Petition for Tariff

&

Aggregate Revenue Requirement (ARR)

For FY 2015-16

For

Suratgarh Super Thermal Power Station (STPS)

Unit (1 to 6)

Submitted to

Rajasthan Electricity Regulatory Commission

Jaipur

by

Rajasthan Rajya Vidyut Utpadan Nigam Limited Vidyut Bhavan, Janpath, Jaipur

November-2014

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Definitions

Act	The Electricity Act, 2003		
Application	This ARR and Tariff Petition for FY-2015-16 for Suratgarh Thermal Power Station of Rajasthan Rajya Vidyut Utpadan Nigam Limited, Jaipur		
Auxiliary Consumption (Aux. Con.)	Auxiliary Consumption in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within the generating station, and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station		
Availability	Availability shall have the same meaning as defined in Section 2(7) of the RERC Tariff Regulations 2014.		
Distribution Company / Discoms	Discoms or Distribution Company shall mean a company engaged primarily in the business of distribution & supply of electricity in its area of supply including Jaipur Vidyut Vitran Nigam Ltd. (JVVN), Ajmer Vidyut Vitran Nigam Ltd. (AVVN) and Jodhpur Vidyut Vitran Nigam Ltd. (JdVVN).		
Gross Calorific Value (GCV)	Gross Calorific Value in relation to a thermal power generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be.		
Regulation	The Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 notified by RERC on March- 27, 2014		
State	The State of Rajasthan.		
Gross Station Heat Rate	Heat energy input in kCal required to generate one unit (kWh) of electrical energy at generator terminals.		
Unit	Unit in relation to a generating station means electric generator, its prime mover and auxiliaries and in relation to a combined cycle thermal power generating station includes combustion turbine – generators, associated waste heat recovery boilers, connected steam turbine-generator and auxiliaries		

ABBREVIATIONS

ARR	Aggregate Revenue Requirement
Ajmer Discom	Ajmer Vidyut Vitran Nigam Limited
CSR	Corporate Social Responsibility
FRP	Financial Restructuring Plan
FY	Financial Year
FY – 14	Financial Year 2013-14
FY – 15	Financial Year 2014-15
FY – 16	Financial Year 2015-16
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
Gol	Government of India
GoR	Government of Rajasthan
Jaipur Discom	Jaipur Vidyut Vitran Nigam Limited
Jodhpur Discom	Jodhpur Vidyut Vitran Nigam Limited
KWh	Kilo Watt Hour or Unit
MU	Million Units
MW	Megawatts
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repairs and Maintenance
RERC/ Commission	Rajasthan Electricity Regulatory Commission
RVUN	Rajasthan Rajya Vidyut Utpadan Nigam Limited
RVPN	Rajasthan Rajya Vidyut Prasaran Nigam Limited
Rs.	Indian Rupees
SHR	Station Heat Rate
Transfer Scheme	The Rajasthan Power Sector Reforms Transfer Scheme, 2000

A1: BACKGROUND

- Rajasthan Rajya Vidyut Utpadan Nigam Ltd (RVUN) was incorporated under the Companies Act 1956, as one of the five successor companies of erstwhile Rajasthan State Electricity Board (RSEB) to take over the electricity generation business in the state of Rajasthan. The existing power stations and those under commissioning in the state sector were transferred to RVUN as per the Rajasthan Power Sector Reforms Transfer Scheme, 2000 notified by State Government provisionally on 19th July 2000 and finally on 18th January 2002.
- 1.2 From 1st April 2004 onwards, RVPN is no longer responsible for the bulk purchase of power in Rajasthan. The capacity allocated to RVPN from RVUN generating stations has been reallocated to the three Discoms (Jaipur, Ajmer and Jodhpur) in the ratio of 39:29:32 from October 2011, 40:28:32 from June 2014 or as modified by competent authority from time to time. RVUN has entered into Long Term Power supply-Purchase Agreements (PPA) in respect of existing and future power projects for 25 Years with the three Discoms on 28.09.06, 07.06.2007 and further supplementary PPA was signed on date 18.5.10 which includes STPS Unit 1 to 6 (1500MW).
- 1.1 RVUN have to file its petition for determination of Tariff and ARR Petition for 2015-16 in accordance with provision of RERC Tariff Regulation 2014. Accordingly this petition is being submitted for STPS (unit 1 to 6) for FY 2015-16 before RERC for Tariff and ARR determination.

A2: GENERATION FORECAST

2.1 The installed capacity of STPS (Unit-1 to 6) is 1500 MW. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from STPS station of RVUN for the period FY 2013-14, FY 2014-15 and FY 2015-16 are as shown in table below:

Table 1: Gross generation, PLF & Ex-bus energy sale from STPS Station (Rs. In Crore)

Particular	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Capacity (MW)	1500	1500	1500.00
PLF (%)	71.61%	80.12%	82.00%
Gross generation (MU)	9,409.55	10,527.75	10,804.32
Aux Cons. (%)	9.06%	9.13%	9.00%
Net Generation (MU)	8,557.05	9,566.33	9,831.93

2.2 The fixed cost elements are detailed hereunder for STPS for the FY 2013-14, FY 2014-15 and FY 2015-16 are as below.

FIXED CHARGES

A3: STPS (UNIT 1 TO 6) ANNUAL CAPACITY (FIXED) CHARGES FOR 2015-16

Depreciation:-

3.1 **The Capital cost of STPS unit 6** has been considered as per Hon'ble Commission Order dated 6.06.2013, however the reduction on account of WCT has mentioned in 06.06.2013 order has not been considered while computing the capital cost by RVUN as the matter is pending in appeal before APTEL. Further, the additional capitalization of Rs. 48.71 crore as claimed in rejoinder dated 19/09/13 (as also reflected in the audited figures of STPS plant) has been added to the capital cost computed as follows:

Table 2: Capital cost of STPS Unit 6

	Amount (Rs
Particular	Crore)
Approved by Commission in order dated 6.6.2013	978.09
Add: WCT (Work Contract Tax) as matter is pending in	
appeal before APTEL	14.26
Total as on 31.3.2010	992.35
Add: Addition as per rejoinder and audited accounts for FY	
2010-11	48.71
Total: Balance of capital cost as on 31.3.2011	1041.06

- 3.2 Whereas the closing balance of gross fixed assets as on 31.03.2012 of unit 1-5 is Rs. 4232.29 crore. With the above calculation, the combined capital cost as on 31.03.2012 of unit 1-6 is Rs. 5273.35 crore.
- 3.3 During the FY 2012-13 and FY 2013-14, RVUN has booked an addition of Rs. 1.30 crore and Rs. 1.55 crore in gross fixed assets respectively.
- 3.4 While calculating the Fixed Asset and Provision for Depreciation (Form 6.1) the above capital cost and additions have been considered and accordingly calculation of Fixed Asset and Provision for Depreciation for Unit 1 to 6 has been shown in Form 6.1.
- 3.5 Depreciation of STPS (Unit 1 to 6) for FY 2013-14, FY 2014-15 has been calculated as per clause No.23 of RERC Tariff Regulations 2009 and for FY 2015-16 as per clause No. 22 of RERC Tariff Regulations 2014. Estimated figures of depreciation for FY 2013-14, FY 2014-15 and FY 2015-16 are summarised in table below:

Table 3: Depreciation (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Depreciation	269.09	211.70	160.24

Interest on Loans:-

3.6 The loan-wise interest expenses & finance charges which include term loans as well as transitional loans have been worked-out and taken as part of fixed cost. The loan repayment amount for term loans and transitional loans combined has been taken equal to the depreciation figure envisaged for 2013-14, FY 2014-15 and 2015-16.

3.7 Estimated figures for interest on term loan, transitional loan and finance charges are summarised in table below:

Table 4: Interest on Loans (Rs. In Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Interest (Term Loan + Transitional Loan) and finance charges	153.18	123.17	99.96
Total	153.18	123.17	99.96

Interest on working Capital

3.8 The interest on working capital loan for FY 2013-14, FY 2014-15 has been computed as per the norms defined under clause No.28 of RERC Tariff regulation 2009 and for FY 2015-16 as per clause No. 27. For FY 2013-14, FY 2014-15 and FY 2015-16, the rate of interest on WLC has taken equal to 250 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the previous year. Estimated figure of Interest on Working Capital is summarised as below:

Table 5: Interest on working Capital (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Interest on Working Capital	113.06	129.94	137.59

Operation & Maintenance Expenses

- 3.9 The Operation & Maintenance Expenses have been computed as per the norms prescribed under Regulation 48 & 47 of RERC Tariff Regulation 2009 & 2014 respectively.
- 3.10 Estimated figures for the period FY 2013-14, FY 2014-15 and FY 2015-16 are summarised in Table below.

Table 6: O & M Expenses (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Operation and Maintenance	205.18	241.35	255.47

Recovery of ARR & Tariff Petition Fees

- 3.11 The Hon'ble Commission vide order dated 10.03.08 has allowed to pass through the fees levied for filling up of ARR & Tariff Petition, as expenses in the ARR. Accordingly, RVUN has claim the fee as under. The Commission may consider and allow the same.
- 3.12 The ARR & Tariff Petition Fees for FY 2013-14, FY 2014-15 and FY 2015-16 are summarised in table below:

Table 7: Recovery of ARR & Tariff Petition Fees (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Petition Fee	0.75	0.75	0.75

Insurance Charges

3.13 RVUN is claiming the insurance charges for STPS for the year 2015-16 based on the estimates of actual insurance charges paid in preceding year with an increment of 5% Yoyo (year on year). The details are shown in the table below

Table 8: Insurance Charges (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Insurance Charges	2.42	2.54	2.67

Return on Equity and Tax thereon

- 3.14 GOR (Government of Rajasthan) has made an announcement for ROE in annual budget. Accordingly the BOD of RVUN in its 238th meeting dated 24/07/2014 has approved to claim ROE and vide letter dated 14.08.2014 the Dy. Secretary to Govt. directed RVUN to implement the budget announcement enclosed as annexure A.
- 3.15 In compliance to the above direction of the state government, RVUN has decided to claim the return on equity for the FY 2014-15 along with the MAT (Minimum Alternative Tax) as per Regulation 20 & 29 respectively of Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014.
- 3.16 The Return on Equity (ROE) for FY 2013-14, FY 2014-15 and FY 2015-16 are summarised in Table below:

Table 9: ROE and Tax

Station	FY 13-14	FY 14-15	FY 15-16	
STPS	Unit 1-6	Unit 1-6	Unit 1-6	
Return on Equity (ROE)	0.00	186.15	186.15	
Tax on ROE	0.00	49.36	49.36	

Non-Tariff Income

- 3.17 The following are the main head of accounts of Non tariff income:
 - a) Sale of Scrap
 - b) Interest on FD/ Staff Loans
 - c) Miscellaneous receipts (rebates etc)

3.18 Estimated figures of Non Tariff Income for FY 2013-14, FY 2014-15 and FY 2015-16 are summarised in table below:

Table 10: Non-Tariff Income (Rs. in Crore)

Station	FY 13-14	FY 14-15	FY 15-16
STPS	Unit 1-6	Unit 1-6	Unit 1-6
Non Tariff Income	7.18	7.54	7.92

3.19 As per the RERC Tariff Regulations 2009 and 2014, the non-tariff income has been deducted from the fixed charges computed and only the net fixed charges are to be recovered from the three distribution companies.

A4: STPS ESTIMATED CAPACITY CHARGES (FIXED)

4.1 The net fixed charges is computed for FY 2013-14, FY 2014-15 and FY 2015-16 in the Table below

Table 11: Net Capacity Charges for STPS (Rs. in Crore)

	FY 13-14	FY 14-15	FY 15-16
	Unit 1-6	Unit 1-6	Unit 1-6
Fixed Charge			
Depreciation	269.09	211.70	160.24
Interest on term Loan & Transitional Loan	153.18	123.17	99.96
Return on Equity	0.00	186.15	186.15
Interest on Working Capital	113.06	129.94	137.59
O & M Expenses	205.18	241.35	255.47
Insurance Charges	2.42	2.54	2.67
Tax on ROE	0.00	49.36	49.36
Recovery of ARR and Tariff Petition Fee	0.75	0.75	0.75
Less: Non-Tariff income	7.18	7.54	7.92
Net Fixed Charge	736.50	937.43	884.27

A5: VARIABLE CHARGES

- 5.1 The Tariff Regulations, 2014 allows SHR 2500 kCal/kWh for Units 1 to 5 and 2357.68 kCal/kWh new 250 MW Unit (Unit #6). Aux. Consumption is considered as 9.0 % for all the six units of STPS. The weighted average of SHR works out to be 2476.28 kCal/kWh and Aux. Consumption 9% for FY 14-15. These figures have been considered for the calculations of variable charges for FY 2015-16.
- 5.2 The impact of blending of imported coal is taken as 10% for the period FY16. It is added that any variation in the cost of generation due to change of Qty. /quality of coal will be adjusted in fuel price adjustment (FPA) prescribed by the Commission.

- 5.3 For estimates of FY16, the average Gross calorific value of the coal/oil and the average rate of coal/oil supply have been calculated on the basis of receipts of previous three months during April, May and June of 2014 as per Commission's formats. For FY 2015-16, GCV of indigenous coal has been considered as 3664 kCal/kg and the price of indigenous coal has been taken as Rs. 4980.15 per MT. Wt. average GCV of secondary fuel (OIL) been considered as 9500 kCal/ltr. for HFO and 9200 kCal/ltr for LDO. Price of the HFO and LDO has been taken as Rs. 51671.55/kl and 65214.45/kl.
- 5.4 As regards Imported Coal, the average GCV has been considered as 6350 kCal/Kg for FY 2015-16 and the price has been taken as Rs. 8752 /MT for FY 2015-16 on the basis of imported coal figures for the months of April, May and June of 2014 as per Commission's formats. The base price & GCV of Imported Coal has been considered on the basis of latest purchase order placed.
- 5.5 The overall estimated figures of variable Cost for the period under consideration, are summarised in Table below.

Table 12: Variable Cost (Rs. in Crores)

Particular	FY 13-14	FY 14-15	FY 15-16
	Unit 1-6	Unit 1-6	Unit 1-6
Capacity (MW)	1500.00	1500.00	1500.00
Availability %	79.68%	85.00%	82%
PLF (%)	71.61%	80.12%	82%
Gross Generation (MU)	9409.55	10527.75	10804.32
Aux Cons. (%)	9.06%	9.13%	9%
Net Generation (MU)	8557.05	9566.33	9831.93
SHR (Kcal/ KWh)	2616.20	2506.99	2476.28
GCV of Indigeneous Coal (kCal/ Kg)	3739.00	3604.00	3664.00
GCV of HFO (kCal/ Ltr)	9500.00	9500.00	9500.00
GCV of LDO (kCal/ Ltr)	9200.00	9200.00	9200.00
GCV of Imported Coal (kCal/ Kg)	6600.00	6350.00	6350.00
Sp. Indigeneous Coal consumption (Kg/ kWh)	0.65	0.61	0.57
Sp. HFO consumption (ml/kWh)	0.80	0.56	0.45
Sp. LDO consumption (ml/kWh)	0.06	0.03	0.05
Sp. Imported Coal consumption (Kg/kWh)	0.02	0.05	0.06
Price of Indegeneous (Rs/MT)	4480.00	4743.00	4980.15
Price of HFO (Rs./kl)	47718.00	49211.00	51671.55
Price of LDO (Rs./kl)	61912.00	62109.00	65214.45
Price of Imported (Rs/MT)	9440.00	8752.00	8752.00
Cost of Indegeneous Coal (Rs.in Crore)	2758.25	2976.22	3043.48
Cost of HFO (Rs. In crores)	36.07	38.81	25.12
Cost of LDO (Rs. In crores)	3.41	4.31	3.52
Cost of Imported Coal (Rs.in Crore)	217.21	489.11	594.28

Fuel cost (Total Variable Cost) (Rs. In Crore)	3014.95	3508.45	3666.41
Variable Cost (Rs/KWh sent out)	3.52	3.67	3.73

A6: ESTIMATED ARR FOR STPS

6.1 The recovery of ARR proposed for STPS is summarised in table below

Table 13: ARR for STPS (Rs. in Crores)

Particular	FY 13-14	FY 14-15	FY 15-16
	Unit 1-6	Unit 1-6	Unit 1-6
Capacity (Fixed Charges)	736.50	937.43	884.27
Variable Cost	3014.95	3508.45	3666.41
Aggregate Revenue Requirement	3751.45	4445.88	4550.68

A7: STPS ESTIMATED TARIFF

7.1 Total per Unit charge in Rs. / kWh is given in given table below:-

Table 14: STPS ESTIMATED TARIFF

Particular	FY 13-14	FY 14-15	FY 15-16
	Unit 1-6	Unit 1-6	Unit 1-6
Ex-Bus Generation (MU)	8557.05	9566.33	9831.93
Capacity(fixed) Charges	736.50	937.43	884.27
Variable Cost	3014.95	3508.45	3666.41
Rate of Fixed Charge(Rs/kWh)	0.86	0.98	0.90
Rate of Variable Charge(Rs/kWh)	3.52	3.67	3.73
Rate of Sale of Energy (Rs/kWh)	4.384	4.647	4.628

A8: FUEL COST ADJUSTMENT

8.1 As per RERC Tariff Regulation 2014, there is provision of fuel cost adjustment on account of fuel related costs of electricity generation to take care of any variation in the variable cost. The fuel cost adjustment will be made accordingly.

A9: RESPONDENTS:-

9.1 All the three Discom's (i.e JVNL/AVNL/ Jd.VNL) Jaipur/ Ajmer/ Jodhpur are respondents for the above petition.

A10: PRAYER

RVUN humbly requests the Hon'ble Commission to:

- ♦ Approval of ARR & Tariff for FY-2015-16.
- ♦ To allow provisional Tariff w.e.f. 1.4.15 for FY 2015-16 till final tariff order is issued as proposed in the petition
- And pass such other further orders as are deemed fit and proper in the facts and circumstances of the case

(M. K. Khandelwal) Chief Accounts Officer (IA&C) RVUN, Jaipur. (P.S. Arya) Chief Engineer (PPMC & IT) RVUN, Jaipur.

Form G 1.1

Summary of Tariff Proposal

Name of the Petitioner Name of the Power Station /Unit : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

(Rs. Crore)

			2013-14	FY 2014-15			FY 2015-16	
S.No.	Particulars	Ref.of Form No	Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	Remark
1	2	3	4	5	6	7	9	10
1	Capacity (Fixed) Charge							
1.1	Depreciation	6.1	269.09	176.99	105.85	105.85	160.24	
1.2	Interest on term Loan & Transitional Loan	6.2	153.18	126.82	61.59	61.59	99.96	
1.3	Return on Equity	6.9	0.00	0.00	93.08	93.08	186.15	
14	Interest on Working Capital	6.11	113.06	125.80	64.93	65.00	137.59	
1.5	O & M Expenses	4.1	205.18	241.35	120.68	120.68	255.47	
1.6	Insurance Charges	6.12	2.42	2.63	1.27	1.27	2.67	
1.7	Tax on ROE	6.13	0.00	0.00	24.68	24.68	49.36	
1.9	Recovery of ARR and Tariff Petition Fee		0.75	0.75	0.38	0.38	0.75	
2.1	Less: Non-Tariff income	3.2	7.18	8.14	3.77	3.77	7.92	
	Total (1)- Capacity (Fixed Charges)		736.50	666.20	468.68	468.75	884.27	
2	Total- Energy (variable) charges		3014.95	3511.12	1754.00	1754.45	3666.41	
3	Units sold to Discoms (MU)		8557.05	9805.07	4677.23	4889.10	9831.93	
4	Rate of Fixed Charges. (1/3)		0.861	0.679	1.002	0.959	0.899	
5	Rate of Variable Charges.			3.581				
5.1	Rate of Energy Charge from Primary Fuel (REC	5.1						
	(i) Coal/ Lignite		3.223		3.219	3.008	3.096	
	(ii) Imported Coal		0.254		0.497	0.525	0.604	
	(iii) Any Other fuel							
	Total 2.1							
5.2	Rate of Energy Charge from Secondary Fuel (RI	5.1	0.046		0.034	0.056	0.029	
5.3	Total-(2) Rate of Energy Charge ex-bus(REC) ³	5.1	4.384	4.260	4.752	4.547	4.628	

Form G 1.2

Aggregate Revenue Requirement

Name of the Petitioner Name of the Power Station/Unit: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

(Rs. Crore)

		Reference 2013-14 FY 2014-15				FY 2015-16		
S.No.	Particulars	Form	Actual/Audited	Approved by the Commissio	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	Remarks
1	2	3	4	5	6	7	9	10
A	Receipts							
1	Revenue from Sale of Power (Tariff income)	3.1	3751.45	4177.32	2222.68	2223.20	4550.68	
2	Non Tariff income		7.18	8.14	3.77	3.77	7.92	
3	Revenue Subsidies, Grants & Subvention from State Govt.							
	Total- (A)		3758.63	4185.46	2226.45	2226.97	4558.60	
В	Expenditure							
1	Variable Costs, including Fuel Cost	5.1	3014.95	3511.12	1754.00	1754.45	3666.41	
2	Depreciation	6.1	269.09	176.99	105.85	105.85	160.24	
3	Interest on term Loan & Finance charges	6.2	153.18	126.82	61.59	61.59	99.96	
4	Return on Equity	6.9	0.00	0.00	93.08	93.08	186.15	
5	Tax on ROE	6.15	0.00	0.00	24.68	24.68	49.36	
6	Interest on Working Capital	6.11	113.06	125.80	64.93	65.00	137.59	
7	O & M Expenses	4.1	205.18	241.35	120.68	120.68	255.47	
8	Insurance Charges	6.14	2.42	2.63	1.27	1.27	2.67	
9	Recovery of ARR and Tariff Petition Fee		0.75	0.75	0.38	0.38	0.75	
C	Total- (B) Expenditure		3758.63	4185.46	2226.45	2226.97	4558.60	
D	A.R.R. (C-A.2)		3751.45	4177.32	2222.68	2223.20	4550.68	

Form G 2.1

Plant Characteristics

Name of the Petitioner	Rajasthan Rajya Vidut Utpadan Nigam Limited, Jaipur (Raj.)
Name of the Power Station/Unit:	Suratgarh Super Thermal Power Station

Basic characteristics of the plant ¹		Coal Based Thermal Power Plant (Conventional Steam Generator)						
Special Features of the Plant								
Site Specific Features ²		Intake water system from IGNP						
Special Technological Features ³								
Environmental Regulation related features ⁴		ESPs of 99.886% efficiency installed fr regulation of SPM						
Any other special features								
Fuel Details ⁵		Primary Fuel			dary Fuel	Alternate Fu	ıels	
D. I		Coal		Unit number	& LDO			
Details	1	2	3	4	5	6	& so on	
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	& SO 011	
Installed Capacity (IC)	250	250	250	250	250	250		
Date of Commercial Operation (COD)	01-Feb-99	01-Oct-00	15-Jan-02	31-Jul-02	19-Aug-03	30-Dec-09		
Type of cooling system ⁶				Closed Circuit System	m	<u>.</u>		
Type of Boiler Feed Pump ⁷				Electric Motor Drive	n			
Pressure (kg/cm2)			154	4.1 Kg/Cm2 (Super Heate	er Outlet)			
Temperature 0C								
-At Superheater Outlet				540 Deg C				
-At Reheater Outlet				540 Deg C				
Turbine Cycle heat Rate(Kcal/ Kwh)								
Boiler Efficiency (%)						87.76%		
Guaranteed Design Heat rate (kCal/kWh)8	2343 (2260 (Desi	gn Heat Rate) + 83 (Accept	able tolerance of 2.5% for T	Γurbine Heat Rate & 1% f	or Boiler Efficiency)	1980		
Conditions on which guaranteed								
% MCR				250 MW				
% Makeup		<u>-</u>	<u>-</u>	0% Make up	·			
Design Fuel		Coal (FC 27%, VM 18%, Moisture 10%, Ash 45%, HHV 3500 Kcal/Kg)						
Design cooling water Temperature				33 Deg C				
Back Pressure				76 mm/Hg				

Form G 2.2 Operational Parameters - Generation

Name of the Station/Unit:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

			2013-14		FY 2014-15		FY 2015-16
S. No.	Particulars	Units	Audited/Actual	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated
1	2	3	4	5	6	7	9
1	Operational Parameters - Hydel						
1.1	Total Capacity	MW	NA	NA	NA	NA	NA
1.2	Capacity Index	%	NA	NA	NA	NA	NA
1.3	Design Energy	MU	NA	NA	NA	NA	NA
1.4	Gross Generation	MU	NA	NA	NA	NA	NA
1.5	Auxiliary Energy Consumption	%	NA	NA	NA	NA	NA
1.6	Auxiliary Energy Consumption	MU	NA	NA	NA	NA	NA
1.7	Net Generation	MU	NA	NA	NA	NA	NA
2	Operational Parameters - Thermal						
2.1	Total Capacity	MW	1500	1500	1500	1500	1500
2.2	Availability	%	79.68%	0.00%	88.47%	85.00%	82.00%
2.3	Plant Load Factor	%	71.61%	82.00%	78.25%	82.00%	82.00%
2.4	Gross Generation	MU	9409.554	10774.800	5155.110	5372.640	10804.320
2.5	Auxiliary Energy Consumption	%	9.06%	9.00%	9.27%	9.00%	9.00%
2.6	Auxiliary Energy Consumption	MU	852.506	969.732	477.879	483.538	972.389
2.7	Net Generation	MU	8557.048	9805.068	4677.231	4889.102	9831.931
2.6	Heat Rate	Kcal/Kwh)	2616.2	2476.28	2545	2500	2476.28

Rs. Crore

Revenue from Sale of Power

Name of the Company Name of the Power Station : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Year 2013-14

	Teal 2013-14								Rs. Crore	
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fix ed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
A)	Revenue from sale of Electricity(as per									
A)	approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		3337.25	39.0%	287.235774	1175.8		1463.07	438.40	
(b)	AVVNL		2481.54	29.0%	213.5855755	874.3		1087.92	438.40	
(c)	JDVVNL		2738.26	32.0%	235.680635	964.8		1200.46	438.40	
2	Other recoveries									
3	Gross Revenue From Sale of Power				736.5019845	3014.95				
4	less: i) State Levies Payable to Govt.						•	·		
5	Less. : ii) Revenue during trial runs									
	(capitalised)									
6	Net revenue		8557.05		736.50	3014.95		3751.45		

Year 2014-15

S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fix ed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		3826.53	40.0%	374.9704128	1403.4		1778.35	464.74	
(b)	AVVNL		2678.57	28.0%	262.4792889	982.4		1244.85	464.74	
(c)	JDVVNL		3061.23	32.0%	299.9763302	1122.7		1422.68	464.74	
2	Other recoveries									
3	Gross Revenue From Sale of Power				937.4260319	3508.45				
4	less: i) State Levies Payable to Govt.									
	Less. : ii) Revenue during trial runs (capitalised)									
6	Net revenue		9566.33		937.43	3508.45		4445.88		

Year 2015-16

	Rs. Crore									
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fix ed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		3932.77	40.0%	353.7081136	1466.6		1820.27	462.85	
(b)	AVVNL		2752.94	28.0%	247.5956795	1026.6		1274.19	462.85	
(c)	JDVVNL		3146.22	32.0%	282.9664909	1173.3		1456.22	462.85	
2	Other recoveries									
3	Gross Revenue From Sale of Power				884.270284	3666.41				
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	Net revenue		9831.93		884.27	3666.41		4550.68		-

Form G 3.2 NON-TARIFF INCOME

Name of the Petitiner

Name of the Power Station/ Unit:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Suratgarh Super Thermal Power Station

Rs. Crore

		2013-14		FY 2014-15		FY 2015-16	
S.No	Particulars	(Actuals/audit ed)	Approved by the	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	Remarks
1	2	3	4	5	6	8	9
	Non-tariff income						
i.	Intt on Govt. Subsidy	0		0	0	0	
ii.	Conveyance Advance	0		0	0	0	
iii.	House Building Advance	0		0	0	0	
iv.	Income from F.D.R. with Banks	0		0	0	0	
v.	Sale of scrap	4.73		2.48	2.48	5.21	
vi.	MISCELLANEOUS RECEIPTS	2.45		1.29	1.29	2.70	
	Total non-tariff income	7.18	8.14	3.77	3.77	7.92	

Form G 3.3 REVENUE SUBSIDIES & GRANTS

Name of the Petitiner: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Name of the Power Station/Unit: Suratgarh Super Thermal Power Station

		Previous year (n-1)		Current Year (Ensuing Year (n+1)		
S. No.	Particulars	(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	Remarks
1	2	3	4	5	6	7	8
A)	Revenue Subsidies & Grants						
1 1	Subvention from State Government towards sale of electricity						
2	State Govt. Grant against addl. Intt. Liability on Company				N.A.		
3	Any Other item						
	Total						

Capital Subsidies and Grants

Name of the Petitioner: Name of the Power Station/Unit:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore

		Previous year		Current Year		Ensuing Year (n-	RS. CI OI C		
S. No.	Particulars	(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	Remarks		
1	2	3	4	5	6	7	8		
A	Capital Cost								
	Subsidy towards cost of Capitals Asset								
	Grant towards cost of Capitals Assets				N.A				
	Receipts from State Govt. under any scheme as grant/subsidy								
	Total								

Form G 4.1

O&M Expenses

Name of the Petitioner: Name of the Station/Unit: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

(Rs. Crore)

		2013-14		FY 2014-15		FY 2015-16
S.No.	Particulars	(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)
1	2	3	4	5	6	8
1	O&M Expense norms (Rs. per MW)					0.17031265
2	Total Capacity in MW					1500.00
3	O&M expense					255.47
4	Special O&M expense for Water pipe lines>50 km					
a	Details of Water pumping Stations beyond 50 K.M. from Water intake point					
b	Pumping Station No.1 :-					
b.1	Power consumption Cost					
b.2	Repair / Maintenance / Employee / other Cost					
b.3	Sub total (b)					
С	Pumping Station No.2 :-		`			
	and so on				_	
d	Total (4) Special O&M Expenses		· · · · · · · · · · · · · · · · · · ·			
5	Totsl O&M expenses	205.18	241.35	120.68	120.68	255.47

FORM 5.1/genco

Details / Information to be submitted in respect of fuel for computation of Energy charges* for FPA

Name of the Company: RVUN

Name of the Power Station : Suratgarh TPS (Information regarding <u>Bituminous Coal</u>)

S.	Month	Unit	(Apr-	-14)	(May	-14)	(Jun-14)	
No.		J	Domestic coal	Imported coal	Domestic coal	Imported coal	Domestic coal	Imported coal
1	Quantity of coal/Lignite in stock at the beginning of the month	(MT)	185890	0	230395	0	157979	41737
2	Quantity of coal/Lignite supplied by coal / Lignite company	(MT)	574887	0	482607	73322	508054	32654
3	Adjustment (+/-) in quantity supplied made by Coalcompany for diversion of wagons etc.	(MT)	0	0	0	0	0	0
4	Coal supplied by Coal / Lignite Company (2+3)	(MT)	574887	0	482607	73322	508054	32654
5	Normative Transit & Handling Losses (For Coal / Lignite based Projects)	(MT)	-2658	0	-3159	0	-2986	0
6	Net coal / Lignite Supplied (4-5)	(MT)	577545	0	485766	73322	511040	32654
7	Total coal (Receipts & Opening Stock) (1)+(6)	(MT)	763435	0	716161	73322	669019	74391
8	Coal / Lignite burnt /consumed	(MT)	533040	0	558182	31585	500237	65781
9	Coal / Lignite in stock at the end of the month (7-8)	(MT)	230395	0	157979	41737	168782	8610
10	Value of Coal in stock (at the start of month including freight)	(Rs.)	875369372	0	1078054147	0	772252780	365370122
11	Amount charged by the Coal / Lignite company	(Rs.)	1219244137	0	1189999670	641868560	1136575296	285642918
12	Adjustment (+/-) in amount charged made by Coal company	(Rs.)	0	0	0	0	0	0
13	Total amount charged (11+12)	(Rs.)	1219244137	0	1189999670	641868560	1136575296	285642918
14	Transportation charges by Rail /Ship/Road transport	(Rs.)	1477617954	0	1232493305	0	1216659217	0
15	Adjustment (+/-) in amount charged made by Railways	(Rs.)	0	0	0	0	0	0
16	Demurrage, Coal aagent, Railway staff and siding charges, if any	(Rs.)	0	0	280983	0	586310	0
17	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	0	0	0	0	0	0
18	Total transportation charges (14+/-15-16+17)	(Rs.)	1477617954	0	1232774288	0	1217245527	0
19	Total amount charged for Coal / Lignite supplied including transportation (10+13+18)	(Rs.)	3572231463	0	3500828105	641868560	3126073603	651013040
20	Average cost of coal /lignite (Opening Stock + Receipts) (19/7)	(Rs./MT)	4679.16	0.00	4888.33	8754.11	4672.62	8751.23
21	Cost of coal in stock at the end of the month (20)x(9)	(Rs.)	1078054147	0	772252780	365370122	788654664	75348124
22	Weighted average GCV of Coal / Lignite as fired	(Kcal/Kg)	3820	0	3670	6350	3492	6350
23	Wtd. Avg GCV Of Coal As Fired	(Kcal/Kg)	382	20	382	14	3824	

FORM 5.1/genco

Details / Information to be submitted in respect of fuel for computation of Energy charges* for FPA lame of the Company: RVUN

Name of the Power Station: Suratgarh TPS (Information regarding <u>HFO & HSD</u>)

Month	Unit	(Apr	-14)	(May	-14)	(Jun-	14)
		HFO	HSD	HFO	HSD	HFO	HSD
Quantity of oil in stock at the beginning of the month	(KL)	3126.180	149.851	2889.690	159.871	2322.090	166.921
Quantity of oil supplied by oil company	(KL)	0.000	24.000	0.000	40.000	0.000	40.000
Adjustment (+/-) in quantity supplied made by oil company for diversion of wagons etc.	(KL)	0.000	0	0.000	0	0.000	0
Oil supplied by oil company (2+3)	(KL)	0.00	24.000	0.00	40.00	0.00	40.00
Normative Transit & Handling Losses	(KL)	0	0	0	0	0	0
Net oil Supplied (4-5)	(KL)	0.00	24.000	0.000	40.00	0.000	40.00
Total oil (Receipts & Opening Stock) (1)+(6)	(KL)	3126.180	173.851	2889.690	199.871	2322.09	206.921
Oil consumed	(KL)	236.490	13.980	567.600	32.950	454.470	33.800
Oil in stock at the end of the month (7-8)	(KL)	2889.690	159.871	2322.090	166.921	1867.620	173.121
Value of oil in stock at the beginning of the month	(Rs.)	153841012	9823257	142203211	10339505	114271307	10542590
Amount charged by the oil company	(Rs.)	0	1420391	0	2284180	0	2238553
Adjustment (+/-) in amount charged made by oil company	(Rs.)	0	0	0	0	0	0
Total amount charged (11+12)	(Rs.)	0	1420391	0	2284180	0	2238553
Transportation charges by Rail /Ship/Road transport	(Rs.)	0	0	0	0	0	0
Adjustment (+/-) in amount charged made by Railways/Transport company	(Rs.)	0	0	0	0	0	0
Demurrage charges, if any	(Rs.)	0	0	0	0	0	0
Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	0	0	0	0	0	0
Total transportation charges (14+/-15-16+17)	(Rs.)	0	0	0	0	0	0
Total amount charged for oil supplied including transportation (10+13+18)	(Rs.)	153841012	11243648	142203211	12623685	114271307	12781143
Average cost of oil (Opening Stock + Receipts) (19/7)	(Rs./KL)	49210.54	64674.05	49210.54	63159.16	49210.54	61768.23
Cost of oil in stock at the end of the Month/Qtr	(Rs.)	142203211	10339505	114271307	10542590	91906592	10693377
Weighted average GCV of oil as fired	(kcal/Ltr)	9500	9200	9500	9200	9500	9200

Energy Charges for Thermal Generation

Name of the Petitioner: Name of the Power Station/Unit: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

S.No. Particulars	Name of the I	Power Station/Unit:		Suratgarh	Super Thermal Po	ower Station			
Counting				2013-14		FY 2014-15		FY 2015-16	
1 Operational Parameters	S.No.	Particulars	Units		Approved by the Commission			Anticipated	Remarks
1. Operational Parameters									
1.1 Total Capacity	1		3	4	5	6	7	8	9
1.2 Availability		_							
1.3 PLF	1.1	Total Capacity	MW	1500	1500	1500	1500	1500.00	
1.3 PLF	1.2	Availability	%	79.68%		88.47%	85.00%	82.00%	
1.5 Auxiliary Energy Consumption	1.3							82.00%	
1.6 Auxiliary Energy Consumption									
1.7 Net Generation									
1.8 Heat Rate									
Pack Parameters (for each primary and secondary Rule									
2.1.1 Fuel - 1 (Indegineous Coal) Real/Kg 3739 3664 3592 3664 3694 3694 3694 3694 3690 9500 9500 9500 9500 9500 9500 250000 25000 25000 25000 25000 25000 25		Fuel Parameters (for each primary and							
2.1.2 Fuel - 2 (HFG)									
2.1.3 Fuel - 3 (LDO) Real/Ly 9200									
2.1.4 Fuel - 4 (Imported Coal) Real/Kg 6600 6600 6350 6350 6350.00									
Landed Fuel Price per unit (Please specify the fuel) Landed Fuel Price per unit (Please specify the fuel) Re/MT									
Color Colo	∠.1.↔	raci - 4 (Imported Coar)	Kcai/Kg	0000	0000	0330	0330	0330.00	
2.2.1 Fuel - 1 (Indegineous Coal) Rs/MT	2.2								
2.2.4 Fuel -3 (LDQ) Rs/KL 61912 63706 62109 62109 62109 62509 6210		Fuel - 1 (Indegineous Coal)							
Second Consumption and Heat Contribution Second Contribution									
Fuel Consumption and Heat Contribution									
Separate Fuel Consumption Sepher Sephe	2.2.4	Fuel - 4 (Imported Coal)	Ks/MT	9440	8752	8752	8752	8752.00	
Separate Fuel Consumption Sepher Sephe		Fuel Consumption and Heat Contribution							
3.1.1 Fuel - 1 (Indegineous Coal) Kg/kWH 0.65 0.62 0.58 0.57 3.1.2 Fuel - 2 (LIFO) MI/kWH 0.06 0.03 0.05 0.05 3.1.3 Fuel - 3 (LDO) MI/kWH 0.06 0.03 0.05 0.05 3.1.4 Fuel - 4 (Imported Coal) Kg/kWH 0.02 0.05 0.05 0.06 3.2.1 Total Fuel Consumption Total Fuel Consumption Total Fuel - 4 (Imported Coal) MT 6156814.00 0.00 3174769.00 3100214.17 6111230.9 3.2.2 Fuel - 2 (HFO) KL 7559.39 0.00 3024.16 4861.94 4861.94 3.2.3 Fuel - 3 (LDO) KL 551.58 0.00 154.17 540.22 540.22 3.2.4 Fuel - 4 (Imported Coal) MT 230096.00 0.00 265506.00 293346.14 679025.66 3.3 Heat Content (each fuel separately) Total Fuel 2 (L1.1 x 3.1.4) Million keal 71814.22 0.00 28729.51 46188.47 46188.47 3.3.2 Fuel 3 (2.1.3 x 3.1.3) Million keal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million keal 5074.55 0.00 148.81 4969.99 4969.99 3.3.4 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (Infeo) (2.2.2 x 3.2.2) Rs Crore 3.41 0.00 0.96 3.36 3.52 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 3.41 0.00 0.96 3.36 3.52 4.1.5 Fuel 5 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 3.41 0.00 0.96 3.36 3.52 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 3.1.4 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) Fuel 3 (L1.6) (171.4) Fuel - 1 (Indegineous Coal) (771.7) Rs/kWh 0.042 0.000 0.032 0.049 0.026 91.1 Fuel - 1 (Indegineous Coal) (Rs/kWh 0.042 0.000 0.002 0.000 0.002 0.007 0.004 91.2 Fuel - 2 (HFO) Rs/kWh 0.042 0.000 0.002 0.002 0.007 0.004 91.3 Fuel - 3 (LDO) Rs/kWh 0.042 0.000 0.002 0.000 0.002 0.007 0.004 91.3 Fuel - 3 (LDO) Rs/kWh 0.042 0.000 0.00		(for each fuel separately)							
3.1.2 Fuel - 2 (HFO)			TC = / 1-33/TT	0.65		0.62	0.50	0.57	
3.1.3 Fuel - 3 (LDO)		Fuel - 2 (HEO)			-				
3.1.4 Fuel - 4 (Imported Coal) Kg/kWH 0.02 0.05 0.06 0.06									
3.2.1 Fuel (Indegineous Coal) MT		Fuel - 4 (Imported Coal)							
3.2.2 Fuel - 2 (HFO)									
3.2.3 Fuel - 3 (LDO)									
3.2.4 Fuel - 4 (Imported Coal) MT 230096.00 0.00 265506.00 293346.14 679025.66 3.3 Heat Content (each fuel separately) 3.3.1 Fuel 1 (2.1.1 x 3.1.1) Million keal 23020327.55 0.00 11403770.25 11359184.71 22391550.1 3.3.2 Fuel 2 (2.1.2 x 3.1.2) Million keal 71814.22 0.00 28729.51 46188.47 46188.47 3.3.3 Fuel 3 (2.1.3 x 3.1.3) Million keal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million keal 1518633.60 0.00 1685963.10 1862748.01 4311812.9 Total Heat Content									
3.3.1 Fuel 1 (2.1.1 x 3.1.1) Million keal 23020327.55 0.00 11403770.25 11359184.71 22391550.1 3.3.2 Fuel 2 (2.1.2 x 3.1.2) Million keal 71814.22 0.00 28729.51 46188.47 46188.47 3.3.3 Fuel 3 (2.1.3 x 3.1.3) Million keal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million keal 1518633.60 0.00 1685963.10 1862748.01 4311812.9 Total Heat Content Total Fuel Cost 4.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 4.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 31.1 0.00 0.96 3.36 3.52 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Rs/kWh 3.204 3.259 3.402 3.266 3.393 Energy Charge per unit (ex-bus) (7/1.7) 9 9.1.1 Fuel -1 (Indegineous Coal) Rs/kWh 3.223 0.000 0.002 0.003 0.049 0.026 0.099 0.009 0.000 0.002 0.007 0.0000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.0000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00									
3.3.1 Fuel 1 (2.1.1 x 3.1.1) Million keal 23020327.55 0.00 11403770.25 11359184.71 22391550.1 3.3.2 Fuel 2 (2.1.2 x 3.1.2) Million keal 71814.22 0.00 28729.51 46188.47 46188.47 3.3.3 Fuel 3 (2.1.3 x 3.1.3) Million keal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million keal 1518633.60 0.00 1685963.10 1862748.01 4311812.9 Total Heat Content									
3.3.2 Fuel 2 (2.1.2 x 3.1.2) Million kcal 71814.22 0.00 28729.51 46188.47 46188.47 3.3.3 Fuel 3 (2.1.3 x 3.1.3) Million kcal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million kcal 1518633.60 0.00 1685963.10 1862748.01 4311812.9 Total Heat Content 4 Total Fuel Cost 4.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Rs/kWh 3.204 3.259 3.402 3.266 3.393 Energy Charge per unit (ex-bus) (7/1.7) 9 1.1 Fuel - 1 (Indegineous Coal) Rs/kWh 0.042 0.000 0.002 0.007 0.004 0.006 0.007 0.007 0.004 0.006 0.007 0.007 0.004 0.000 0.00	3.3	Heat Content (each fuel separately)							
3.3.3 Fuel 3 (2.1.3 x 3.1.3) Million kcal 5074.55 0.00 1418.41 4969.99 4969.99 3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million kcal 1518633.60 0.00 1685963.10 1862748.01 4311812.9 Total Heat Content	3.3.1	Fuel 1 (2.1.1 x 3.1.1)	Million kcal	23020327.55	0.00	11403770.25	11359184.71	22391550.14	
3.3.4 Fuel 4 (2.1.4 x 3.1.4) Million kcal 1518633.60 0.00 1685963.10 1862748.01 4311812.9. Total Heat Content 4 Total Fuel Cost 4.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 4.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 3.41 0.00 0.96 3.36 3.52 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Terminal) (7/1.4) Rs/kWh 3.204 3.259 3.402 3.266 3.393 Finergy Charge per unit (ex-bus) (7/1.7) 9.1.1 Fuel - 1 (Indegineous Coal) Rs/kWh 3.223 0.000 3.219 3.008 3.096 9.1.2 Fuel - 2 (HFO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004	3.3.2	Fuel 2 (2.1.2 x 3.1.2)	Million keal	71814.22	0.00	28729.51	46188.47	46188.47	
Total Heat Content 4 Total Fuel Cost 4.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 4.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 3.4.1 0.00 0.96 3.36 3.52 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Terminal) (71.4) Rs/kWh 3.204 3.259 3.402 3.266 3.393 Energy Charge per unit (ex-bus) (7/1.7) 9 1.1 Fuel - 1 (Indegineous Coal) Rs/kWh 3.223 0.000 3.219 3.008 3.096 9.1.2 Fuel - 2 (HFO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004	3.3.3	Fuel 3 (2.1.3 x 3.1.3)	Million kcal	5074.55	0.00	1418.41	4969.99	4969.99	
4.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 4.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 3.4.1 0.00 0.96 3.36 3.5.12 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Terminal) (71.4) 3.204 3.259 3.402 3.266 3.393 Energy Charge per unit (ex-bus) (7/1.7) 9.1.1 Fuel - 1 (Indegineous Coal) Rs/kWh 3.223 0.000 3.219 3.008 3.096 9.1.2 Fuel - 2 (HFO) Rs/kWh 0.004 0.000 0.032 0.049 0.026 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004	3.3.4		Million keal	1518633.60	0.00	1685963.10	1862748.01	4311812.94	
A.1.1 Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1) Rs Crore 2758.25 0.00 1505.79 1470.43 3043.48 A.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12 A.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 3.41 0.00 0.96 3.36 3.52 A.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Rs/kWh 3.204 3.259 3.402 3.266 3.393 Fuel - 1 (Indegineous Coal) Rs/kWh 3.223 0.000 3.219 3.008 3.096 9.1.2 Fuel - 2 (HFO) Rs/kWh 0.004 0.000 0.032 0.049 0.026 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.4 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.5 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.6 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.7 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004 9.1.8 Fuel - 3 (LDO) Rs/kWh 0.004 0.000		Conton							
4.1.2 Fuel 2 (HFO) (2.2.2 x 3.2.2) Rs Crore 36.07 0.00 14.88 23.93 25.12	4	Total Fuel Cost							
4.1.3 Fuel 3 (LDO) (2.2.3 x 3.2.3) Rs Crore 3.41 0.00 0.96 3.36 3.52 4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 5 Details of limestone consumption (Applicable for Lignite based generating stations) 6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Rs/kWh 3.204 3.259 3.402 3.266 3.393 9 Energy Charge per unit (ex-bus) (7/1.7) 9 9 1.1 Fuel - 1 (Indegineous Coal) Rs/kWh 3.223 0.000 3.219 3.008 3.096 9 9 1.2 Fuel - 2 (HEO) Rs/kWh 0.0042 0.000 0.032 0.049 0.026 9 1.3 Fuel - 3 (LDO) Rs/kWh 0.0040 0.000 0.002 0.007 0.004 1 1 1 1 1 1 1 1 1	4.1.1	Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1)	Rs Crore	2758.25	0.00	1505.79	1470.43	3043.48	
4.1.4 Fuel 4 (Imported Coal) (2.2.4 x 3.2.4) Rs Crore 217.21 0.00 232.37 256.74 594.28 Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41 5									
Total Fuel Cost Rs Crore 3014.95 0.00 1754.00 1754.45 3666.41									
Details of limestone consumption (Applicable for Lignite based generating stations)	4.1.4								
6 Other Charges and Adjustments Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Fs/kWh 3.204 3.259 3.402 3.266 3.393		1 Otal Fuel Cost	AS Crore	3014.95	0.00	1/54.00	1/54.45	3000.41	
6 Other Charges and Adjustments 7 Total Cost (4+5+6) Rs Crore 3014.95 3511.12 1754.00 1754.45 3666.41 8 Cost of Generation per unit (at Generation Terminal) (7/1.4) 3.204 3.259 3.402 3.266 3.393 Energy Charge per unit (ex-bus) (7/1.7)	5	Details of limestone consumption (Applicab	le for Lignite	e based genera	ting stations)				
8 Cost of Generation per unit (at Generation Terminal) (7/1.4) Energy Charge per unit (ex-bus) (7/1.7) 9 1.1. Fuel - 1 (Indegineous Coal) Public Fuel - 2 (HFO) Rs/kWh Rs		Other Charges and Adjustments							
Terminal) (7/1.4) 3.204 3.259 3.402 3.266 3.393				3014.95	3511.12	1754.00	1754.45	3666.41	
9 Rs/kWh 3.223 0.000 3.219 3.008 3.096 9.1.2 Fuel - 2 (HFO) Rs/kWh 0.042 0.000 0.032 0.049 0.026 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004	8	Terminal) (7/1.4)	Rs/kWh	3.204	3.259	3.402	3.266	3.393	
9.1.2 Fuel - 2 (HFO) Rs/kWh 0.042 0.000 0.032 0.049 0.026 9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004			D - 4-337	2 222	0.000	3 3 1 0	3 008	3.006	
9.1.3 Fuel - 3 (LDO) Rs/kWh 0.004 0.000 0.002 0.007 0.004									
Total(9) Rs/kWh 3.523 3.581 3.750 3.588 3.729		Total (9)	Da/1-337-	3 522	3 501	3.750	3 500	3 730	

Form G 6.1

Fixed assets & provisons for depreciation

Name of the Petitioner Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Year (n-1) (2013-14) (Figures in Rs Crore)

				Gross fix	ed assets	() (Provisions fo	r depreciation		Net fixed assets at	
S. No.	Particular	Rate of depreciation %	At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the begining of the year		Adjustment during the year		the beginning of the year	Net Fixed Asset at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights	Nil	9.820	0.000	0.00	9.820	0.000	0.00	0.00	0.000	9.82	9.82
1A	Building & Civil works of Power plant	3.34	394.568	0.000	0.00	394.568	102.661	13.18	0.00	115.840	291.91	278.73
2	Hydraulic works	5.28	114.994	0.005	0.00	114.999	58.594	6.07	0.00	64.666	56.40	50.33
3	Other Civil works	3.34	67.750	0.000	0.00	67.750	21.948	2.26	0.00	24.211	45.80	43.54
4	Plant & machinery	5.28	4614.27	1.441	0.00	4615.72	2347.418	243.67	0.00	2591.090	2266.86	2024.63
5	Lines and Cable Networks	5.28	49.370	0.000	0.00	49.370	19.163	2.61	0.00	21.770	30.21	27.60
6	Vehicles	6.33	0.900	0.000	0.00	0.900	0.800	0.01	0.00	0.810	0.10	0.09
7	Furniture & fixtures	6.33	0.589	0.078	0.00	0.668	0.068	0.04	0.00	0.108	0.52	0.56
8	Office Equipments	6.33	6.481	0.022	0.00	6.504	1.679	0.41	0.00	2.090	4.80	4.41
9	Capital spares	5.28	15.896	0.000	0.00	15.896	3.230	0.84	0.00	4.069	12.67	11.83
	Total (1) to (11)		5274.64	1.55	0.00	5276.19	2555.56	269.09	0.00	2824.65	2719.08	2451.54

Year (n) (2014-15) (Figures in Rs Crore)

Gross fixed assets Provisions for depreciation

				Gross fix	ed assets			Provisions fo	r depreciation		Net fixed assets at	
S. No.	Particular	Rate of depreciation %	At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the begining of the year	Additions during the year	Adjustment during the year		the beginning of the year	Net Fixed Asset at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights	Nil	9.82	0.00	0.00	9.820	0.000	0.00	0.00	0.000	9.82	9.82
1A	Building & Civil works of Power plant	3.34	394.57	0.00	0.00	394.568	115.840	12.17	0.00	128.014	278.73	266.55
2	Hydraulic works	5.28	115.00	0.00	0.00	114.999	64.666	6.02	0.00	70.681	50.33	44.32
3	Other Civil works	3.34	67.75	0.00	0.00	67.750	24.211	2.41	0.00	26.616	43.54	41.13
4	Plant & machinery	5.28	4615.72	0.00	0.00	4615.716	2591.090	187.05	0.00	2778.145	2024.63	1837.57
5	Lines and Cable Networks	5.28	49.37	0.00	0.00	49.370	21.770	2.60	0.00	24.373	27.60	25.00
6	Vehicles	6.33	0.90	0.00	0.00	0.900	0.810	0.00	0.00	0.813	0.09	0.09
7	Furniture & fixtures	6.33	0.67	0.00	0.00	0.668	0.108	0.01	0.00	0.117	0.56	0.55
8	Office Equipments	6.33	6.50	0.00	0.00	6.504	2.090	0.60	0.00	2.688	4.41	3.82
9	Capital spares	5.28	15.90	0.00	0.00	15.896	4.069	0.84	0.00	4.908	11.83	10.99
	Total (1) to (11)		5276.19	0.00	0.00	5276.19	2824.65	211.70	0.00	3036.35	2451.54	2239.84

								Ye	ar (n-1) (2015-16)		(Figures in Rs Crore)	
				Gross fix	ed assets			Provisions fo	r depreciation		Net fixed assets at	
S. No.	Particular	Rate of depreciation %	At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the begining of the year	during the	Adjustment during the year	Cumulative at the end of the year	the beginning of the year	Net Fixed Asset at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights	Nil	9.82	0.00	0.00	9.820	0.000		0.00	0.000	9.82	9.82
1A	Building & Civil works of Power plant	3.34	394.57	0.00	0.00	394.568	128.014	11.88	0.00	139.898	266.55	254.67
2	Hydraulic works	5.28	115.00	0.00	0.00	114.999	70.681	2.69	0.00	73.375	44.32	41.62
3	Other Civil works	3.34	67.75	0.00	0.00	67.750	26.616	1.84	0.00	28.461	41.13	39.29
4	Plant & machinery	5.28	4615.72	0.00	0.00	4615.716	2778.145	140.74	0.00	2918.882	1837.57	1696.83
5	Lines and Cable Networks	5.28	49.37	0.00	0.00	49.370	24.373	1.63	0.00	26.001	25.00	23.37
6	Vehicles	6.33	0.90	0.00	0.00	0.900	0.813	0.00	0.00	0.815	0.09	0.08
7	Furniture & fixtures	6.33	0.67	0.00	0.00	0.668	0.117	0.01	0.00	0.125	0.55	0.54
8	Office Equipments	6.33	6.50	0.00	0.00	6.504	2.688	0.60	0.00	3.286	3.82	3.22
9	Capital spares	5.28	15.90	0.00	0.00	15.896	4.908	0.84	0.00	5.748	10.99	10.15
	Total (1) to (11)		5276.19	0.00	0.00	5276.19	3036.35	160.24	0.00	3196.59	2239.84	2079.60

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

Name of the Petitioner Name of the Power Station : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station Name of the Petitioner Name of the Power Station :

							Year (2013-14	ł)		Rs. Crore				
			Opening	Anticipated	Anticipated	Intere	st rate	Closing	Average Rate of	Liability of Interest	Financial	Total interest &		Net interest &
S. No.	Source (loan)	Currency	Balance	Receipts	Repayment	Fixed Floating		Balance	Interest#	during the year	charges	finance charges	charges capitalised	finance charges
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14
1	Term Loan + Transitional Loan	Indian	1345.72	0.00	269.09	12.48%		1076.63	12.48%	151.18	2.00	153.18	0.00	153.18
2	Finance chanrges													
	Total (for Station)		1345.72	0.00	269.09			1076.63		151.18	2.00	153.18	0.00	153.18

							Year (2014-15)		Rs. Crore				
			Opening	Anticipated	Anticipated	Intere	st rate	Closing	Average Rate of	Liability of Interest	Financial	Total interest &		Net interest &
S. No.	Source (loan)	Currency	Balance	Receipts	Repayment	Fixed	Floating	Balance	Interest#	during the year	charges	finance charges	charges capitalised	finance charges
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14
1	Term Loan + Transitional Loan	Indian	1076.63	0.00	211.70	12.48%		864.93	12.48%	121.17	2.00	123.17	0.00	123.17
	Total (for Station)		1076.63	0.00	211.70			864.93		121.17	2.00	123.17	0.00	123.17

							Year (2015-16	5)		Rs. Crore				
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interes Fixed	st rate Floating	Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	charges	Net interest & finance charges
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14
1	Term Loan + Transitional Loan	Indian	864.93	0.00	160.24	12.48%		704.69	12.48%	97.96	2.00	99.96	0.00	99.96
													•	
	Total (for Station)		864.93	0.00	160.24			704.69		97.96	2.00	99.96	0.00	99.96

Form G 6.3 Details of Project Specific Loans

Name of the Petitioner Name of the Power Station Commercial Operation Date Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore Year (n-1)* **Particulars** Package1 Package2 Package3 Package5 Package6 Package4 3 1 4 5 Source of Loan¹ LIC, PFC, Govt loan etc Currency² Indian Amount of Loan sanctioned Amount of Gross Loan drawn upto previos year/during current/ensuing year/COD 3,4,5,13,15 1714.96 Interest Type⁶ Fixed Interest Rate, if applicable Base Rate, if Floating Interest⁷ Margin, if Floating Interest⁸ Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No Are there any Caps/Floor⁹ If above is yes, specify caps/floor Moratorium Period¹⁰ Moratorium effective from Repayment Period¹¹ Repayment effective from Repayment Frequency¹² Repayment Instalment^{13,14} Base Exchange Rate¹⁶

Consilidated report on additions to Fixed Assets during the year

Name of the Petitioner Name of the Power Station :

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

_																		(Rs. in c	crores)											
						FY 13	-14						FY 1	4-15						FY 15-	16						Current Y	(ear (n+2)		
S.No.	Asset Description	Asset				(Actuals/a	udited)						(Actuals & A	Anticipated)						(Anticipa	ted)						(Antic			
5.100.	Asset Description	Code	Cost	Interest	Finance Charges	Pre- Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Interest	Finance Charges	Pre- Operative expenses	Exchange fluctuations	Total	Date of commissionin g	Cost	Interest		Pre- Operativ e	Exchange fluctuati ons	Total	Date of commissioning
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	11	12	13	14	15	16	17	11	12	13	14	15	16	17
	Land & land rights		0.00																											
	Building & Civil works of Power plant		0.00																											
	Hydraulic works		0.01																											
	Other Civil works		0.00																											
	Plant & machinery		1.44																											
	Lines and Cable Networks		0.00																											
	Vehicles		0.00																											
	Furniture & fixtures		0.08																											
	Office Equipments		0.02																											
	Capital spares		0.00																											
	Total		1.55																											

Form G 6.5 Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Petitioner : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station : Suratgarh Super Thermal Power Station

New Projects

Capital Cost Estimates

Board of Director/ Agency approving the Capital cost estimates:							
Date of approval of the Capital cost estimates:							
But of approval of the capital cost estimates.							
		Present Day			Comple		
Price level of approved estimates	As of End of	Qtr. Of th	e year	As on So	cheduled CO	D of the Station	
Foreign Exchange rate considered for theCapital cost							
estimates	NA	NA	NA	NA	NA	NA	NA
Capital Cost excluding IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant							
Currency)	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Capital cost excluding IDC & FC (Rs. Cr)							
	NA	NA	NA	NA	NA	NA	NA
IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant Currency)						7,100	
	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Total IDC & FC (Rs.Cr.)	NA	NA	NA	NA	NA	NA	NA
Rate of taxes & duties considered	NA	NA	NA	NA	NA	NA	NA
Capital cost Including IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant							
Currency)	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Capital cost Including IDC & FC (Rs. Cr)	NA	NA	NA	NA	NA	NA	NA
Schedule of Commissioning	NA	NA	NA	NA	NA	NA	NA
COD of Unit-I/Block-I	NA	NA	NA	NA	NA	NA	NA
COD of Unit-II/Block-II	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA
COD of last Unit/Block	NA	NA	NA	NA	NA	NA	NA

Break-up of Capital Cost for Coal/Lignite / gas/liquid fuel based projects

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station Name of the Petitioner: Name of the Power Station :

Form G 6.6

							Rs. Crore.
			Cost in Rs. Crores				
S.No.	Break Down	As per original Estimates	Actual Expenditure as on COD	Liabilities/Provisions	Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
1	Z I and a City Day of a second	3	4	5	6	7	8
1.0	Land & Site Development						
2.0	Access road						
3.0	Temporary construction and enabling works						
4	Water storage system						
5.0	Water transportation system						
6.0 7.0	Railway system Steam generator / Boiler Island						
	Steam Turbine Generator island including taxes,						
8.0	dueties etc.						
	Balance of Plant						
9.1	Mechanical BOP Coal handling system /fuel handling system and						
9.1.1	storage						
9.1.2	Ash handling system						
9.1.3	CW System						
9.1.4	DM Plant						
9.1.5	Raw water system						
9.1.6	Effuelent treatment Plant						
9.1.7	Station Piping System						
9.1.8	Fire Fighting System						
	Compressed Air System						
9.1.10	Air Conditioning and Ventilation System Misc. items including EOT cranes, hoist and elevators						
9.1.11							
9.1.12	Tax, Duties, F&I						
9.1.13	Spares						
9.2	Electrical BOP						
9.2.1	Power Transformers						
9.2.2	Switchyard						
	Bus Duct						
	HT Switchgear						
	LT Switchgear						
	DC Power System						
	Power and Control Cables						
	Control and Relay Panels				NA		
	Station Lighting				INA		
	DG Set						
	Electrical equipment erection, cabling and grounding						
	Other Misc. items Taxes, Duties and F&I						
	ETC and spares						
9.2.14	Total BOP Civil Works						
	Main Power house building						
	Plant water system						
	Chimney						
	Permanent Township						
9.3.5	Ash dyke						
	Misc. plant buildings						
	Temp. sheds						
	Control and Instrumentation						
	Operator Training						
	Start up fuel						

Form G 6.7 Break-up of Construction / Supply / Service packages Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Name of the Petitioner: Suratgarh Super Thermal Power Station Name of the Power Station : Name/No. of Whether awarded No. of bids | Date of | Date of Start | Actual expenditure | Taxes & Duties | IDC, FC, FERV Variation Date of Value of Firm or Variation on Reason Variation Reason Scope of works¹ (in Construction / Supply / Service Package through ICB/DCB/ With till the completion line with head of cost received Award of work Completion Award² in and Pre-& Hedging cost (Rs.Cr.) account of change for or up to COD Depatmentally/ of Work Escalation operative in Price (Rs. Cr.) Change break-ups as (Rs. Cr.) change account Deposit Work whichever is in Price applicable) in prices Expenses of in Scope change of Work earlier(Rs.Cr.) in Scope of Work (Rs. Cr.) 10 11 13 14 15 17 2 3 4 5 6 9 12 16 18 NA 32

Form G 6.8

Draw Down Schedule for Calculation of IDC & Financing Charges (year wise from commencement of works to COD)

Name of the Petitioner: Name of the Power Station Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore

	Draw Down		Quarter 1			Quarter 2			Quarter 3			Quarter 4	Ro. Crore
S.No.	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee		Exchange Rate on draw down date		Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Loans											•	
1.1	Foreign Loans												
	Total Foreign Loans												
	Draw down Amount												
	IDC Financing charges												
	Indian Loans												
	THATAIT DOWNS												
1.2	Total Indian Loans												
	Draw down Amount												
	IDC												
	Financing charges												
1	Total of Loans drawn												
	IDC												
	Financing charges												
2	Equity												
2.1	Foreign equity drawn												
	T 11												
2,2	Indian equity drawn												
	Total equity deployed												

RETURN ON EQUITY

Name of the Petitioner: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Name of the Power Station: Suratgarh Super Thermal Power Station

Rs. Crore

			Previous year (n- 1)		Current Year (n)		Ensuing Year (n+2)	
S.No.	Particulars	Reference	(Actuals/audited	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	Remarks
1	2	3	4	5	6	7 = 5+6	9	10
1	Equity at the beginning of the year			0	1200.97	1200.97	1200.97	
2	Capitalisation			0	0	0	0.00	
3	Equity portion of capitalisation			0	0	0	0.00	
4	Equity at the end of the year			0	1200.97	1200.97	1200.97	
	Return Computation							
5	Return on Equity at the beginning of the year	15.50%*(1)		0	93.08	93.08	186.15	
6	Return on Equity portion of capitalisation (on pro-rata basis)	15.5%*(3)/(n/12)		0		0	0.00	
7	Total Return on Equity	(5)+(6)		0	93.08	93.08	186.15	

Form G 6.10

Statement of Additional Capitalisation after COD and Details for Financing

Name of the Petitioner: Name of the Power Station Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

COD

(Rs. Crore) **Source of Finance** Work/Equipment added Regulations under Amount after COD up to Cut off Capitalised/ which such additional S.No. Justification Admitted Cost^I Loan 2 and so Total Equity Internal Loan 1 Date / Beyond Cut off Proposed to be capitalisation has been Sources or on Loan Date capitalised claimed Others (mention details) Land & land rights 0.00 Building & Civil works of I 0.00 Hydraulic works 0.01 Other Civil works 0.00 Plant & machinery 1.44 Lines and Cable Networks 0.00 Vehicles 0.00 Furniture & fixtures 0.08 Office Equipments 0.02 Capital spares 0.00 Total (1) to (11) 1.55

Interest on Working Capital

Name of the Petitioner Name of the Power Station

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore

			FY 2013-14		FY 2013-14		FY 2015-16	
S. No.	Particulars		(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	Remarks
1	2		3	4	5	6 = 4+5	8	9
1	Coal Cost (Non pit head)	1½ Month	371.93	0.00	217.27	215.90	454.72	
2	Coal Cost (Pit head)	Half month	NA	NA	NA	NA	NA	
3	Cost of Gas	Half month	NA	NA	NA	NA	NA	
4	Sec.Fuel Oil	Two month	6.58	0.00	2.64	4.55	4.77	
5	Liquid Fuel Stock	Half month	NA	NA	NA	NA	NA	
6	O & M expenses	One month	17.10		10.06	10.06	21.29	
	Maintenance Spares	20% of O&M	41.04		24.14	24.14	51.09	
	Recievables	1½ Month	468.93		277.84	277.90	568.84	
	Total Working Capital		905.58		531.94	532.53	1100.71	
	Rate of Interest (as per norms)		12.48%		12.21%	12.21%	12.50%	
	Interest on Working Capital		113.06	119.89	64.93	65.00	137.59	

Form G 6.12

Insurance Expenses

Name of the Petitioner: Name of the Power Station :

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore

		Previous Year	urrent Year (n)			Ensuring Year	Remarks
S. No.	Particulars	2013-14	2014-15			2015-16	
		(Actuals/audited)	oved by the Commi	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	3	4	5	6	7	8
	Insurance Expenses						
a)	Provision made/ proposed for the year	2.42	2.63	1.27	1.27	2.67	
b)	Acual insurance expenses incurred	2.42					
c)	Average Net Fixed Assets	2857.89		1292.65	1292.65	3279.64	

Tax on R.O.E. Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Name of the Petitioner: Name of the Power Station :

Rs.

S. No.	Particulars	Previous Year (n-1)	2014-15	2015-16	Remarks	
		(Actuals/audited) Actual/ Estimated		Proposed to be recovered		
1	2	3	4	6	7	
A)	Advance Tax assessed & deposited on					
a)	for Quarter I & deposited on 15 th June.					
b)	for Quarter II & deposited on 15 th Sept.					
c)	for Quarter III & deposited on 15 th Dec.					
d)	for Quarter IV & deposited on 15 th March.					
	Total(A)		49.36	49.36		
В)	Deffered tax liability before 01.04.2009					

Proposed improvement in performance

Name of the Petitioner Name of the Power Station : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd. Suratgarh Super Thermal Power Station

Rs. Crore

		Previous year	Current year							
S.No.	Particulars	FY 2013-14		FY 2014-15		FY 2015-16	n+3	n+4	n+5	Remarks
		(Actuals / audited)	Apr-Sep (Actual)	Oct-Mar (Estimated)	Total (April - March)					
1	2	3	4	5	6 = 4+5	8	9	10	11	12
1	Plant load factor	71.61%	78.25%	82.00%		82.00%				
2	Auxiliary consumption	9.06%	9.27%	9.00%		9.00%				
3	Specific fuel consumption									
(I)	coal, kg / kWh	0.68	0.67	0.64		0.63				
ii)	gas, SCM / kWh									
(iii)	oil, ml / kwh	0.86	0.62	0.50		0.50				
(iv)	Limestone kg / kWh									
(v)	any other fuel									
4	Station heat rate, kcal / kwh	2616.2	2545	2500		2476.28				
5	Annual Maitenance shut down days									
	Forced / planned shut down except annual shut down									
(I)	number / year									
(ii)	cumulative duration, hours / year									
7	Fly ash utilisation, %	100%	100%	100%		100%				
8	Other bye product utilisation(give list)									
9	Outstanding dues, days of receivables									
10	Availability	79.68%	88.47%	85.00%		82.00%				