

Petition  
For  
Approval of Aggregate Revenue Requirement (ARR)  
&  
Provisional Tariff

For FY 2015-16  
For  
Kalisindh Thermal Power Station (KaTPP) Unit – 1

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 Petition for approval of ARR and Provisional Tariff for FY 2015-16 for Unit-1 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 <sup>th</sup> , 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 – 15	Financial Year 2014-15
FY – 16	Financial Year 2015-16
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	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

## 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) and in the ratio of 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 23.06.2004 and supplementary agreement dated 18.05.2010 with respect to this power project.
- 1.4 The petition for approval of ARR and Provisional Tariff for FY2015-16 for Kalisindh Thermal Power Station-Unit 1 (600 MW) has been prepared and is submitted to the Hon'ble Commission for approval of ARR and Provisional Tariff for FY 2015-16 of KaTPP (Unit 1) under Regulation 6 and Regulation 11 of RERC Tariff Regulations, 2014. The Kalisindh TPS-Unit 1 has achieved the COD on 07.05.2014.

## A2: BRIEF HISTORY

- 2.1 The Board of Director in its 117<sup>th</sup> meeting held on dated 06.01.2007 has accorded approval for setting up of 2X500 MW Unit – 1 & 2 Kalisindh Thermal Power Station by RVUN in state sector. The State Government vide letter dated 06.06.2007 accorded "Administrative" & "Financial" approval for setting up of 2X500 MW Unit – 1&2 Kalisindh Thermal Power Station having total project cost of Rs. 4600 Crores which includes equity support of Rs 920 crore.
- 2.2 The State Government vide letter dated 25/26.06.2007, accorded approval for revising unit sizes for Kalisindh Thermal Power project from 2X500 MW to 2X600 MW.
- 2.3 The Board of Director in the 187<sup>th</sup> BOD meeting held on dated 4.05.2011 has revised the capital cost from Rs. 4600 crore to Rs. 7723 crore. Government of Rajasthan enhanced capital cost and equity support of Rs. 524.60. Out of total project cost of Rs. 7723 crores for Kalisindh unit 1&2, equity support from GoR was Rs.1545 Crores and balance was to be arranged as loan from financial institutions.
- 2.4 The PFC vide letter dated 31.03.2008 and dated 14.11.2011 has sanctioned a loan of Rs. 3680 crore and 2498.4 crore respectively totalling to Rs 6178.4 Crore to RVUN.

- 2.5 The cost of the project further revised to Rs. 9479.51 crore due to various reasons as mentioned in the 235<sup>th</sup> BOD meeting held on dated 27.03.2014. Due to revision of capital cost from Rs. 7723 crore to Rs. 9479.51 crore, the IDC has been increased from Rs. 850 crore to Rs. 2445 crore.
- 2.6 The total expenditure of KaTPP unit 1 upto 07.05.2014 is 5082.89 crore and Rs 472 crore is proposed to incurred during FY 2015-16.
- 2.7 For the above cost the RVUN has utilized the loan of Rs. 4066.31 crore and Equity of Rs. 1017.58 crore and for additional capitalization of Rs. 472.29 crore, a loan of Rs. 377.80 crore and Equity equivalent Rs. 94.46 crore shall be utilized.
- 2.8 With the above details, the fixed charges and variable charges have been calculated and accordingly, the ARR and Tariff petition for FY 2015-16 for Unit -1 has been prepared and is being submitted to the Hon'ble Commission.

**A3: KaTPP-UNIT 1, GENERATION FORECAST FOR 2015-16**

- 3.1 The installed capacity of KaTPP-Unit 1 is 600 MW and considering date of COD as 07.05.2014, the Gross generation, PLF & net energy sale to three Discoms for FY 2015-16 has been calculated. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from KaTPP-Unit 1 for 2015-16 is as shown in table below:

Table 1: Gross generation, PLF & Ex-bus energy sale from KaTPP-Unit 1 for FY 16

Sr. No	Particular	2014-15	2015-16
1	Capacity (MW)	600.00	600.00
2	PLF (%)	57.63%	83.00%
3	Gross generation(MU)	2266.24	4374.43
4	Aux Cons. (%)	7.20%	5.75%
5	Aux Cons. (MU)	163.17	251.53
6	Net Generation (MU)	2103.07	4122.90

**A4: KaTPP -UNIT 1 ANNUAL CAPACITY (FIXED) CHARGES FOR 2015-16**

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

**DEPRECIATION**

- 4.2 Depreciation of KaTPP-Unit 1, for FY 16 has been calculated based on the clause No.22 of RERC Tariff Regulations 2014. Estimated figures of depreciation are summarised in Table below:

Table 2 : Depreciation KaTPP-Unit 1

Station	FY 14-15	FY 15-16
KaTPP		
Depreciation	253.80	265.77

**INTEREST ON TERM LOANS AND FINANCE CHARGES**

- 4.3 The loan-wise interest and finance charges have been worked-out and taken as part of fixed charges for 2015-16 for Unit 1. Estimated figures of Interest on Term Loans and Finance Charges are summarised in Table below:



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

Station	FY 14-15	FY 15-16
<b>KaTPP</b>		
Interest Term Loan and finance charges	485.75	529.47
<b>Total</b>	<b>485.75</b>	<b>529.47</b>

INTEREST ON WORKING CAPITAL LOAN

4.4 The requirement of working capital loan has computed as per norms defined under clause No.27 of RERC Tariff Regulation 2014 and rate of interest on WLC shall be 250 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the year previous to the relevant year. Estimated figures of Interest on Working Capital Loans are summarised in Table below:

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

Station	FY 14-15	FY 15-16
<b>KaTPP</b>		
Interest on Working Capital	36.06	47.46

OPERATION & MAINTENANCE EXPENSES

4.5 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

Station	FY 14-15	FY 15-16
<b>KaTPP</b>		
Operation and Maintenance	78.31	91.96

RECOVERY OF ARR & TARIFF PETITION FEES

4.6 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 2015-16 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

Station	FY 14-15	FY 15-16
<b>KaTPP</b>		
Petition Fee	0.30	0.30

## RETURN ON EQUITY AND TAX

- 4.1 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.
- 4.2 In compliance to the above direction of the state government, RVUN has decided to claim the return on equity for the FY 2015-16 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.
- 4.3 The Return on Equity (ROE) for FY 2014-15 and FY 2015-16 are summarised in Table below:

Table 7 : Return on Equity and Tax

Station	FY 14-15	FY 15-16
KaTPP		
ROE	148.63	172.21
Tax on ROE	39.41	45.67

## INSURANCE CHARGES

- 4.4 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. RVUN is claiming the insurance charges for Kalisindh Unit 1 for the year 2014-15 and FY 2015-16, as shown in the table below:

Table 8 : Insurance Charges KaTPP-Unit 1

Station	FY 14-15	FY 15-16
KaTPP		
Insurance Charges	10.38	10.34

## KaTPP UNIT-1, NON-TARIFF INCOME FOR 2015-16

- 4.5 The following are the main head of accounts of Non tariff income:
- Sale of Scrap
  - Interest on FD/ Staff Loans
  - Miscellaneous receipts (rebates etc)
- 4.6 Estimated figures of Non Tariff Income for the Period FY-2015-16 are summarised in Table below:

Table 9 : Non-Tariff Income KaTPP-Unit 1

Station	FY 14-15	FY 15-16
KaTPP		
Non Tariff Income	2.10	2.21

4.7 As per the RERC Regulations 2014, the non-tariff income has been deducted from the fixed charges computed and only the net capacity (fixed) charges are to be recovered from the three Discoms.

A5: KaTPP UNIT-1, ESTIMATED CAPACITY (FIXED) CHARGES FOR 2015-16

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

Table 10 : Net Estimated Capacity (Fixed) Charges for FY16 KaTPP-Unit 1

Particular	FY14(Rs. in Cr.)	FY15 (Rs. in Cr.)
<b>Fixed Charge</b>		
O & M Expenses	78.31	91.96
Depreciation	253.80	265.77
Interest on Term Loans & Fin. Charges	485.75	529.47
Interest on Working Capital Loans	36.06	47.46
Insurance Charges	10.38	10.34
Recovery of ARR & Tariff Petition Fees	0.30	0.30
ROE	148.63	172.21
Tax on ROE	39.41	45.67
<b>Total Capacity (Fixed) Charge</b>	<b>1052.64</b>	<b>1163.18</b>
Less: Non-Tariff Income	2.10	2.21
<b>Net Capacity (Fixed) Charge</b>	<b>1050.54</b>	<b>1160.97</b>

A6: KaTPP UNIT-1, VARIABLE CHARGES FOR 2015-16

- 6.1 SHR of Unit-1 has been taken as 2320.63 kcal/kWh. The PLF has been considered as 83% and for Auxiliary consumption computation of 5.75%, 80% weight has been given to Steam driven boiler and 20% weight has been given to electrically driven boiler.
- 6.2 The coal for Unit 1 is being procured from Parsa East and Kanta Basan coal blocks. Ministry of coal vide letter dated 19/25.06.2007 has allocated Parsa East and Kanta Basan coal blocks to RVUN under Govt. Company dispensation route for Kalisindh phase-I (Unit#1&2) etc.
- 6.3 The GCV of Coal has been taken as 4500.00 kCal/Kg for domestic coal and 6600.00 kCal/Kg for Imported coal. The prices of Domestic coal have been taken as Rs. 3772.09/MT and Rs. 8445.47/MT for Imported Coal for FY 15.
- 6.4 The GCV of oil (HSD/LDO) has been taken as 10000.00 kCal/litre for HFO and 10000.00 kCal/litre for LDO. The prices of oil have been taken as Rs. 49650/KL for HFO and Rs. 67874/KL for LDO for FY 15.
- 6.5 It is submitted that any variation in the cost of generation due to change of Qty./quality of coal will be adjusted in fuel price adjustment prescribed by the Commission. If any variation in price of the fuel happens before the passing of the tariff order, the Hon'ble Commission is requested to consider the change in tariff accordingly.
- 6.6 The overall estimated figures of Variable Cost for the period under consideration, are summarised in Table below:

Table 11 : Variable Cost KaTPP-Unit 1 for FY-16

Operational Parameters/Particulars	Units	Current Year Estimated 2014-15	Current Year Estimated 2015-16
1	2		3
Operational Parameters			
Total Capacity	MW	600	600.00
Availability	%	83.00%	83.00%
PLF	%	57.63%	83.00%
Gross Generation	MU	2266.24	4374.43
Auxiliary Energy Consumption	%	7.20%	5.75%
Auxiliary Energy Consumption	MU	163.1708	251.53
Net Generation	MU	2103.0692	4122.90
SHR	kCal/kWh	2652.95	2320.63
Fuel Parameters			
Gross Calorific Value			
Fuel - (Indigenous Coal)	kCal/Kg	4500	4500.00
Fuel 2 (HFO)	kCal/Ltr.	10000	10000.00
Fuel 3 (LDO)	kCal/Ltr.	10000	10000.00
Fuel 4 (Imported Coal)	kCal/Kg	6600	6600.00
Specific Fuel Consumption			
Fuel - (Indigenous Coal)	Kg/kWh	0.55	0.44
Fuel 2 (HFO)	ml/kWh	3.40	0.45
Fuel 3 (LDO)	ml/kWh	1.62	0.05
Fuel 4 (Imported Coal)	Kg/kWh	0.02	0.05
Landed Fuel Price per unit			
Fuel - (Indigenous Coal)	Rs/MT	3592.46	3772.09
Fuel 2 (HFO)	Rs/KL	47286.00	49650.30
Fuel 3 (LDO)	Rs/KL	64641.95	67874.05
Fuel 4 (Imported Coal)	Rs/MT	8043.30	8445.47
Total Fuel Cost			
Fuel - (Indigenous Coal)	Rs Crore	444.13	730.12
Fuel 2 (HFO)	Rs Crore	36.41	9.77
Fuel 3 (LDO)	Rs Crore	23.71	1.48
Fuel 4 (Imported Coal)	Rs Crore	40.86	181.63
Total Cost	Rs Crore	545.11	923.01
Cost of Generation per unit	Rs/Unit	2.405	2.110
Energy Charge per unit (ex-bus)	Rs/Unit	2.592	2.239

A7: KaTPP UNIT-1, ESTIMATED AGGREGATE REVENUE REQUIREMENT FOR FY-16

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

Table 12 : ARR FOR KaTPP-Unit 1 for FY-16

Parameter	FY 14-15	FY 15-16
Capacity (Fixed) Charges	1050.54	1160.97
Variable Cost	545.11	923.01
Aggregate Revenue Requirement	1595.65	2083.99

A8: KaTPP UNIT-1, ESTIMATED TARIFF FOR FY 16

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

Table 13 : TARIFF for FY15, KaTPP-Unit 1

<b>Particulars</b>	<b>FY 14-15</b>	<b>FY 15-16</b>
Ex-Bus Generation (MU)	2103.07	4122.90
Capacity charge /Fixed charge ( Rs. in Crore)	1050.54	1160.97
Variable Cost (Rs. in Crore)	545.11	923.01
Fixed cost (Rs/kWh sent out)	5.00	2.82
Variable Cost (Rs/kWh sent out)	2.59	2.24
<b>Total cost (Rs/kWh sent out)</b>	<b>7.59</b>	<b>5.05</b>

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.

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:

- ◆ For Approval of ARR & Provisional Tariff claimed in this petition for period FY 2015-16 for Kalisindh Unit 1 till final tariff order is issued.
- ◆ And pass 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

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LII

Name of the Power Station /Unit :

Kalisindh Thermal Power Station-Unit-1

(Rs. Crore)

S.No.	Particulars	Ref.of Form No	Previous year (n-1)	Current year (n)			Ensuing Year (FY 2015-16)	Remark
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
1	Capacity (Fixed) Charge							
1.1	Depreciation	6.1			126.90	126.90	265.77	
1.2	Interest on term Loan & Finance charges	6.2			242.87	242.87	529.47	
1.3	Return on Equity	6.9			74.31	74.31	172.21	
1.4	Interest on Working Capital	6.11			15.16	20.90	47.46	
1.5	O & M Expenses	4.1			39.16	39.16	91.96	
1.6	Insurance Charges	6.12			5.19	5.19	10.34	
1.7	Tax on ROE	6.13			19.71	19.71	45.67	
1.8	ARR & tariff petition fee				0.15	0.15	0.30	
	Less: Non-Tariff income	3.2			1.05	1.05	2.21	
	Total (1)- Capacity (Fixed Charges)				522.40	528.14	1160.97	
2	Total- Energy (variable ) charges				184.65	360.46	923.01	
3	Units sold to Discoms (MU)				444.21	1658.86	4122.90	
4	Rate of Fixed Charges. ( 1/3)				11.76	3.18	2.82	
5	Rate of Variable Charges.							
5.1	Rate of Energy Charge from Primary Fuel (REC) <sub>p</sub>	5.1						
	(i) Indian Coal				2.61	1.98	1.77	
	(ii) Imported Coal				0.64	0.08	0.44	
	(iii) Any Other fuel							
	Total 2.1							
5.2	Rate of Energy Charge from Secondary Fuel (REC) <sub>s</sub>	5.1			0.91	0.12	0.03	
5.3	Total-(2) Rate of Energy Charge ex-bus(REC) <sup>3A,3B,3C</sup>	5.1			15.92	5.36	5.05	

## 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 Power Station-Unit-1

(Rs. Crore)

S.No.	Particulars	Reference Form	Previous Year (n-1)	Current Year (n)			Ensuing Year (FY 2015 16)	Remarks
			Actual/Audited	Approved by the Commissi on	Apr-Sep (Actual)	Estimated for the year	Anticipated	
1	2	3	4	5	6	7	8	9
A	Receipts							
1	Revenue from Sale of Power (Tariff income)	3.1			707.05	888.60	2083.99	
2	Non Tariff income	3.2			1.05	1.05	2.21	
3	Revenue Subsidies, Grants & Subvention from State Govt.							
	Total- (A)				708.10	889.65	2086.19	
B	Expenditure							
1	Variable Costs, including Fuel Cost	5.1			184.65	360.46	923.01	
2	Depreciation	6.1			126.90	126.90	265.77	
3	Interest on term Loan & Finance charges	6.2			242.87	242.87	529.47	
4	Return on Equity	6.9			74.31	74.31	172.21	
5	Tax on ROE	6.13			19.71	19.71	45.67	
6	Interest on Working Capital	6.11			15.16	20.90	47.46	
7	O & M Expenses	4.1			39.16	39.16	91.96	
8	Insurance Charges	6.12			5.19	5.19	10.34	
9	Recovery of ARR & Tariff Petition Fees				0.15	0.15	0.30	
C	Total- (B) Expenditure				708.10	889.65	2086.19	
D	A.R.R. (C-A.2)				707.05	888.60	2083.99	

## 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		
Basic characteristics of the plant <sup>1</sup>	Conventional steam generator		
<u>Special Features of the Plant</u>			
Site Specific Features <sup>2</sup>	Close cycle cooling system		
Special Technological Features <sup>3</sup>			
Environmental Regulation related features <sup>4</sup>	ESP		
Any other special features			
Fuel Details <sup>5</sup>	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)	07.05.2014		
Type of cooling system <sup>6</sup>	Natural Draft Cooling Tower (Closed Cycle)		
Type of Boiler Feed Pump <sup>7</sup>	Centrifugal Multistage Barrel Type Main Pump and Horizontal Split Type Booster Pump		
Pressure (kg/cm <sup>2</sup> )	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) <sub>s</sub>	2220.7		
Conditions on which guaranteed			
% MCR	100% STG MCR		



## 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

S. No.	Particulars	Units	Previous Year (n-1)	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
			Audited/Actual	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
2	Operational Parameters - Thermal							
2.1	Total Capacity	MW			600.00	600.00	600.00	
2.2	Availability	%			32.69%	83.00%	83.00%	
2.3	Plant Load Factor	%			22.80%	81.78%	83.00%	
2.4	Gross Generation	MU			482.52	1783.72	4374.43	
2.5	Auxiliary Energy Consumption	%			7.94%	7.00%	5.75%	
2.6	Auxiliary Energy Consumption	MU			38.31	124.86	251.53	
2.7	Net Generation	MU			444.21	1658.86	4122.90	
2.6	Heat Rate	Kcal/Kwh)			3691.00	2365.00	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								
FY 2014-15		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		841.23	40.0%	420.22	218.04		638.26	7.587	
(b)	AVVNL		588.86	28.0%	294.15	152.63		446.78	7.587	
(c)	JDVVNL		672.98	32.0%	336.17	174.44		510.61	7.587	
(d)										
(e)										
(f)										
6	Net revenue		2103.07		1050.54	545.11		1595.65		

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:		3								
FY 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
A)	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		1649.16	40.0%	464.39	369.20		833.59	5.055	
(b)	AVVNL		1154.41	28.0%	325.07	258.44		583.52	5.055	
(c)	JDVVNL		1319.33	32.0%	371.51	295.36		666.88	5.055	
6	Net revenue		4122.90		1160.97	923.01		2083.99		

## NON-TARIFF INCOME

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited, Jaipur (Raj.)					
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit-1					
		Rs. Crore					
S.No	Particulars	Previous year (n-1)	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	(Anticipated)	
1	2	3	4	5	6	7	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			0.2625	0.2625	0.55125	
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			0.2625	0.2625	0.55125	
ix.	Rebate for early payment						
x.	Income from advertisement						
xi.	Other miscellaneous receipts			0.525	0.525	1.1025	
	Total non-tariff income			1.05	1.05	2.21	

## REVENUE SUBSIDIES &amp; GRANTS

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

S. No.	Particulars	Previous year (n-1)	Current Year (n)			Ensuing Year (FY 2015-16)	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							Form G 3.4
Name of the Company			Rajasthan Rajya Vidut Utpadan Nigam Limited, Jaipur (Raj.)				
Name of the Station/Unit:			Kalisindh Thermal Power Station-Unit-1				
							Rs. Crore
S. No.	Particulars	Previous year	Current Year			Ensuing Year (FY 2015-16)	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&amp;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				
		(Rs. Crore)				
S.No.	Particulars	Previous year (n-1)	Current year (n)		Ensuing Year (FY 2015-16)	
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-Mar (Estimated)	(Anticipated)
1	2	3	4	5	6	7
1	O&M Expense norms (Rs. per MW)			0.0724	0.0724	0.15
2	Total Capacity in MW			600	600	600.00
3	O&M expense			39.16	39.16	91.96
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	<b><u>Pumping Station No.1 :-</u></b>					
b.1	Power consumption Cost					
b.2	Repair / Maintenance / Employee / other Cost					
b.3	Sub total (b)					
c	<b><u>Pumping Station No.2 :-</u></b>					
	and so on .....					
d	Total (4) Special O&M Expenses					
5	<b>Totsl O&amp;M expenses</b>			39.16	39.16	91.96

## Details/Information in respect of Fuel for Computation of Energy Charges

Name of the Petitioner:

Name of the Power Station/unit:

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

S.No	Particulars	Unit	07.05.14 to 31.05.14		Jun-14		Jul-14	
			Domestic coal	Imported coal	Domestic coal	Imported coal	Domestic coal	Imported coal
1	2	3	4	5	6	7	4	5
1	Quantity of coal/lignite in stock at the beginning of the month	(MMT)	128804.88	11733.67	185797.37	34737.19	218315.87	42531.42
2	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MMT)	53994.04	23452.22	32518.5	7794.23	58766.95	3932.10
3	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company for diversion of wagons etc.	(MMT)	15705.93	0		0	0.00	0.00
4	Coal supplied by Coal/Lignite Company (2+3)	(MMT)	69699.97	23452.22	32518.5	7794.23	58766.95	3932.10
5	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)	0	0	0	0	0.00	0.00
6	Net coal / Lignite Supplied (4-5)	(MMT)	69699.97	23452.22	32518.5	7794.23	58766.95	3932.10
7	Total coal (Receipts & Opening Stock) (1)+(6)	(MMT)	198504.85	35185.89	218315.87	42531.42	277082.82	46463.52
8	Coal/lignite burnt/consumed	(MMT)	12707.48	448.7	0	0	126224.40	14024.93
9	Coal/lignite in stock at the end of the month (7)-(8)	(MMT)	185797.37	34737.19	218315.87	42531.42	150858.42	32438.59
10	Value of coal/lignite in stock	(Rs.)	464177455	93443728	665868047	278546063	780295850	341432032
11	Amount charged by the Coal /Lignite Company	(Rs.)	190558180	187816610	114074898	62694448	200630367	31628633
12	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)	55096402	0	0	0	0	0
13	Total amount Charged (11+12)	(Rs.)	245654582	187816610	114074898	62694448	200630367	31628633
14	Transportation charges by rail/ship/road transport	(Rs.)					0	0
15	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)					0	0
16	Demurrage Charges, if any	(Rs.)	1576783	883595	352050	191654	513826	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.)	1576783	883595	352050	191654	513826	0
19	Total amount Charged for coal/lignite supplied including Transportation (13+18)	(Rs.)	247231365	188700205	114426948	62886102	201144193	31628633
20	Average cost of coal/lignite (Opening stock + receipts) ((10+19)/7)	(Rs./MMT)	3583.84	8018.67	3574.16	8027.76	3542.05	8029.11
21	Cost of coal in stock at the end of the month (20)x(9)	(Rs.)	665868047	278546063	780295850	341432032	534348067	260453007
22	Weighted average GCV of coal/ Lignite as Received	(kCal/Kg)	4500	6600	4500	6600	4500	6600

Form G 5.1								
Unit : 2x600 MW Kalisindh Super Thermal Power Project, Rajasthan Rajya Vidyut Utpadan Nigam Ltd., Jhalawar								
Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges for FPA								
S. No	Month	Unit	Month : May'14 (07.05.14 to 31.05.14)		Month June'14		Jul-14	
			HFO	LDO	HFO	LDO	HFO	LDO
1	2	3	4	5	6	7	4	5
1	Quantity of Sec. Fuel Oil (HFO / LDO) in stock at the beginning of t	KL	3485.756293	462	6260.961093	898	6260.96109	803
2	Quantity of Sec. Fuel Oil (HFO / LDO) supplied by Company	KL	2929.48	774	0	0	0	896.382
3	Adjustment (+/-) in quantity of Sec. Fuel Oil (HFO / LDO) supplied by Company	KL	0	0	0	0	0	0
4	Gross oil supplied by Company (2+3)	KL	2929.48	774	0	0	0	896.382
5	Normative / Transit Loss	KL	0	0	0	0	0	0
6	Net Oil (HFO / LDO) supplied by company (4-5)	KL	2929.48	774	0	0	0	896.382
7	<b>Total HFO / LDO receipts &amp; in stock (1+6)</b>	KL	6415.236293	1236	6260.961093	898	6260.96109	1699.382
8a	<b>HFO / LDO burnt/consumed for generating purpose</b>	KL	154.2752	338	0	95	1886.961	763.382
8b	<b>HFO / LDO burnt/consumed for other than generating purpose</b>	KL	0	0	0	0	0	0
9	<b>Oil in stock at the end of the month</b>	KL	6260.961093	898	6260.961093	803	4374.00009	936
10	<b>Value of HFO / LDO in stock</b>	(Rs.)	170924337.4	31547821	298435724.2	60862663.46	298435724	54423963
11	Amount charged by the Company	(Rs.)	134818418	52223061	0	0	0	60041325
12	Adjustment (+/-) in amount charged made by Company	(Rs.)	0	0	0	0	0	0
13	<b>Total amount Charged (11+12)</b>	(Rs.)	134818418	52223061	0	0	0	60041325
14	Transportation charges	( Rs.)	0	0	0	0	0	0
15	Adjustment (+/-) in Transportation charges	( Rs.)	0	0	0	0	0	0
16	Demurrage Charges, if any	( Rs.)	46669	0	0	0	0	0
17	Cost of diesel in transporting oil through MGR system, if applicable	( Rs.)	0	0	0	0	0	0
18	<b>Total Transportation Charges (14+15-16+17)</b>	( Rs.)	46669	0	0	0	0	0
19	<b>Total amount charged for oil including Transportation (13+18)</b>	( Rs.)	134865087	52223061	0	0	0	60041325
20	<b>Average cost of oil (In stock + receipt) ((19+10)/7)</b>	( Rs.)	47666.12022	67775.7945	47666.12022	67775.7945	47666	67357
21	<b>Cost of Oil in stock at the end of the month</b>	(Rs.)	298435724.2	60862663.46	298435724.2	54423962.98	208491614	63046160
22	Weighted average GCV of Oil fired	(kCal/Ltr.)	10000	10000	10000	10000	10000	10000



**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						
S.No.	Particulars	Units	Previous Year	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
			(n-1)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)		
1	2	3	4	5	6	7	8	9
1	<b>Operational Parameters</b>							
1.1	Total Capacity	MW			600	600	600.00	
1.2	Availability	%			32.69%	83%	83.00%	
1.3	PLF	%			22.80%	82%	83.00%	
1.4	Gross Generation	MU			482.52	1783.72	4374.43	
1.5	Auxiliary Energy Consumption	%			7.94%	7%	5.75%	
1.6	Auxiliary Energy Consumption	MU			38.31	124.86	251.53	
1.7	Net Generation	MU			444.21	1658.86	4122.90	
1.8	Heat Rate	kcal/kWh			3691.00	2365.00	2320.63	
2	<b>Fuel Parameters (for each primary and secondary fuel)</b>							
2.1	Gross Calorific Value							
2.1.1	Fuel - (Indigenous Coal)	kCal/Kg			4500	4500	4500.00	
2.1.2	Fuel 2 (HFO)	kCal/Ltr.			10000	10000	10000.00	
2.1.3	Fuel 3 (LDO)	kCal/Ltr.			10000	10000	10000.00	
2.1.4	Fuel 4 (Impored Coal)	kCal/Kg			6600	6600	6600	
2.2	Landed Fuel Price per unit (Please specify the fuel)							
2.2.1	Fuel - (Indigenous Coal)	Rs/MT			3543.67	3610.00	3772.09	
2.2.2	Fuel 2 (HFO)	Rs/KL			47180.41	48200.00	49650.30	
2.2.3	Fuel 3 (LDO)	Rs/KL			67380.94	61700.00	67874.05	
2.2.4	Fuel 4 (Impored Coal)	Rs/MT			8043.32	8043.32	8445.47	
3	<b>Fuel Consumption and Heat Contribution (for each fuel separately)</b>							
3.1	<b>Specific Fuel Consumption</b>							
3.1.1	Fuel - (Indigenous Coal)	Kg/kWh			0.67	0.51	0.44	
3.1.2	Fuel 2 (HFO)	ml/kWh			12.26	1	0.45	
3.1.3	Fuel 3 (LDO)	ml/kWh			3.9	1	0.05	
	Fuel 4 (Impored Coal)	Kg/kWh			0.074	0.009	0.05	
3.2	<b>Total Fuel Consumption</b>							
3.2.1	Fuel - (Indigenous Coal)	MT			326586.83	909695.40	1935587.11	
3.2.2	Fuel 2 (HFO)	KL			5916.24	1783.72	1968.49	
3.2.3	Fuel 3 (LDO)	KL			1884.18	1783.72	218.72	
	Fuel 4 (Impored Coal)	MT			35323.60	15476.42	215065.23	
3.3	<b>Heat Content (each fuel separately)</b>							
3.3.1	Fuel - (Indigenous Coal)	Million			1469639.84	4093629.32	8710141.99	
3.3.2	Fuel 2 (HFO)	Million			59162.36	17837.16	19684.94	
3.3.3	Fuel 3 (LDO)	Million			18841.80	17837.16	2187.22	
	Fuel 4 (Impored Coal)	Million			233135.76	102144.35	1419430.55	
	<b>Total Heat Content</b>							
4	<b>Total Fuel Cost</b>							
4.1.1	Fuel - (Indigenous Coal)	Rs Crore			115.73	328.4	730.12	
4.1.2	Fuel 2 (HFO)	Rs Crore			27.81	8.6	9.77	
4.1.3	Fuel 3 (LDO)	Rs Crore			12.7	11.01	1.48	
	Fuel 4 (Impored Coal)	Rs Crore			28.41	12.45	181.63	
	<b>Total Fuel Cost</b>	Rs Crore			184.65	360.46	923.01	
5	<b>Details of limestone consumption (Applicable for Lignite based generating stations)</b>							
6	<b>Other Charges and Adjustments</b>							
7	<b>Total Cost (4+5+6)</b>	Rs Crore			184.65	360.46	923.01	
8	<b>Cost of Generation per unit (at Generation Terminal) (7/1.4)</b>	Rs/kWh			3.83	2.02	2.11	
9	<b>Energy Charge per unit (ex-bus) (7/1.7)</b>							
9.1.1	Fuel - (Indigenous Coal)	Rs/kWh			4.16	2.17	2.24	
9.1.2	Fuel 2 (HFO)	Rs/kWh			2.61	1.98	1.77	
9.1.3	Fuel 3 (LDO)	Rs/kWh			0.63	0.05	0.02	
	Fuel 4 (Impored Coal)	Rs/kWh			0.29	0.07	0.00	
	<b>Total--(9)</b>	Rs/kWh			4.16	2.17	2.24	

Note

## Form G 6.1

## Fixed assets &amp; provisions for depreciation

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit-1											
		Ensuing Year (FY 2014-15)										(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 begining 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	10.39			10.39				0.00	10.39	10.39	
1A	Hydraulic works	5.28	83.25	110.42		193.67		7.31		7.31	83.25	186.36	
2	Building & Civil works of Power plant	3.34	1329.26	50.91		1380.17		45.25		45.25	1329.26	1334.93	
3	Plant & machinery including sub-station equipments	5.28	3644.43	310.96		3955.39		200.64		200.64	3644.43	3754.75	
4	Communication equipment		4.32			4.32		0.00		0.00	4.32	4.32	
5	Vehicles	6.33	0.10			0.10		0.01		0.01	0.10	0.09	
6	Furniture & fixtures	6.33	0.68			0.68		0.04		0.04	0.68	0.64	
7	Office Equipments	6.33	0.12			0.12		0.01		0.01	0.12	0.11	
8	Capital spares	5.28	10.33			10.33		0.55		0.55	10.33	9.78	
9	IT Equipments		0.00			0.00		0.00		0.00	0.00	0.00	
10	IT/ SCADA Software		0.00			0.00		0.00		0.00	0.00	0.00	
11	Any other items		0.00			0.00		0.00		0.00	0.00	0.00	
	Total (1) to (11)		5082.89	472.29		5555.18		253.80		253.80	5082.89	5301.38	

## Form G 6.1

## Fixed assets &amp; provisions for depreciation

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Name of the Station/Unit:		0											
		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 begining 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	10.39			10.39	0.00			0.00	10.39	10.39	
1A	Hydraulic works	5.28	193.67			193.67	7.31	10.23		17.54	186.36	176.14	
2	Building & Civil works of Power plant	3.34	1380.17			1380.17	45.25	46.10		91.35	1334.93	1288.83	
3	Plant & machinery including sub-station equipments	5.28	3955.39			3955.39	200.64	208.84		409.48	3754.75	3545.91	
4	Communication equipment		4.32			4.32	0.00	0.00		0.00	4.32	4.32	
5	Vehicles	6.33	0.10			0.10	0.01	0.01		0.01	0.09	0.09	
6	Furniture & fixtures	6.33	0.68			0.68	0.04	0.04		0.09	0.64	0.59	
7	Office Equipments	6.33	0.12			0.12	0.01	0.01		0.01	0.11	0.10	
8	Capital spares	5.28	10.33			10.33	0.55	0.55		1.09	9.78	9.24	
	Total (1) to (11)		5555.18	0.00		5555.18	253.80	265.77		519.57	5301.38	5035.61	

Form G 6.2

## LOAN REPAYMENT &amp; INTREST LIABILITY

Name of the Petitioner												RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED											
Name of the Power Station :												Kalisindh Thermal Power Station-Unit-1											
Ensuing Year (FY 2014-15)												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											
						Fixed	Floating																
1	2	2A	3	4	5	6	7	8	9	10	11	12											
1	PFC	Indian Rupee	4066.31	378	253.80	13%		4190.35		483.75	2.00	485.75											
	Total (for Station)		4066.31		253.80			4190.35		483.75		485.75											

Form G 6.2

## LOAN REPAYMENT &amp; INTREST LIABILITY

Name of the Petitioner												RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED											
Name of the Power Station :												Rajasthan Raja Vidut Utpadan Nigam Limited,Jaipur (Raj.)											
Ensuing Year (FY 2015-16)												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											
						Fixed	Floating																
1	2	2A	3	4	5	6	7	8	9	10	11	12											
1	PFC	Indian Rupee	4190.35		265.77	13%		3924.58		527.47	2.00	529.47											
	Total (for Station)		4190.35		265.77			3924.58		527.47		529.47											

## Details of Project Specific Loans

Name of the Petitioner		<b>RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED</b>				
Name of the Power Station		<b>Kalisindh Thermal Power Station-Unit-1</b>				
Commercial Operation Date	31.07.2014					
		Year (n-1)*				Rs. Crore
Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>	PFC					
Currency <sup>2</sup>	Indian					
Amount of Loan sanctioned	As per annexure C					
Amount of Gross Loan drawn upto previous year/during current/ensuing year/COD <sup>3,4,5,13,15</sup>						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>						
Are there any Caps/Floor <sup>9</sup>						
If above is yes,specify caps/floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>16</sup>						

Consolidated report on additions to Fixed Assets during the year

Form G 6.4

Name of the Company		Rajasthan Rajya Vidut Utpadan Nigam Limited, Jaipur (Raj.)																					
Name of the Station/Unit:		Kalisindh Thermal Power Station-Unit-1																					
		(Rs. in crores)																					
S.No.	Asset Description	Asset Code	Previous year (n-1)							Current Year (n)							Current Year (n+1)						
			(Actuals/audited)							(Actuals & Anticipated)							(Anticipated)						
			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 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
	Land & land rights									10.39													
	Hydraulic works									193.67													
	Building & Civil works of Power plant									1380.17													
	Plant & machinery including sub-station equipments									3955.39													
	Communication equipment									4.32													
	Vehicles									0.10													
	Furniture & fixtures									0.68													
	Office Equipments									0.12													
	Capital spares									10.33													
	IT Equipments									0.00													
	IT/ SCADA Software									0.00													
	Any other items									0.00													
	Total (1) to (11)									5555.18													

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 :	Kalisindh Thermal Power Station-Unit-1					
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	Annexure C					
<u>Capital Cost excluding IDC &amp; FC</u>						
Foreign Component, if any (In Million US \$ or the relevant Currency)						
Domestic Component (Rs. Cr.)						
Capital cost excluding IDC & FC (Rs. Cr)						
<u>IDC &amp; FC</u>						
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)						
<u>Schedule of Commissioning</u>						
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 :	Kalisindh Thermal Power Station-Unit-1

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	18.47	8.54	0	
2.0	Access road	11.4	0.61	5.95	
3.0	Temporary construction and enabling works	4.75	2.22	0.18	
4	Water storage system	799	308.42	106.53	
5.0	Water transportation system	86	41.75	1.46	
6.0	Railway system	243.69	70.44	60.12	
7.0	Steam generator / Boiler Island				
8.0	Steam Turbine Generator island including taxes, duties etc.				
9.0	BTG & Balance of Plant	5391.00	3111.12	144.42	
9.1	Mechanical BOP				
10.0	Other Works (EPC exclusion)				
(i)	Construction of Permanent Township	77			
(ii)	Construction of Plant and colony boundary wall & fence	2.28			
(iii)	Construction of Store Shed/ Field Hostel	12.97			
(iv)	Fire Tender & Dozer	8			
(v)	Additional Raw Water Reservoir for 20 days storage	52			
(vi)	Third Party inspection Agency	3.75			
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		64.17	112.46	
	other works & third party inspection	267.2	42.8	41.17	
17.0	Capital cost excluding IDC & FC				
18	Interest During Construction (IDC)	2445			
19	Financing Charges (FC)	57	1433		
20.0	Capital cost including IDC & FC	9479.51	5082.89	472.29	
21	Cost per MW				

**Break-up of Construction / Supply / Service packages**  
**RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED**  
**Kalisindh Thermal Power Station-Unit-1**

Name/No. of Construction / Supply / Service Package	Scope of works <sup>1</sup> (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 <sup>2</sup> 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	18.47								8.54							
Access road	11.4								0.61							
Temporary construction	4.75								2.22							
Water storage system	799								308.42							
Water transportation system	86								41.75							
Railway system	243.69								70.44							
Steam generator / Boiler	0								0							
Steam Turbine Generator	0								0							
BTG & Balance of Plant	5391								3111.12							
Mechanical BOP	0								0							
Coal handling system / Overheads	0								0							
Development Expenses	267.2								64.17							
Sub-total of Item 16	0								0							
other works & third party	0								42.8							
Capital cost excluding Interest	0															
Interest During Construction	2445								1433							
Financing Charges (FCI)	57								0							
Capital cost including Interest	9479.51								5082.89							



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

Name of the Petitioner:

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station

Kalisindh Thermal Power Station-Unit-1

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												

As per annexure C

## RETURN ON EQUITY

Name of the Petitioner:

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station :

Kalisindh Thermal Power Station-Unit-1

Rs. Crore

S.No.	Particulars	Reference	Previous year (n-1)	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
			(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	
1	2	3	4	5	6	7 = 5+6	8	9
1	Equity at the beginning of the year					0	1111	
2	Capitalisation					5555	0	
3	Equity portion of capitalisation					1111	0	
4	Equity at the end of the year					1111	1111	
	Return Computation							
5	Return on Equity at the beginning of the year	15.50%*(1)						
6	Return on Equity portion of capitalisation (on pro-rata basis)	15.5%*(3)/(n/12)				148.63	172.21	
7	Total Return on Equity	(5)+(6)				148.63	172.21	



Name of the Petitioner  
Name of the Power Station

Interest on Working Capital  
RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED  
Kalisindh Thermal Power Station-Unit-1

Rs. Crore

S. No.	Particulars	Previous year (n-1)	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
		(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	3	4	5	6 = 4+5	7	8
1	Landed Cost of coal or lignite for 1½ (one and a half) months for non-pit-head			18.02	42.61	91.27	
2	Cost of secondary fuel oil for two months			6.752	3.268	1.88	
3	Operation and Maintenance expenses for one month			3.26	6.53	7.66	
4	Maintenance spares @ 20% of operation and maintenance expenses			7.83	7.83	18.39	
5	Receivables equivalent to 1½ (one and a half) months of fixed and variable charges			88.38	111.07	260.50	
	Total Working Capital			124.24	171.31	379.70	
	Rate of Interest (as per norms)			12.20%	12.20%	12.50%	
	Interest on Working Capital			15.16	20.90	47.46	

## Insurance Expenses

Name of the Petitioner:

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station :

Kalisindh Thermal Power Station-Unit-1

Rs. Crore

S. No.	Particulars	Previous Year	Current Year (n)			Ensuing Year (FY 2015-16)	Remarks
		n-1	n			n+1	
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	4	5	6	7=6+5	8	9
	Insurance Expenses						
a)	Provision made/ proposed for the year			5.19	5.19	10.34	
b)	Actual insurance expenses incurred						
c)	Average Net Fixed Assets			5192.13	5192.13	5168.49	

## Form G 6.13

## Tax on R.O.E.

Name of the Petitioner:	<b>RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED</b>
Name of the Power Station :	<b>Kalisindh Thermal Power Station-Unit-1</b>

Rs.

S. No.	Particulars	Previous Year (n-1)	Current Year (n)	Ensuing Year (FY 2015-16)	Remarks
		(Actuals/audited)	Actual/ Estimated	Proposed to be recovered	
1	2	3	4	5	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)		39.41	45.67	
B)	Deffered tax liability before 01.04.2009				

## Proposed improvement in performance

Name of the Petitioner

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED

Name of the Power Station :

Kalisindh Thermal Power Station-Unit-1

Rs. Crore

S.No	Particulars	Previous year	Current year			MYT Control Period					Remarks	
		n-1	n			Ensuing Year (FY 2015-16)	n+2	n+3	n+4	n+5		
		(Actuals / audited)	Apr-Sep (Actual)	Oct-Mar (Estimated)	Total (April - March)	(Anticipated)						
1	2	3	4	5	6 = 4+5	7	8	9	10	11	12	
1	Plant load factor				57.63%	83.00%						
2	Auxiliary consumption				7.20%	5.75%						
3	Specific fuel consumption											
(i)	coal, kg / kWh				0.545521319	0.44						
ii)	gas, SCM / kWh											
(iii)	oil, ml / kwh											
(iv)	Limestone kg / kWh											
(v)	any other fuel											
4	Station heat rate, kcal / kwh				2652.952801	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				83.00%	83.00%						