

**AMRAVATI POWER TRANSMISSION
COMPANY LIMITED**

Petition for approval of Aggregate Revenue Requirement and determination of Multi Year Tariff for the second Control Period from FY 2011-12 to FY 2015-16 for Amravati Power Transmission Company Ltd.

Petition Filed with: Maharashtra Electricity Regulatory Commission

1. Executive Summary:

A. Introduction:

- The Hon'ble Commission vide Order dated 30 December, 2010 and its Amendment vide Order dated 04 August, 2014, granted a Transmission Licence (Licence No. 3 of 2010) to Amravati Power Transmission Company Limited (APTCL). The Commission authorized APTCL to establish and operate the following transmission lines inclusive of related infrastructure:
 - 400 KV D/C Quad Moose Amravati TPP-Akola- II S/S transmission line (104 km),
 - LILO of 400 KV S/C Akola - Koradi transmission line at Amravati TPP (7 km),
 - 2 Nos. 400 KV Line Bays at MSETCL Akola-I substation.
- The capital expenditure for the transmission line mentioned under the Licence has been approved by the Hon'ble Commission vide Letter No. MERC/CAPEX/20112012/APTCL/334 dated 10 May, 2011.
- APTCL submitted the Business Plan for MYT second Control Period (FY 2011-12 to FY 2015-16) on 17 September, 2011. The Hon'ble Commission approved the Business Plan of APTCL vide its Order dated 26 April, 2012 in Case No. 135 of 2011 in accordance with the provisions of the MERC (MYT) Regulations, 2011.
- In compliance with the directions of the Hon'ble Commission in the Business Plan Order, APTCL is submitting the present Petition for approval of Aggregate Revenue Requirement (ARR) and determination of Multi Year Tariff for the second Control Period from FY 2013-14 to FY 2015-16.
- APTCL is submitting this MYT Petition in accordance with the directive given by the Hon'ble Commission, post commissioning of LILO of 400 KV S/C Akola - Koradi transmission line, 2 Nos. of 400 KV line Bays at Akola- I S/S and 400kV Quad Line. APTCL is submitting its capital cost considering the actual expenditure till 20 March, 2015 pertaining to LILO, Bays and 400 kV Quad Line. Further, APTCL has created provisions for additional capital expenditure expected for initial spares, Emergency Restoration System and residential colony to be capitalised by 1 January, 2016.
- APTCL has charged LILO line of 400 KV S/C Akola - Koradi transmission line on 2 October, 2012 and the expense towards the LILO line has been capitalised in books on 3 June, 2013. APTCL has charged 2 Nos. of 400 KV line Bays at MSETCL Akola- I S/S on 29 January, 2014 and 19 September, 2014 respectively. However, as the works related to 400 KV Bays were completed on 31 March, 2014, APTCL has capitalised expenses in books on 1 April, 2014. APTCL charged its 400 KV D/C Quad Moose transmission line (104 km) Circuit -1 on 19 March, 2015 and Circuit – 2 on 20 March, 2015. Accordingly, APTCL is proposing capitalisation of its assets on

20 March, 2015.

B. Capital Cost considered:

- The completed capital cost of LILO of 400 KV S/C Akola-Koradi transmission line, 2 Nos. of 400 KV line Bays at MSETCL Akola-I S/s and the revised estimated capital cost of 400 KV D/C Quad Moose Amravati TPP-Akola S/s transmission line is given in the table below.

Table 1: Revised Capital cost of APTCL (in Rs crore)

Sl. No.	Particulars	Cost approved by MERC (A)	Revised Costs (Rs crore) (proposed in ARR Petition) (B)							Total = (1)+(2) +(3)+(4)
			LILO (1)	400 KV Bays (2)			Quad (3)	Total capitalised cost =(1)+(2)+(3)	Provision for additional capitalisation in FY 15-16 (4)	
			(Capitalised as on 03.06.2013)	(Capitalised partially as on 01.04.2014)	(Additional capitalisation as on 20.03.15)	Total capitalisation for Bays	(Capitalised as on 20.03.2015)			
1	Preliminaries									
1.1	License and other Statutory approvals	1.00	0.00	0.00	0.00	0.00	0.58	0.58	0.00	0.58
1.2	Detailed route survey	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	Compensation for ROW	5.55	0.00	0.00	0.00	0.00	1.11	1.11	0.00	1.11
2	Transmission Lines									
2.1	400 KV Quad Moose D/C Line from Amravati TPP – Akola-II S/S		0.00	0.00	0.00	0.00	180.86	180.86	0.00	180.86
2.2	LILO of 400KV S/C line at Amravati	194.20	10.12	0.00	0.00	0.00	0.00	10.12	0.00	10.12
	Sub Total (2)	194.20	10.12	0.00	0.00	0.00	180.86	190.98	0.00	190.98
3	Sub-Station									
3.1	400kV Bays MSETCL Akola-I Sub-station 2 nos.	10.00	0.00	12.82	1.57	14.39	0.00	14.39	0.00	14.39
4	Sub-Total- I (1+2+3)	210.97	10.12	12.82	1.57	14.39	182.55	207.06	0.00	207.06
5	Overheads including Establishment, management, engineering, spares, audit and accounts and maintenance during construction etc	12.66	0.28	0.45	0.05	0.50	6.13	6.91	4.72	11.63
6	Escalation towards completion cost	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Initial Spares and Tools	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79	1.79
8	Contingency	6.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Consultancy	7.80	0.17	1.71	0.00	1.71	6.30	8.17	0.00	8.17
10	Margin Money for working capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Sub-Total-II (4+5+6+7+8+9+10)	258.86	10.57	14.98	1.62	16.60	194.98	222.14	6.51	228.66
12	Financing & IDC	17.10	0.00	2.80	0.46	3.26	55.22	58.48		58.48
13	Total - A (DPR expenses)	275.96	10.57	17.78	2.08	19.86	250.20	280.63	6.51	287.14

Sl. No.	Particulars	Cost approved by MERC (A)	Revised Costs (Rs crore) (proposed in ARR Petition) (B)							Total = (1)+(2) +(3)+(4)
			LILO (1)	400 KV Bays (2)			Quad (3)	Total capitalised cost =(1)+(2)+(3)	Provision for additional capitalisation in FY 15-16 (4)	
			(Capitalised as on 03.06.2013)	(Capitalised partially as on 01.04.2014)	(Additional capitalisation as on 20.03.15)	Total capitalisation for Bays	(Capitalised as on 20.03.2015)			
14	(B) Additional capitalisation towards procurement of ERS (Non-DPR expense)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50	9.50
15	Total (A+B)	275.96	10.57	17.78	2.08	19.86	250.20	280.63	16.01	296.64

- **Funding Pattern of the Project:** APTCL proposes to fund the project through a 75:25 debt: equity ratio as per the Regulation 30 of MERC (MYT) Regulations, 2011. The details of funding is as shown below:

Table 2: Source of Funding (in Rs crore)

Particulars	Revised Cost			
	LILO Line (Rs. Crores)	Quad line including Bays (Rs. Crores)	Additional Capitalisation (Rs. Crores)	Total (Rs. Crores)
Hard Cost	10.57	211.58	16.01	238.16
IDC and Finance charge		58.48		58.48
Project Cost including IDC	10.57	270.06	16.01	296.64
Equity	2.64	67.52	4.00	74.16
Debt	7.93	202.55	12.01	222.48

- APTCL in its Business Plan submission had considered a normative debt: equity ratio of 70:30 which was approved by the Hon'ble Commission vide Order dated 26 April, 2012 in Case No. 135 of 2011. However, in order to avail better debt funding, the Petitioner had approached various lenders/ banks for debt funding of 75% of capital cost and now same is finalised with Power Finance Corporation Ltd. & Rural Electrification Corporation Ltd. Hence in this Petition the Petitioner has considered a debt: equity ratio of 75:25.

C. Computation of ARR for the second Control Period

- Being a new Transmission Licensee, APTCL has projected its Aggregate Revenue Requirement for the MYT second Control Period from the COD of LILO line achieved in FY 2013-14 up to FY 2015-16 on the following basis:-
- The ARR has been projected considering COD of various elements as per following:

Table 3: CoD considered for various assets

Transmission element	COD	ARR for FY		
		2013-14	2014-15	2015-16
LILO line	03 June, 2013 (Actual)	Partial year from 03.06.13 to 31.03.14	Complete year	Complete year
400 KV Bays at Akola-I S/S	01 April, 2014 (Actual)	-	Complete year	Complete year
Quad transmission line	20 March, 2015 (Actual)	-	Partial year from 20.03.2015 to 31.03.2015	Complete year
Additional Capitalisation (Initial Spares, Residential Colony and ERS)	1 January, 2016 (Expected)	-	-	Partial year from 01.01.2016 to 31.03.2016

- ARR for the MYT second Control Period has been projected on the basis of actual capital cost of Rs. 10.57 crore incurred for LILO of 400 KV S/C Akola - Koradi transmission line and Rs. 19.86 crore incurred for 400 KV Bays and revised completed capital cost of Rs 250.20 crore for 400 KV D/C Quad Moose Amravati TPP-Akola-II S/s transmission line. APTCL has estimated additional capital cost of Rs. 16.01 crore for procurement of initial spares, ERS and construction/ purchase of residential colony and the cost is expected to be capitalised on 1 January, 2016.
- Operations & Maintenance Expenses: The Operations and Maintenance (O&M) Expenses for transmission network has been projected for the second Control Period considering “per Bay” and “per ckt km” norm in accordance with MERC (MYT) Regulations, 2011 for new Transmission Licensee. The O&M expenses for the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below:

Table 4: O&M Expenses for second control period

O&M Expenses	FY 2013-14	FY 2014-15	FY 2015-16
O&M Expenses	0.14	2.44	3.90

- Depreciation: Depreciation has been computed on Gross Fixed Assets at the rate of

5.28% per annum. The Depreciation expenses for the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below:

Table 5: Depreciation for second control period

Depreciation	FY 2013-14	FY 2014-15	FY 2015-16
GFA-opening balance	-	10.57	280.63
GFA-additions	10.57	270.07	16.01
GFA-closing balance	10.57	280.63	296.64
Depreciation expense	0.46	2.04	15.03

- Interest on Long Term Loans: The Interest on Long Term Loans for the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below

Table 6: Interest Expenses for second control period

Interest expense	FY 2013-14	FY 2014-15	FY 2015-16
Opening balance of debt	-	7.47	207.98
Additions	7.93	202.56	12.01
Repayment	0.46	2.04	15.03
Closing balance of debt	7.47	207.98	204.96
Interest expense	0.86	3.81	26.45

- Interest on Working Capital: Interest on working capital has been computed on normative basis in accordance with Regulation 35.2 (b) of MERC (MYT) Regulations, 2011 at an interest rate of 14.60% being equal to the State Bank Advance Rate (SBAR) of SBI as on date of submission of this Petition. The Interest on Working Capital for the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below:

Table 7: Interest on working capital for second control period

Working Capital	FY 2013-14	FY 2014-15	FY 2015-16
One month equivalent of Operations and Maintenance Expenses	0.01	0.20	0.32
One-twelfth of the sum of the book value of stores, materials and supplies	0.01	0.23	0.25
One and a half months of the expected revenue from transmission charges at the prevailing tariffs	0.28	10.18	7.53
Total Working Capital Requirement	0.30	10.61	8.10
Interest on Working Capital@14.60%	0.03	0.23	1.17

- Contribution to Contingency Reserves: Contribution to contingency reserves is computed at the rate of 0.25% of opening GFA in accordance with Regulation 61.10 of MERC (MYT) Regulations, 2011. The Contribution to Contingency Reserves for

the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below

Table 8: Contribution to contingency reserves for second control period

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Contingency Reserve	0.03	0.70	0.74

- Return on Equity: APTCL has projected the Return on Equity at the rate of 15.50 % per annum in accordance with the MERC (MYT) Regulations, 2011. The Return on Equity for the 2nd MYT control period from FY 2013-14 to FY 2015-16 are provided in table below

Table 9: Return on Equity for second control period

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening Balance of Equity	-	2.64	70.16
Additions to equity towards capital investments	2.64	67.52	4.00
Closing balance of Equity	2.64	70.16	74.16
ROE @ 15.5%	0.34	1.50	11.03

- Income Tax Expenses: Income Tax expense has been included as a part of ARR taking into consideration applicable MAT of 20.96 %.

Table 10: Income Tax for second control period

Income Tax	FY 2013-14	FY 2014-15	FY 2015-16
Income Tax	0.09	0.40	2.92

- Non-tariff Income: Non-Tariff Income has been computed based on the interest from investment made out of contingency reserves at an interest rate of 8.00% and interest on other investments made by APTCL.

Table 11: Non-tariff Income for second control period

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Non-tariff Income	0.11	0.22	0.03

- The ARR for APTCL for the second Control Period FY 2013-14 to 2015-16, considering above factors, is summarized in the table as under:

Table 12: Summary of ARR for the second Control Period (in Rs crore)

Sl.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Operation & Maintenance Expenses	0.14	2.44	3.90
2	Depreciation	0.46	2.04	15.03
3	Interest on Long-term Loan	0.86	3.81	26.45
4	Interest on Working Capital	0.03	0.23	1.17
5	Other Expenses	-	-	-
6	Contribution to Contingency Reserves	0.03	0.70	0.74
7	Income Tax Expense	0.09	0.40	2.92
8	Total Revenue Expenditure	1.61	9.62	50.22
9	Return on Equity Capital	0.34	1.50	11.03
10	Aggregate Revenue Requirement	1.95	11.12	61.25
11	Less: Non-Tariff Income	0.11	0.22	0.03
12	Less: Income from Other Business	-	-	-
13	Aggregate Revenue Requirement from Retail Tariff	1.84	10.90	61.21

- Carrying Costs: APTCL further submits that LILO line has been capitalised on 3 June, 2013 and Bays at Akola I on April 1, 2014 and Quad line is recently commissioned on 20 March, 2015. However, the recovery of ARR of APTCL will commence only after Commission issues its Order on MYT Petition of APTCL and the approved ARR gets included in InSTS Order for the State. Hence, APTCL requests the Hon'ble Commission to allow carrying cost to compensate for the delay in recovery of ARR. APTCL has computed the carrying cost by considering the projected ARR of APTCL for the year FY 2013-14 & FY 2014-15 and the time delay for FY 2015-16 during the tenure of proceedings post filing of the Petition, which is estimated nearly four (4) months from March 2015. Thereby, APTCL has considered recovery of ARR from the month of August 2015. The carrying cost computed by APTCL comes to Rs 6.99 crore.

Executive Summary: APTCL MYT Petition

- Standards of Performance: APTCL submits its commitment to adhere to the standards of performance and has proposed a roadmap on the same.
- Compliance with Directives: The Hon'ble Commission in its Order dated 26 April, 2012 in Case No. 135 of 2011 had made certain observations regarding completed capital cost, construction risks, operation risks, capacity off-take risks, impact on capital cost due to any delay in generation project and risk profile of the transmission business vis-a-vis interest rate on long term loan. The Petitioner has made point-wise submissions on each on these issues and has endeavoured to comply with each of them.