## Vidarbha Industries Power Limited - Transmission

### **Revised Petition towards:**

Approval of Capital Cost and Determination of Aggregate Revenue Requirement ("ARR") for the period FY 14-15 to FY 15-16

Filed with

Maharashtra Electricity Regulatory Commission

#### 1. Executive Summary

#### A.1 Introduction

Vidarbha Industries Power Limited (hereinafter referred as 'VIPL') is a special purpose vehicle and a wholly owned subsidiary of Reliance Power Limited. VIPL has established a 600 (2X300) MW coal based power plant in the Butibori area in Nagpur district of State of Maharashtra. VIPL has signed a PPA with Reliance Infrastructure Limited – Distribution (hereinafter referred as RInfra-D) for procurement of entire 600 MW from the station to serve the energy requirement of its consumers in its license area.

RInfra-D has filed a petition bearing Case No 2 of 2013 for approval of PPA signed with VIPL. In the same petition, the petitioner requested to approve the provisional capital cost of VIPL as well. Hon'ble Commission vide its Order in Case No 2 of 2013 dated 20th February 2013, has approved the PPA for procurement of 300 MW from Unit 2 and accorded conditional approval for procurement of another 300 MW from Unit 1 subject to 'No Objection' from MIDC. In the said Order, the Hon'ble Commission directed to segregate the associated transmission arrangement developed by VIPL to be part of Maharashtra InSTS. Accordingly asked to apply for a transmission license for the transmission arrangement, said directive was pursuant to the Order in Case No 34 of 2007 dated 13th September 2013. VIPL subsequently submitted another supplementary application bearing Case No 76 of 2013 for approval of PPA for procurement of 300 MW from Unit 1 after obtaining No Objection from MIDC. Hon'ble Commission vide its Order dated 17th July 2013 accorded approval to the PPA and consolidated agreement combining the individual PPA for both the units. Further to this, VIPL submitted another application for provisional tariff determination of VIPL-G segregating the capital cost of transmission assets.

The Petitioner submitted a Petition No 60 of 2014, dated February 20, 2014 citing Sections 14, 61 and 62 of the Electricity Act (EA), 2003, the MERC (Transmission Licence Conditions) Regulations, 2004 and MERC (Multi Year Tariff (MYT)) Regulations, 2011 for VIPL-T Transmission business.

Technical Validation Session (TVS) was held on April 15, 2014. During the proceedings, Hon'ble Commission directed VIPL to segregate the petition in two matters one for obtaining the license

and other for approval of ARR in accordance with MERC (MYT) Regulations, 2011. Accordingly, Hon'ble Commission considered petition filed on February 20, 2014 as licensee petition and completed the hearing with direction to revise the petition accordingly. Accordingly, VIPL submitted a revised Application for grant of Transmission Licence on April 25 2014.

In exercise of the powers vested in the Commission under Section 14 of EA, 2003, the Commission granted a Transmission Licence to VIPL-T for a period of 25 years vide order dated January 5, 2015 from the date of the order, under Alternative 2 and in accordance with the MERC (Transmission Licence Conditions) Regulations, 2004 as amended in 2006. The Commission also directed the Petitioner to make its ARR submissions to the Commission in accordance with the applicable Regulations within 60 days of this Order.

Following the directives by the Hon'able Commission, VIPL-T submitted the Petition towards Approval of Capital Cost and Determination of Aggregate Revenue Requirement ("ARR") for the period FY 14-15 to FY 15-16 on 18<sup>th</sup> Feb 2015. Hon'able Commission raised clarifications on data-gaps vide E-mail for Data Gaps Set-1 & 2 dated 2<sup>nd</sup> July, 2015 & 7<sup>th</sup> July 2015 respectively which were duly replied by VIPL-T vide submissions Ref No: VIPL/MUM/2015-16/MERC/VIPL-T/1 dated 17<sup>th</sup> July 2015 and Ref No.: VIPL/MUM/2015-16/MERC/VIPL-T/2 dated 20<sup>th</sup> July 2015. The reply to the data gaps are attached in Appendix 12.

Technical Validation Session (TVS) was held on 21 July 2015. During the proceedings, Hon'ble Commission directed VIPL to ensure compliance with the data-gaps raised by the Commission and based on scrutiny of the responses submitted by VIPL-T, the Commission shall decide on the next steps to be adopted before the admittance of the Petition.

#### B.1 Approach and Objective of the Petition

VIPL-T is hereby submitting the revised application for approval of Capital Cost and Determination of Aggregate Revenue Requirement ("ARR") for the period FY 14-15 to FY 15-16, where the projections are guided by respective provisions of MERC (MYT) Regulations 2011.

#### C.1 Capital Expenditure

VIPL-T has constructed the interconnecting transmission arrangement from the generating station VIPL-G to respective substations of MSETCL in Butibori location (viz., Butibori I and Butibori III). The capital cost identified for the transmission assets is Rs 28.64 Cr.

VIPL submits that transmission system was not envisaged to be developed as separate installation and envisaged to be considered as part of the generating station as a whole. Because of this arrangement, capitalization of transmission assets was linked with generation assets as the commissioning and capitalization of generating assets was a pre-requisite for capitalization of transmission assets. This is the reason for showing capitalization of Scheme 1 in audited accounts of VIPL for FY2013-14, even though the same was charged and tested (and thus was ready to use) on June 29th 2012. Further, as already stated above, transmission Scheme 2 is also charged and tested on June 13th 2013 and the same is capitalized in the books of accounts of VIPL during 2013-14.

However, Hon'ble Commission vide its order in case 2 of 2013 dated February 28, 2013, directed to separate the evacuation lines from generation project and treat same as part of InSTS. However, if the transmission assets are to be considered on standalone basis as part of the InSTS system, both the transmission lines are to be considered as capitalized on respective dates of commissioning for regulatory purpose.

The lines were tested by an electrical inspector and charged on June 29, 2012 and June 13, 2013 (Certificates of Electrical Inspector attached in Appendix 1. The COD date of the generating units and actual starting date of evacuation of the power from the transmission lines is summarized below:

E 1: Summary of Dates of COD of Generating Units & Transmission Lines

Units	Dates
Generating Units – COD	
Unit 1	April 4, 2013
Unit 2	March 28, 2014
Transmission Lines Actual Evacuation Starting Date	
Transmission Line 1 & 2	June 29, 2012
Transmission Line 3 & 4	June 13, 2013

VIPL-T submits that the present filing is in accordance with the Order of the Hon'ble Commission in Case No 97 of 2010 dated May 25, 2011 for approval of capital cost based on date of commissioning of the transmission lines.

VIPL further submits that the project was funded as part of total power station, there is no segregated source wise funding identified towards creation of the transmission asset. However, for the purpose of the Interest rate for the project, the Petitioner submits that interest rate as per Rupee of loan availed for the VIPL project has been considered for transmission assets. The actual capitalization of the assets by the commissioning date of the project is as provided in the table below:

FY 13-14 FY 14-15 FY 15-16 Total

E 2: Capitalisation for Transmission Licensee (in Rs Cr)

# 7.27 21.37 - - 28.64

#### D.1 <u>Capital Expenditure considered for ARR for FY 14-15 & FY 15-16</u>

Actual

FY 12-13

Actual

As already explained above, that the generating stations linked with transmission system were considered the same project, so the financing and capex of these two components were completed considering the same as single project. Later, when Hon'able Commission guided to separate both the asset components and file separate petitions, same has been followed by VIPL-T.

Though, the transmission lines were commissioned much earlier i.e. on June, 29<sup>th</sup> 2012 & June 13<sup>th</sup>, 2013, VIPL-T is claiming the ARR from 1<sup>st</sup> April 2014, since the PPA for Butibori power station for supply of power commences from this date. This is the date when the actual power supply through the transmission lines commenced. Further, the Petitioner has considered the depreciated cost of the project as on March 31, 2014 for the purpose of determination of ARR for 2014-15 and 2015-16.

The depreciation on the assets since the COD of the respective schemes till March 31, 2014 has been worked out as Rs 1.41 Crore. The overall value of assets of the Power Station considered by Petitioner for the purpose of ARR determination is therefore Rs 27.22 Crore (Rs 28.64 Crore - Rs 1.41 Crore).

#### E.1 Funding Pattern of the project cost as on April 1, 2014

VIPL-T in accordance with the Regulation 30 of the MYT Regulations 2011 proposes a debtequity ratio of 70:30 for the total capital cost. It is submitted that the actual capital structure of VIPL as a whole is also 70:30¹ and therefore the same capital structure can be adopted for both generation and transmission segments for the purposes of determining opening debt and equity. The details of debt and equity to be considered for determination of ARR are provided in table below:

E 3: Source of Funding

Particulars	Amount (Rs Cr)
Hard Cost	18.69
Supervision Charges	5.75
Pre-Operative Expenses	1.45
IDC and financing charges	2.75
Project Cost including IDC	28.64
Less: Audited Accumulated Depreciation for FY 12-13 & FY 13-14	1.41
Capex as at April 1, 2014	27.22
Equity (30 %)	8.17
Debt (70%)	19.05
Interest Rate	14%

The overall value of assets considered by Petitioner for the purpose of ARR determination is as provided earlier Rs 27.22 Crore. VIPL-T has considered the D/E ratio of 70:30 for the purpose of ARR calculation. Accordingly the overall normative loan and equity components as on April 1, 2014 based on the WDV value of the capital cost of station is provided above.

#### F.1 Annual Revenue Requirement

VIPL-T has estimated the components of ARR based on actual capital cost of the transmission assets.

a. <u>Operation and Maintenance Expenses:</u> O&M expenses for the 2<sup>nd</sup> MYT control period from FY 2014-15 & FY 2015-16 are provided in the table below

E 4: O&M Expenses (in Rs Cr)

O&M Expenses	UoM	FY 2014-15 Normative	FY 2015-16 Normative
O&M Expenses	Rs Cr	0.66	0.69

<sup>&</sup>lt;sup>1</sup> Kindly refer section 4.3.4 of Order of Hon'ble Commission in Case No 91 of 2013 dated 17<sup>th</sup> January 2014

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Depreciation: Depreciation has been computed in accordance with the depreciation rates in MERC MYT Regulations 2011, depreciation for the 2<sup>nd</sup> MYT control period from FY 2014-15 & FY 2015-16 is provided in the table below:

E 5: Depreciation (Rs. Cr.)

Particulars	UoM	FY 2014-15 Normative	FY 2015-16 Normative
Depreciation	Rs Cr	1.49	1.49

c. <u>Interest on Loan Capital:</u> VIPL-T has estimated the Interest on loan based on interest rate applicable on Rupees Loan borrowings of the VIPL project and the same for the 2<sup>nd</sup> MYT control period is shown below:

E 6: Interest on Loan Capital (Rs. Cr.)

Particulars Particulars	UoM	FY 2014-15	FY 2015-16
		ESI.	ESI.
Interest on Loan Capital	Rs. Cr	2.56	2.10

d. <u>Interest on Working Capital</u>: VIPL-T has estimated the Interest on working capital in accordance with MERC MYT Regulations and considering the applicable SBI Advance rate. VIPL-T projects the same for the 2<sup>nd</sup> MYT control period as in table below:

E 7: Interest on Working Capital (Rs. Cr)

Particulars Particulars Particulars	UoM	FY 2014-15 Prov.	FY 2015-16 Est.
Interest on Working Capital @ 14.75%	Rs. Cr	0.13	0.13

e. <u>Contribution to contingency reserves:</u> VIPL -T has estimated contingency reserves for the control period on the basis of provisions of MYT Regulations, 2011 as in table below:

E 8: Contribution to contingency reserves (Rs. Cr)

- Particulars	UoM	FY 2014-15	FY 2015-16
		Est.	Est.
Contingency Reserves	Rs Cr	0.14	0.14

f. <u>Return on Equity:</u> VIPL -T has estimated RoE for the control period on the basis of provisions of MYT Regulations, 2011 as in table below:

E 9: Return on Equity (Rs. Cr.)

Particulars	UoM	FY 2014-15	FY 2015-16
		Normative	Normative
RoE @ 15.5% on Average Equity Balance	Rs. Cr	1.27	1.27

g. <u>Income Tax:</u> VIPL –T has estimated the Income Tax in accordance with the judgment of the Hon'ble ATE in its Judgment in Appeal No 104/2012, 138/2012 and139/2012 w.r.t. treatment of income tax allowances for the regulated business activities. VIPL-T submits that as per the settled law of the Hon'ble ATE, each regulated business segments need to be treated on standalone business based on the profit of respective business. Accordingly the estimations has been made in table below considering the grossing up of tax:

E 10: Income Tax (Rs. Cr.)

Particulars	UoM	FY 2014-15 Normative	FY 2015-16 Normative
Income Tax Liability	Rs. Cr	0.34	0.34

h. <u>Non-Tariff Income and Income from other businesses</u>: VIPL-T envisages no other business opportunity in forthcoming period for VIPL-T and therefore accordingly projected income from other businesses has been considered as nil. However, for Non-Tariff income, the interest proposed to be accrued on contingency reserves is considered as in table below:

E 11: Non-Tariff Income (Rs. Cr.)

Particulars	UoM	FY 2014-15 Prov.	FY 2015-16 Est.
Non-Tariff Income	Rs Cr	0.01	0.02

i. <u>Aggregate Revenue Requirement</u>: Based on the above parameters, the Aggregate Revenue Requirement for VIPL-T for the second control period FY 2014-15 to 2015-16 is summarized in the table below:

E 12: Aggregate Revenue Requirement for FY 14-15 and FY 15-16 (in Rs Cr)

Particulars	MYT Period	
Particulars	FY 14-15	FY 15-16
Operation & Maintenance Expenses	0.66	0.69
Depreciation Expenses	1.49	1.49
Interest on Long-term Loan Capital	2.56	2.10
Interest on Working Capital and on consumer security deposits	0.13	0.13
Other Expenses	-	-
Income Tax (FY 15, FY 16)	0.34	0.34
Contribution to contingency reserves	0.14	0.14
Total Revenue Expenditure	5.32	4.89
Return on Equity Capital	1.27	1.27
Aggregate Revenue Requirement	6.59	6.16
Less: Non-Tariff Income	0.01	0.02
Less: Income from Other Business	-	-
Aggregate Revenue Requirement from Transmission Tariff	6.58	6.14

VIPL-T submits that since the transmission arrangement of VIPL-T is part of InSTS network, this entails recovery of transmission charges on monthly basis in line with Regulation 64 of MYT Regulations 2011.