



**MERC**

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**

13th Floor, Centre No. 1, World Trade Centre, Cuffe Parade, Colaba, Mumbai - 400 005.  
Tel.: 022-2216 3964 / 2216 3965 / 2216 3969 ♦ Fax : 022-2216 3976 ♦ Website : www.mercindia.org.in  
E-mail : mercindia@mercindia.org.in

MERC/CAPEX/20122013/00082

April 12, 2012

✓ The Managing Director,  
The Tata Power Company Ltd,  
Bombay House,  
24, Homi Mody Street,  
Fort, Mumbai 400 001

**Sub: In-principle clearance of the investment scheme of TPC-T for**

- a) Replacement of 22 kV Bus Sections I & III**
  - b) Replacement of 33 kV Bus Sections I & II**
- at Carnac R/S.**

**Ref: REG/MERC/11/154 dated 30<sup>th</sup> June, 2011.**

Sir,



This has reference to the Detailed Project Report for the captioned scheme submitted by TPC-T vide letter under reference.

1. The scheme has been evaluated with reference to the guidelines circulated by the Commission on 9<sup>th</sup> Feb. 2005. I am directed to convey in-principle clearance of this scheme. The particulars of the scheme as approved in principle are outlined in the Annexure A and the breakup of the project cost is given in Appendix-A.
2. Please note that this in-principle clearance should not be construed as final approval for ARR purpose and the scheme will be open for scrutiny during the tariff determination process / ARR review, particularly in the context of actual cost incurred, scope and objective achieved etc. ex-post after implementation of the scheme. TPC-T will be required to submit the status of implementation of the scheme with cost incurred till date, likely completion date etc. along with their ARR petition or during the tariff determination process at the appropriate time.
3. Since, this is a replacement scheme; TPC-T should ensure that the equity component of the original cost of the replaced asset is knocked off from the equity base.
4. As per the Directive of the Commission vide Order dated 3<sup>rd</sup> September 2010 (Case no 96 of 2009) TPC-T should submit all the relevant details in the case of replacement schemes for all years from FY 2005-06 onwards for the Commission to ensure that the impact of such asset



replacement is passed on in the desired manner to the consumers, and take the same into consideration by the Commission in the next Order.

5. TPC-T should submit quarterly progress report indicating the name of the scheme, approved cost and the cost incurred till the last quarter. TPC-T should also submit half yearly report giving the status of implementation of the scheme in terms of expenditure incurred and item wise physical progress achieved during the implementation of the scheme.

6. Asset created after execution of the scheme should be maintained separately in the Asset register.

7. Immediately after completion/commissioning of the scheme, TPC-T should communicate to the Commission the date of completion of the scheme, actual cost incurred, escalation in cost, if any with reasons, the scope and objectives of the scheme and to what extent they have been achieved, etc so as to facilitate a comparison between the in-principle clearance and the actual.



Yours Faithfully,

(Kuldip N. Khawarey)  
Secretary, MERC

Encl: Annexure-A & Appendix-A.  
c.c. to

**Prayas Energy Group,**  
**Amrita Clinic, Athawale Corner,**  
Lakdipool-Karve Road Junction,  
Deccan Gymkhana, Karve Road,  
Pune 411 004.

The General Secretary,  
**Thane Belapur Industries Association,**  
Plot No.P-14, MIDC,  
Rabale Village, PO Ghansoli,  
Navi Mumbai 400 701.

The President,  
**Mumbai GrahakPanchayat,**  
GrahakBhavan,  
SantDnyaneshwarMarg,  
Behind Cooper Hospital,  
Vile Parle (West),  
Mumbai 400 056.

The President,  
**Vidarbha Industries Association,**  
1st floor, UdyogBhawan, Civil Lines,  
Nagpur 440 001.





**Annexure-A**

**Brief particulars of the scheme for  
Replacement of 22 kV Bus Sections I, III & 33 kV Bus Sections I, II at Carnac R/S**

**Particulars furnished in the Feasibility Report by TPC-T**

1.	a) Name of the Scheme b) Scheme code No.	Replacement of 22 kV Bus Sections I, III & 33 kV Bus Sections I, II at Carnac R/S. TPC-T/FY12/02		
2.	Estimated Cost	Rs. 23.61 Cr. (As estimated by TPC-T) (Break up as per Appendix A)		
3.	ROI / Cost Benefit	No direct monetary benefit is envisaged as the scheme is proposed to replace the old outdated equipment of the existing Carnac receiving substation.		
4.	Brief Scope of Work	a) Replacement of 22 kV Bus Sections I & III with 33 kV GIS Bus Sections I & III (operated at 22 kV) b) Replacement of 33 kV AIS Bus Sections I to II with 33 kV GIS Bus Sections		
5.	Objective / Justification	1. As the existing switchgear being more than 17 Years old and does not have spares available, the replacement is required. 2. To supply reliable power to customers. 3. To cater the present and future load demand by strengthening the existing transmission network. 4. To reduce interruptions due to fault.		
6.	Funding Arrangement	Internal accruals or from reputed leading institutions.		
7.	Time Frame / Phasing of Expenditure	Work is scheduled to be completed in FY-14.		
	Year	Replacement of 22 kV Bus I, III	Replacement of 33 kV Bus I, II	Amount (Rs.Cr.)
	2011-12	7.40	-	7.40
	2012-13	1.46	12.52	13.98
	2013-14	-	2.23	2.23
	Total	8.86	14.75	23.61



**Appendix-A**

**Replacement of 22 kV Bus Sections I & III at Carnac R/S**  
**Break Up of Cost Estimate**

Amt. in Rs. Lakhs					
Sr. No.	Description	Qty	Unit	Unit Price	Item Price
1	Civil works for 33 kV GIS Installation	1	LS	28	28
2	Procurement of 33 kV GIS complete with CTs, Dummy Panels disconnections, BCU/ BCPU equipment (17 bays)	2	Set	272	544
3	33 kV, 1 C X 630 Sq. mm Cu-XLPE cables	2000	M	0.04	80
4	Installation of 33 kV cable terminations for bays	20	Set	0.3	6
5	Aux. System (earthing, cable trays, etc) - lump sum	1	LS	24	24
6	LV Power & control cables	1	LS	28	28
7	Services for SCADA integration Trombay, Dharavi, Carnac	1	LS	21	21
8	Installation, erection, testing & commissioning of all equipments	1	LS	36	36
9	Consultancy Services	1	LS	4	4
10	Staff cost @ 2% of material cost				36
	<b>Sub-Total</b>				<b>807</b>
11	Contingencies @ 2%				16
12	IDC				63
	<b>Project Cost (A)</b>				<b>886</b>
	<b>Say Rs. Crores</b>			<b>8.86</b>	



**Replacement of 33 kV Bus Sections I & II at Carnac R/S**  
**Break Up of Cost Estimate**

Amt. in Rs. Lakhs					
Sr. No.	Description	Qty	Unit	Unit Price	Item Price
1	Civil works for 33 kV GIS Installation	1	LS	40	40
2	Procurement of 33 kV GIS complete with CTs, Dummy Panels disconnections, BCU/ BCPU equipment (29 bays)	2	Set	464	928
3	33 kV, 1 C X 630 Sq. mm Cu- XLPE cables	4500	M	0.04	180
4	Installation of 33 kV cable terminations for bays	20	Set	0.25	5
5	Aux. System (earthing, cable trays, etc) - lump sum	1	LS	24	24
6	LV Power & control cables	1	LS	28	28
7	Services for SCADA integration Trombay, Dharavi, Carnac	1	LS	36	36
8	Installation, erection, testing & commissioning of all equipments	1	LS	36	36
9	Consultancy Services	1	LS	4	4
10	Staff cost		LS		60
	<b>Sub-Total</b>				<b>1341</b>
11	Contingencies @ 2%				27
12	IDC				107
	<b>Project Cost (B)</b>				<b>1475</b>
	<b>Say Rs. Crores</b>			<b>14.75</b>	

Sr. No.	Scheme Details	Project Cost (in Crs.)
1	Replacement of 22 kV Bus Sections I & III (A)	8.86
2	Replacement of 33 kV Bus Sections I & II (B)	14.75
	<b>Total Project Cost (A+B)</b>	<b>23.61</b>



