
	Rep Schedule	12 annual Instalments from 07.03.2012			
5	Bond XXI				
	Gross loan opening	130.00	130.00	130.00	130.00
	Cumulative Repayment upto DOCO/previous year	0.00	10.83	21.67	32.50
	Net Loan-Opening	130.00	119.17	108.33	97.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	10.83	10.83	10.83	10.83
	Net Loan-Closing	119.17	108.33	97.50	86.67
	Average Loan	124.58	113.75	102.92	92.08
	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	10.88	9.93	8.98	8.04
	Rep Schedule	12 annual Instalments from 11.10.2010			
6	Bond XXV				
	Gross loan opening	1660.00	1660.00	1660.00	1660.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	138.33	276.67
	Net Loan-Opening	1660.00	1660.00	1521.67	1383.33
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	138.33	138.33	138.33
	Net Loan-Closing	1660.00	1521.67	1383.33	1245.00
	Average Loan	1660.00	1590.83	1452.50	1314.17
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	167.66	160.67	146.70	132.73
	Rep Schedule	12 annual Instalments from 12.06.2011			

7	Bond XXVIII				
	Gross loan opening	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	8.33
	Net Loan-Opening	100.00	100.00	100.00	91.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	8.33	8.33
	Net Loan-Closing	100.00	100.00	91.67	83.33
	Average Loan	100.00	100.00	95.83	87.50
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	9.33	9.33	8.94	8.16
	Rep Schedule	12 equal installments w.e.f. 15.12.2012			
8	Bond XIX				
	Gross loan opening	70.00	70.00	70.00	70.00
	Cumulative Repayment upto DOCO/previous year	5.83	5.83	11.67	17.50
	Net Loan-Opening	64.17	64.17	58.33	52.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	5.83	5.83	5.83
	Net Loan-Closing	64.17	58.33	52.50	46.67
	Average Loan	64.17	61.25	55.42	49.58
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	5.94	5.67	5.13	4.59
	Rep Schedule	12 annual Instalments from 24.07.2010			
9	Bond XXIV				
	Gross loan opening	110.00	110.00	110.00	110.00
	Cumulative Repayment upto DOCO/previous year	0.00	9.17	18.33	27.50
	Net Loan-Opening	110.00	100.83	91.67	82.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	9.17	9.17	9.17	9.17
	Net Loan-Closing	100.83	91.67	82.50	73.33
	Average Loan	105.42	96.25	87.08	77.92
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	10.49	9.58	8.66	7.75
	Rep Schedule	12 annual Instalments from 26.03.2011			
10	Bond XXXIII				
	Gross loan opening	19.00	19.00	19.00	19.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	19.00	19.00	19.00	19.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	19.00	19.00	19.00	19.00
	Average Loan	19.00	19.00	19.00	19.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	1.64	1.64	1.64	1.64
	Rep Schedule	12 annual installments from 08.07.2014			

11	Bond XXXI				
	Gross loan opening	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.83
	Net Loan-Closing	10.00	10.00	10.00	9.17
	Average Loan	10.00	10.00	10.00	9.58
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	0.89	0.89	0.89	0.85
	Rep Schedule	12 annual Instalments from 25.02.2014			
12	Bond XXXII				
	Gross loan opening	397.70	397.70	397.70	397.70
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	397.70	397.70	397.70	397.70
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	33.14
	Net Loan-Closing	397.70	397.70	397.70	364.56
	Average Loan	397.70	397.70	397.70	381.13
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	35.16	35.16	35.16	33.69
	Rep Schedule	12 annual Instalments from 29.03.2014			
13	Bond XXX				
	Gross loan opening	170.00	170.00	170.00	170.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	170.00	170.00	170.00	170.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	14.17
	Net Loan-Closing	170.00	170.00	170.00	155.83
	Average Loan	170.00	170.00	170.00	162.92
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	14.96	14.96	14.96	14.34
	Rep Schedule	12 annual Instalments from 29.09.2013			

14	ABD III Asset-6 (b) (Ex Rate @ 47.44)				
	Gross loan opening	274.20	274.20	274.20	274.20
	Cumulative Repayment upto DOCO/previous year	8.47	13.02	22.81	33.62
	Net Loan-Opening	265.73	261.18	251.39	240.59
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	4.55	9.79	10.80	11.90
	Net Loan-Closing	261.18	251.39	240.59	228.69
	Average Loan	263.45	256.28	245.99	234.64
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	4.53	4.41	4.23	4.04
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
	Total Loan				
	Gross loan opening	5646.94	5646.94	5646.94	5646.94
	Cumulative Repayment upto DOCO/previous year	82.47	160.31	454.69	766.58
	Net Loan-Opening	5564.47	5486.63	5192.25	4880.36
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	77.84	294.38	311.89	369.95
	Net Loan-Closing	5486.63	5192.25	4880.36	4510.41
	Average Loan	5525.55	5339.44	5036.31	4695.39
	Rate of Interest	6.1978%	6.1734%	6.1055%	6.0205%
	Interest	342.46	329.63	307.49	282.68

Annexure 5

	Name of the Company:	PGCIL			
	Name of the Tr. System:	Single Asset-8 : 2 Nos. of 400/230 kV 315 MVA ICTs along with associated bays and downstream equipment at 400/230 kV Puducherry substation.			
	Notional DOCO:	01.10.2010			
	Petition No.:	332/2010			
	Tarrif setting Period:	2009-14			
CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(₹ in lakh)					
	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	ADB III (Ex Rate @ 46.69)				
	Gross loan opening	669.53	669.53	669.53	669.53
	Cumulative Repayment upto DOCO/previous year	20.69	31.80	55.71	82.08
	Net Loan-Opening	648.85	637.73	613.83	587.45
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	11.11	23.90	26.38	29.06
	Net Loan-Closing	637.73	613.83	587.45	558.39
	Average Loan	643.29	625.78	600.64	572.92
	Rate of Interest	1.72%	1.72%	1.72%	1.72%
	Interest	11.06	10.76	10.33	9.85
	Rep Schedule	30 Half Yearly Installments from 15.01.2010			
2	Bond XXII				
	Gross loan opening	270.00	270.00	270.00	270.00
	Cumulative Repayment upto DOCO/previous year	0.00	22.50	45.00	67.50
	Net Loan-Opening	270.00	247.50	225.00	202.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	22.50	22.50	22.50	22.50
	Net Loan-Closing	247.50	225.00	202.50	180.00
	Average Loan	258.75	236.25	213.75	191.25
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	22.46	20.51	18.55	16.60
	Rep Schedule	12 annual Instalments from 07.12.2010			

3	Bond XXVI				
	Gross loan opening	390.00	390.00	390.00	390.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	32.50	65.00
	Net Loan-Opening	390.00	390.00	357.50	325.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	32.50	32.50	32.50
	Net Loan-Closing	390.00	357.50	325.00	292.50
	Average Loan	390.00	373.75	341.25	308.75
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	36.27	34.76	31.74	28.71
	Rep Schedule	12 annual Instalments from 07.03.2012			
4	Bond XXI				
	Gross loan opening	170.00	170.00	170.00	170.00
	Cumulative Repayment upto DOCO/previous year	0.00	14.17	28.33	42.50
	Net Loan-Opening	170.00	155.83	141.67	127.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	14.17	14.17	14.17	14.17
	Net Loan-Closing	155.83	141.67	127.50	113.33
	Average Loan	162.92	148.75	134.58	120.42
	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	14.22	12.99	11.75	10.51
	Rep Schedule	12 annual Instalments from 11.10.2010			
5	Bond XXV				
	Gross loan opening	870.00	870.00	870.00	870.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	72.50	145.00
	Net Loan-Opening	870.00	870.00	797.50	725.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	72.50	72.50	72.50
	Net Loan-Closing	870.00	797.50	725.00	652.50
	Average Loan	870.00	833.75	761.25	688.75
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	87.87	84.21	76.89	69.56
	Rep Schedule	12 annual Instalments from 12.06.2011			

6	Bond XXVIII				
	Gross loan opening	130.00	130.00	130.00	130.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	10.83
	Net Loan-Opening	130.00	130.00	130.00	119.17
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	10.83	10.83
	Net Loan-Closing	130.00	130.00	119.17	108.33
	Average Loan	130.00	130.00	124.58	113.75
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	12.13	12.13	11.62	10.61
	Rep Schedule	12 equal installments w.e.f. 15.12.2012			
7	Bond XIX				
	Gross loan opening	90.00	90.00	90.00	90.00
	Cumulative Repayment upto DOCO/previous year	7.50	7.50	15.00	22.50
	Net Loan-Opening	82.50	82.50	75.00	67.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	7.50	7.50	7.50
	Net Loan-Closing	82.50	75.00	67.50	60.00
	Average Loan	82.50	78.75	71.25	63.75
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	7.63	7.28	6.59	5.90
	Rep Schedule	12 annual Instalments from 24.07.2010			
8	Bond XXIV				
	Gross loan opening	140.00	140.00	140.00	140.00
	Cumulative Repayment upto DOCO/previous year	0.00	11.67	23.33	35.00
	Net Loan-Opening	140.00	128.33	116.67	105.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	11.67	11.67	11.67	11.67
	Net Loan-Closing	128.33	116.67	105.00	93.33
	Average Loan	134.17	122.50	110.83	99.17
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	13.35	12.19	11.03	9.87
	Rep Schedule	12 annual Instalments from 26.03.2011			

10	Bond XXXI				
	Gross loan opening	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.83
	Net Loan-Closing	10.00	10.00	10.00	9.17
	Average Loan	10.00	10.00	10.00	9.58
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	0.89	0.89	0.89	0.85
	Rep Schedule	12 annual Instalments from 25.02.2014			
11	Bond XXXII				
	Gross loan opening	402.50	402.50	402.50	402.50
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	402.50	402.50	402.50	402.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	33.54
	Net Loan-Closing	402.50	402.50	402.50	368.96
	Average Loan	402.50	402.50	402.50	385.73
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	35.58	35.58	35.58	34.10
	Rep Schedule	12 annual Instalments from 29.03.2014			
12	Bond XXX				
	Gross loan opening	220.00	220.00	220.00	220.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	220.00	220.00	220.00	220.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	18.33
	Net Loan-Closing	220.00	220.00	220.00	201.67
	Average Loan	220.00	220.00	220.00	210.83
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	19.36	19.36	19.36	18.55
	Rep Schedule	12 annual Instalments from 29.09.2013			

	Total Loan				
	Gross loan opening	3362.03	3362.03	3362.03	3362.03
	Cumulative Repayment upto DOCO/previous year	28.19	87.64	272.37	470.42
	Net Loan-Opening	3333.85	3274.40	3089.66	2891.62
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	59.45	184.74	198.05	253.43
	Net Loan-Closing	3274.40	3089.66	2891.62	2638.18
	Average Loan	3304.12	3182.03	2990.64	2764.90
	Rate of Interest	7.8940%	7.8772%	7.8354%	7.7806%
	Interest	260.83	250.66	234.33	215.13

Name of the Company:	PGCIL
Name of the Tr. System:	Combined Asset-A: Asset-1: LILO of 400 kV Ramagundam-Khammam line along with associated bays and equipments (DOCO:01.08.2009)(Covered under P.No.136/2010), Asset-3: 400 kV Neyveli-Pugulur-Madurai D/C Line alongwith associated bays and equipment (DOCO:01.09.2009) (Covered under P.No.136/2010) AND Asset-5: Udumalpet-Arasur line alongwith S/S at Arasur and associated bays at Udumalpet & LILO of Neyveli-Sriperrumbudur 400 kV S/C line at Pondicherry S/S with associated bays. (DOCO:01.08.2010)(Covered under instant petition).
Notional DOCO:	01.08.2010
Petition No.:	332/2010
Tarrif setting Period:	2009-14

Expdtr as on	Claimed as on DOCO	Admitted Capital Cost as on DOCO after IDC & IEDC adjustment	2009-10	2010-11	2011-12	Total	Claimed	Deemed vto be claimed as admitted capital cost	Worked Out	Excess/ Short
In petition no. 136/2010										
Asset-1										
Transmission Line	1314.30	1,314.30	43.14	32.10	-	1,389.54	-	-	10.50	10.50
Sub-Station	2585.91	2,585.91	271.95	191.89	70.30	3,120.05	47.92	47.92	78.77	30.85
Asset-2										
Transmission Line	0	-	-	-	-	-	-	-	0.00	0.00
Sub-Station	4453.91	4,453.91	112.85	93.40	25.50	4,685.66	107.29	107.29	117.39	10.10
Asset-3										
Transmission Line	39015.57	37,878.72	1,343.56	172.50	68.88	39,463.66	332.79	323.09	295.77	-27.32
Sub-Station	5277.23	5,124.48	614.39	228.67	35.92	6,003.46	198.64	192.89	148.99	-43.90
Asset-4										
Transmission Line	0	-	-	-	-	-	-	-	0.00	0.00
Sub-Station	4246.81	4,086.20	241.85	83.33	14.15	4,425.53	79.46	76.45	111.51	35.06
In petition no. 332/2010										
Asset-5*										
Transmission Line	9813.31	9,327.94	-	385.54	10.00	9,723.48	-	-	73.48	73.48
Sub-Station	7661.60	7,322.97	-	1,479.05	140.00	8,942.02	266.86	255.07	222.74	-32.32
Asset-6										
Transmission Line	0	-	-	-	-	-	-	-	0.00	0.00
Sub-Station	1894.63	1,851.15	-	-	156.11	2,007.26	23.33	22.79	50.88	28.09
Asset-7										
Transmission Line	0	-	-	-	-	-	-	-	0.00	0.00

		-				-				
Sub-Station	1925.92	1,876.30	-	-	156.11	2,032.41	23.33	22.73	51.53	28.80
Asset-8										
Transmission Line	0	-	-	-	-	-	-	-	0.00	0.00
Sub-Station	4802.87	4,338.33	-	65.04	10.00	4,413.37	94.22	85.11	110.98	25.87
Asset-9										
Transmission Line	965.72	799.97	-	139.10	20.00	959.07		-	7.25	7.25
Sub-Station	281.97	233.50	-	-	-	233.50	6.23	6.23	5.83	-0.40
Whole Project										
Transmission Line		49,320.93				51,535.75	332.79	323.09	387.00	(63.90)
Sub-Station		31,872.75				35,863.26	847.28	816.48	898.64	(82.15)
		Cost as on Cut off date	Initial Spares claimed	Ceiling Limit as per clause 8	work out	Excess/ Shortfall				
Transmission Line		51535.75	323.09	0.75%	387.00	-63.90				
Sub-Station		35863.26	816.48	2.50%	898.64	-82.15				

*As per affidavit dated 15.04.2011, Rs.208 lakh against Arasur S/S & Udumalpet up stream System. Rs.58.86 lakh against Pondicherry S/S up stream System.