

**Petition for
Aggregate Revenue Requirement (ARR) and Tariff
for FY 2017-18 For
Kalisindh Thermal Power Station (KaTPP) Unit –1&2**

Submitted to
Rajasthan Electricity Regulatory Commission
Jaipur
by
Rajasthan Rajya Vidyut Utpadan Nigam Limited
Vidyut Bhavan, Janpath, Jaipur

January-2017

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DEFINITIONS

Act	The Electricity Act, 2003
Application	This Petition for approval of ARR and Provisional Tariff for FY 2017-18 for Unit-1&2 for Kalisindh 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 th , 2014.
State	The State of Rajasthan.
Gross Station Heat Rate	The heat energy input in kCal required to generate one kWh of electrical energy at generator terminals.
Unit	Unit in relation to a thermal power generating station means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle thermal power generating station, means turbine-generator and auxiliaries.

Abbreviations

ARR	Aggregate Revenue Requirement
Ajmer Discom	Ajmer Vidyut Vitran Nigam Limited
FY	Financial Year
FY – 17	Financial Year 2017-18
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
Ajmer Discom	Ajmer 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

Notes:

In this Petition:

All currency figures used in this Application, unless specifically stated otherwise, are in Rs Crores.

Capacity figures used in this Application, unless specifically stated otherwise, are in Megawatt (MW).

All energy unit figures used in this Application, unless specifically stated otherwise, are in Million Units (MU).

A1: BACKGROUND

- 1.1 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 RVUN had entered into a Power Purchase Agreement (PPA) with RVPN on 20th October 2001. As per the provisions of the PPA, the RVPN was responsible for purchase of all the generation from RVUN plants. The PPA was for the period upto 31.03.2003 with a provision to extend the same with mutual agreement.
- 1.3 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 38:31:31 (till October 2011), in the ratio of 39:29:32(from October 2011) and in the ratio of 40:28:32 from 26.06.2014 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, 18.05.2010 and further supplementary PPA was signed on date 29.06.2015 which includes KaTPP Unit 1 and 2 (1200MW).
- 1.4 **The petition for approval of ARR and Provisional Tariff for FY 2017-18 for Kalisindh Thermal Power Station-Unit 1 (600 MW) and Unit-2 (600 MW) has been prepared and is submitted to the Hon'ble Commission under Regulation 6 and Regulation 11 of RERC Tariff Regulations, 2014. The Kalisindh TPS-Unit 1 & 2 have achieved the COD on 07.05.2014 and 25.07.2015 respectively.**

A2: KATPP-UNIT 1&2, GENERATION FORECAST FOR 2017-18

- 2.1 The installed capacity of KaTPP-Unit 1&2 is 1200 MW. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from KaTPP station of RVUN for the period FY 2015-16, FY 2016-17 and FY 2017-18 are as shown in table below:

Table 1: Gross generation, PLF & Ex-bus energy sale of KaTPP-Unit 1&2 for FY 17

Sr. No	Particulars	FY 15-16		FY 16-17		FY 17-18	
		UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
1	Capacity (MW)	600.00	600.00	600.00	600.00	600.00	600.00
2	PLF (%)	66.88%	64.18%	71.91%	54.64%	83.00%	83.00%
3	Gross generation(MU)	3570.70	2350.50	3813.52	2881.15	4362.48	4362.48
4	Aux Cons. (%)	6.95%	6.98%	6.59%	6.06%	5.75%	5.75%
5	Aux Cons. (MU)	248.30	164.14	251.18	174.59	250.84	250.84
6	Net Generation (MU)	3322.40	2186.36	3562.34	2706.56	4111.64	4111.64

A3: CAPITAL COST

3.1 It is submitted that KaTPP Unit #1 had achieved the date of commercial operation 07.05.2014, thus on 18.06.2014 RVUN has filed the petition for determination of capital cost under regulation 42(4) of RERC tariff Regulation 2014 before the Hon'ble Commission. The Hon'ble Commission in its order dated 14.05.2015 has finalized the provisional capital cost of KaTPP unit #1 of Rs 4502.07 Cr. against the RVUN Claim of Rs. 5082.89 Crore.

17 Additional capitalization

(1) *The following capital expenditure, actually incurred after the date of commercial operation and upto the cut-off date and duly audited, may be considered by the Commission against the original scope of work , subject to prudence check:*
(a) *Due to undischarged liabilities;*
(b) *On works deferred for execution;*
(c) *To meet award of arbitration or satisfaction of order or decree of a court;*
(d) *On account of change in law;*
(e) *On procurement of initial spares included in the original project costs subject to the ceiling norm laid down in regulation 16.*

3.2 RVUN has incurred and booked capitalisation of Rs. 80.80 crore, Rs. 87.68 crore during FY 14-15, FY 15-16 respectively and further, RVUN have to incur additional capitalization of Rs. 209.33 crore during FY 2016-17 against the original scope of work as per regulation 17 (1)(a)&(b) of RERC Tariff Regulation 2014. Therefore RVUN is claiming capital cost of KaTPP Unit-1 as Rs.4879.88 crore.

3.3 It is submitted that KaTPP Unit #2 had achieved the date of commercial operation 25.07.2015, thus on 02.11.2015 RVUN has filed the petition for determination of capital cost under regulation 42(4) of RERC tariff Regulation 2014 before the Hon'ble Commission. The Hon'ble Commission has not yet finalised the above petition. RVUN has incurred Capital cost of Rs. 4101.26 crore upto FY 2015-16 and further, RVUN have to incur additional capitalization of Rs. 164.47 crore during FY 2016-17 against the original scope of work as per regulation 17 (1)(a)&(b) of RERC Tariff Regulation 2014. Therefore RVUN is claiming capital cost of KaTPP Unit-2 as Rs.4265.73 crore.

A4: KaTPP -UNIT 1&2 ANNUAL CAPACITY (FIXED) CHARGES FOR 2017-18

4.1 The details of various components of the annual capacity (fixed) charges are as under:-

DEPRECIATION

4.2 Estimated figures of depreciation for FY 2015-16, FY 2016-17 and FY 2017-18 as computed under format 6.1 are summarised in table below:

Table 2: Depreciation KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Depreciation	264.15	138.82	271.46	205.55	276.74	209.64

INTEREST ON TERM LOANS AND FINANCE CHARGES

- 4.3 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 along with finance charges as per regulation 21 of RERC tariff regulations 2014. The loan repayment amount for term loans and transitional loans combined has been taken equal to the depreciation figure envisaged for FY 2015-16, FY 2016-17 and FY 2017-18.
- 4.4 Estimated figures for interest on term loan, transitional loan and finance charges as computed under format 6.2 are summarised in table below:

Table 3: Interest on Term Loans and Finance Charges KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Interest Term Loan and finance charges	417.63	276.31	399.00	389.15	375.21	371.42
Total	417.63	276.31	399.00	389.15	375.21	371.42

INTEREST ON WORKING CAPITAL LOAN

- 4.5 The interest on working capital loan for FY 2015-16, FY 2016-17 and FY 2017-18 has been computed as per the norms defined under clause No.27 of RERC Tariff regulation 2014. For FY 2015-16, FY 2016-17 and FY 2017-18, 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 loan as computed under format 6.11 is summarised as below:

Table 4: Interest on Working Capital Loan KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Interest on Working Capital	43.61	27.47	46.00	43.13	46.86	45.52

OPERATION & MAINTENANCE EXPENSES

- 4.6 The Operation & Maintenance Expenses have been computed as per the norms prescribed under RERC Tariff Regulation 2014. Estimated figures of O & M Expenses are summarised in Table below:

Table 5: O & M Expenses KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Operation and Maintenance	35.12	18.40	97.34	97.34	103.02	103.02

RECOVERY OF ARR & TARIFF PETITION FEES

4.7 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 claimed the fee for FY 2016-17 & 2017-18 as under. The Commission may consider and allow the same. The ARR & Tariff Petition Fees are summarised in Table below:

Table 6: Recovery of ARR & Tariff Petition Fees KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Petition Fee	0.30	0.30	0.30	0.30	0.30	0.30

INSURANCE CHARGES

The insurance charges can be claimed as per norms defined under clause No. 25 of RERC Tariff regulation 2014 which allows actual insurance charges by the generating company, subject to a ceiling of 0.2% of average Net Fixed Assets for the year.

Table 7 : Insurance Charges

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Insurance Charges	0.10	0.10	4.50	4.50	4.50	4.50

RETURN ON EQUITY

4.8 The Return on Equity has been computed as per the norms prescribed under Regulation 20 of RERC Tariff Regulation 2014

4.9 The Return on Equity (ROE) for FY 2015-16, FY 2016-17 and FY 2017-18 are summarised in Table below:

Table 8 : Return on Equity

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
ROE	138.80	61.92	148.03	129.69	151.28	132.24

KaTPP UNIT-2, NON-TARIFF INCOME FOR 2017-18

4.10 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)

4.11 Estimated figures of Non Tariff Income for the Period FY-2017-18 are summarised in Table below:

Table 9 : Non-Tariff Income KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
KaTPP						
Non Tariff Income	2.87	2.87	2.87	2.87	2.87	2.87

A5: KaTPP UNIT-1&2, ESTIMATED CAPACITY (FIXED) CHARGES FOR 2017-18

5.1 The net capacity (fixed) charges are computed in Table below:

Table 10 : Net Estimated Capacity (Fixed) Charges for FY18 KaTPP-Unit 1&2

Particulars	FY 2015-16		FY 2016-17		FY 2017-18	
	Unit-1	Unit-2	Unit-1	Unit-2	Unit-1	Unit-2
Capacity (Fixed) Charge						
Depreciation	264.15	138.82	271.46	205.55	276.74	209.64
Interest on term Loan & Finance charges	417.63	276.31	399.00	389.15	375.21	371.42
Return on Equity	138.80	61.92	148.03	129.69	151.28	132.24
Interest on Working Capital	43.61	27.47	46.00	43.13	46.86	45.52
O & M Expenses	35.12	18.40	97.34	97.34	103.02	103.02
Insurance Charges	0.10	0.10	4.50	4.50	4.50	4.50
Tax on ROE	0.00	0.00	0.00	0.00	0.00	0.00
ARR & tariff petition fee	0.30	0.30	0.30	0.30	0.30	0.30
Additional Liability towards Pension and Gratuity Fund	0.00	0.00	0.00	0.00	0.00	0.00
Less: Non-Tariff income	2.87	2.87	2.87	2.87	2.87	2.87
Capacity (Fixed Charges)	896.83	520.44	963.77	866.79	955.03	863.77

A6: KaTPP UNIT-1&2, VARIABLE CHARGES FOR 2017-18

Coal GCV, Price and cost

6.1 The average GCV and price of domestic coal has been considered on the basis of coal received during April 16 to June 16 i.e. 4283.38 kCal/kg & Rs.4187.33/kg and for HFO GCV and price has been Considered 9883.00 kCal/ltr & Rs. 25818.10for unit 1 & 2. The GCV and price for LDO has been considered 9883.00 kCal/ltr & Rs. 34460.48 for Unit 1 & 2.

6.2 The overall estimated figures of Variable Cost for the period under consideration, are summarised in Table below:

Table 11 : Variable Cost KaTPP-Unit 1&2 for FY-17

Particulars	Units	FY 2015-16		FY 2016-17		FY 2017-18	
		UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
Operational Parameters							
Total Capacity	MW	600.00	600.00	600.00	600.00	600.00	600.00
Availability	%	82.16%	82.16%	83.00	83.00	83.00%	83.00%
PLF	%	66.88%	64.18%	72%	55%	83.00%	83.00%
Gross Generation	MU	3570.70	2350.50	3813.52	2881.15	4362.48	4362.48
Auxiliary Energy Consumption	%	6.95%	6.98%	6.59%	6.06%	5.75%	5.75%
Auxiliary Energy Consumption	MU	248.30	164.14	251.18	174.59	250.84	250.84
Net Generation	MU	3322.40	2186.36	3562.34	2706.56	4111.64	4111.64
SHR	kCal/kWh	2586.47	2606.83	2388.07	2345.42	2320.63	2320.63
Fuel Parameters							
Gross Calorific Value							
Fuel - (Indigenous Coal)	kCal/Kg	4316.07	4316.07	4283.38	4283.38	4283.38	4283.38
Fuel 2 (HFO)	kCal/Ltr.	9883.00	9883.00	9883.00	9883.00	9883.00	9883.00
Fuel 3 (LDO)	kCal/Ltr.	9883.00	9883.00	9883.00	9883.00	9883.00	9883.00
Fuel 4 (Imported Coal)	kCal/Kg	0.00	0.00	0.00	0.00	0.00	0.00
Specific Fuel Consumption							
Fuel - (Indigenous Coal)	Kg/kWh	0.60	0.40	0.56	0.55	0.55	0.55
Fuel 2 (HFO)	ml/kWh	1.52	0.70	0.49	0.44	0.45	0.45
Fuel 3 (LDO)	ml/kWh	0.95	0.60	0.37	0.13	0.05	0.05
Fuel 4 (Imported Coal)	Kg/kWh	0.00	0.00	0.00	0.00	0.00	0.00
Landed Fuel Price per unit							
Fuel - (Indigenous Coal)	Rs/MT	4093.94	4093.94	4187.33	4187.33	4187.33	4187.33
Fuel 2 (HFO)	Rs/KL	30861.59	30861.59	25818.10	25818.10	25818.10	25818.10
Fuel 3 (LDO)	Rs/KL	42900.69	42900.69	34460.48	34460.48	34460.48	34460.48
Fuel 4 (Imported Coal)	Rs/MT	0.00	0.00	0.00	0.00	0.00	0.00
Total Fuel Cost							
Fuel - (Indigenous Coal)	Rs Crore	870.60	578.18	888.14	659.70	987.56	987.56
Fuel 2 (HFO)	Rs Crore	16.74	7.70	4.87	3.28	5.07	5.07
Fuel 3 (LDO)	Rs Crore	14.62	9.13	4.81	1.30	0.75	0.75
Fuel 4 (Impored Coal)	Rs Crore	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost	Rs Crore	901.97	595.01	897.81	664.28	993.38	993.38
Cost of Generation per unit	Rs/Unit	2.526	2.531	2.354	2.306	2.277	2.277
Energy Charge per unit (ex-bus)	Rs/Unit	2.715	2.721	2.520	2.454	2.416	2.416

A7: KaTPP UNIT-1&2, ESTIMATED AGGREGATE REVENUE REQUIREMENT FOR FY-17

7.1 The recovery Of ARR proposed For KaTPP-Unit 1 &2 is summarised in table below

Table 12 : ARR FOR KaTPP-Unit 1&2 for FY-17

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
Capacity (Fixed) Charges	896.83	520.44	963.77	789.50	955.03	863.77
Variable Cost	901.97	595.01	897.81	664.28	993.38	993.38
Aggregate Revenue Requirement	1798.80	1115.46	1861.58	1453.78	1948.41	1857.15

A8: KaTPP UNIT-1&2, ESTIMATED TARIFF FOR FY 17

8.1 Total per unit charge in Rs / kWh is given in table below:-

Table 13 : TARIFF for FY17, KaTPP-Unit 1&2

Particulars	FY 15-16		FY 16-17		FY 17-18	
	UNIT-1	UNIT-2	UNIT-1	UNIT-2	UNIT-1	UNIT-2
Ex-Bus Generation (MU)	3322.40	2186.36	3562.34	2706.56	4111.64	4111.64
Capacity charge /Fixed charge (Rs. in Crore)	896.83	520.44	963.77	789.50	955.03	863.77
Variable Cost (Rs. in Crore)	901.97	595.01	897.81	664.28	993.38	993.38
Fixed cost (Rs/kWh sent out)	2.70	2.38	2.71	2.92	2.32	2.10
Variable Cost (Rs/kWh sent out)	2.71	2.72	2.52	2.45	2.42	2.42
Total cost (Rs/kWh sent out)	5.41	5.10	5.23	5.37	4.74	4.52

A9: FUEL COST ADJUSTMENT

9.1 The Commission in their Tariff Regulations, 2014 have provided for fuel cost adjustment for adjustment of tariff on account of fuel related costs of electricity generation to take care of any variation in the variable cost and the same is proposed to be recovered from Discoms with a drop down in GCV of 150 kCal/kWh.

A10: RESPONDENTS

10.1 All the three Discom's (i.e. JVVNL/AVVNL/Jd.VVNL) Jaipur/ Ajmer/ Jodhpur are respondents for the above petition.

A11: PRAYER

RVUN humbly requests the Hon'ble Commission to:

- ◆ Approval of ARR & Tariff for FY-2017-18.
- ◆ To condone any inadvertent omissions/errors/rounding off differences/ shortcomings and permit the Petitioner to add/alter this filing and make further submissions as may be required by the Hon'ble Commission; and

- ◆ And pass such other further orders as are deemed fit and proper in the facts and circumstances of the case

(Y.K. Upadhyay)
Chief Accounts Officer (Comml.)
RVUN, Jaipur.

(A.K.Saxena)
Addl. Chief Engineer (PPMC & IT)
RVUN, Jaipur.

Form G 1.1

Summary of Tariff Proposal

Name of the Petitioner

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station/Unit :

Kalisindh Thermal Power Station-Unit- 1 & 2

(Rs. Crore)

S.No.	Particulars	Ref.of Form No	FY 2015-16		FY 2016-17					FY 2017-18	
			Actual/Audited		Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Sep (Actual)	Oct-Mar (Estimated)	Anticipated	
			Unit-1	Unit-2	Unit-1	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2
1	Capacity (Fixed) Charge										
1.1	Depreciation	6.1	264.15	138.82	214.19	135.73	135.73	102.78	102.78	276.74	209.64
1.2	Interest on term Loan & Finance charges	6.2	417.63	276.31	385.70	199.50	199.50	194.57	194.57	375.21	371.42
1.3	Return on Equity	6.9	138.80	61.92	139.56	74.02	74.02	64.84	64.84	151.28	132.24
1.4	Interest on Working Capital	6.11	43.61	27.47	47.76	21.70	24.29	16.54	26.59	46.86	45.52
1.5	O & M Expenses	4.1	35.12	18.40	97.34	48.67	48.67	48.67	48.67	103.02	103.02
1.6	Insurance Charges	6.12	0.10	0.10	4.50	2.25	2.25	2.25	2.25	4.50	4.50
1.7	Tax on ROE	6.13	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	ARR & tariff petition fee		0.30	0.30	0.30	0.15	0.15	0.15	0.15	0.30	0.30
	Additional Liability towards Pension and Gratuity Fund										
	Less: Non-Tariff income	3.2	2.87	2.87	0.39	1.44	1.44	1.44	1.44	2.87	2.87
	Total (1)- Capacity (Fixed Charges)		896.83	520.44	888.96	480.59	483.18	428.37	438.42	955.03	863.77
2	Total- Energy (variable) charges		901.97	595.01	1001.92	411.56	495.33	172.79	495.33	993.38	993.38
3	Units sold to Discoms (MU)		3322.40	2186.36	4111.64	1512.15	2050.19	656.38	2050.19	4111.64	4111.64
4	Rate of Fixed Charges. (1/3)		2.70	2.38	2.16	3.18	2.36	6.53	2.14	2.32	2.10
5	Rate of Variable Charges.										
5.1	Rate of Energy Charge from Primary Fuel (REC) _p	5.3									
	(i) Indian Coal		2.62	2.64	0.00	2.68	2.40	2.61	2.40	2.40	2.40
	(ii) Imported Coal		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(iii) Any Other fuel										
	Total 2.1										
5.2	Rate of Energy Charge from Secondary Fuel (REC) _s	5.3	0.09	0.08	0.00	0.04	0.01	0.03	0.01	0.01	0.01
5.3	Total-(2) Rate of Energy Charge ex-bus(REC) ^{3A,3B,3C}	5.3	5.41	5.10	2.44	5.90	4.77	9.16	4.55	4.74	4.52

Form G 1.2

Aggregate Revenue Requirement

Name of the Petitioner

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station/Unit:

Kalisindh Thermal

0

(Rs. Crore)

S.No.	Particulars	Reference Form	FY 2015-16		FY 2016-17				FY 2017-18		Remarks
			Actual/Audited	Actual/Audited	Apr-Sep (Actual)	Estimated for (Oct-Mar)	Apr-Sep (Actual)	Estimated for (Oct-Mar)	Anticipated		
									Unit-1	Unit-2	
1	2	3	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2	9
A	Receipts										
1	Revenue from Sale of Power (Tariff income)	3.1	1798.80	1115.46	892.14	978.51	795.74	1128.32	1948.41	1857.15	
2	Non Tariff income	3.2	2.87	2.87	1.44	1.44	1.44	1.44	2.87	2.87	
3	Revenue Subsidies, Grants & Subvention from State Govt.										
	Total- (A)		1801.67	1118.33	893.58	979.94	797.17	1129.76	1951.28	1860.02	
B	Expenditure										
1	Variable Costs, including Fuel Cost	5.3	901.97	595.01	411.56	495.33	172.79	495.33	993.38	993.38	
2	Depreciation	6.1	264.15	138.82	135.73	135.73	102.78	102.78	276.74	209.64	
3	Interest on term Loan & Finance charges	6.2	417.63	276.31	199.50	199.50	389.15	389.15	375.21	371.42	
4	Return on Equity	6.9	138.80	61.92	74.02	74.02	64.84	64.84	151.28	132.24	
5	Tax on ROE	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	Interest on Working Capital	6.11	43.61	27.47	21.70	24.29	16.54	26.59	46.86	45.52	
7	O & M Expenses	4.1	35.12	18.40	48.67	48.67	48.67	48.67	103.02	103.02	
8	Insurance Charges	6.12	0.10	0.10	2.25	2.25	2.25	2.25	4.50	4.50	
9	Recovery of ARR & Tariff Petition Fees		0.30	0.30	0.15	0.15	0.15	0.15	0.30	0.30	
10	Additional Liability towards Pension and Gratuity Fund										
C	Total- (B) Expenditure		1801.67	1118.33	893.58	979.94	797.17	1129.76	1951.28	1860.02	
D	A.R.R. (C-A.2)		1798.80	1115.46	892.14	978.51	795.74	1128.32	1948.41	1857.15	

Plant Characteristics

Name of the Petitioner	Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)		
Name of the Power Station/Unit:	Kalisindh Thermal Power Station-Unit- 1 & 2		
Basic characteristics of the plant ¹	Conventional steam generator		
Special Features of the Plant			
Site Specific Features ²	Close cycle cooling system		
Special Technological Features ³			
Environmental Regulation related features ⁴	ESP		
Any other special features			
Fuel Details ⁵	Primary Fuel	Secondary Fuel	Alternate Fuels
	Pulverised Coal	FO/HSD/LDO	NA
Details	Unit number		
Installed Capacity (IC)	2X600 MW		
Date of Commercial Operation (COD)	UNIT - I ON 07.05.2014 & UNIT - II ON 25.07.2015		
Type of cooling system ⁶	Natural Draft Cooling Tower (Closed Cycle)		
Type of Boiler Feed Pump ⁷	Centrifugal Multistage Barrel Type Main Pump and Horizontal Split Type Booster Pump		
Pressure (kg/ cm2)	22 MP(a)		
Temperature 0C			
-At Superheater Outlet	541		
-At Reheater Outlet	541		
Turbine Cycle heat Rate(Kcal/ Kwh)			
Boiler Efficiency (%)			
Guaranteed Design Heat rate (kCal/kWh) _s	2220.7		
Conditions on which guaranteed			
% MCR	100% STG MCR		
% Makeup	0% Make Up		
Design Fuel	3500 Kcal/ Kg (GCV of Coal)		
Design cooling water Temperature	31		
Back Pressure			

Operational Parameters - Generation

Name of the Company	Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)
Name of the Station/Unit:	Kalisindh Thermal Power Station-Unit- 1 & 2

S. No.	Particulars	Units	FY 2015-16		FY 2016-17						FY 2017-18		Remarks	
			Audited/Actual	Audited/Actual	Approved by the Commission	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Sep (Actual)	Oct-Mar (Estimated)	Anticipated UNIT-1	Anticipated UNIT-2		
1	2	3	UNIT-1	UNIT-2	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2			9	
2	Operational Parameters -													
2.1	Total Capacity	MW	600	600	600.00		600.00	600.00	600.00	600.00	600.00	600.00	600.00	
2.2	Availability	%	82.16%	82.16%	0.00%		82.16%	83.00%	82.16%	83.00%	83.00%	83.00%	83.00%	
2.3	Plant Load Factor	%	66.88%	64.18%	83.00%		60.88%	83.00%	26.43%	83.00%	83.00%	83.00%	83.00%	
2.4	Gross Generation	MU	3570.70	2350.50	4362.48		1638.26	2175.26	705.89	2175.26	4362.48	4362.48	4362.48	
2.5	Auxiliary Energy Consumption	%	6.95%	6.98%	5.75%		7.70%	5.75%	7.01%	5.75%	5.75%	5.75%	5.75%	
2.6	Auxiliary Energy Consumption	MU	248.30	164.14	250.8426		126.11	125.08	49.51	125.08	250.84	250.84	250.84	
2.7	Net Generation	MU	3322.40	2186.36	4111.6374		1512.15	2050.19	656.38	2050.19	4111.64	4111.64	4111.64	
2.6	Heat Rate	Kcal/Kwh)	2586.47	2606.83	2320.63		2480.95	2320.63	2429.58	2320.63	2320.63	2320.63	2320.63	

Form G 3.1										
Revenue from Sale of Power										
Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)								
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit- 1 & 2								
FY 2015-16		Kalisindh Thermal Power Station-Unit- 1								
										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 approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1328.96	40.0%	358.73	360.79		719.52	5.414	
(b)	AVVNL		930.27	28.0%	251.11	252.55		503.66	5.414	
(c)	JDVVNL		1063.17	32.0%	286.99	288.63		575.62	5.414	
6	Net revenue		3322.40		896.83	901.97		1798.80		

Form G 3.1										
Revenue from Sale of Power										
Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)								
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit- 1								
FY 2016-17										
										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 approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1424.94	40.0%	385.51	362.75		748.26	5.251	
(b)	AVVNL		997.46	28.0%	269.85	253.93		523.78	5.251	
(c)	JDVVNL		1139.95	32.0%	308.41	290.20		598.61	5.251	
6	Net revenue		3562.34		963.77	906.89		1870.65		

Form G 3.1										
Revenue from Sale of Power										
Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)								
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit- 1								
FY 2017-18										
										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 approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1644.65	40.0%	382.01	397.35		779.37	4.739	
(b)	AVVNL		1151.26	28.0%	267.41	278.15		545.56	4.739	
(c)	JDVVNL		1315.72	32.0%	305.61	317.88		623.49	4.739	
6	Net revenue		4111.64		955.03	993.38		1948.41		

Form G 3.1										
Revenue from Sale of Power										
Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)								
Name of the Station/Unit:		kalisindh Thermal Power Station-Unit- 2								
FY 2016-17										
										Rs. Crore
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fixed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Existing Tariff
1	2	3	4	5	6	7	8	9	10	11
A)	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1082.62	40.0%	346.72	267.25		613.97	5.671	2.44
(b)	AVVNL		757.84	28.0%	242.70	187.07		429.78	5.671	2.44
(c)	JDVVNL		866.10	32.0%	277.37	213.80		491.17	5.671	2.44
2	Other recoveries									
3	Gross Revenue From Sale of Power									
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	Net revenue		2706.56		866.79	668.12		1534.91		2.44

Form G 3.1										
Revenue from Sale of Power										
Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)								
Name of the Station/Unit:		kalisindh Thermal Power Station-Unit- 2								
FY 2017-18										
										Rs. Crore
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fixed 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 approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1644.65	40.0%	345.51	397.35		742.86	4.517	
(b)	AVVNL		1151.26	28.0%	241.86	278.15		520.00	4.517	
(c)	JDVVNL		1315.72	32.0%	276.41	317.88		594.29	4.517	
2	Other recoveries									
3	Gross Revenue From Sale of Power									
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	Net revenue		4111.64		863.77	993.38		1857.15		

NON-TARIFF INCOME

Form G 3.2

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)										
Name of the Station/Unit:		Kalsindh Thermal Power Station-Unit- 1 & 2										
S.No	Particulars	FY 2015-16		FY 2016-17						FY 2017-18		Remarks
		(Actuals/audited)		Approved by the Commission	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Sep (Actual)	Oct-Mar (Estimated)	(Anticipated)		
		Unit-1	Unit-2	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2	
1	2											8
	Non-tariff income											
	i. Interest on loans and advances to employees											
	ii. Interest on loans and advances to suppliers/contractors											
	iii. Interest and other income from investments and deposits											
	iv. Income from rent on land/building											
	v. Income from sale of scrap					0	0			0	0	
	vi. Interest on subvention received from govt.											
	vii. Net Income from sale of power to housing colony/ township for its staff											
	viii. Income from sale of ash/ rejected coal					0	0			0	0	
	ix. Rebate for early payment											
	x. Income from advertisement											
	xi. Other miscellaneous receipts	2.87	2.87			1.44	1.44	1.44	1.44	2.87	2.87	
	Total non-tariff income	2.87	2.87	0.39		1.44	1.44	1.44	1.44	2.87	2.87	

REVENUE SUBSIDIES & GRANTS

Name of the Company	Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)
Name of the Station/Unit:	Kalisindh Thermal Power Station-Unit- 1 & 2

S. No.	Particulars	FY 2015-16	FY 2016-17		FY 2017-18	Remarks	
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)		(Anticipated)
1	2	3	4	5	6	7	8
A)	Revenue Subsidies & Grants	N.A.					
1	Subvention from State Government towards sale of electricity						
2	State Govt. Grant against addl. Intt. Liability on Company						
3	Any Other item						
	Total						

Capital Subsidies and Grants

Name of the Company	Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)
Name of the Station/Unit:	Kalisindh Thermal Power Station-Unit- 1 & 2

Rs. Crore

S. No.	Particulars	FY 2015-16	FY 2016-17		FY 2017-18	Remarks	
		(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)		(Anticipated)
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 Company	Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)
Name of the Station/Unit:	Kalisindh Thermal Power Station-Unit- 1 & 2

(Rs. Crore)

S.No.	Particulars	FY 2015-16		FY 2016-17				FY 2017-18	
		(Actuals/audited)	(Actuals/audited)	Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Sep (Actual)	Oct-Mar (Estimated)	(Anticipated)	
1	2	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2
1	O&M Expense norms (Rs. per MW)	0.06	0.06	0.08	0.08	0.08	0.08	0.17	0.17
2	Total Capacity in MW	600	600	600	600	600	600	600.00	600.00
3	O&M expense	35.12	18.40	48.67	48.67	48.67	48.67	103.02	103.02
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)								
c	Pumping Station No.2 :-								
	and so on								
d	Total (4) Special O&M Expenses								
5	Totals O&M expenses	35.12	18.40	48.67	48.67	48.67	48.67	103.02	103.02

Name of the Power Station/unit:

Form G 5.1

2x600 MW Kalisindh Super Thermal Power Project,
Rajasthan Raja Vidut Utpadan Nigam Ltd., Jhalawar

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges for FPA

S.No	Particulars	Unit	Apr-16	May-16	Jun-16	Ist Quarter
			Indian	Indian	Indian	Indian
1	2	3	4	6	8	
1	Quantity of coal/lignite in stock at the beginning of the month	(MT)	69662.79	76953.78	120139.30	
2 (a)	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MT)	408164.20	418677.98	419698.93	
2 (b)	Diverted from other TPS	(MT)	60.90	7385.78	4089.62	
3	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company for diversion of wagons etc.	(MT)	0.00	0.00	0.00	
4	Coal supplied by Coal/Lignite Company (2+3)	(MT)	408225.10	426063.76	423788.55	
5	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MT)	0.00	0.00	0.00	
6	Net coal / Lignite Supplied (4-5)	(MT)	408225.10	426063.76	423788.55	
7	Total coal (Receipts & Opening Stock) (1)+(6)	(MT)	477887.89	503017.54	543927.85	
8 (a)	Coal/lignite burnt/consumed (UNIT-1)	(MT)	214382.70	193877.34	195259.16	
8 (b)	Coal/lignite burnt/consumed (UNIT-2)	(MT)	186551.41	189000.90	23924.16	
8 (c)	Coal/lignite burnt/consumed (TOTAL)	(MT)	400934.11	382878.24	219183.32	1002995.67
9	Coal/lignite in stock at the end of the month (7)-(8 c)	(MT)	76953.78	120139.30	324744.53	
10	Value of coal/lignite in stock	(Rs.)	293376812.97	322521588.07	502561275.36	
11 (a)	Amount charged by the Coal /Lignite Company	(Rs.)	945924615.14	968904581.32	973239848.78	
11 (b)	Amount charged by the Coal Company for diverted from other TPS	(Rs.)	141136.36	17092172.08	9483419.82	
12	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	0.00	0.00	0.00	
13	Total amount Charged (11+12)	(Rs.)	946065751.50	985996753.39	982723268.60	
14	Transportation charges by rail/ship/road transport	(Rs.)	760336435.04	779921714.70	781823560.78	
15	Transportation charges by rail/ship/road transport (for diverted rake)	(Rs.)	113445.74	13758378.70	7618225.93	
16	Adjustment (+/-) in amount charged made by Railways / Transport Company for Diverted from other TPS	(Rs.)	0.00	0.00	0.00	
17	Demurrage Charges, if any	(Rs.)	2987221.00	2001743.00	3092395.00	
18	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	0.00	0.00	0.00	
19	Total Transportation Charges (14+15+16+17+18)	(Rs.)	763437101.78	795681836.40	792534181.71	
20	Total amount Charged for coal/lignite supplied including Transportation (13+19)	(Rs.)	1709502853.28	1781678589.80	1775257450.31	
21	Average cost of coal/lignite (Opening stock + receipts) ((10+20)/7)	(Rs/MT)	4191.11	4183.15	4187.72	4187.33
22	Cost of coal in stock at the end of the month (21)x(9)	(Rs.)	322521588.07	502561275.36	1359939873.44	
23	Weighted average GCV of coal/ Lignite as ARB	(kCal/Kg)	4293.63	4287.38	4257.65	4283.38

Form G 5.1 (Oil)

S. No	Month	Unit	Apr-16		May-16		Jun-16	
			HFO	LDO	HFO	LDO	HFO	LDO
1	2	3	4	5	6	7	8	9
1	Quantity of Sec. Fuel Oil (HFO / LDO) in stock at the beginning of the month	KL	1433.0001	398.000000	1278.0001	858.000000	1080.0001	695.000000
2	Quantity of Sec. Fuel Oil (HFO / LDO) supplied by Company	KL	0.000000	612.000000	0.000000	0.000000	0.000000	0.000000
3	Adjustment (+/-) in quantity of Sec. Fuel Oil (HFO / LDO) supplied by Company	KL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	Gross oil supplied by Company (2+3)	KL	0.0000	612.0000	0.0000	0.0000	0.0000	0.0000
5	Normative / Transit Loss	KL	0.00	0.00	0.00	0.00	0.00	0.00
6	Net Oil (HFO / LDO) supplied by company (4-5)	KL	0.0000	612.0000	0.0000	0.0000	0.0000	0.0000
7	Total HFO / LDO receipts & in stock (1+6)	KL	1433.0001	1010.0000	1278.0001	858.0000	1080.0001	695.0000
8a	HFO / LDO burnt/consumed for generating purpose (UNIT-1)	KL	0.000000	0.000000	60.000000	47.000000	36.000000	72.000000
8b	HFO / LDO burnt/consumed for generating purpose (UNIT-2)	KL	155.000000	152.000000	138.000000	116.000000	0.000000	0.000000
8c	HFO / LDO burnt/consumed for generating purpose (TOTAL)	KL	155.000000	152.000000	198.000000	163.000000	36.000000	72.000000
8d	HFO / LDO burnt/consumed for other than generating purpose	KL	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	Oil in stock at the end of the month (7-8c-8d)	KL	1278.0001	858.0000	1080.0001	695.0000	1044.0001	623.0000
10	Value of HFO / LDO in stock	(Rs.)	36997341.24	13718255.93	32995535.57	29567094.50	27883551.56	23950035.75
11	Amount charged by the Company	(Rs.)	0.00	21086832.00	0.00	0.00	0.00	0.00
12	Adjustment (+/-) in amount charged made by Company	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
13	Total amount Charged (11+12)	(Rs.)	0.00	21086832.00	0.00	0.00	0.00	0.00
14	Transportation charges	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
15	Adjustment (+/-) in Transportation charges	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
16	Demurrage Charges, if any	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
17	Cost of diesel in transporting oil through MGR system, if applicable	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
18	Total Transportation Charges (14+15-16+17)	(Rs.)	0.00	0.00	0.00	0.00	0.00	0.00
19	Total amount charged for oil including Transportation (13+18)	(Rs.)	0.00	21086832.00	0.00	0.00	0.00	0.00
20	Average cost of oil (In stock + receipt) ((19+10)/7)	(Rs.)	25818.10	34460.48	25818.10	34460.48	25818.10	34460.48
21	Cost of Oil in stock at the end of the month	(Rs.)	32995535.57	29567094.50	27883551.56	23950035.75	26954099.92	21468880.97
22	Weighted average GCV of Oil fired	(kCal/Ltr.)	9883	9883	9883	9883	9883	9883

Energy Charges for Thermal Generation

Form G 5.3

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)									
Name of the Station/Unit:		Kalisindh Thermal Power Station Unit 1 & 2									
S.No.	Particulars	Units	FY 2015-16		Approved by the Commission	FY 2016-17				FY 2017-18	
						Apr-Sep (Actual)		Oct-March (Estimated)		Anticipated	
1	2	3	4		5	6		7		8	
1	Operational Parameters		Unit-I	Unit-II		Unit-I	Unit-II	Unit-I	Unit-II	Unit-I	Unit-II
1.1	Total Capacity	MW	600.00	600.00		600.00	600.00	600.00	600.00	600.00	600.00
1.2	Availability	%	82.16%	82.16%		82.16%	82.16%	83.00%	83.00%	83.00%	83.00%
1.3	PLF	%	66.88%	64.18%		60.88%	26.43%	83.00%	83.00%	83.00%	83.00%
1.4	Gross Generation	MU	3570.700	2350.500		1638.260	705.890	2175.26	2175.26	4362.48	4362.48
1.5	Auxiliary Energy Consumption	%	6.95%	6.98%		7.70%	7.01%	5.75%	5.75%	5.75%	5.75%
1.6	Auxiliary Energy Consumption	MU	248.30	164.14		126.11	49.51	125.08	125.08	250.84	250.84
1.7	Net Generation	MU	3322.40	2186.36		1512.15	656.38	2050.19	2050.19	4111.64	4111.64
1.8	Heat Rate	kcal/kWh	2586.47	2606.83		2480.95	2429.58	2320.63	2320.63	2320.63	2320.63
2	Fuel Parameters (for each primary and secondary fuel)										
2.1	Gross Calorific Value										
2.1.1	Fuel 1 Indigenus Coal	kcal/Kg	4316.07	4316.07		4283.38	4283.38	4283.38	4283.38	4283.38	4283.38
2.1.2	Fuel 2 (HFO)	kcal/Ltr.	9883.00	9883.00		9883.00	9883.00	9883.00	9883.00	9883.00	9883.00
	Fuel 3 (LDO)	kcal/Ltr.	9883.00	9883.00		9883.00	9883.00	9883.00	9883.00	9883.00	9883.00
2.2	Landed Fuel Price per unit (Please specify the										
2.2.1	Fuel 1 Indigenus Coal	Rs/MT	4093.94	4093.94		4187.33	4187.33	4187.33	4187.33	4187.33	4187.33
	Fuel 2 (HFO)	Rs/KL	30861.59	30861.59		25818.1	25818.1	25818.1	25818.1	25818.1	25818.1
2.2.2	Fuel 3 (LDO)	Rs/KL	42900.69	42900.69		34460.48	34460.48	34460.48	34460.48	34460.48	34460.48
3	Fuel Consumption and Heat Contribution (for										
3.1	Specific Fuel Consumption										
3.1.1	Fuel 1 Indigenus Coal	kg/ kWh	0.60	0.60		0.58	0.57	0.54	0.54	0.54	0.54
	Fuel 2 (HFO)	MI/ kWh	1.52	1.06		0.55	0.42	0.45	0.45	0.45	0.45
3.1.2	Fuel 3 (LDO)	MI/ kWh	0.95	0.91		0.78	0.38	0.05	0.05	0.05	0.05
3.2	Total Fuel Consumption										
3.2.1	Fuel 1 Indigenus Coal	MT	2126563.82	1412291.13		945011.89	399476.47	1175995.09	1175995.09	2358451.68	2358451.68
	Fuel 2 (HFO)	KL	5424.75	2495.00		907.92	293.00	978.87	978.87	1963.12	1963.12
3.2.2	Fuel 3 (LDO)	KL	3408.37	2127.67		1286.00	268.00	108.76	108.76	218.12	218.12
3.3	Heat Content (each fuel separately)										
3.3.1	Fuel 1 Indigenus Coal	Million kcal	9178398.31	6095547.38		4047845.03	1711109.52	5037233.83	5037233.83	10102144.77	10102144.77
	Fuel 2 (HFO)	Million kcal	23413.60	10768.59		3888.97	1255.03	4192.87	4192.87	8408.77	8408.77
3.3.2	Fuel 3 (LDO)	Million kcal	33684.92	21027.76		12709.54	2648.64	1074.91	1074.91	2155.72	2155.72
	Total Heat Content	Million kcal	9235496.83	6127343.73		4064443.53	1715013.20	5042501.60	5042501.60	10112709.26	10112709.26
4	Total Fuel Cost										
4.1.1	Fuel 1 Indigenus Coal	Rs Crore	870.60	578.18		395.71	167.27	492.43	492.43	987.56	987.56
	Fuel 2 (HFO)	Rs Crore	16.74	7.70		2.34	0.76	2.53	2.53	5.07	5.07
4.1.2	Fuel 3 (LDO)	Rs Crore	14.62	9.13		4.43	0.92	0.37	0.37	0.75	0.75
	Total Fuel Cost	Rs Crore	901.97	595.01		402.48	168.95	495.33	495.33	993.38	993.38
5	Other Charges and Adjustments		0	0		0	0	0	0	0	0
6	Total Cost (4+5)	Rs Crore	901.97	595.01	0.00	402.48	168.95	495.33	495.33	993.38	993.38
7	Cost of Generation per unit (at Generation Terminal) (7/1.4)	Rs/kWh	2.526	2.531		2.457	2.393	2.277	2.277	2.277	2.277
8	Energy Charge per unit (ex-bus) (7/1.7)		2.715	2.721		2.662	2.574	2.416	2.416	2.416	2.416

Fixed assets & provisons for depreciation

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Name of the Station/Unit:		UNIT-2											
		Ensuing Year (FY 2015-16)										(Figures in Rs Crore)	
S. No.	Particular	Rate of depreciation %	Gross fixed assets				Provisions for depreciation				Net fixed assets at the beginning of the year	Net Fixed Asset at the end of the year	
			At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the beginning of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Land & land rights	Nil	7.31	3.97	0	11.28	0.19	0		0.19	7.12	11.09	
1A	Hydraulic works	5.28	0.00	647.56	0	647.56	0.00	23.51		23.51	0.00	624.05	
2	Building & Civil works of Power plant	3.34	4.19	590.29	0	594.48	0.53	13.70		14.23	3.66	580.25	
3	Plant & machinery including sub-station equipments	5.28	12.22	2659.31	0	2671.53	0.84	97.20		98.04	11.38	2573.49	
4	Communication equipment	6.33	0.00	3.14	0	3.14	0.00	0.14		0.14	0.00	3.00	
5	Vehicles	9.5	0.07	0.04	0	0.11	0.03	0.01		0.03	0.05	0.08	
6	Furniture & fixtures	6.33	0.48	0.78	0	1.26	0.06	0.06		0.12	0.42	1.14	
7	Office Equipments	6.33	0.08	0.10	0	0.18	0.03	0.01		0.04	0.05	0.14	
8	Capital spares	5.28	0.00	16.63	0	16.63	0.00	0.60		0.60	0.00	16.03	
9	Other Civil Works	3.34	2.40	152.69		155.09	0.22	3.59		3.80	2.19	151.29	
	Total (I) to (11)		26.75	4074.51	0.00	4101.26	1.89	138.82	0.00	140.72	24.86	3960.54	
				647.56									

Fixed assets & provisons for depreciation

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Name of the Station/Unit:		UNIT-2											
		Ensuing Year (FY 2016-17)										(Figures in Rs Crore)	
S. No.	Particular	Rate of depreciation %	Gross fixed assets				Provisions for depreciation				Net fixed assets at the beginning of the year	Net Fixed Asset at the end of the year	
			At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the beginning of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Land & land rights	Nil	11.28	0.49		11.77	0.19			0.19	11.09	11.58	
1A	Hydraulic works	5.28	647.56	43.79		691.35	23.51	35.35		58.86	624.05	632.49	
2	Building & Civil works of Power plant	3.34	594.48	0.00		594.48	14.23	19.86		34.08	580.25	560.40	
3	Plant & machinery including sub-station equipments	5.28	2671.53	95.64		2767.17	98.04	143.58		241.62	2573.49	2525.55	
4	Communication equipment	6.33	3.14	0.00		3.14	0.14	0.20		0.34	3.00	2.80	
5	Vehicles	9.5	0.11	0.00		0.11	0.03	0.01		0.04	0.08	0.07	
6	Furniture & fixtures	6.33	1.26	0.00		1.26	0.12	0.08		0.20	1.14	1.06	
7	Office Equipments	6.33	0.18	0.00		0.18	0.04	0.01		0.05	0.14	0.13	
8	Capital spares	5.28	16.63	0.00		16.63	0.60	0.88		1.48	16.03	15.15	
9	Other Civil Works	3.34	155.09	24.55		179.64	3.80	5.59		9.39	151.29	170.25	
	Total (I) to (11)		4101.26	164.47	0.00	4265.73	140.72	205.55	0.00	346.27	3960.54	3919.46	

8936.28

Fixed assets & provisons for depreciation

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Name of the Station/Unit:		UNIT-2											
		Ensuing Year (FY 2017-18)										(Figures in Rs Crore)	
S. No.	Particular	Rate of depreciation %	Gross fixed assets				Provisions for depreciation				Net fixed assets at the beginning of the year	Net Fixed Asset at the end of the year	
			At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the beginning of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Land & land rights	0	11.77	0		11.77	0.19	0.00		0.19	11.58	11.58	
1A	Hydraulic works	5.28	691.35	0.00		691.35	58.86	36.50		95.36	632.49	595.98	
2	Building & Civil works of Power plant	3.34	594.48	0.00		594.48	34.08	19.86		53.94	560.40	540.54	
3	Plant & machinery including sub-station equipments	5.28	2767.17	0.00		2767.17	241.62	146.11		387.73	2525.55	2379.44	
4	Communication equipment	6.33	3.14	0.00		3.14	0.34	0.20		0.53	2.80	2.61	
5	Vehicles	9.5	0.11	0.00		0.11	0.04	0.01		0.06	0.07	0.05	
6	Furniture & fixtures	6.33	1.26	0.00		1.26	0.20	0.08		0.28	1.06	0.98	
7	Office Equipments	6.33	0.18	0.00		0.18	0.05	0.01		0.06	0.13	0.12	
8	Capital spares	5.28	16.63	0.00		16.63	1.48	0.88		2.36	15.15	14.27	
9	Total (I) to (11)	3.34	179.64	0.00		179.64	9.39	6.00		15.39	170.25	164.25	
	Total (I) to (11)		4265.73	0.00	0.00	4265.73	346.27	209.64	0.00	555.91	3919.46	3709.82	

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

Form G 6.2

Name of the Petitioner													Name of the Petitioner					
Name of the Power Station :													Name of the Power Station :					
RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED													RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED					
Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)													Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)					
KATPP UNIT-1													KATPP UNIT-1					
Ensuing Year (FY 2015-16)													Ensuing Year (FY 2015-16)					
Rs. Crore													Rs. Crore					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	3430.03	70.144	264.15	12.50%		3236.03		416.63	1.00	417.63		417.63				
Total (for Station)			3430.03	70.144	264.15			3236.03		416.63		417.63		417.63				

Form G 6.2

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

LOAN REPAYMENT & INTREST LIABILITY

Name of the Petitioner													Name of the Petitioner					
Name of the Power Station :													Name of the Power Station :					
RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED													RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED					
Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)													Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)					
KATPP UNIT-1													KATPP UNIT-1					
Ensuing Year (FY 2016-17)													Ensuing Year (FY 2016-17)					
Rs. Crore													Rs. Crore					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	3236.03	167.464	271.46	12.50%		3132.03		398.00	1.00	399.00		399.00				
Total (for Station)			3236.03	167.464	271.46			3132.03		398.00		399.00		399.00				

Ensuing Year (FY 2017-18)													Ensuing Year (FY 2017-18)					
Rs. Crore													Rs. Crore					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	3132.03		276.74	12.50%		2855.29		374.21	1.00	375.21		375.21				
Total (for Station)			3132.03		276.74			2855.29		374.21		375.21		375.21				

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

Name of the Petitioner RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED													Name of the Petitioner					
Name of the Power Station : Unit - 2													Name of the Power Station :					
Ensuing Year (FY 2015-16)													Ensuing Year (FY 2015-16)					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	0.00	3281.01	138.82	12.50%		3142.18		275.31	1.00	276.31		276.31				
Total (for Station)			0.00		138.82			3142.18		275.31		276.31		276.31				

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

Name of the Petitioner RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED													Name of the Petitioner					
Name of the Power Station : Unit - 2													Name of the Power Station :					
Ensuing Year (FY 2016-17)													Ensuing Year (FY 2016-17)					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	3142.18	131.573	205.55	12.50%		3068.21		388.15	1.00	389.15		389.15				
Total (for Station)			3142.18		205.55			3068.21		388.15		389.15		389.15				

3105.195107

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

Form G 6.2

Name of the Petitioner RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED													Name of the Petitioner					
Name of the Power Station : Unit - 2													Name of the Power Station :					
Ensuing Year (FY 2017-18)													Ensuing Year (FY 2017-18)					
S. No.	Source (loan)	Currency	Opening Balance	Anticipated Receipts	Anticipated Repayment	Interest rate		Closing Balance	Average Rate of Interest#	Liability of Interest during the year	Financial charges	Total interest & finance charges	Less: Interest charges capitalised	Net interest & finance charges	Loan swapped during the Year			
						Fixed	Floating								Domestic loan	Foreign loan	old Interest rate	New Interest rate
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PFC	Indian Rupee	3068.21	0	209.64	12.50%		2858.56		370.42	1.00	371.42		371.42				
Total (for Station)			3068.21		209.64			2858.56		370.42		371.42		371.42				

Form G 6.3
Details of Project Specific Loans

Name of the Petitioner		RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED				
Name of the Power Station		KATPP UNIT 1 & 2				
Commercial Operation Date	31.07.2014					

Particulars	Year (n-1)*						Rs. Crore
	Package1	Package2	Package3	Package4	Package5	Package6	
1	2	3	4	5	6	7	
Source of Loan ¹	PFC						
Currency ²	Indian						
Amount of Loan sanctioned							
Amount of Gross Loan drawn upto previous year/during current/ensuing year/COD ^{3,4,5,13,15}							
Interest Type ⁶							
Fixed Interest Rate, if applicable							
Base Rate, if Floating Interest ⁷							
Margin, if Floating Interest ⁸							
Are there any Caps/Floor ⁹							
If above is yes,specify caps/floor							
Moratorium Period ¹⁰							
Moratorium effective from							
Repayment Period ¹¹							
Repayment effective from							
Repayment Frequency ¹²							
Repayment Instalment ^{13,14}							
Base Exchange Rate ¹⁶							

Consolidated report on additions to Fixed Assets during the year

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited, Jaipur (Raj.)																								
Name of the Station/Unit:		KATPP UNIT 1 & 2																								
		(Rs. in crores)																								
S.No.	Asset Description	Asset Code	FY 2015-16								FY 2016-17								FY 2017-18							
			(Actuals/audited)								(Actuals & Anticipated)								(Anticipated)							
			Cost	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissioning
UNIT-1	UNIT-2							UNIT-1	UNIT-2								UNIT-1	UNIT-2								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	1 Land & land rights		0.01	3.97							0.52	0.49							0.00	0.00						
1A	Hydraulic works		15.63	647.56							45.19	43.79							0.00	0.00						
	2 Building & Civil works of Power plant		20.22	590.29							24.82	0.00							0.00	0.00						
	3 Plant & machinery including sub-station equipments		33.30	2659.31							138.80	95.64							0.00	0.00						
	4 Communication equipment		0.02	3.14							0.00	0.00							0.00	0.00						
	5 Vehicles		0.00	0.04							0.00	0.00							0.00	0.00						
	6 Furniture & fixtures		0.14	0.78							0.00	0.00							0.00	0.00						
	7 Office Equipments		0.06	0.10							0.00	0.00							0.00	0.00						
	8 Capital spares		10.08	16.63							0.00	0.00							0.00	0.00						
	9 Other Civil Works		8.22	152.69							0.00	24.55							0.00	0.00						
	Total (1) to (11)		87.68	4074.51							209.33	164.47							0.00	0.00						

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

Name of the Petitioner : **RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED**
 Name of the Power Station : **KATPP UNIT 1 & 2**
 New Projects
 Capital Cost Estimates 9480 for unit 1&2

Board of Director/ Agency approving the Capital cost estimates:	9480 for unit 1&2						
Date of approval of the Capital cost estimates:	27.03.2014						
	Present Day Cost			Completed Cost			
Price level of approved estimates	As of End of ____Qtr. Of the year _____			As on Scheduled COD of the Station			
Foreign Exchange rate considered for theCapital cost estimates	NA						
Capital Cost excluding IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Capital cost excluding IDC & FC (Rs. Cr)							
IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Total IDC & FC (Rs.Cr.)							
Rate of taxes & duties considered							
Capital cost Including IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Capital cost Including IDC & FC (Rs. Cr)							
Schedule of Commissioning							
COD of Stage I (1X600 MW)							
COD of Unit-II/Block-II							

COD of last Unit/Block							

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

Name of the Petitioner:	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
Name of the Power Station :	KATPP UNIT 1 & 2

S.No.	Break Down	Cost in Rs. Crores			Admitted Cost (Rs. Cr.)
		As per Revised Estimates for Unit 1&2	Actual Expenditure as on COD for unit 1	Liabilities/Provisions	
1	2	3	4	5	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	Railway system				
7.0	Steam generator / Boiler Island				
8.0	Steam Turbine Generator island including taxes, duties etc.				
9.0	BTG & Balance of Plant				
9.1	Mechanical BOP				
10.0	Other Works (EPC exclusion)				
(i)	Construction of Permanent Township				
(ii)	Construction of Plant and colony boundary wall & fencing				
(iii)	Construction of Store Shed/ Field Hostel				
(iv)	Fire Tender & Dozer				
(v)	Additional Raw Water Reservoir for 20 days storage				
(vi)	Third Party inspection Agency				
11.0	Operator Training				
12.0	Start up fuel				
13.0	Construction insurance				
14.0	Special T&P				
15.0	Total Cost of Works (sum of items 1 to 15 above)				
16.0	Overheads				
16.1	Development Expenses				
16.2	Legal Expenses				
16.3	Establishment/Construction supervision				
16.4	Consultancy and Engineering				
16.5	Audit and Account				
16.6	Contingency				
16.7	Sub-total of Item 16				
	other works & third party inspection				
17.0	Capital cost excluding IDC & FC				
18	Interest During Construction (IDC)				
19	Financing Charges (FC)				
20.0	Capital cost including IDC & FC				
21	Cost per MW				

Break-up of Construction / Supply / Service packages
RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

Name/No. of Construction / Supply / Service Package	Scope of works ¹ (in line with head of cost break-ups as applicable)	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award ² in (Rs. Cr.)	Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier(Rs.Cr.)	Taxes & Duties and Pre-operative Expenses	IDC, FC, FERV & Hedging cost	Variation (Rs.Cr.)	Variation on account of change in Price (Rs. Cr.)	Reason for change in Price	Variation on account of change in Scope of Work (Rs. Cr.)	Reason for Change in Scope of Work
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Land & Site Development	0								0							
Access road	0								0							
Temporary construction	0								0							
Water storage system	0								0							
Water transportation system	0								0							
Railway system	0								0							
Steam generator / Boiler	0								0							
Steam Turbine Generator	0								0							
BTG & Balance of Plant	0								0							
Mechanical BOP	0								0							
Coal handling system / fuel	0								0							
Overheads	0								0							
Development Expenses																
Sub-total of Item 16																
other works & third party inspection																
Capital cost excluding IDC & FC																
Interest During Construction (IDC)																
Financing Charges (FC)																
Capital cost including IDC & FC																

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 VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

Rs. Crore

S.No.	Draw Down Particulars	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
		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	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
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Loans												
1.1	Foreign Loans												
1.1.1	Foreign Loan 1												
1.1	Total Foreign Loans												
	Draw down Amount												
	IDC												
	Financing charges												
1.2	Indian Loans												
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												
2.2	Indian equity drawn												
	Total equity deployed												

RETURN ON EQUITY

Name of the Petitioner: RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
 Name of the Power Station : KATPP UNIT 1 & 2

Rs. Crore

S.No.	Particulars	Reference	FY 2015-16		FY 2016-17					FY 2017-18		Remarks
			(Actuals/audited)	(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	(Anticipated)	
1	2	3	Unit-1	Unit-2	5	6	Unit -1	Unit-2	Unit-1	Unit-2	9	
1	Equity at the beginning of the year		916.57	5.35			934.11	820.25	975.98	853.15		
2	Capitalisation		87.68	4074.51			209.33	164.47	0.00	0.00		
3	Equity portion of capitalisation		17.54	814.90			41.87	32.89	0.00	0.00		
4	Equity at the end of the year		934.11	820.25			975.98	853.15	975.98	853.15		
	Return Computation											
5	Return on Equity at the beginning of the year	ROI for 2016-17 is 15.50% & For 2015-16 is 15.50. %	137.49	0.80			144.79	127.14	151.28	132.24		
6	Return on Equity portion of capitalisation (on pro-rata basis)	ROI for 2016-17 is 15.50% & For 2015-16 is 15.50. %	1.32	61.12			3.24	2.55	0.00	0.00		
7	Total Return on Equity	(5)+(6)	138.80	61.92	139.56		148.03	129.69	151.28	132.24		

Form G 6.10

Statement of Additional Capitalisation after COD and Details for Financing

Name of the Petitioner:
Name of the Power Station
COD

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

(Rs. Crore)

S.No.	Work/Equipment added after COD up to Cut off Date / Beyond Cut off Date	Amount Capitalised / Proposed to be capitalised	Justification	Regulations under which such additional capitalisation has been claimed	Source of Finance					Admitted Cost ¹
					Loan 1	Loan 2 and so on	Total Loan	Equity	Internal Sources or Others (mention details)	
	Land and Site Developme	1.02								
	Access	104.61								
	Temprorary Construction	45.04								
	Water Storage Syaystem	267.74								
	Water Transportation Syst	0.02								
	Railway System	0.00								
	EPC contractor (M/S BGR	0.14								
	Other Works & Third Part	0.06								
	Overheads (including CSF	10.08								
	IDC & Financial Cost	32.77								
Total		461			369			92		

Interest on Working Capital

Name of the Petitioner
Name of the Power Station

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

Rs. Crore

S. No.	Particulars	FY 2015-16		FY 2016-17						FY 2017-18		Remarks
		(Actuals/ audited)	(Actuals/ audited)	Approved by the Commission	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	(Anticipated)	
1	2	Unit-1	Unit-2	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2	8
1	Landed Cost of coal or lignite for 1½ (one and a half) months for non-pit-head	108.83	72.27			50.60	61.55	21.39	61.55	123.45	123.45	
2	Cost of secondary fuel oil for two months	5.227	2.805			1.129	0.484	0.280	0.484	0.970	0.970	
3	Operation and Maintenance expenses for one month	2.93	1.53			4.06	4.06	4.06	4.06	8.59	8.59	
4	Maintenance spares @ 20% of operation and maintenance expenses	7.02	3.68			9.73	9.73	9.73	9.73	20.60	20.60	
5	Receivables equivalent to 1.5 months of fixed and variable charges for 16-17	224.85	139.43			111.52	122.31	99.47	141.04	243.55	232.14	
	Total Working Capital	348.85	219.72			177.03	198.14	134.93	216.87	397.16	385.75	
	Rate of Interest (as per norms)	12.50%	12.50%			12.26%	12.26%	12.26%	12.26%	11.80%	11.80%	
	Interest on Working Capital	43.61	27.47	47.76		21.70	24.29	16.54	26.59	46.86	45.52	

Insurance Expenses

Name of the Petitioner:
Name of the Power Station :

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

Rs. Crore

S. No.	Particulars	FY 2015-16		FY 2016-17						FY 2017-18		Remarks
		(Actuals/audited)		Approved by the Commission	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)		
1	2	Unit-1	Unit-2	Unit-1	Unit-2	Unit-1	Unit-1	Unit-2	Unit-2	Unit-1	Unit-2	9
	Insurance Expenses											
a)	Provision made/ proposed for the year	0.10	0.10	4.50		2.25	2.25	2.25	2.25	4.50	4.50	
b)	Actual insurance expenses incurred											
c)	Average Net Fixed Assets	4258.37	1992.70			4139.07	4139.07	3940.00	3940.00	3969.63	3814.64	

Form G 6.13

Tax on R.O.E.

Name of the Petitioner:	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
Name of the Power Station :	Kalisindh Unit-1

Rs.

S. No.	Particulars	FY 2015-16	FY 2016-17	FY 2017-18	Remarks
		(Actuals/audited)	Actual/ Estimated	Proposed to be recovered	
1	2	Unit-1	Unit-1	Unit-1	6
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)	0.00	0.00	0.00	
B)	Deffered tax liability before 01.04.2009				

Note:- Tax calculated should be only for the generation business and should not include income from any other income stream like efficiency gain & incentive etc.

Form G 6.13

Tax on R.O.E.

Name of the Petitioner:	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
Name of the Power Station :	Unit-2

Rs.

S. No.	Particulars	Previous Year (n-1)	Current Year (n)	Ensuing Year (FY 2017-18)	Remarks
		(Actuals/audited)	Actual/ Estimated	Proposed to be recovered	
1	2	Unit-2	Unit-2	Unit-2	6
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)	0.00	0.00	0.00	
B)	Deffered tax liability before 01.04.2009				

Name of the Petitioner
Name of the Power Station :

Proposed improvement in performance
RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED
KATPP UNIT 1 & 2

Rs. Crore

S.No.	Particulars	Previous year				Current year				MYT Control Period				Remarks	
		FY 2015-16				FY 2016-17				FY 2017-18	n+2	n+3	n+4		
		(Actuals / audited)				Apr-Sep (Actual)	Oct-Mar (Estimated)	Apr-Sep (Actual)	Oct-Mar (Estimated)	(Anticipated)					
1	2	UNIT-1	Unit-2			UNIT-1	UNIT-1	Unit-2	Unit-2	Unit-1	Unit-2	9	10	11	12
1	Plant load factor	66.88%	64.18%	83.00%	83.00%	60.88%	83.00%	26.43%	83.00%	83.00%	83.00%				
2	Auxiliary consumption	6.95%	6.98%	5.75%	5.75%	7.70%	5.75%	7.01%	5.75%	5.75%	5.75%				
3	Specific fuel consumption														
(i)	Fuel - (Indigenous Coal)	0.60	0.60	0.54	0.54	0.58	0.55	0.57	0.55	0.55	0.55				
ii)	Fuel 2 (HFO)	1.52	1.06	0.45	0.45	0.55	0.45	0.42	0.45	0.45	0.45				
(iii)	Fuel 3 (LDO)	0.95	0.91	0.05	0.05	0.78	0.05	0.38	0.05	0.05	0.05				
(iv)	Limestone kg / kWh														
(v)	any other fuel														
4	Station heat rate, kcal / kwh	2586.47	2606.83	2320.63	2320.63	2480.95	2320.63	2429.58	2320.63	2320.63	2320.63				
5	Annual Maitenance shut down days														
6	Forced / planned shut down except annual shut down														
(i)	number / year														
(ii)	cumulative duration, hours / year														
7	Fly ash utilisation, %														
8	Other bye product utilisation(give list)														
9	Outstanding dues, days of receivables														
10	Availability	82.16%	82.16%	0.00%	0.00%	82.16%	70.00%	82.16%	70.00%	70.00%	70.00%				