

## EXECUTIVE SUMMARY

### Background

Vidarbha Industries Power Limited (VIPL), a power generation company, has developed 600 MW (2X300 MW) power station at Butibori, in Nagpur district of Maharashtra. VIPL along with Reliance Infrastructure Limited (Rinfra) had approached Hon'ble Commission pursuant to case 2 of 2013 for approval of Power Purchase Agreement (PPA) and for determination of provisional tariff for VIPL's Butibori Plant.

MERC vide its order dated 20<sup>th</sup> February 2013 has accorded "in principle" approval to PPA between Rinfra and VIPL for procurement of 300 MW power from unit 2 of Butibori station. By an order dated 19<sup>th</sup> July 2013, Hon'ble Commission has approved PPA for procurement of 300 MW from unit 1 and consolidation agreement for treating supply under two PPAs as supply from power station as a whole for supply starting from 1st April 2014.

VIPL has filed this petition for purpose of determining provisional tariff for the generating station as a whole under regulation 38.4 of MERC MYT Regulations, 2011.

### Cost of the Project

**Estimated Capital Cost:** Butibori power station comprises of two units of 300 MW each and first unit (i.e. Unit-1) achieved CoD on April 4, 2013 and the second unit (i.e. Unit 2) is expected to get commissioned by end of December 2013/early 2014. Considering the overall principles enshrined in the Tariff Regulations, the envisaged capital cost of the Power Station as on COD is around Rs 4132.36 crores. The capital cost submitted is the expected capital cost of the power station as a whole and the same is based on the following considerations:

- (i) The aforesaid capital cost includes interest during construction (IDC) till May 2013 and the Petitioners will furnish the actual IDC for the project at the time of final determination of tariff. The aforesaid capital cost includes IDC for Unit 1 till April 2013 (i.e. Unit 1 CoD).
- (ii) The capital cost is inclusive of overheads, startup expenses and the realized foreign exchange differences on settlements of buyers credit as on 31<sup>st</sup> May 2013 as per C.A certificate.

The petitioner will submit the final capital cost including IDC and other breakup, post COD of the station along with audited accounts at the time of final determination of tariff.

**Capital Cost for Tariff Determination Purpose:** Petitioner submits that since the Unit 1 has already achieved CoD and therefore, for the purpose of tariff determination, the written down value of the project need to be considered. For the purpose of this Petition, the Petitioners have considered the Written Down value of the project as on April 1, 2014 i.e. Rs 4063.05 crore, based on the following:

- Petitioner has considered the Likely WDV of Assets as on April 1, 2014.
- Petitioner has reduced the depreciation of Rs 69.31 Cr pertaining to period April 2013 to March 2014.
- Petitioners will submit the corresponding depreciation amount pursuant to COD of the generating station for the purpose of estimation of WDV of the generating station at the time of final determination of tariff.

### **Project funding for the Project and D/E for the purpose of Tariff determination**

The Petitioners have considered the same D/E ratio as envisaged at the time of COD of the station i.e. 70:30. Accordingly the overall loan and equity components as on April 1, 2014 based on the WDV value of the capital cost of station are provided below:

**Table 1: Project funding based on WDV of capital cost as on April 1, 2014**

Funding source	Amount
Indian loan*	Rs 2006.98 Cr.
ECB*	Rs 602.65 Cr. (\$ 128.57 million)
Normative additional loan* for meeting the WDV cost of the Project as on April 1, 2014.	Rs 234.51 Cr.
<b>Total Loan</b>	<b>Rs. 2844.14 Cr.</b>
<b>Equity</b>	<b>Rs 1218.92 Cr.</b>
<b>Total Capital cost</b>	<b>Rs 4063.05 Cr.</b>

\* There are certain repayments envisaged for the actual portfolio of loans and hence normative loans are considered to maintain debt: equity ratio of 70: 30

### **Aggregate Revenue Requirement**

**Energy Charges:** The Petitioner envisages use of domestic coal as the primary fuel for generation of power. VIPL has signed a LoA with WCL for supply of 2.345 MTPA of coal with GCV band of G 9 for Butibori plant. Quantum of coal required for achieving normative PLF is around 2.29 MTPA. The overall CV and expected landed price of fuel for both domestic coal and also the secondary oils for the period 2014-15 and 2015-16 are provided in the table below:

**Table 2: CV and Price of Fuel**

	FY 2014- 15		FY 2015-16	
	Calorific Value (KCal/kg)	Landed Price (Rs/MT)	Calorific Value (KCal/kg)	Landed Price (Rs/MT)
Domestic Coal	4,750	2,017	4,750	2,127
FO	10,400	52,994	10,400	55,114
LDO	10,700	71,058	10,700	73,900

Following table illustrates assumed operational performance for calculation of energy charge:

**Table 3: Operational Parameters<sup>1</sup>**

Particulars	Units	FY 2014-15	FY 2015-16
No. of days		365	366
Installed Capacity	MW	600	600
Availability	%	85%	85%
PLF	%	85%	85%
Gross Generation	MU	4,468	4,480
Auxiliary Cons*	%	9.13%	9.13%
Net Generation	MU	4,060	4,071
Station Heat Rate**	kCal/kWh	2,450	2,450
Specific Oil Consumption	ml/kWh	1.00	1.00

Note: \* Relaxation of additional 0.13% has been sought in Aux. Cons.

\*\* SHR relaxation to match operational requirement has been sought

**Fixed Charges:** The petitioner has relied upon the prevailing regulation i.e. MERC MYT Regulations 2011, while projecting the components of fixed charges. The table below summarizes the fixed charges for the FY 2014-15 and FY 2015-16 of the second MYT period:

**Table 4: Fixed Charges<sup>2</sup>**

Particulars	FY 2014-15	FY 2015-16
O & M Expenses (Rs Crore)	105.00	111.00
Depreciation	205.61	205.61
Interest on Loan	321.54	300.42
Interest on Working Capital	47.37	48.12
Income Tax	40.88	40.88
Return on Equity Capital	195.03	195.03
<b>Total Fixed Cost</b>	<b>915.43</b>	<b>901.06</b>

<sup>1</sup> As per MERC MYT Regulations 2011 and detailed rationale submitted in petition and annexure thereupon

<sup>2</sup> Detailed rationale for the projection of individual component fixed charges and relief sought has been submitted in revised petition and annexure thereupon

**Aggregate Revenue Requirement:** ARR for FY 2014-15 and FY 2015-16 is presented in the table below:

**Table 5: Aggregate Revenue Requirement & Tariff**

Particulars	Unit	FY 2014-15	FY 2015-16
Depreciation	Rs Cr.	205.61	205.61
Operations & Maintenance Expenses	Rs Cr.	105.00	111.00
Interest on Long Term Loan	Rs Cr.	321.54	300.42
Interest on Working Capital	Rs Cr.	47.37	48.12
Return on Equity Capital	Rs Cr.	195.03	195.03
Income Tax	Rs Cr.	40.88	40.88
Total Fixed Charges	Rs Cr.	915.43	901.06
Total Variable Charges	Rs Cr.	506.76	535.49
<b>Aggregate Revenue Requirement</b>	<b>Rs Cr.</b>	<b>1,422.19</b>	<b>1,436.55</b>
Net Generation	MU	4,060	4,071
Fixed Cost	Rs/kWh	2.25	2.21
Variable Cost	Rs/kWh	1.25	1.32
<b>Total Tariff</b>	<b>Rs. / kWh</b>	<b>3.50</b>	<b>3.53</b>

## Prayers

The Petitioner humbly prays to the Hon'ble Commission to:

- (a) Admit the present Petition;
- (b) Approve the provisional tariff for VIPL's Butibori project for 600 MW;
- (c) approve the request for relaxation of norms and/or removal of difficulty in respect of
  - i. Station Heat Rate;
  - ii. Auxiliary Power Consumption; and
  - iii. treatment of cost for hedging foreign currency loans and/or treatment of foreign exchange rate variation on foreign currency loans;
- (d) Dispose-off the present Petition expeditiously;
- (e) Condone any inadvertent omissions/errors or shortcomings in the Petition;
- (f) Allow additions/alternations/changes/ amendments to the Petition at a future date;
- (g) Grant such order as deemed appropriate under the facts and circumstances of the case.