

**Petition for  
Aggregate Revenue Requirement (ARR) and Tariff  
for FY 2018-19 For  
Kota Thermal Power Station (KTPS)  
Unit (1 to 7)**

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

January 2018

A1:	BACKGROUND	7
A2:	GENERATION FORECAST	7
A3:	KTPS (UNIT 1 TO 7) ANNUAL CAPACITY (FIXED) CHARGES FOR 2018-19	8
	DEPRECIATION:-	8
	INTEREST ON LOANS:-	9
	INTEREST ON WORKING CAPITAL	9
	OPERATION & MAINTENANCE EXPENSES	9
	RECOVERY OF ARR & TARIFF PETITION FEES	10
	INSURANCE CHARGES	10
	RETURN ON EQUITY (ROE)	10
	NON-TARIFF INCOME	10
A4:	KTPS ESTIMATED CAPACITY CHARGES (FIXED)	11
A5:	VARIABLE CHARGES	11
A6:	ESTIMATED ARR FOR KTPS	13
A7:	KTPS ESTIMATED TARIFF	13
A8:	FUEL COST ADJUSTMENT	13
A9:	RESPONDENTS:-	14
A10:	PRAYER	14

## LIST OF TABLES

TABLE 1: GROSS GENERATION, PLF & EX-BUS ENERGY SALE FROM KTPS STATION.....	7
TABLE 2: DEPRECIATION (RS. IN CRORE).....	8
TABLE 3: INTEREST ON LOANS (RS. IN CRORE).....	9
TABLE 4: INTEREST ON WORKING CAPITAL (RS. IN CRORE).....	9
TABLE 5: O & M EXPENSES (RS. IN CRORE).....	9
TABLE 6: RECOVERY OF ARR & TARIFF PETITION FEES (RS. IN CRORE).....	10
TABLE 7: INSURANCE CHARGES (RS. IN CRORE).....	10
TABLE 8: RETURN ON EQUITY (RS. IN CRORE).....	10
TABLE 9: NON-TARIFF INCOME (RS. IN CRORE).....	11
TABLE 10: NET CAPACITY CHARGES FOR KTPS (RS. IN CRORE).....	11
TABLE 11: VARIABLE COST (RS. IN CRORE).....	12
TABLE 12: ARR FOR KTPS (RS. IN CRORES).....	13
TABLE 13: KTPS ESTIMATED TARIFF.....	13

## Formats

Form No.	Particulars	Page No.
Form G 1.1	Summary of Tariff proposal	15
Form G 1.2	Aggregate Revenue Requirement	16
Form G 2.1	Plant characteristics	17
Form G 2.2	Operational Parameters – Generation	18
Form G 3.1	Revenue from sale of power	19
Form G 3.2	Non-tariff income	20
Form G 3.3	Revenue Subsidies & Grants	21
Form G 3.4	Capital Subsidies and Grants	22
Form G 4.1	O&M Expenses	23
Form G 5.1	Details/Information in respect of Fuel for Computation of Energy Charges	22-25
Form G 5.3	Energy Charges for Thermal Generation	26
Form G 6.1	Fixed assets & provisions for depreciation	27-28
Form G 6.2	Loan Repayment & Interest liability	29
Form G 6.3	Details of Project Specific Loans	30
Form G 6.4	Consolidated report on additions to Fixed Assets during the year	31
Form G 6.5	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	32
Form G 6.6	Break-up of Capital Cost for Coal / Lignite / gas / liquid fuel based projects	33
Form G 6.7	Break-up of Construction / Supply / Service packages	34
Form G 6.8	Draw Down Schedule for Calculation of IDC & Financing Charges	35
Form G 6.9	Return on Equity	36
Form G 6.10	Statement of Additional Capitalisation after COD and Details for Financing	37
Form G 6.11	Interest on Working capital	38
Form G 6.12	Insurance Expenses	39
Form G 6.13	Tax on R.O.E.	40
Form G 7.1	Proposed improvement in performance	41

## Definitions

<b>Act</b>	The Electricity Act, 2003
<b>Application</b>	This ARR and Tariff Petition for FY-2018-19 for Kota Thermal Power Station of Rajasthan Rajya Vidyut Utpadan Nigam Limited, Jaipur
<b>Auxiliary Consumption (Aux. Con.)</b>	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
<b>Availability</b>	Availability shall have the same meaning as defined in Section 2(7) of the RERC Tariff Regulations 2014.
<b>Distribution Company / Discoms</b>	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).
<b>Gross Calorific Value (GCV)</b>	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.
<b>Regulation</b>	The Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 notified by RERC on March- 27, 2014
<b>State</b>	The State of Rajasthan.
<b>Gross Station Heat Rate</b>	Heat energy input in kCal required to generate one unit (kWh) of electrical energy at generator terminals.
<b>Unit</b>	Unit in relation to a generating station means electric generator, its prime mover and auxiliaries and in relation to a combined cycle thermal power generating station includes combustion turbine – generators, associated waste heat recovery boilers, connected steam turbine-generator and auxiliaries

## ABBREVIATIONS

ARR	Aggregate Revenue Requirement
Ajmer Discom	Ajmer Vidyut Vitran Nigam Limited
CSR	Corporate Social Responsibility
FRP	Financial Restructuring Plan
FY	Financial Year
FY – 17	Financial Year 2016-17
FY – 18	Financial Year 2017-18
FY – 19	Financial Year 2018-19
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
Gol	Government of India
GoR	Government of Rajasthan
Jaipur Discom	Jaipur Vidyut Vitran Nigam Limited
Jodhpur Discom	Jodhpur Vidyut Vitran Nigam Limited
KWh	Kilo Watt Hour or Unit
MU	Million Units <sup>0</sup>
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 From 1<sup>st</sup> April 2004 onwards, RVPN is no longer responsible for the bulk purchase of power in Rajasthan. The capacity allocated to RVPN from RVUN generating stations has been reallocated to the three Discoms (Jaipur, Ajmer and Jodhpur) in the ratio of 39:29:32 from October 2011, 40:28:32 from June 2015 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 KTPS Unit 1 to 7 (1240MW).
- 1.3 RVUN have to file its petition for determination of Tariff and ARR Petition for 2018-19 in accordance with provision of RERC Tariff Regulation 2014. Accordingly, this petition is being submitted for KTPS (unit 1 to 7) for FY 2018-19 before RERC for ARR and Tariff determination.

## A2: GENERATION FORECAST

- 1.4 The installed capacity of KTPS (Unit-1 to 7) is 1240 MW. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from KTPS station of RVUN for the period FY 2016-17, FY 2017-18 and FY 2018-19 are as shown in table below:

**Table 1: Gross generation, PLF & Ex-bus energy sale from KTPS Station**

Particulars		FY 2016-17	FY 2017-18	FY 2018-19
Total Capacity	MW	1240	1240	1240
PLF	%	67.26%	73.00%	82.00%
Gross Generation	MU	7486.91	7278.26	8907.17
Auxiliary Energy Consumption	MU	858.12	739.80	825.69
Auxiliary Energy Consumption	%	11.46%	10.16%	9.27%
Net Generation	MU	6628.79	6538.46	8081.47

- 1.5 The fixed cost elements are detailed hereunder for KTPS for the FY 2016-17, FY 2017-18 and FY 2018-19 are as below.

## FIXED CHARGES

### A3: KTPS (UNIT 1 TO 7) ANNUAL CAPACITY (FIXED) CHARGES FOR 2018-19

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

#### Depreciation:-

1.7 Unit 1-6: For the purpose of computation of depreciation, RVUN has considered approved capital cost as per RERC order dated 20.06.2017. Accordingly, the opening capital cost of KTPS has been considered as Rs.1257.63 crore for FY 2016-17.

1.8 Similarly, as per aforesaid true up order of FY 2015-16, the approved capital cost of KTPS Unit 7 as on 01.04.2016 has been considered as Rs. 851.85 Crore.

1.9 Further during FY 2016-17, RVUN has incurred additional capitalisation of Rs. 0.16 crore under units 1-6 of KTPS power Station as per regulation 17(2)(iv) of RERC, Tariff Regulations, 2014. The detail of additional capitalization is as follows:

- a. Rs. 0.13 crore has been incurred towards purchase of ambulance.
- b. Rs. 0.02 crore has been incurred towards purchase of office equipments

1.10 Both the additional capitalization have been incurred as per RERC tariff Regulation 17(2)(iv) of Regulations 2014, which states that any additional works/ services, which have become necessary for efficient and successful operation of a generating station but not included in the original capital cost. The above additional capitalization was inevitable for smooth functioning of plant and not covered under original scope of work. Thus RVUN request the Hon'ble Commission to approve the aforesaid additional capitalization during FY 2016-17.

1.11 While calculating Depreciation (Form 6.1) the above capital cost and additions have been considered and accordingly calculation of Fixed Asset and Depreciation for Unit 1 to 7 has been shown in Form 6.1.

1.12 Based on the above, estimated figures of depreciation for FY 2016-17, FY 2017-18 and FY 2018-19 as computed under format 6.1 are summarised in table below:

**Table 2: Depreciation (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
KTPS			
Depreciation	76.13	71.33	71.33

#### Interest on Loans:-

1.13 The loan-wise interest expenses & finance charges which include term loans as well as transitional loans have been worked-out and taken as part of fixed cost. The loan repayment amount for term loans and transitional loans combined has been taken equal to the depreciation figure envisaged for FY 2016-17, FY 2017-18 and FY 2018-19.

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



**Table 3: Interest on Loans (Rs. In Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Interest (Term Loan + Transitional Loan) and finance charges	54.48	42.79	36.06

**Interest on working Capital**

1.15 The interest on working capital loan for FY 2016-17, FY 2017-18 and FY 2018-19 has been computed as per the norms defined under clause No.27 of RERC Tariff regulation 2014. FY 2016-17, FY 2017-18 and FY 2018-19, the rate of interest on WCL has taken equal to 250 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the previous year. Estimated figure of Interest on Working Capital is summarised as below:

**Table 4: Interest on working Capital (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Interest on Working Capital	78.66	68.99	79.37

**Operation & Maintenance Expenses**

1.16 The Operation & Maintenance Expenses have been computed as per the norms prescribed under Regulation 47 of RERC Tariff Regulation 2014 respectively.

1.17 Estimated figures for the period FY 2016-17, FY 2017-18 and FY 2018-19 are summarised in Table below.

**Table 5: O & M Expenses (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Operation and Maintenance	237.36	236.62	250.46

**Recovery of ARR & Tariff Petition Fees**

1.18 The Hon'ble Commission vide order dated 10.03.08 has allowed to pass through the fees levied for filling up of ARR & Tariff Petition, as expenses in the ARR. Accordingly, RVUN has claim the fee as under. The Commission may consider and allow the same.

1.19 The ARR & Tariff Petition Fees for FY 2016-17, FY 2017-18 and FY 2018-19 are summarised in table below :

**Table 6: Recovery of ARR & Tariff Petition Fees (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
---------	---------	----------	----------

<b>KTPS</b>			
Petition Fee	0.62	0.62	0.62

### Insurance Charges

1.20 RVUN is claiming the insurance charges for KTPS for the year 2018-19 based on the estimates of actual insurance charges paid in preceding year with an increment of 5% YoY (year on year). The details are shown in the table below.

**Table 7: Insurance Charges (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Insurance Charges	2.92	3.07	3.22

### Return on Equity (ROE)

1.21 The Return on Equity have been computed as per the norms prescribed under Regulation 20 of RERC Tariff Regulation 2014.

1.22 The Return on Equity (ROE) for FY 2016-17, FY 2017-18 and FY 2018-19 are summarised in Table below:

**Table 8: Return on Equity (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
ROE	78.14	78.14	78.14

### Non-Tariff Income

1.23 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)

1.24 Estimated figures of Non Tariff Income for FY 2016-17, FY 2017-18 and FY 2018-19 are summarised in table below:

**Table 9: Non-Tariff Income (Rs. in Crore)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Non Tariff Income	18.08	18.99	19.94

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

### A4: KTPS ESTIMATED CAPACITY CHARGES (FIXED)

1.26 The net fixed charges is computed for FY 2016-17, FY 2017-18 and FY 2018-19 in the Table below:

**Table 10: Net Capacity Charges for KTPS (Rs. in Crore)**

KTPS	FY16-17	FY 17-18	FY 18-19
Fixed Charge			
Depreciation	76.13	71.33	71.33
Interest on term Loan & Transitional Loan	54.48	42.79	36.06
Return on Equity	78.14	78.14	78.14
Interest on Working Capital	78.66	68.99	79.37
O & M Expenses	237.36	236.62	250.46
Insurance Charges	2.92	3.07	3.22
Additional Liability towards Pension & Gratuity	19.83	0.00	0.00
Recovery of ARR and Tariff Petition Fee	0.62	0.62	0.62
<b>Total Fixed Charge</b>	<b>548.14</b>	<b>501.56</b>	<b>519.20</b>
Less: Non-Tariff Income	18.08	18.99	19.94
<b>Net Fixed Charge</b>	<b>530.05</b>	<b>482.57</b>	<b>499.27</b>

**A5: VARIABLE CHARGES****PLF ,Auxiliary Consumption ,SHR,Coal GCV, Price and Cost**

- 1.27 PLF and Auxiliary Consumption have been considered normative for unit 1-7 that is 82% and 9.27% respectively.
- 1.28 SHR of the station has been considered 2570.98 kCal/kWh instead of 2561.70 kCal/kWh approved by the commission as the matter is pending before Hon'ble Aptel for SHR of Unit # 7 of KTPS.
- 1.29 For FY 2018-19, the average Gross calorific value and average rate of oil supply have been calculated on the basis of receipts of previous three months during Sep to Nov of 2017 as per Commission's formats.
- 1.30 The GCV of indigenous coal has been considered as 3822 kCal/kg and price Rs 3579 /MT, GCV of secondary fuel (OIL) been considered as 9448.16 kCal/ltr. Price of the indigenous coal has been taken Rs. 3579 per MT and for HFO and LDO has been taken as Rs. 32143.47/kl.
- 1.31 Based on past usage of imported coal, the use of imported coal is considered as nil for FY 2018-19.
- 1.32 The overall estimated figures of variable Cost for the period under consideration, are summarised in Table below.

**Table 11: Variable Cost (Rs. in Crore)**

S.No.	Particulars	Units	FY 2016-17	FY 2017-18	FY 2018-19
			Actual/Audited	April-march	Anticipated
			Unit 1-7	(Estimated)	Unit 1-7

1	2	3	4	8	9
<b>1</b>	<b>Operational Parameters</b>				
1.1	Total Capacity	MW	1240	1240	1240.00
1.2	Availability	%	88.74%	83.00%	82.00%
1.3	PLF	%	67.26%	73.00%	82.00%
<b>1.4</b>	<b>Gross Generation</b>	<b>MU</b>	<b>7486.91</b>	<b>7278.26</b>	<b>8907.17</b>
1.5	Auxiliary Energy Consumption	%	11.46%	10.00%	9.27%
1.6	Auxiliary Energy Consumption	MU	858.12	739.80	825.69
<b>1.7</b>	<b>Net Generation</b>	<b>MU</b>	<b>6628.79</b>	<b>6538.46</b>	<b>8081.47</b>
1.8	Heat Rate	kcal/kWh	2551.16	2609.95	2570.98
<b>2</b>	<b>Fuel Parameters (for each primary and secondary fuel)</b>				
<b>2.1</b>	<b>Gross Calorific Value</b>				
2.1.1	Fuel - 1 (Indegineous Coal)	kcal/Kg	3846	3822	3822
2.1.2	Fuel - 2 (Oil)	kcal/Ltr.	9547	9448	9448
2.1.4	Fuel - 3(Imported Coal)	kcal/Kg	0	0	0
<b>2.2</b>	<b>Landed Fuel Price per unit (Please specify the fuel)</b>				
2.2.1	Fuel - 1 (Indegineous Coal)	Rs/MT	4088	3579	3579
2.2.2	Fuel - 2 (Oil)	Rs/KL	27752	32143.47	32143
2.2.4	Fuel - 3 (Imported Coal)	Rs/MT	0	0	0
<b>3</b>	<b>Fuel Consumption and Heat Contribution (for each fuel separately)</b>				
3.1	Specific Fuel Consumption				
3.1.1	Fuel - 1 (Indegineous Coal)	Kg/ kWh	0.66	0.68	0.67
3.1.2	Fuel - 2 (Oil)	ML/ kWh	0.81	0.63	0.5
3.1.4	Fuel - 3 (Imported Coal)	Kg/ kWh	0.00	0.00	0.00
4	Total Fuel Cost				
4.1.1	Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1)	Rs Crore	2023.97	1790.86	2140.48
4.1.2	Fuel - 2 (Oil) (2.2.2 x 3.2.2)	Rs Crore	16.78	14.64	14.32
4.1.4	Fuel 3 (Imported Coal) (2.2.4 x 3.2.4)	Rs Crore	0.00	0.00	0.00
	<b>Total Fuel Cost</b>	<b>Rs Crore</b>	<b>2040.76</b>	<b>1805.50</b>	<b>2154.79</b>
<b>5</b>	<b>Other Charges and Adjustments</b>		9.12	0	0
	<b>Total Cost (4+5)</b>	<b>Rs Crore</b>	<b>2049.88</b>	<b>1805.50</b>	<b>2154.79</b>
<b>6</b>					
<b>7</b>	<b>Cost of Generation per unit (at Generation Terminal) (6/1.4)</b>	<b>Rs/kWh</b>	<b>2.738</b>	<b>2.481</b>	<b>2.419</b>
<b>8</b>	<b>Energy Charge per unit (ex-bus) (6/1.7)</b>		<b>3.092</b>	<b>2.761</b>	<b>2.666</b>

## A6: ESTIMATED ARR FOR KTPS

1.33 The recovery of ARR proposed for KTPS is summarised in table below

**Table 12: ARR for KTPS (Rs. in Crores)**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Capacity (Fixed Charges)	530.05	482.57	499.27
Variable Cost	2049.88	1805.50	2154.79
Aggregate Revenue Requirement	2579.93	2288.08	2654.06

**A7: KTPS ESTIMATED TARIFF**

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

**Table 13: KTPS ESTIMATED TARIFF**

Station	FY16-17	FY 17-18	FY 18-19
<b>KTPS</b>			
Ex-Bus Generation (MU)	6628.79	6538.46	8081.47
Capacity(fixed) Charges	530.05	482.57	499.27
Variable Cost	2049.88	1805.50	2154.79
Rate of Fixed Charge(Rs/kwh)	0.800	0.738	0.618
Rate of Variable Charge(Rs/kwh)	3.092	2.761	2.666
Rate of Sale of Energy (Rs/kwh)	3.892	3.499	3.284

**A8: FUEL COST ADJUSTMENT**

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

**A9: RESPONDENTS:-**

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

**A10: PRAYER**

1.37 RVUN humbly requests the Hon'ble Commission to:

- ◆ Approval of ARR & Tariff for FY-2018-19.
- ◆ To allow adhoc tariff w.e.f. 1.4.18 for FY 2018-19 till final tariff order is issued as proposed in the petition.
- ◆ 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 (IA&C)  
RVUN, Jaipur.

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

## Form G 1.1 Summary of Tariff Proposal

the Petitioner  
the Power Station /Unit :

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

(Rs. Crore)

Particulars	Ref.of Form No	FY 2016-17	FY 2017-18			FY 2018-19	Remark
		Actual	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
2	3		5	6	7	8	9
<b>Capacity (Fixed) Charge</b>							
Depreciation	6.1	76.13	71.11	35.67	35.67	71.33	
Interest on term Loan & Transitional Loan	6.2	54.48	35.31	21.40	21.40	36.06	
Return on Equity	6.9	78.14	78.13	39.07	39.07	78.14	
Interest on Working Capital	6.11	78.66	87.36	29.36	39.64	79.37	
O & M Expenses	4.1	237.36	236.62	118.31	118.31	250.46	
Insurance Charges	6.12	2.92	3.14	1.53	1.53	3.22	
Tax on ROE	6.13	0.00	0.00	0.00	0.00	0.00	
Recovery of ARR and Tariff Petition Fee		0.62	0.62	0.31	0.31	0.62	
Additional Liability towards Pension & Gratuity		19.83					
Less: Non-Tariff income	3.2	18.08	18.19	9.49	9.49	19.94	
<b>Total (1)- Capacity (Fixed Charges)</b>		<b>530.05</b>	<b>494.10</b>	<b>236.15</b>	<b>246.43</b>	<b>499.27</b>	
<b>Total- Energy (variable ) charges</b>		<b>2049.88</b>	<b>2444.02</b>	<b>731.06</b>	<b>1074.44</b>	<b>2154.79</b>	
<b>Units sold to Discoms (MU)</b>		<b>6628.79</b>	<b>8081.47</b>	<b>2508.79</b>	<b>4029.67</b>	<b>8081.47</b>	
<b>Rate of Fixed Charges. ( 1/3)</b>		<b>0.800</b>	<b>0.611</b>	<b>0.941</b>	<b>0.612</b>	<b>0.618</b>	
<b>Rate of Variable Charges.</b>			3.024				
Rate of Energy Charge from Primary Fuel (REC) <sub>p</sub>	5.1						
(i) Coal/ Lignite		3.067		2.884	2.649	2.649	
(ii) Imported Coal		0.000		0.000	0.000	0.000	
(iii) Any Other fuel							
Total 2.1							
Rate of Energy Charge from Secondary Fuel (REC) <sub>s</sub>	5.1	0.025		0.030	0.018	0.018	
Total-(2) Rate of Energy Charge ex-bus(REC) <sup>3A,3B,3C</sup>	5.1	3.892	3.635	3.855	3.278	3.284	

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

**Form G 1.2**  
**Aggregate Revenue Requirement**  
**Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.**  
**Kota Super Thermal Power Station**

(Rs. Crore)

S.No.	Particulars	Reference Form	FY 2016-17	FY 2017-18		FY 2018-19	Remarks	
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)		Anticipated
1	2	3	4	5	6	7	9	10
<b>A</b>	<b>Receipts</b>							
1	Revenue from Sale of Power (Tariff income)	3.1	2579.93	2938.12	988.60	1342.27	2654.06	
2	Non Tariff income	3.2	18.08	18.19	9.49	9.49	19.94	
	<b>Total- (A)</b>		<b>2598.02</b>	<b>2956.31</b>	<b>998.09</b>	<b>1351.76</b>	<b>2674.00</b>	
<b>B</b>	<b>Expenditure</b>							
1	Variable Costs, including Fuel Cost	5.3	2049.88	2444.02	731.06	1074.44	2154.79	
2	Depreciation	6.1	76.13	71.11	35.67	35.67	71.33	
3	Interest on term Loan & Finance charges	6.2	54.48	35.31	42.79	42.79	36.06	
4	Return on Equity	6.9	78.14	78.13	39.07	39.07	78.14	
5	Tax on ROE	6.15	0.00	0.00	0.00	0.00	0.00	
6	Interest on Working Capital	6.11	78.66	87.36	29.36	39.64	79.37	
7	O & M Expenses	4.1	237.36	236.62	118.31	118.31	250.46	
8	Insurance Charges	6.12	2.92	3.14	1.53	1.53	3.22	
9	Additional Liability towards Pension & Gratuity		19.83	0.00	0.00	0.00	0.00	
10	Recovery of ARR and Tariff Petition Fee	1.1	0.62	0.62	0.31	0.31	0.62	
<b>C</b>	<b>Total- (B) Expenditure</b>		<b>2598.02</b>	<b>2956.31</b>	<b>998.09</b>	<b>1351.76</b>	<b>2674.00</b>	
<b>D</b>	<b>A.R.R. (C-A.2)</b>		<b>2579.93</b>	<b>2938.12</b>	<b>988.60</b>	<b>1342.27</b>	<b>2654.06</b>	



## Plant Characteristics

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

Basic characteristics of the plant <sup>1</sup>	Coal Based Thermal Power Plant (conventional steam generator)						
Special Features of the Plant							
Site Specific Features <sup>2</sup>	Intake Water System from IGNP						
Special Technological Features <sup>3</sup>	Once through cooling system for Unit # 1 to 5 & Cooling-Tower(closed cycle) for Unit # 6 to 7 and intake/makeup water from Kota barrage						
Environmental Regulation related features <sup>4</sup>	ESPs of 99.886% efficiency installed for regulation of SPM						
Any other special features							
Fuel Details <sup>5</sup>	Primary Fuel		Secondary Fuel			Alternate Fuels	
Details	COAL		HFO/ HSD & LDO				
	<b>Module number or Unit number</b>						
	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Unit # 6	Unit # 7
Installed Capacity (IC)	110	110	210	210	210	195	195
Date of Commercial Operation (COD)	1.04.83	1.04.84	11.03.89	16.01.90	18.07.95	01.08.04	31/12/2009
Type of cooling system <sup>6</sup>	Once-Through				Closed circuit cooling		
Type of Boiler Feed Pump <sup>7</sup>	Electric Motor driven						
Pressure (kg/ cm <sup>2</sup> )	130	130	147.1	147.1	147.1	147.1	147.1
Temperature 0C							
-At Superheater Outlet	545 Deg C						
-At Reheater Outlet	545 Deg C						
Turbine Cycle heat Rate(Kcal/ Kwh)							
Boiler Efficiency (%)							
Guaranteed Design Heat rate (kCal/kWh) <sub>s</sub>	2517	2517	2307	2307	2309	2287	2284.45
Conditions on which guaranteed							
% MCR	3						
% Makeup	3						
Design Fuel	4450	4450	4278	4278	3500	3500	3500
Design cooling water Temperature	30 Deg C						
Back Pressure	0.88						

## Operational Parameters - Generation

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Station/Unit:

Kota Super Thermal Power Station

S. No.	Particulars	Units	FY 2016-17	FY 2017-18			FY 2018-19	Remarks
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
1	2	3	5	5	6	7	8	9
2	<b>Operational Parameters - Thermal</b>							
2.1	Total Capacity	MW	1240	1240.00	1240	1240	0	
2.2	Availability	%	88.74%		83.24%	82.00%	82.00%	
2.3	Plant Load Factor	%	67.26%	82.00%	50.77%	82.00%	82.00%	
2.4	Gross Generation	MU	7486.91	8907.17	2836.87	4441.38	8907.17	
2.5	Auxiliary Energy Consumption	%	11.46%	9.27%	11.56%	9.27%	9.27%	
2.6	Auxiliary Energy Consumption	MU	858.12	825.69	328.08	411.72	825.69	
2.7	Net Generation	MU	6628.79	8081.47	2508.79	4029.67	8081.47	
2.6	Heat Rate	Kcal/ Kwh)	2551.16	2561.70	2670.95	2570.98	2570.98	

## Revenue from Sale of Power

Name of the Company  
Name of the Power Station :

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

FY 2016-17

Rs. Crore

S.No.	Particulars	Allocation (in %)	Unit Sold	% of total	Demand/fix	Energy	Others, if any	Total (6+7+8)	Average'	Remarks
1	2	3	4	5	6	7	8	9	10	11
A)	<b>Revenue from sale of Electricity(as per approved tariff)</b>									
1	Dist.Licensee/ trader/ consumers									
(a)	JVVNL		2651.52	40%	212.0217226	820.0		1031.97	389.20	
(b)	AVVNL		1856.06	28%	148.4152058	574.0		722.38	389.20	
(c)	JDVVNL		2121.21	32%	169.6173781	656.0		825.58	389.20	
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>		<b>6628.79</b>		<b>530.05</b>	<b>2049.88</b>		<b>2579.93</b>		

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)	Existing Tariff
1	2	3	4	5	6	7	8	9	10	11
A)	<b>Revenue from sale of Electricity(as per approved tariff)</b>									
1	Dist.Licensee/ trader/ consumers									
(a)	JVVNL		2615.38	40.0%	193.0290012	722.2		915.23	349.94	363.54
(b)	AVVNL		1830.77	28.0%	135.1203008	505.5		640.66	349.94	363.54
(c)	JDVVNL		2092.31	32.0%	154.4232009	577.8		732.18	349.94	363.54
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>		<b>6538.46</b>		<b>482.57</b>	<b>1805.50</b>		<b>2288.08</b>		<b>363.54</b>

FY 2018-19

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)	Existing Tariff
1	2	3	4	5	6	7	8	9	10	11
A)	<b>Revenue from sale of Electricity(as per approved tariff)</b>									
1	Dist.Licensee/ trader/ consumers									
(a)	JVVNL		3232.59	40.0%	199.7068334	861.9		1061.62	328.41	363.54
(b)	AVVNL		2262.81	28.0%	139.7947834	603.3		743.14	328.41	363.54
(c)	JDVVNL		2586.07	32.0%	159.7654667	689.5		849.30	328.41	363.54
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>		<b>8081.47</b>		<b>499.27</b>	<b>2154.79</b>		<b>2654.06</b>		

## NON-TARIFF INCOME

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/ Unit:

Kota Super Thermal Power Station

Rs. Crore

S.No	Particulars	FY 2016-17	FY 2017-18			FY 2018-19	Remarks
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	3	4	5	6	7	8
	<b>Non-tariff income</b>						
i.	Intt on Govt. Subsidy	0.000		0.000	0.000	0.000	
ii.	Interest on Loans and Advances to Staff	0.000		0.000	0.000	0.000	
iii.	House Building Advance	0.000		0.000	0.000	0.000	
iv.	Income from F.D.R. with Banks	0.000		0.000	0.000	0.000	
v.	Sale of scrap	0.000		0.000	0.000	0.000	
vi.	MISCELLANEOUS RECEIPTS	18.083		9.494	9.494	19.937	
	<b>Total non-tariff income</b>	<b>18.08</b>	<b>18.19</b>	<b>9.49</b>	<b>9.49</b>	<b>19.94</b>	

## REVENUE SUBSIDIES &amp; GRANTS

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit :

Kota Super Thermal Power Station

S. No.	Particulars	Previous year (n-1)	Current Year (n)			Ensuing Year (n+1)	Remarks
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Estimated for the year	(Anticipated)	
1	2	3	4	5	6	7	8
A)	<b>Revenue Subsidies &amp; Grants</b>	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						
	<b>Total</b>						

## Capital Subsidies and Grants

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

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

Rs. Crore

S. No.	Particulars	Previous year	Current Year			Ensuing Year (1	Remarks
		(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (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						
	<b>Total</b>						

## Form G 4.1

## O&amp;M Expenses

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Station/Unit:

Kota Super Thermal Power Station

(Rs. Crore)

S.No.	Particulars	FY 2016-17	FY 2017-18			FY 2018-19
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)
1	2	3		5	6	8
1	O&M Expense norms (Rs. per MW)	0.19		0.19	0.19	0.20
2	Total Capacity in MW	1240		1240	1240	1240.00
3	O&M expense	237.36	236.62	118.31	118.31	250.46
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>Totals O&amp;M expenses</b>	<b>237.36</b>	<b>236.62</b>	<b>118.31</b>	<b>118.31</b>	<b>250.46</b>

Name of Company : - **RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED**

F 5.1

Name of the Power Station: - **KOTA SUPER THERMAL POWER STATION**

S. No.	Month	Unit	Sep'17	Oct'17	Nov'17
1.	Quantity of coal/lignite in stock at the beginning of the month	(MT)	165114	58159	107053
2	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MT)	381743	498377	513194
2 (a)	Quantity of Coal (PKCL)	(MT)			
3.	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company for diversion of wagons etc.	(MT)	0	0	0
4	Coal supplied by Coal/Lignite Company {2+ 2(a)+3}	(MT)	381743	498377	513194
5(a)	Normative transit & Handling losses (for Coal/Lignite based Project	(MT)	3054	3987	4106
5(b)	Actual transit & Handling losses (for Coal/Lignite based Project	(MT)	2686	10231	7594
6	Net Coal / Lignite Supplied (4-5)	(MT)	379057	488146	505600
6.A	Carpet coal recovered	(MT)	2	2	2
7	Total coal (Receipts & Opening Stock) (1) + (6)	(MT)	544171	546305	612653
8	Coal / Lignite burnt / consumed	(MT)	486012	439252	523979
8 b	PKCL Coal transported to KaTPP ,Jhalawar	(MT)			
9	Coal / Lignite in stock at the end of the month	(MT)	58159	107053	88674
10	Value of Coal / Lignite stock at the beginning of the month(Landed cost of 1)	(lacs Rs.)	6154.66	2071.75	3802.76
11	Amount charged by the Coal / Lignite Company	(lacs Rs.)	7516.22	9234.09	10274.33
11(a)	Amount charged by the Coal / Lignite Company (PKCL)	(lacs Rs.)	0.00	0.00	0.00
12	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(lacs Rs.)	0.00	0.00	0.00
13	Total amount charged (11+11(a)+12+13)	(lacs Rs.)	7516.22	9234.09	10274.33
14	Transportation charges by rail/ship/road transport	(lacs Rs.)	5697.67	8319.18	8212.76
15	Adjustment (+/-) in amount charged made by Rly./Transport Company	(lacs Rs.)	0.00	0.00	0.00
16	Demurrage Charges, if any	(lacs Rs.)	2.92	2.77	0.297
17	Cost of diesel in transporting coal through MGR system, if applicable	(lacs Rs.)	0.00	0.00	0.00
18	Total Transportation Charges (14 +/-15 +16 + 17)	(lacs Rs.)	5700.59	8321.94	8213.06
18. A	Value of Coal Transported to Jhalawar	(lacs Rs.)			
19	Total amt. Charged for coal/lignite supplied including Transportation (13 +18)	(lacs Rs.)	13216.80	17556.03	18487.38
20	Average cost of coal/lignite (Opening stock +receipts) (19+10)/(1+4-5(a))	(Rs/MT)	3562.22	3552.22	3617.70
21	Cost of coal in stock at the end of the month (20) x (9)	(lacs Rs.)	2071.75	3802.76	3207.96
22	Weighted average GCV of coal/lignite as received	Kcal/Kg	3901	3729	3828
23	<b>Wt Average Cost of Coal Rs/ MT</b>	<b>RS/MT</b>		3579	
24	<b>WT Average GCV of Coal</b>	<b>kCal/kWh</b>		3822	



**Kota Super Thermal Power Station, Kota**

F 5.1

Secondary Fuel consumption detail for the month Sep to Nov

S.No.	Particulars		Sep'17		Oct '17		Nov'17	
			F.O	HSD/ LDO	F.O	HSD/ LDO	F.O	LDO
<b>B.</b>	<b>FO /HSD / LDO</b>							
1	Quantity of oil in stock at beginning	KL	3638.560	129.298	3458.800	209.982	3119.860	175.671
2	Quantity of oil supplied by oil company	KL	2.7	105	6.4	0	0	187
3	Adjustment(+/-) in quantity supplied/ made by oil company due to -----( to be mentioned specifically)	KL	0	0	0	0	0	0
4	Oil supplied by oil company (2+3)	KL	2.7	105	6.4	0	0	187
5	Normative Transit / handling losses	KL	0.000	0.000	0.000	0.000	0.000	0.000
6	Net oil supplied (4-5)	KL	2.70	105.00	6.40	0.00	0.00	187.00
7	Total oil ( Receipts + Opening stock) (1+6)	KL	3641.260	234.298	3465.200	209.982	3119.860	362.671
8	Oil consumed :-	KL	182.460	24.316	345.340	34.311	40.110	165.042
(i)	Firm power	KL						
(ii)	Infirm power	KL		-				-
9	Quantity of oil in stock at the end	KL	3458.800	209.982	3119.860	175.671	3079.750	197.629
10	Value of oil in stock at beginning	Rs.	100779252.17	5432679.21	95800132.05	8650731.07	86411877.43	7495419.84
11	Amount charged by oil company	Rs.	74566.737	4219810	176750.784	308648.96		8433326
12	Adjustment(+/-) in amount charged / made by oil company on a/c of the reason( to be mentioned specifically)	Rs.in lakhs	0.00	0.00	0.00	0.00	0.00	0.00
13	Total amount charged (11+12)	Rs.in lakhs	74566.74	4219810.00	176750.78	308648.96	0.00	8433326.00
14	Transportation charges	Rs.in lakhs	0	0	0.00	0.00	0	0
15	Adjustment(+/-) in amount charged / made by Railway / Transport company	Rs.in lakhs	0.00	0.00	0.00	0.00	0.00	0.00
16	Demurrage charge, if any	Rs.in lakhs	0.00	0.00	0.00	0.00	0.00	0.00
17	Any other charges (to be mentioned specifically)	Rs.in lakhs				0		
18	Total transportation charges	Rs.in lakhs				0		
19	Total amount charged for oil incl. transportation charges	Rs.in lakhs	74566.74	4219810.00	176750.78	308648.96	0.00	8433326.00
20	Average cost of oil (Opening stock + receipts) (19/7)	Rs./ KL	27697.51	41197.49	27697.36	42667.37	27697.36	43920.65
21	Cost of oil in stock at the end of the month (20x9)	Rs.	95800132.05	8650731.07	86411877.43	7495419.84	85300936.43	8679994.02
22	GCV of Oil	Kcal/ Ltr	9558.9	9167	9558.9	9167	9558.9	9167
23	Weighted Avg cost of oil (Rs./KL)						9558.9	9167
24	Weighted GCV of oil (kcal/ltr)						27697.405	43432.349

## Energy Charges for Thermal Generation

Name of the Petitioner:

RVUN

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit:

KTPS

Kota Super Thermal Power Station

S.No.	Particulars	Units	FY 2016-17	FY 2017-18			FY 2017-18	FY 2018-19
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	April-march	Anticipated
			Unit 1-7		Unit 1-7		(Estimated)	Unit 1-7
1	2	3	4	5	6	7	8	9
<b>1</b>	<b>Operational Parameters</b>							
1.1	Total Capacity	MW	1240	1240	1240	1240	1240	1240.00
1.2	Availability	%	88.74%	82.00%	83.24%	83.00%	83.00%	82.00%
1.3	PLF	%	67.26%	82.00%	50.77%	82.00%	73.00%	82.00%
<b>1.4</b>	<b>Gross Generation</b>	<b>MU</b>	<b>7486.91</b>	<b>8907.17</b>	<b>2836.87</b>	<b>4441.38</b>	<b>7278.26</b>	<b>8907.17</b>
1.5	Auxiliary Energy Consumption	%	11.46%	9.27%	11.56%	9.27%	10.00%	9.27%
1.6	Auxiliary Energy Consumption	MU	858.12	825.69	328.08	411.72	739.80	825.69
<b>1.7</b>	<b>Net Generation</b>	<b>MU</b>	<b>6628.79</b>	<b>8081.47</b>	<b>2508.79</b>	<b>4029.67</b>	<b>6538.46</b>	<b>8081.47</b>
1.8	Heat Rate	kcal/kWh	2551.16	2561.7	2670.95	2570.98	2609.95	2570.98
<b>2</b>	<b>Fuel Parameters (for each primary and secondary fuel)</b>							
<b>2.1</b>	<b>Gross Calorific Value</b>							
2.1.1	Fuel - 1 (Indegineous Coal)	kcal/Kg	3846	3844.19	3822	3822	3822	3822
2.1.2	Fuel - 2 (Oil)	kcal/Ltr.	9547	10140.77	9448	9448	9448	9448
2.1.4	Fuel - 3(Imported Coal)	kcal/Kg	0	0	0	0	0	0
<b>2.2</b>	<b>Landed Fuel Price per unit (Please specify the fuel)</b>							
2.2.1	Fuel - 1 (Indegineous Coal)	Rs/MT	4088	4105.55	3579	3579	3579	3579
2.2.2	Fuel - 2 (Oil)	Rs/KL	27752	26852.59	32143.47	32143.47	32143.47	32143
2.2.4	Fuel - 3 (Imported Coal)	Rs/MT	0	0	0	0	0	0
<b>3</b>	<b>Fuel Consumption and Heat Contribution (for each fuel separately)</b>							
<b>3.1</b>	<b>Specific Fuel Consumption</b>							
3.1.1	Fuel - 1 (Indegineous Coal)	Kg/ kWh	0.66		0.70	0.67	0.68	0.67
3.1.2	Fuel - 2 (Oil)	MJ/ kWh	0.81		0.82	0.5	0.63	0.5
3.1.4	Fuel - 3 (Imported Coal)	Kg/ kWh	0.00		0.00	0.00	0.00	0.00
<b>4</b>	<b>Total Fuel Cost</b>							
4.1.1	Fuel 1 (Indegineous Coal) (2.2.1 x 3.2.1)	Rs Crore	2023.97		723.55	1067.31	1790.86	2140.48
4.1.2	Fuel - 2 (Oil) (2.2.2 x 3.2.2)	Rs Crore	16.78		7.50	7.14	14.64	14.32
4.1.4	Fuel 3 (Imported Coal) (2.2.4 x 3.2.4)	Rs Crore	0.00		0.00	0.00	0.00	0.00
	<b>Total Fuel Cost</b>	<b>Rs Crore</b>	<b>2040.76</b>	<b>2444.02</b>	<b>731.06</b>	<b>1074.44</b>	<b>1805.50</b>	<b>2154.79</b>
<b>5</b>	<b>Other Charges and Adjustments</b>		9.12	0	0	0	0	0
<b>6</b>	<b>Total Cost (4+5)</b>	<b>Rs Crore</b>	<b>2049.88</b>	<b>2444.02</b>	<b>731.06</b>	<b>1074.44</b>	<b>1805.50</b>	<b>2154.79</b>
<b>7</b>	<b>Cost of Generation per unit (at Generation Terminal) (6/1.4)</b>	<b>Rs/kWh</b>	<b>2.738</b>	<b>2.744</b>	<b>2.577</b>	<b>2.419</b>	<b>2.481</b>	<b>2.419</b>
<b>8</b>	<b>Energy Charge per unit (ex-bus) (6/1.7)</b>		<b>3.092</b>	<b>3.024</b>	<b>2.914</b>	<b>2.666</b>	<b>2.761</b>	<b>2.666</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner Rajasthan Raja Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 1-6 2016-17

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 & deductons	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	3.32	0.00	0.00	3.32						
1A	Building & Civil works of Power plant	3.34	182.27	0.00	0.00	182.27						
2	Hydraulic works	5.28	5.50	0.00	0.00	5.50						
3	Other Civil works	3.34	33.77	0.00	0.00	33.77						
4	Plant & machinery	5.28	956.95	0.00	0.00	956.95						
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00						
6	Vehicles	9.5	0.90	0.13	0.00	1.04						
7	Furniture & fixtures	6.33	0.21	0.00	0.00	0.21						
8	Office Equipments	6.33	0.24	0.02	0.00	0.26						
9	Capital spares	5.28	74.47	0.00	0.00	74.47						
	<b>Total (1) to (11)</b>		<b>1257.63</b>	<b>0.16</b>	<b>0.00</b>	<b>1257.79</b>	<b>777.44</b>	<b>33.57</b>	<b>0.00</b>	<b>811.01</b>	<b>480.19</b>	<b>777.60</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner Rajasthan Raja Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 1-6 2017-18

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 & deductons	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	3.32	0.00	0.00	3.32						
1A	Building & Civil works of Power plant	3.34	182.27	0.00	0.00	182.27						
2	Hydraulic works	5.28	5.50	0.00	0.00	5.50						
3	Other Civil works	3.34	33.77	0.00	0.00	33.77						
4	Plant & machinery	5.28	956.95	0.00	0.00	956.95						
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00						
6	Vehicles	9.5	1.04	0.00	0.00	1.04						
7	Furniture & fixtures	6.33	0.21	0.00	0.00	0.21						
8	Office Equipments	6.33	0.26	0.00	0.00	0.26						
9	Capital spares	5.28	74.47	0.00	0.00	74.47						
	<b>Total (1) to (11)</b>		<b>1257.79</b>	<b>0.00</b>	<b>0.00</b>	<b>1257.79</b>	<b>811.01</b>	<b>28.77</b>	<b>0.00</b>	<b>839.79</b>	<b>446.77</b>	<b>811.01</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner Rajasthan Raja Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 1-6 2018-19

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 & deductons	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	3.32	0.00	0.00	3.32						
1A	Building & Civil works of Power plant	3.34	182.27	0.00	0.00	182.27						
2	Hydraulic works	5.28	5.50	0.00	0.00	5.50						
3	Other Civil works	3.34	33.77	0.00	0.00	33.77						
4	Plant & machinery	5.28	956.95	0.00	0.00	956.95						
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00						
6	Vehicles	9.5	1.04	0.00	0.00	1.04						
7	Furniture & fixtures	6.33	0.21	0.00	0.00	0.21						
8	Office Equipments	6.33	0.26	0.00	0.00	0.26						
9	Capital spares	5.28	74.47	0.00	0.00	74.47						
	<b>Total (1) to (11)</b>		<b>1257.79</b>	<b>0.00</b>	<b>0.00</b>	<b>1257.79</b>	<b>839.79</b>	<b>28.77</b>	<b>0.00</b>	<b>868.56</b>	<b>418.00</b>	<b>839.79</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 7 2016-17

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 & deductions	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	0.00	0.00	0.00	0.00		0.00				
1A	Building & Civil works of Power plant	3.34	120.83	0.00	0.00	120.83		4.04				
2	Hydraulic works	5.28	11.93	0.00	0.00	11.93		0.63				
3	Other Civil works	3.34	3.93	0.00	0.00	3.93		0.13				
4	Plant & machinery	5.28	709.73	0.00	0.00	709.73		37.47				
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00		0.00				
6	Vehicles	9.5	0.00	0.00	0.00	0.00		0.00				
7	Furniture & fixtures	6.33	0.05	0.00	0.00	0.05		0.00				
8	Office Equipments	6.33	0.06	0.00	0.00	0.06		0.00				
9	Capital spares	5.28	5.31	0.00	0.00	5.31		0.28				
	<b>Total (1) to (11)</b>		<b>851.85</b>	<b>0.00</b>	<b>0.00</b>	<b>851.85</b>	<b>263.08</b>	<b>42.56</b>	<b>0.00</b>	<b>305.64</b>	<b>588.77</b>	<b>546.21</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 7 2017-18

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 & deductions	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	0.00	0.00	0.00	0.00		0.00				
1A	Building & Civil works of Power plant	3.34	120.83	0.00	0.00	120.83		4.04				
2	Hydraulic works	5.28	11.93	0.00	0.00	11.93		0.63				
3	Other Civil works	3.34	3.93	0.00	0.00	3.93		0.13				
4	Plant & machinery	5.28	709.73	0.00	0.00	709.73		37.47				
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00		0.00				
6	Vehicles	9.5	0.00	0.00	0.00	0.00		0.00				
7	Furniture & fixtures	6.33	0.05	0.00	0.00	0.05		0.00				
8	Office Equipments	6.33	0.06	0.00	0.00	0.06		0.00				
9	Capital spares	5.28	5.31	0.00	0.00	5.31		0.28				
	<b>Total (1) to (11)</b>		<b>851.85</b>	<b>0.00</b>	<b>0.00</b>	<b>851.85</b>	<b>305.64</b>	<b>42.56</b>	<b>0.00</b>	<b>348.20</b>	<b>546.21</b>	<b>503.65</b>

## Fixed assets &amp; provisions for depreciation

Form G 6.1

Name of the Petitioner : Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station : Kota Super Thermal Power Station Unit 7 2018-19

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 & deductions	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	0.00	0.00	0.00	0.00		0.00				
1A	Building & Civil works of Power plant	3.34	120.83	0.00	0.00	120.83		4.04				
2	Hydraulic works	5.28	11.93	0.00	0.00	11.93		0.63				
3	Other Civil works	3.34	3.93	0.00	0.00	3.93		0.13				
4	Plant & machinery	5.28	709.73	0.00	0.00	709.73		37.47				
5	Lines and Cable Networks	5.28	0.00	0.00	0.00	0.00		0.00				
6	Vehicles	9.5	0.00	0.00	0.00	0.00		0.00				
7	Furniture & fixtures	6.33	0.05	0.00	0.00	0.05		0.00				
8	Office Equipments	6.33	0.06	0.00	0.00	0.06		0.00				
9	Capital spares	5.28	5.31	0.00	0.00	5.31		0.28				
	<b>Total (1) to (11)</b>		<b>851.85</b>	<b>0.00</b>	<b>0.00</b>	<b>851.85</b>	<b>348.20</b>	<b>42.56</b>	<b>0.00</b>	<b>390.75</b>	<b>503.65</b>	<b>461.09</b>

Form G 6.2

LOAN REPAYMENT & INTREST LIABILITY

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

UNIT 1-7

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
						6	7								15	16	17	18
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Term Loan	Indian	459.52	0.13	76.13	12.04%		383.51	12.04%	50.74	2.95	53.69	0.00	53.69	Nil	Nil	Nil	Nil
2	Transitional Loan	Indian	8.01	0.00	0.00	9.90%		8.01	9.90%	0.79	0.00	0.79	0.00	0.79				
	<b>Total (for Station)</b>		467.53	0.13	76.13	0.22	0.00	391.52	0.22	51.54	2.95	54.48	0.00	54.48	Nil	Nil	Nil	Nil

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
						6	7								15	16	17	18
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Term Loan	Indian	383.51	0.00	62.70	12.04%		320.81	12.04%	42.39	0.00	42.39	0.00	42.39	Nil	Nil	Nil	Nil
2	Transitional Loan	Indian	8.01	0.00	8.01	9.90%		0.00	9.90%	0.40	0.00	0.40	0.00	0.40	Nil	Nil	Nil	Nil
	<b>Total (for Station)</b>		391.52	0.00	70.71			320.81		42.79	0.00	42.79	0.00	42.79	Nil	Nil	Nil	Nil

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
						6	7								15	16	17	18
1	2	2A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Term Loan	Indian	320.81	0.00	42.56	12.04%		278.25	12.04%	36.06	0.00	36.06	0.00	36.06	Nil	Nil	Nil	Nil
2	Transitional Loan	Indian	0.00	0.00	0.00	9.90%		0.00	9.90%	0.00	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil
	<b>Total (for Station)</b>		320.81	0.00	42.56			278.25		36.06	0.00	36.06	0.00	36.06	Nil	Nil	Nil	Nil

## Consolidated report on additions to Fixed Assets during the year

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

(Rs. in crores)

S.No.	Asset Description	Asset Code	2016-17							2017-18							2018-19							
			(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	
1	Land & land rights	10.1 XX	0.00								0							0						
1A	Building & Civil works of Power plant	10.2 XX	0.00								0							0						
2	Hydraulic works	10.3 XX	0.00								0							0						
3	Other Civil works	10.4 XX	0.00								0							0						
4	Plant & machinery	10.5 XX	0.00								0							0						
5	Lines and Cable Networks	10.6 XX	0.00								0							0						
6	Vehicles	10.7 XX	0.13								0							0						
7	Furniture & fixtures	10.8 XX	0.00								0							0						
8	Office Equipments	10.9 XX	0.02								0							0						
9	Capital spares	10.10 XX	0.00								0							0						
			0.1585																					

Form G 6.3

Details of Project Specific Loans

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station

Kota Super Thermal Power Station

Commercial Operation Date

2012-13

Rs. Crore

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>	PFC, SLR Bond and NCRPB Loan					
Currency <sup>2</sup>	Indian					
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto previous year/during current/ensuing year/ COD <sup>3,4,5,13,15</sup>	849					
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable	Floating					
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No
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>						

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

Name of the Petitioner :	Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.						
Name of the Power Station :	Kota Super Thermal Power Station						
New Projects							
Capital Cost Estimates							
Board of Director/ Agency approving the Capital cost estimates:							
Date of approval of the Capital cost estimates:							
	<b>Present Day Cost</b>			<b>Completed Cost</b>			
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						
<b>Capital Cost excluding IDC &amp; FC</b>							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
<b>Capital cost excluding IDC &amp; FC (Rs. Cr)</b>							
<b>IDC &amp; FC</b>							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
<b>Total IDC &amp; FC (Rs.Cr.)</b>							
Rate of taxes & duties considered							
<b>Capital cost Including IDC &amp; FC</b>							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
<b>Capital cost Including IDC &amp; FC (Rs. Cr)</b>							
<b>Schedule of Commissioning</b>							
COD of Unit-I/ Block-I							
COD of Unit-II/ Block-II							
-----							
-----							
COD of last Unit/ Block							
Note:							
1. Copy of approval letter should be enclosed.							
2. Details of Capital cost are to be furnished in relevant forms							
3. Details of IDC & Financing Charges are to be furnished in relevant form							



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

Form G 6.6

Name of the Petitioner:  
Name of the Power Station :

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

S.No.	Break Down	Cost in Rs. Crores			Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
		As per original Estimates	Actual Expenditure as on COD	Liabilities/Provisions			
1	2	3	4	5	6	7	8
1.0	Land & Site Development						
2.0	Access road						
3.0	Temporary construction and enabling works						
4	Water storage system						
5.0	Water transportation system						
6.0	Railway system						
7.0	Steam generator / Boiler Island						
8.0	Steam Turbine Generator island including taxes, duties etc.						
9.0	<b>Balance of Plant</b>						
9.1	<b>Mechanical BOP</b>						
9.1.1	Coal handling system / fuel handling system and storage						
9.1.2	Ash handling system						
9.1.3	CW System						
9.1.4	DM Plant						
9.1.5	Raw water system						
9.1.6	Effluent treatment Plant						
9.1.7	Station Piping System						
9.1.8	Fire Fighting System						
9.1.9	Compressed Air System						
9.1.10	Air Conditioning and Ventilation System						
9.1.11	Misc. items including EOT cranes, hoist and elevators etc.						
9.1.12	Tax, Duties, F&I						
9.1.13	Spares						
9.2	<b>Electrical BOP</b>						
9.2.1	Power Transformers						
9.2.2	Switchyard						
9.2.3	Bus Duct						
9.2.4	HT Switchgear						
9.2.5	LT Switchgear						
9.2.6	DC Power System						
9.2.7	Power and Control Cables						
9.2.8	Control and Relay Panels						
9.2.9	Station Lighting						
9.2.10	DC Set						
9.2.11	Electrical equipment erection, cabling and grounding						
9.2.12	Other Misc. Items						
9.2.13	Taxes, Duties and F&I						
9.2.14	ETC and spares						
9.3	<b>Total BOP Civil Works</b>						
9.3.1	Main Power house building						
9.3.2	Plant water system						
9.3.3	Chimney						
9.3.4	Permanent Township						
9.3.5	Ash dyke						
9.3.6	Misc. plant buildings						
9.3.7	Temp. sheds						
10.0	Control and Instrumentation						
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	<b>Overheads</b>						
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						
17.0	<b>Capital cost excluding IDC &amp; FC</b>						
18	Interest During Construction (IDC)						
19	Financing Charges (FC)						
20.0	<b>Capital cost including IDC &amp; FC</b>						
21	Cost per MW						

NA

None  
1. Above list is illustrative  
2. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the generating company.

**Form G 6.7**  
**Break-up of Construction / Supply / Service packages**

Name of the Petitioner :  
Name of the Power Station :

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

S.No.	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.)	Reason for change in Price	Variation on account of change in Scope of Work (Rs. Cr.)	Reason for Change in Scope of Work
1	2	3	4	5	6	7	8	9	16	17	18
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											
28											
29											
30											
31											
32											

NA

<sup>1</sup> The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal/ lignite based plants to the extent possible. In case of Gas/ Liquid fuel based projects, break down in the similar manner in the relevent heads.

<sup>2</sup> If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separately alongwith the currency, the exchange rate and the date e.g. Rs.80 Cr+US\$50m=Rs.280Cr at US\$=Rs40 as on say 4.1.1999.

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

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station

Kota Super Thermal Power Station

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	Total Foreign Loans												
	Draw down Amount												
	IDC												
	Financing charges												
1.2	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												

NA

Note: Drawal of debt and equity shall be on paripassu basis to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.

Form G 6.9

RETURN ON EQUITY

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

Rs. Crore

S.No.	Particulars	Reference	FY 2016-17	FY 2017-18			FY 2018-19	Remarks
			(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	3	4	5	6	7 = 5+6	9	
1	Equity at the beginning of the year		504.07	0	504.10	504.10	504.10	
2	Capitalisation		0.16	0		0	0.00	
3	Equity portion of capitalisation		0.03	0		0.00	0.00	
4	Equity at the end of the year		504.10	0	504.10	504.10	504.10	
	<b>Return Computation</b>							
5	Return on Equity at the beginning of the year	ROI For 2016-17 is 15.50%	78.13	0	39.07	39.07	78.14	
6	Return on Equity portion of capitalisation (on pro-rata basis)	ROI For 2016-17 is 15.50%	0.00	0		0.00	0.00	
7	<b>Total Return on Equity</b>	(5)+(6)	78.14	78.13	39.07	39.07	78.14	

Form G 6.10

Statement of Additional Capitalisation after COD and Details for Financing

Name of the Petitioner: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.  
 Name of the Power Station: Kota Super Thermal Power Station  
 COD: \_\_\_\_\_

(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 <sup>1</sup>
					Loan 1	Loan 2 and so on	Total Loan	Equity	Internal Sources or Others (mention details)	
1	Land & land rights	0.00								
2	Building & Civil works of	0.00								
3	Hydraulic works	0.00								
4	Other Civil works	0.00								
5	Plant & machinery	0.00								
6	Lines and Cable	0.00								
	Vehicles	0.13								
	Furniture & fixtures	0.00								
	Office Equipments	0.02								
	Capital spares	0.00								
Total		0.16								

**Form G 6.11  
Interest on Working Capital**

Name of the Petitioner  
Name of the Power Station

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

Rs. Crore

S. No.	Particulars		FY 2016-17	FY 2017-18		FY 2018-19	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	Coal Cost ( Non pit head)	1½ Month	253.00		90.44	133.41	267.56	
2	Coal Cost ( Pit head)	Half month			NA	NA	NA	
3	Cost of Gas	Half month			NA	NA	NA	
4	Sec.Fuel Oil	Two month	2.80		1.25	1.19	2.39	
5	Liquid Fuel Stock	Half month			NA	NA	NA	
6	O & M expenses	One month	18.63		9.86	9.86	20.87	
	Maintenance Spares	20% of O&M	44.71		23.66	23.66	50.09	
	Recievables	1½ Month	322.49		123.57	167.78	331.76	
	<b>Total Working Capital</b>		<b>641.62</b>		<b>248.79</b>	<b>335.91</b>	<b>672.67</b>	
	Rate of Interest (as per norms)		12.26%		11.80%	11.80%	11.80%	
	<b>Interest on Working Capital</b>		<b>78.66</b>	<b>87.36</b>	<b>29.36</b>	<b>39.64</b>	<b>79.37</b>	

**Form G 6.12**  
**Insurance Expenses**

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

							Rs. Crore
S. No.	Particulars	Previous Year	Current Year (n)			FY	Remarks
		2015-16	2016-17			2017-18	
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2	4	5	6	7=6+5	9	10
	<b>Insurance Expenses</b>						
a)	Provision made/ proposed for the year	2.92	3.14	1.53	1.53	3.22	
b)	Actual insurance expenses incurred						
c)	Average Net Fixed Assets	1196.38		1153.82	1153.82	1111.26	

## Tax on R.O.E.

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station :

Kota Super Thermal Power Station

Rs.

S. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	Remarks
		(Actuals/audited)	Actual/ Estimated	Proposed to be recovered	
1	2	3	4	5	7
A)	Advance Tax assessed & deposited on-----				
a)	for Quarter I & deposited on 15 th June.				
b)	for Quarter II & deposited on 15 th Sept.				
c)	for Quarter III & deposited on 15 th Dec.				
d)	for Quarter IV & deposited on 15 th March.				
	Total---(A)				
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 7.1

Proposed improvement in performance

Name of the Petitioner  
Name of the Power Station :

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

Rs. Crore

S.No.	Particulars	Previous year	Current year			MYT Control Period					Remarks
		FY 2016-17 (Actuals / audited)	FY 2017-18			FY 2018-19	n+2	n+3	n+4	n+5	
			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	67.26%	50.77%	82.00%		82.00%					
2	Auxiliary consumption	11.46%	11.56%	9.27%		9.27%					
3	Specific fuel consumption										
(I)	coal, kg / kWh	0.66	0.70	0.67		0.67					
ii)	gas, SCM / kWh										
(iii)	oil, ml / kwh	0.81	0.82	0.50		0.50					
(iv)	Limestone kg / kWh										
(v)	any other fuel										
4	Station heat rate, kcal / kwh	2551.16	2670.95	2570.98		2570.98					
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, %	100%	100%	100%		100%					
8	Other bye product utilisation(give list)										
9	Outstanding dues, days of receivables										
10	Availability	88.74%	83.24%	83.00%		82.00%					

Note:-1. Remarks to indicate manner in which performance parameters reflected in the tariff proposal

2.list is illustrative