

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 173/TT/2013**

**And**

**Petition No. 111/TT/2015**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Dr. M.K. Iyer, Member**

**Date of Order : 19.12.2018**

**In the matter of:**

Revision of order dated 15.6.2016 in Petition Nos. 173/TT/2013 and 111/TT/2015 in the light of order dated 28.2.2018 in Review Petition No. 33/RP/2016.

**Petition No. 173/TT/2013**

**And in the matter of:**

Approval of transmission tariff of Combined assets of LILO of 400 kV S/C Vindhyachal-Korba Transmission line and 400 kV D/C Gandhar-Hazira Transmission line and 400/220 kV GIS sub-station at Hazira and associated bays and 400 kV D/C Quad Moose Transmission line from Mahan Thermal Power Plant-Sipat Pooling Sub-station and associated bays for the years 2012-13 and 2013-14 in tariff block 2009-14 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.

**Petition No. 111/TT/2015**

Truing up of Annual Fixed Cost of capital cost of combined assets of LILO of 400 kV S/C Vindhyachal-Korba transmission line and 400 kV D/C Gandhar-Hazira transmission line and 400/220 kV GIS Sub-station at Hazira and associated bays (actual date of commercial operation 1.4.2013) referred as Stage-I (Asset-1) for 2013-14 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.



**And in the matter of:**

Essar Power Transmission Company Limited  
(EPTCL), Tower-2, 5<sup>th</sup> Floor, Equinox Business Park,  
Off Bandra Kurla Complex, LBS Marg,  
Kurla (W), Mumbai-400070.

.....Petitioner

**Vs**

1. Essar Power M.P Limited,  
Prakash Deep Building, 10<sup>th</sup> Floor, 7  
Tolstoy Marg, New Delhi-110001.
2. Power Grid Corporation of India Limited,  
B-9, Qutub Institutional Area,  
Katwaria Sarai, New Delhi-110016.
3. National Load Despatch Centre,  
B-9, Qutub Institutional Area, Katwaria  
Sarai, New Delhi-110016.
4. Western Region Power Committee,  
F-3, MIDC Area, Marol, Opp. SEEPZ, Central  
Road, Andheri (East), Mumbai-400093
5. Essar Steel India Limited,  
27<sup>th</sup> KM on Surat-Hazira Road,  
Hazira-394 270, Distt.-Surat
6. Government of Madhya Pradesh,  
Energy Department, Mantralaya,  
Vallabh Bhavan, Bhopal-462004.

....Respondents

**ORDER**

This order is being issued for giving effect to the order dated 28.2.2018 in Review  
Petition No.33/RP/2016 in Petition Nos. 173/TT2013 and 111/TT/2015.



## **Brief background**

2. The Commission vide its order dated 15.6.2016 in Petition No. 173/TT/2013 and Petition No. 111/TT/2015 determined the transmission tariff for the year 2013-14 of the 2009-14 tariff block and trued up the Annual Fixed Cost in respect of Combined assets of LILO of 400 kV S/C Vindhyachal-Korba Transmission Line and 400 kV D/C Gandhar-Hazira Transmission Line and 400/220 kV GIS Sub-station at Hazira and associated bays.

3. Against the said order dated 15.6.2016, the petitioner preferred Review Petition No. 33/RP/2016 mainly on the following issues, namely:-

- (a) disallowance of ₹7673 lakh as cost incurred towards procuring RoW for Stage-I of the project;
- (b) condonation of time over-run in execution of the project owing to RoW issues and time over-run due on account of statutory approvals viz- grant of approval under section 164 of the Electricity Act, 2003 from the Ministry of Power and delay in grant of forest clearance;
- (c) disallowance of IDC and IEDC; and
- (d) reduction in capital cost on account of appointment of EPC contractor, disallowance of administrative and specialist expenses and disallowance of certain O&M Expenses.

4. The Commission vide its order dated 28.2.2018 disposed of the Review Petition No. 33/RP/2016, wherein some relief pertaining to compensation paid procuring RoW, condonation of time over-run of 5 months and consequent IDC and IEDC, O&M



Expenses and cost of creek piling was granted. Accordingly, the following consequential changes are necessary to be made to order dated 15.6.2016 in Petition Nos. 173/TT/2013 and 111/TT/2015.

### **Revision in allowable Hard Cost**

5. The petitioner has claimed ₹42590 lakh towards Hard Cost for the Stage I. The Commission in order dated 15.6.2016 allowed ₹29222 lakh of hard cost as on COD. However, the Commission revised the hard cost of the Stage-I assets in order dated 28.2.2018 in Review Petition No.33/RP/2016 by allowing additional capital cost of ₹6394.34 lakh (i.e. ₹4594.34 towards compensation paid to land owners + ₹1800 lakh towards administrative and specialist expense). As a result, the hard cost of the Stage-I assets works out to ₹35616.34 lakh (i.e. ₹29222+ ₹6394.34). The relevant portions of the order dated 28.2.2018 is extracted hereunder:-

“32. The schedule COD of the transmission system was 15.7.2011 as per the investment approval. As per affidavit dated 1.8.2013 (as submitted in the impugned order), the Review Petitioner has submitted that Letter of Award was issued on 15.7.2009. However, the Review Petitioner has considered Jantri rate of 2011. If the Review Petitioner had executed the transmission as per the timeline envisaged in the license, the Review Petitioner would have saved escalation in land price. Therefore, due to delay in addressing the RoW issues, the Review Petitioner is not entitled for reimbursement of expenditure which is attributable to the negligence/inefficiency of the Review Petitioner.

33. The Resolution dated 18.4.2011 issued by the Government of Gujarat provides for the following:-

“(1) Before implementation of New Jantri 2011, Jantri (ASR) 2006 dated 1.4.2008 was in implementation. In that reference in new Jantri 2011, the assessment of land and immovable property are increased and it is held that 50% reduction relief will be given in it.”

From the above stipulation, it can be inferred that there is increase in Jantri rate by 50% over a period from 1.4.2008 to 31.3.2011 (3 years), which works out to escalation of 17.3% per annum in Jantri rate.



34. We have considered the revised Jantri rate of 17.30% escalation rate after taking into account all practical aspects. The compensation granted has been worked out as under:-

(Amount in ₹)

Taluka	(Tower land compensation) 65% Land value of tower area	(Land beneath the tower line) 15% land value for stringing area*	Crop Compensation	Total
Olpad	14446361	189135383	4,02,97,248	243878992
Hansot	259017	0	88,52,654	9111671
Ankleshwar	3099675	43242970	67612156	113954801
Bharuch	2742382	40772246	15935040	59449668
Jhagadiya	1231300	7256450	2,45,51,368	33039118
	<b>21778735</b>	<b>280407050</b>	<b>157248466</b>	<b>459434250</b>

\*escalation of 17.30% reduced for one year only.”

“58. We have considered the submissions of the Review Petitioner. The Review Petitioner vide affidavit dated 3.7.2015 (part of earlier petition) had submitted that the expenditure of ₹1800 lakh was incurred towards administrative and specialist expenses have been added to meet mobilization of machine and man power. The Review Petitioner has submitted that the expenditure of ₹1800 lakh is related with creek piling and Narmada River piling work as these were unexpected work items and were also beyond the normal scope of work. The Review Petitioner would have considered this expenditure as part of creek piling work. However, as the cost of creek piling and river crossing has already been allowed in the capital cost, in the impugned order, the cost of the expenditure of ₹1800 lakh related with creek piling and Narmada River crossing is allowed for the purpose of tariff.”

### **Interest During Construction (IDC)**

6. The entire time over-run of 29 months in case of the instant assets was not condoned in order dated 15.6.2016 and accordingly the IDC and IEDC for the period of time over-run was disallowed. In order dated 28.2.2018, time over-run of 5 months from November 2010 to 31.3.2011, out of the total 29 months was condoned. Accordingly, the IDC and IEDC for the period of 5 months are allowed in this order. The relevant portions of the order dated 28.2.2018 is extracted hereunder:-

“51. As discussed above in preceding paragraph, the delay in grant of approval under Section 164 of the Act is not condoned. Further, it is observed that the major delay of 24 months (out of 29 months) is attributable to the delay in application of forest clearance. If this delay had not occurred, the ROW problem due to court cases would



have occurred earlier and as such the line could have commissioned by April, 2011. In the light of the above, the delay of 5 months starting from November, 2010 to 31.3.2011 out of 29 months is not attributable to the Review Petitioner and is therefore condoned.”

“53. Consequent to the condonation of the time over-run of 5 months as above, the IDC and IEDC shall be worked out and allowed in due course by a separate order.”

The petitioner had claimed ₹6282 lakh towards IDC for Stage-I assets. It is observed that the actual drawal of loan was made only after 5 months from the scheduled COD. Accordingly, IDC of ₹830.51 lakh for the first 5 months after drawal of loan is allowed and considered for the purpose of tariff computation.

#### **Incidental Expenses During Construction (IEDC)**

7. The petitioner has claimed ₹459 lakh towards IEDC for Stage-I assets. As the entire period of time over-run was not condoned, IEDC of only ₹69.02 lakh incurred up to scheduled COD was allowed vide order dated 15.6.2016. As stated above, the time over-run of 5 months was condoned in order dated 28.2.2018 in Review Petition No. 33/RP/2016. Accordingly, the allowable IEDC has been revised to ₹176.79 lakh and the same has been considered for the purpose of tariff.

8. The apportioned approved cost, capital cost claimed, capital cost allowed in the order dated 15.6.2016 and the revised capital cost considered for tariff based on the order dated 28.2.2018 in Review Petition No. 33/RP/2016 are as follows:-



(₹ in lakh)

Particulars	Apportionment of project cost as per para 25(b) of order dated 15.6.2016 in Petition Nos. 173/TT/2013 and 111/TT/2015	Capital cost claimed in Petition Nos. 173/TT/2013 and 111/TT/2015	Capital cost allowed in order dated 15.6.2016 in Petition Nos. 173/TT/2013 and 111/TT/2015	Additional capital cost allowed vide order dated 28.2.2018 in Petition No.33/RP/2016	Revised capital cost pursuant to order dated 28.2.2018 in Petition 33/RP/2016
1	2	3	4	5	6=4+5
LILO of 400 kV Vidhyanchal-Korba S/C transmission line of POWERGRID at Mahan	2373.00	3089.00	2650.00	0.00	2650.00
400 kV (twin conductor) D/C transmission line from Gandhar (NTPC) switchyard to Hazira including two additional typical foundation in Narmada river crossing and cost of pile foundation near Hazira plant	14633.00	30051.00	18402.00	6394.34	24796.34
400/220 kV GIS S/S at Hazira	10000.00	9450.00	8170.00	0.00	8170.00
<b>Total Hard Cost</b>	Included above	<b>42590.00</b>	<b>29222.00</b>	<b>6394.34</b>	<b>35616.34</b>
IEDC	Included above	459.00	69.02	107.77	176.79
IDC	Included above	6282.00	0.00	830.51	830.51
<b>Total cost as on COD (₹ in crore)</b>	---	<b>49331.00</b>	<b>29291.02</b>	<b>7332.63</b>	<b>36623.65</b>
Additional Capital Exp. for 2013-14	---	256.00	0.00	0.00	0.00
<b>Capital cost as on 31.3.2014 for Stage I</b>	<b>27006.00</b>	<b>49587.00</b>	<b>29291.02</b>	<b>7332.63</b>	<b>36623.65</b>



## **Debt- Equity Ratio**

9. The revised the debt-equity ratio, because of the revision in capital cost, as on COD and as on 31.3.2014 is as follows:-

Particulars	As on COD		As on 31.3.2014	
	₹ in lakh	%	₹ in lakh	%
Debt	25636.55	70.00	25636.55	70.00
Equity	10987.09	30.00	10,987.09	30.00
Total	36623.65	100.00	36623.65	100.00

## **O&M Expenses**

10. The O&M Expenses for the LILO of 400 kV S/C Vindhyachal-Korba Transmission Line was allowed considering it as single circuit (twin conductor) in order dated 15.6.2016. In the order dated 28.2.2018, the same was revised as the LILO of 400 kV S/C Vindhyachal-Korba Transmission Line is a double circuit (twin conductor). The relevant portion of the order dated 28.2.2018 is given below. Accordingly, the O&M Expenses allowed are revised in this order.

“60. We have considered the submissions of the Review Petitioner. We are of the view that the O&M Expenses for the LILO of 400 kV S/C Vindhyachal-Korba transmission line should have been allowed considering it as a double circuit (twin conductor) line and allowing the O&M Expense on the basis of single circuit (twin conductor) is an apparent mistake. This error is corrected. The O&M Expenses are allowed for the LILO of 400 kV S/C Vindhyachal-Korba transmission line considering it as the D/C line as per the 2009 Tariff Regulations. Accordingly, the allowable O&M Expenses for the assets covered in Stage-I as per Regulation 19(g) of the 2009 Tariff Regulations, 2009, are as under:-

Element	(₹ in lakh) 2013-14
104.60 km 400 kV (twin conductor) D/C transmission line from Gandhar (NTPC) switchyard to Hazira (₹0.783 lakh/km)	81.9018
22.40 km LILO of 400 kV Vindhyachal-Korba S/C transmission line of POWERGRID at Mahan(₹0.783 lakh/km)	17.5392
4 nos. 400 kV bays (₹65.46lakh/bay)	261.8400
2 nos. 220 kV bays (₹45.82lakh/bay)	91.6400
<b>Total</b>	<b>452.9210</b>





### **Annual Fixed Cost**

11. The annual fixed cost is determined based on the admitted capital cost applying the following parameters:-

Srl. No.	AFC Component	Parameters	2013-14
1	Return Equity	Base Rate	15.00%
		MAT Rate	20.961%
		Gross up Rate	19.610%
2	Interest on Loan	WAROI	13.2864%
3	Depreciation	Dep. Method	Straight line
		Dep. Rate	5.2322%
4	Interest on Working capital	Rate of Interest	13.20%
5	O&M Expenses	Normative	As per Regulation

12. The revised annual fixed charges worked out for the Stage-I assets are as follows:-

**(₹ in lakh)**

Particulars	2013-14
Depreciation	1916.21
Interest on Loan	3278.87
Return on Equity	2154.57
Interest on Working Capital	189.78
O & M Expenses	452.92
Total	7992.35

13. The revised details of the components of tariff of the Stage-I assets are given in the Annexure.

14. All other contents of order dated 15.6.2016 in Petition Nos. 173/TT/2016 and 111/TT/2015 shall remain unaltered.

Sd/  
**(Dr. M.K. Iyer)**  
Member

Sd/  
**(P. K. Pujari)**  
Chairperson



<b>CALCULATION OF ANNUAL TRANSMISSION CHARGES</b>			
(₹ in lakh)			
Particulars		As on COD	2013-14
			<b>1.00</b>
<b>Gross Block</b>			
As on COD		<b>36623.65</b>	36623.65
Addition during 2009-14 due to Projected Additional Capitalisation			0.00
Gross Block			36623.65
Average Gross Block			36623.65
<b>Depreciation</b>			
Rate of Depreciation			5.2322%
Depreciable Value	90%		32961.28
Remaining Depreciable Value			32961.28
Depreciation			<b>1916.21</b>
Cumulative Depreciation/ Advance against Depreciation		0.00	1916.21
<b>Cumulative Repayment of Loan</b>			
Cumulative Repayment of Loan		0.00	1916.21
<b>Interest on Loan</b>			
Gross Normative Loan		25636.55	25636.55
Cumulative Repayment upto Previous Year			0.00
Net Loan-Opening			25636.55
Addition due to Additional Capitalisation			0.00
Repayment during the year			1916.21
Net Loan-Closing			23720.34
Average Loan			24678.45
Weighted Average Rate of Interest on Loan			13.2864%
Interest			<b>3278.87</b>
<b>Return on Equity</b>			
Opening Equity		10987.09	10987.09
Addition due to Additional Capitalisation			0.00
Closing Equity			10987.09
Average Equity			10987.09
Return on Equity (Base Rate )			<b>15.50%</b>
Tax rate for the year 2013-14 (MAT)			20.961%
Rate of Return on Equity (Pre Tax )			19.610%
Return on Equity (Pre Tax)			<b>2154.57</b>



<b>Interest on Working Capital</b>			
Maintenance Spares	15.00%		67.94
O & M expenses			37.74
Receivables	2 Months		1332.06
Total			1437.74
Interest (SBI Base Rate @ 9.70% as on 1.4.2013 plus 350 points)	13.20%		<b>189.78</b>
<b>Annual Transmission Charges</b>			
Depreciation			1916.21
Interest on Loan			3278.87
Return on Equity			2154.57
Interest on Working Capital			189.78
O & M Expenses			452.92
<b>Total</b>			<b>7992.35</b>

