

Petition For
Aggregate Revenue Requirement (ARR) and Tariff
For FY 2017-18
For
Mahi Hydel Power Station

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

January-2017

CONTENTS

A1: BACKGROUND.....	7
A2: GENERATION FORECAST	7
A3: MAHI ANNUAL CAPACITY (FIXED) CHARGES FOR 2017-18	8
DEPRECIATION:-	9
ADDITIONAL CAPITALIZATION FOR FY 2015-16	9
INTEREST ON WORKING CAPITAL	10
OPERATION & MAINTENANCE EXPENSES	10
RECOVERY OF ARR & TARIFF PETITION FEES	10
INSURANCE CHARGES.....	11
RETURN ON EQUITY (ROE)	11
NON-TARIFF INCOME.....	11
A4: MAHI ESTIMATED CAPACITY CHARGES (FIXED)	12
A5: ESTIMATED ARR FOR MAHI	12
A6: MAHI ESTIMATED TARIFF	12
A7: RESPONDENTS:-	13
A8: PRAYER.....	13

LIST OF TABLES

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

FORMATS

Form No.	Particulars	Page No.
Form G 1.1	Summary of Tariff proposal	14
Form G 1.2	Aggregate Revenue Requirement	15
Form G 2.1	Plant characteristics	16
Form G 2.2	Operational Parameters - Generation	17
Form G 3.1	Revenue from sale of power	18
Form G 3.2	Non-tariff income	19
Form G 3.3	Revenue Subsidies & Grants	20
Form G 3.4	Capital Subsidies and Grants	21
Form G 4.1	O&M Expenses	22
Form G 5.1	Details/Information in respect of Fuel for Computation of Energy Charges	23
Form G 5.2	Limestone for computation of Energy Rate	24
Form G 5.3	Energy Charges for Thermal Generation	25
Form G 6.1	Fixed assets & provisions for depreciation	26
Form G 6.2	Loan Repayment & Interest liability	27
Form G 6.3	Details of Project Specific Loans	28
Form G 6.4	Consolidated report on additions to Fixed Assets during the year	29
Form G 6.5	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	30
Form G 6.6	Break-up of Capital Cost for Coal / Lignite / gas / liquid fuel based projects	31
Form G 6.7	Break-up of Construction / Supply / Service packages	32
Form G 6.8	Draw Down Schedule for Calculation of IDC & Financing Charges	33
Form G 6.9	Return on Equity	34
Form G 6.10	Statement of Additional Capitalisation after COD and Details for Financing	35
Form G 6.11	Interest on Working capital	36
Form G 6.12	Insurance Expenses	37
Form G 6.13	Tax on R.O.E.	38
Form G 7.1	Proposed improvement in performance	39

DEFINITIONS

Act	The Electricity Act, 2003
Application	This ARR and Tariff Petition for FY 2017-18 for Mahi Hydel 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 Vidyt Vitran Nigam Ltd. (JVVN), Ajmer Vidyt Vitran Nigam Ltd. (AVVN) and Jodhpur Vidyt 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 (The Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 notified by RERC on March-27, 2014
State	The State of Rajasthan.
Gross Station Heat Rate	Heat energy input in kCal required to generate one unit (kWh) of electrical energy at generator terminals.
Unit	Unit in relation to a generating station means electric generator, its prime mover and auxiliaries and in relation to a combined cycle thermal power generating station includes combustion turbine – generators, associated waste heat recovery boilers, connected steam turbine-generator and auxiliaries

ABBREVIATIONS

ARR	Aggregate Revenue Requirement
Ajmer Discom	Ajmer Vidyut Vitran Nigam Limited
CSR	Corporate Social Responsibility
FY	Financial Year
FY – 16	Financial Year 2015-2016
FY – 17	Financial Year 2016-2017
FY – 18	Financial Year 2017-2018
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoR	Government of Rajasthan
Jaipur Discom	Jaipur Vidyut Vitran Nigam Limited
Jodhpur Discom	Jodhpur Vidyut Vitran Nigam Limited
KWh	Kilo Watt Hour or Unit
MU	Million Units
MW	Megawatts
NRLDC	Northern Regional Load Despatch Centre
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 1st April 2004 onwards, RVPN is no longer responsible for the bulk purchase of power in Rajasthan. The capacity allocated to RVPN from RVUN generating stations has been reallocated to the three Discoms (Jaipur, Ajmer and Jodhpur) in the ratio of 39:29:32 from October 2011, 40:28:32 from June 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 MAHI (140 MW).
- 1.3 RVUN have to file its petition for determination of ARR and Tariff Petition for 2017-18 in accordance with provision of RERC tariff regulation 2014. Accordingly this petition is being submitted for MAHI HYDEL POWER STATION (140 MW) for FY 2017-18 before RERC for ARR and tariff determination. The figures for FY 2015-2016, FY 2016-2017 and FY 2017-2018 are un-audited and estimated.

A2: GENERATION FORECAST

- 2.1 The installed capacity of MAHI is 140 MW. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from MAHI station of RVUN for the period FY 2015-16, FY 2016-17 and FY 2017-18 are as shown in table below:

Table 1 : Gross generation, PLF and Ex-BUS energy sale

Particular	FY 2015-16	FY 2016-17	FY2017-18
Capacity (MW)	140	140	140.00
PLF (%)	13.69%	12.23%	12.23%
Gross generation (MU)	168.39	150.00	150.00
Aux Cons. (%)	0.63%	1.00%	1.00%
Net Generation (MU)	167.33	148.50	148.50

- 2.2 The fixed cost elements as detailed hereunder for MAHI for the FY 2015-16, FY 2016-17 and FY 2017-18 are as below.

FIXED CHARGES

A3: MAHI ANNUAL CAPACITY (FIXED) CHARGES FOR 2017-18

- 3.1 Mahi Power House -I is located on a saddle dam of Mahi Dam periphery. The Mahi Dam is the property of Water Resources Deppt. and the use/distribution of the water stored in the dam is completely in the control of water irrigation Committee headed by the District collector Banswara. Whenever there is the need of irrigation in the area and water is to be released in the LMC (left Main Canal) & RMC (right Main Canal) then only the operation of machines at Mahi Power House-I is possible. For this purpose, the water Irrigation Committee intimates the plants in charge regarding the schedule of canals and quantity of water to be released in the LMC & RMC, so that as per designed discharge capacity of machines, the running Hours of machines or the operation of machines may be decided. So it is requested that at Mahi PH-I the operation of machines totally depended on the irrigation requirement, besides that the machines can remain in "ready to start mode"/available for operation. So the Mahi PH-I is not purely run of river power station with pondage and storage type because the storage of water (Mahi Dam) is not the part of RVUN.
- 3.2 Here it is to submit the irrigation schedule is intimated to the plant very shortly and as the machines remains in ready to start mode, they are in operation. So it is not possible to provide a pre-decided schedule of declared capacity of the machines.
- 3.3 Mahi power house-II is canal based power plant and its balancing reservoir is located at the end of LMC, means whenever water is released in LMC and after furnishing the irrigation demand, the balance water stores in the balancing reservoir. For the operation of machine, a certain level of water is to be maintained of reservoir means whenever water stores in the balancing reservoir. If the available water in the reservoir is optimum for generation then only the machines can run at Mahi PH-II. So at Mahi PH-II Machines remain in "ready to start mode"/available for operation but operation of machines totally depended on the availability of water.
- 3.4 The regulation 46(1)(c) of RERC tariff Regulations 2014 states that:
- The Commission may relax the normative capacity index in case of non availability of adequate quantity of water on case to case basis.*
- 3.5 Considering the above uncontrollable factor, the RVUN request the Hon'ble Commission to not to reduced the fixed charges on pro-rata basis

Depreciation:-

- 3.6 For the purpose of Computation of depreciation, RVUN has considered approved capital cost as per RERC order dated 17.10.2016. Accordingly, the capital cost of Mahi Hydel has been considered as Rs.259.02 Crore. Therefore in the instant petition the opening balance of capital cost considered is Rs. 259.02 Crore as on 1.04.2014.

Additional Capitalization

- 3.7 Regulation 19 of RERC Tariff Regulations 2009 is reproduce below:

19 Additional capitalization

(1) The following capital expenditure, actually incurred after the date of commercial operation and duly audited, may be considered by the Commission, subject to prudent check

(a) Due to deferred liabilities within the original scope of work,

(b) On works within the original scope of work, deferred for execution

(c) To meet award of arbitration or satisfaction of order or decree of a court arising out of original scope of works,

(d) On account of change in law,

(e) On procurement of initial spares included in the original project costs subject to the ceiling norm laid down in Regulation 18,

(f) Any additional works/ services, which have become necessary for efficient and successful operation of a generating station or a transmission or a distribution system but not included in the original capital cost:

- 3.8 During FY 2015-16, RVUN has incurred additional capitalization of Rs. 0.05 Crore, towards furniture & fixtures and office equipment, which have become necessary for efficient and successful operation of a generating station. Hon'ble Commission is requested to consider the same as additional capitalization under above regulation 19 (1) (f) of RERC Tariff Regulation 2009.

Additional capitalization for FY 2015-16

S.No	Particulars	Amount	Justification/Remark
1.	Office Equipment	265049	Computer system PO No. 670 Dt. 10/08/2015 Rs. 197445/- Digital copier & multifunctional system PO No. 1002 Dt. 28/10/2015 Rs. 55364/- UPS 600 VA , computer system PO No. 1094 Dt. 10/11/2015 Rs. 12240/-
2	Furniture & Fixtures	207488	Electric ceiling fan PO No. 1279 Dt. 22/12/2015 Rs. 200788/- fixed cellular terminal instrument PO No. 615 Dt. 30/07/2015 Rs 6700/-
	Total	472537	

- 3.9 Considering the above approved capital cost and additional capitalization, the RVUN has computed the below mentioned depreciation:

Table 2: Depreciation (Rs. in Crore)

Particular	FY 15-16	FY 16-17	FY 17-18
Mahi			
Depreciation	4.19	4.19	4.19

Interest on working Capital

- 3.10 The interest on working capital loan for FY 2015-16, FY 2016-17 and FY 2017-18 has been computed as per the norms defined under clause No. 27 of RERC tariff regulation 2014. For FY 2015-16, FY 2016-17 and FY 2017-18 the rate of interest on WLC has taken equal to 250 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the previous year.

- 3.11 Estimated figures of Interest on Working Capital Loan as computed under format 6.11 is summarised as below:

Table 3 Interest on working Capital (Rs. in Crore)

Particular	FY 15-16	FY 16-17	FY 17-18
Mahi			
Interest on Working Capital	1.68	1.47	1.16

Operation & Maintenance Expenses

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

- 3.13 Estimated Figures for the period FY 2015-16, FY 2016-17 and FY 2017-18 as computed under format 4.1 are summarised in table below:

Table 4 : O & M Expenses (Rs. in Crore)

Particular	FY 15-16	FY 16-17	FY 17-18
Mahi			
Operation and Maintenance	21.34	22.53	16.47

Recovery of ARR & Tariff Petition Fees

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

3.15 The ARR & Tariff Petition Fees for FY 2015-16, FY 2016-17 and FY 2017-18 are summarised in table below:

Table 5 : Recovery of ARR & Tariff Petition Fees (Rs. in Crore)

Station	FY 15-16	FY 16-17	FY 17-18
Mahi			
Petition Fee	0.07	0.07	0.07

Insurance Charges

3.16 RVUN is claiming the insurance charges for Mahi for the year 2017-18 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 6: Insurance Charges (Rs. in Crore)

Particular	FY 15-16	FY 16-17	FY 17-18
Mahi			
Insurance Charges	0.00	0.00	0.00

Return on Equity (ROE)

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

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

Table 7: Return on Equity (Rs. in Crore)

Station	FY 15-16	FY 16-17	FY 17-18
Mahi			
ROE	8.52	26.42	26.42
Tax on ROE	0.00	0.00	0.00

Non-Tariff Income

3.19 The following are the main head of accounts of Non tariff income:

- a) Sale of Scrap
- b) Interest on FD/ Staff Loans
- c) Miscellaneous receipts (rebates etc)

3.20 Estimated figures of Non Tariff Income for FY 2015-16, FY 2016-17 and FY 2017-18 are summarised in table below:

Table 8: Non-Tariff Income (Rs. in Crore)

Particular	FY 15-16	FY 16-17	FY 17-18
Mahi			
Non Tariff Income	0.57	0.60	0.63

A4: MAHI ESTIMATED CAPACITY CHARGES (FIXED)

4.1 The net fixed charges is computed for FY 2015-16, FY 2016-17 and FY 2017-18 in the table below:

Table 9 Net Capacity Charges for MAHI (Rs. in Crore)

Station	FY 15-16	FY 16-17	FY 17-18
Fixed Charge			
Prior Period Expenses	0.91	0.00	0.00
O & M Expenses	21.34	22.53	16.47
Depreciation	4.19	4.19	4.19
Return on Equity	8.52	26.42	26.42
Tax on RoE	0.00	0.00	0.00
Interest on Working Capital Loans	1.68	1.47	1.16
Recovery of ARR & Tariff Petition Fees	0.07	0.07	0.07
Insurance Charges	0.00	0.00	0.00
Total Fixed Charge	36.70	54.68	48.31
Less: Non-Tariff Income	0.57	0.60	0.63
Net Fixed Charge	36.13	54.08	47.68

A5: ESTIMATED ARR FOR MAHI

5.1 The recovery of ARR proposed for MAHI is summarised in table below:

Table 10: ARR for MAHI (Rs. in Crores)

Station	FY 15-16	FY 16-17	FY 17-18
Mahi			
Capacity (Fixed Charges)	36.13	54.08	47.68
Variable Cost	0.00	0.00	0.00
Aggregate Revenue Requirement	36.13	54.08	47.68

A6: MAHI ESTIMATED TARIFF

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

Table 11: MAHI ESTIMATED TARIFF

Station	FY 15-16	FY 16-17	FY 17-18
Mahi			
Ex-Bus Generation (MU)	167.33	148.50	148.50
Capacity(fixed) Charges	36.13	54.08	47.68
Variable Cost	0.00	0.00	0.00
Rate of Fixed Charge(Rs/kWh)	2.159	3.642	3.211
Rate of Variable Charge(Rs/kWh)	0.000	0.000	0.000
Rate of Sale of Energy (Rs/kWh)	2.159	3.642	3.211

A7: RESPONDENTS:-

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

A8: PRAYER

RVUN humbly requests the Hon'ble Commission to:

- ◆ Approval of ARR & tariff for FY-2017-18.
- ◆ To allow adhoc tariff w.e.f. 1.4.17 for FY 2017-18 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 (Comml.)

(Ajay Kumar Saxena)
Addl. Chief Engineer (PPMC&IT)

Summary of Tariff Proposal

Form G 1.1

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

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydel Power Station

(Rs. Crore)

S.No.	Particulars	Ref.of Form No	FY 2015-16	FY 2016-17			FY 2017-18	Remark
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
1	Capacity (Fixed) Charge							
1.1	Depreciation	6.1	4.19	4.20	2.10	2.10	4.19	
1.2	Interest on term Loan & Transitional Loan	6.2	0.00	0.00	0.00	0.00	0.00	
1.3	Return on Equity	6.9	8.52	26.41	13.21	13.21	26.42	
1.4	Interest on Working Capital	6.11	1.68	1.17	0.74	0.74	1.16	
1.5	O & M Expenses	4.1	21.34	15.56	11.26	11.26	16.47	
1.6	Insurance Charges	6.12	0.00	0.02	0.00	0.00	0.00	
1.7	Tax on ROE	6.13	0.00	0.00	0.00	0.00	0.00	
1.9	Recovery of ARR and Tariff Petition Fee		0.07	0.07	0.04	0.04	0.07	
1.9	Prior Period Expenses		0.91	0.00	0.00	0.00	0.00	
2.1	Less: Non-Tariff income	3.2	0.57	0.04	0.30	0.30	0.63	
	Total (1)- Capacity (Fixed Charges)		36.13	47.39	27.04	27.04	47.68	
2	Total- Energy (variable) charges		0.00	0.00	0.00	0.00	0.00	
3	Units sold to Discoms (MU)		167.33	138.60	40.49	108.01	148.50	
4	Rate of Fixed Charges. (1/3)		2.159	3.419	6.679	2.503	3.211	
5	Rate of Variable Charges.							
5.1	Rate of Energy Charge from Primary Fuel (REC) _p	5.1						
	(i) Coal/ Lignite		0.000	0.000	0.000	0.000	0.000	
	(ii) Imported Coal		0.000	0.000	0.000	0.000	0.000	
	(iii) Any Other fuel							
	Total 2.1							
5.2	Rate of Energy Charge from Secondary Fuel (REC) _s	5.1	0.000	0.000	0.000	0.000	0.000	
5.3	Total-(2) Rate of Energy Charge ex-bus(REC) ^{3A,3B,3C}	5.1	2.159	3.419	6.679	2.503	3.211	

Form G 1.2

Aggregate Revenue Requirement

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit:

Mahi Hydel Power Station

(Rs. Crore)

S.No.	Particulars	Reference Form	FY 2015-16	FY 2016-17			FY 2017-18	Remarks
			Actual/Audited	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
A	Receipts							
1	Revenue from Sale of Power (Tariff income)	3.1	29.77	47.39	27.04	27.04	47.68	
2	Non Tariff income		0.57	0.04	0.30	0.30	0.63	
3	Revenue Subsidies, Grants & Subvention from State Govt.							
	Total- (A)		36.70	47.43	27.34	27.34	48.31	
B	Expenditure							
1	Variable Costs, including Fuel Cost	5.1	0.00	0.00	0.00	0.00	0.00	
2	Depreciation	6.1	4.19	4.20	2.10	2.10	4.19	
3	Interest on term Loan & Finance charges	6.2	0.00	0.00	0.00	0.00	0.00	
4	Return on Equity	6.9	8.52	26.41	13.21	13.21	26.42	
5	Tax on ROE	6.15	0.00	0.00	0.00	0.00	0.00	
6	Interest on Working Capital	6.11	1.68	1.17	0.74	0.74	1.16	
7	O & M Expenses	4.1	21.34	15.56	11.26	11.26	16.47	
8	Insurance Charges	6.14	0.00	0.02	0.00	0.00	0.00	
9	Recovery of ARR and Tariff Petition Fee		0.07	0.07	0.04	0.04	0.07	
10	Prior Period Expenses		0.91	0.00	0.00	0.00	0.00	
C	Total- (B) Expenditure		36.70	47.43	27.34	27.34	48.31	
D	A.R.R. (C-A.2)		36.13	47.39	27.04	27.04	47.68	

Plant Characteristics

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

Rajasthan Rajya Vidut Utpadan Nigam Limited,Jaipur (Raj.)
Mahi Hydel

Basic characteristics of the plant¹	Hydel Power Station						
Special Features of the Plant							
Site Specific Features²	Canal Based Power Station						
Special Technological Features³	Semi Kaplan (Horizontal)						
Environmental Regulation related features⁴							
Any other special features							
Fuel Details⁵	Primary Fuel			Secondary Fuel		Alternate Fuels	
Details	Unit number						
	1	2	3	4			
	Unit 1	Unit 2	Unit 3	Unit 4			
Installed Capacity (IC)	25 MW	25 MW	45 MW	*			
Date of Commercial Operation (COD)	22.1.1986	6.2.1986	15.2.1989	17.9.1989			
Type of cooling system ⁶							
Type of Boiler Feed Pump ⁷							
Pressure (kg/cm2)							
Temperature 0C							
-At Superheater Outlet							
-At Reheater Outlet							
Turbine Cycle heat Rate(Kcal/ Kwh)							
Boiler Efficiency (%)							
Guaranteed Design Heat rate (kCal/kWh)s							
Conditions on which guaranteed							
% MCR							
% Makeup							
Design Fuel							
Design cooling water Temperature							
Back Pressure							

Operational Parameters - Generation

Name of Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Station/Unit:

Mahi Hydel Power Station

S. No.	Particulars	Units	FY 2015-16	FY 2016-17			FY 2017-18	Remarks
			Audited/Actual	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
1	Operational Parameters - Hydel							
1.1	Total Capacity	MW	140	0	140	140	140	
1.2	Capacity Index	%	81.68%	0.00%	83.64%	96.00%	89.00%	
1.3	Design Energy	MU	288.66	0.00	125.55	163.11	288.66	
1.4	Gross Generation	MU	168.39	0.00	40.74	109.26	150.00	
1.5	Auxiliary Energy Consumption	%	0.63%	0.00%	0.62%	1.14%	1.00%	
1.6	Auxiliary Energy Consumption	MU	1.055	0.000	0.252	1.247	1.500	
1.7	Net Generation	MU	167.33	0.00	40.49	108.01	148.50	
2	Operational Parameters - Thermal							

Form G 3.1

Revenue from Sale of Power

Name of the Company
Name of the Power Station :
Year 2015-16

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydel Power Station

Rs. Crore

S.No.	Particulars	Allocation (in %)	Unit Sold	% of total	Demand/fixed	Energy	Others, if any	Total (6+7+8)	Average'	Existing Tariff
1	2	3	4	5	6	7	8	9	10	11
A)	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		66.93	40.0%	14.07	0.0		14.07	210.24	
(b)	AVVNL		46.85	28.0%	9.85	0.0		9.85	210.24	
(c)	JDVVNL		53.55	32.0%	11.26	0.0		11.26	210.24	
2	Other recoveries									
3	Gross Revenue From Sale of Power				35.18	0.00				
6	Net revenue		167.33		35.18	0.00		35.18		0.00

Year 2016-17

Rs. Crore

S.No.	Particulars	Allocation (in %)/contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fixed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	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		59.40	40.0%	21.63142555	0.0		21.63	364.17	
(b)	AVVNL		41.58	28.0%	15.14199788	0.0		15.14	364.17	
(c)	JDVVNL		47.52	32.0%	17.30514044	0.0		17.31	364.17	
2	Other recoveries									
3	Gross Revenue From Sale of Power				54.07856387	0.00				
6	Net revenue		148.50		54.08	0.00		54.08		

Year 2017-18

Rs. Crore

S.No.	Particulars	Allocation (in %)/contract demand	Unit Sold (M.U.)	% of total Unit Sold	Demand/fixed Charges @	Energy Charges @	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
A)	Revenue from sale of Electricity(as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)	JVVNL		59.40	40.0%	19.07059088	0.0		19.07	321.05	
(b)	AVVNL		41.58	28.0%	13.34941362	0.0		13.35	321.05	
(c)	JDVVNL		47.52	32.0%	15.2564727	0.0		15.26	321.05	
2	Other recoveries									
3	Gross Revenue From Sale of Power				47.68	0.00				
6	Net revenue		148.50		47.68	0.00		47.68	321.05	

NON-TARIFF INCOME

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/ Unit:

Mahi Hydel Power Station

Rs. Crore

S.No	Particulars	FY 2015-16	FY 2016-17		FY 2017-18	Remarks	
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)		(Anticipated)
1	2	3	4	5	6	7	8
	Non-tariff income						
x.	Income from advertisement	0.00	0.00	0.00	0.00	0.00	
xi.	Other miscellaneous receipts	0.57	0.04	0.30	0.30	0.63	
	Total non-tariff income	0.57	0.04	0.30	0.30	0.63	

REVENUE SUBSIDIES & GRANTS

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit :

Mahi Hydel 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)	Revenue Subsidies & Grants	N.A.					
1	Subvention from State Government towards sale of electricity						
2	State Govt. Grant against addl. Intt. Liability on Company						
3	Any Other item						
	Total						

Capital Subsidies and Grants

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit :

Mahi Hydel Power Station

Rs. Crore

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

Form G 4.1

O&M Expenses

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Station/Unit:

Mahi Hydel Power Station

(Rs. Crore)

S.No.	Particulars	FY 2015-16	FY 2016-17			FY 2017-18
		(Actuals/audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)
1	2	3	4	5	6	7
1	O&M Expense norms (Rs. per MW)	0.15	0.11	0.08	0.08	0.12
2	Total Capacity in MW	140	140	140	140	140
3	O&M expense	21.34	15.56	11.26	11.26	16.47
4	Special O&M expense for Water pipe lines > 50 km					
a	Details of Water pumping Stations beyond 50 K.M. from Water intake point					
b	Pumping Station No.1 :-					
b.1	Power consumption Cost					
b.2	Repair / Maintenance / Employee / other Cost					
b.3	Sub total (b)					
c	Pumping Station No.2 :-					
	and so on					
d	Total (4) Special O&M Expenses					
5	Totsl O&M expenses	21.34	15.56	11.26	11.26	16.47

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

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/unit:

Mahi Hydel Power Station

S.No	Particulars	Unit	For preceeding 3rd Month		For preceeding 2nd Month		For preceeding 1st month		Average for # Months	
			Domestic coal	Imported coal	Domestic coal	Imported coal	Domestic coal	Imported coal	Domestic coal	Imported coal
1	2	3	4	5	6	7			8	9
1	Quantity of coal/lignite in stock at the beginning of the month	(MMT)								
2	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MMT)								
3	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company for diversion of wagons etc.	(MMT)								
4	Coal supplied by Coal/Lignite Company (2+3)	(MMT)								
5	Normative Transit & Handling Losses (For coal/Lignite based Projects)	(MMT)								
6	Net coal / Lignite Supplied (4-5)	(MMT)								
7	Total coal (Receipts & Opening Stock) (1)+(6)	(MMT)								
8	Coal/lignite burnt/consumed	(MMT)								
9	Coal/lignite in stock at the end of the month (7)-(8)	(MMT)								
10	Value of coal/lignite in stock	(Rs.)								
11	Amount charged by the Coal /Lignite Company	(Rs.)								
12	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)								
13	Total amount Charged (11+12)	(Rs.)								
14	Transportation charges by rail/ship/road transport	(Rs.)								
15	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)								
16	Demurrage Charges, if any	(Rs.)								
17	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)								
18	Total Transportation Charges (14+15+16+17)	(Rs.)								
19	Total amount Charged for coal/lignite supplied including Transportation (13+18)	(Rs.)								
20	Average cost of coal/lignite (Opening stock + receipts) (19/7)	(Rs/MMT)								
21	Cost of coal in stock at the end of the month (20)x(9)	(Rs.)								
22	Weighted average GCV of coal/ Lignite as Received	(kCal/Kg)								
22	Weighted average GCV of coal/ Lignite as fired	(kCal/Kg)								
23	Weighted average Sulphur content	(%)								

NA

Limestone for computation of Energy Rate

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/ Unit:

Mahi Hydel Power Station

S. No.	Month	Unit	For preceeding 3rd Month	For preceeding 2nd Month	For preceeding 1st Month	Remarks
1	2	3	4	5	6	7
1	Quantity of Limestone supplied by limestone Supply Company	(MMT)				NA
2	Adjustment (+/-) in quantity supplied made by Limestone supply Company	(MMT)				
3	Limestone supplied by Limestone supply Company (1+2)	(MMT)				
4	Amount charged by limestone Supply Company	(Rs.)				
5	Adjustment (+/-) in amount charged made by limestone Supply Company	(Rs.)				
6	Total amount Charged (4+5)	(Rs.)				
7	Transportation charges by rail/ship/road transport	(Rs.)				
8	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)				
9	Demurrage Charges, if any	(Rs.)				
10	Total Transportation Charges (7+8+9)	(Rs.)				
11	Total amount Charged for Limestone supplied including Transportation (6+10)	(Rs.)				

Energy Charges for Thermal Generation

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station/Unit:

Mahi Hydel Power Station

S.No.	Particulars	Units	FY 2015-16	FY 2016-17			FY 2017-18	Remarks
			April-March (Audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	Anticipated	
1	2	3	4	5	6	7	8	9
1	Operational Parameters							
1.1	Total Capacity	MW	140		140	140	140	
1.2	Capacity Index	%	81.68%	0%	83.64%	96.00%	89.00%	
1.3	Design Energy	MU	288.66	0	125.55	163.109	288.66	
1.4	Availability	%	81.68%	0.00%	83.64%	96.00%	89.00%	
1.5	PLF	%	13.69%	0.00%	7.92%	15.34%	12.23%	
1.6	Gross Generation	MU	168.39	0.00	40.74	109.26	150.00	
1.7	Auxiliary Energy Consumption	%	0.63%	0.00%	0.62%	1.14%	1.00%	
1.8	Auxiliary Energy Consumption	MU	1.06	0.00	0.25	1.25	1.50	
1.9	Net Generation	MU	167.33	0.00	40.49	108.01	148.50	

Fixed assets & provisions for depreciation

Name of the Petitioner Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Name of the Power Station : Mahi Hydel Power Station

Year (n+1) (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	0.87	0.00	0.00	0.871	0.638	0.00	0.00	0.639	0.23	0.23
1A	Building & Civil works of Power plant	3.34	38.17	0.00	0.00	38.166	27.929	0.57	0.00	28.500	10.24	9.67
2	Hydraulic works	5.28	121.29	0.00	0.00	121.294	88.761	2.54	0.00	91.303	32.53	29.99
3	Other Civil works	3.34	1.13	0.00	0.00	1.132	0.828	0.00	0.00	0.828	0.30	0.30
4	Plant & machinery	5.28	70.46	0.00	0.00	70.460	51.561	1.07	0.00	52.632	18.90	17.83
5	Lines and Cable Networks	5.28	26.38	0.00	0.00	26.384	19.307	0.00	0.00	19.307	7.08	7.08
6	Vehicles	9.5	0.48	0.00	0.00	0.485	0.355	0.00	0.00	0.355	0.13	0.13
7	Furniture & fixtures	6.33	0.15	0.02	0.00	0.171	0.125	0.00	0.00	0.129	0.03	0.04
8	Office Equipments	6.33	0.08	0.03	0.00	0.105	0.077	0.00	0.00	0.081	0.00	0.02
9	Capital spares	5.28	0.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.00	0.00
	Total (1) to (11)		259.02	0.05	0.00	259.07	189.58	4.19	0.00	193.77	69.44	65.29

Year (n+1) (2016-17) (Figures in Rs Crore)												
S. No.	Particular	Rate of depreciation %	Gross fixed assets				Provisions for depreciation				Net fixed assets at the beginning of the year	Net Fixed Asset at the end of the year
			At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the 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	0.87	0.00	0.00	0.871	0.639	0.00	0.00	0.639	0.23	0.23
1A	Building & Civil works of Power plant	3.34	38.17	0.00	0.00	38.166	28.500	0.57	0.00	29.070	9.67	9.10
2	Hydraulic works	5.28	121.29	0.00	0.00	121.294	91.303	2.54	0.00	93.846	29.99	27.45
3	Other Civil works	3.34	1.13	0.00	0.00	1.132	0.828	0.00	0.00	0.828	0.30	0.30
4	Plant & machinery	5.28	70.46	0.00	0.00	70.460	52.632	1.07	0.00	53.703	17.83	16.76
5	Lines and Cable Networks	5.28	26.38	0.00	0.00	26.384	19.307	0.00	0.00	19.307	7.08	7.08
6	Vehicles	9.5	0.48	0.00	0.00	0.485	0.355	0.00	0.00	0.355	0.13	0.13
7	Furniture & fixtures	6.33	0.17	0.00	0.00	0.171	0.129	0.00	0.00	0.133	0.04	0.04
8	Office Equipments	6.33	0.10	0.00	0.00	0.105	0.081	0.00	0.00	0.085	0.02	0.02
9	Capital spares	5.28	0.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.00	0.00
	Total (1) to (11)	0	259.07	0.00	0.00	259.07	193.77	4.19	0.00	197.97	65.29	61.10

Year (n+1) (2017-18) (Figures in Rs Crore)												
S. No.	Particular	Rate of depreciation %	Gross fixed assets				Provisions for depreciation				Net fixed assets at the beginning of the year	Net Fixed Asset at the end of the year
			At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the 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	0.87	0.00	0.00	0.871	0.639	0.00	0.00	0.639	0.23	0.23
1A	Building & Civil works of Power plant	3.34	38.17	0.00	0.00	38.166	29.070	0.57	0.00	29.641	9.10	8.52
2	Hydraulic works	5.28	121.29	0.00	0.00	121.294	93.846	2.54	0.00	96.388	27.45	24.91
3	Other Civil works	3.34	1.13	0.00	0.00	1.132	0.828	0.00	0.00	0.828	0.30	0.30
4	Plant & machinery	5.28	70.46	0.00	0.00	70.460	53.703	1.07	0.00	54.774	16.76	15.69
5	Lines and Cable Networks	5.28	26.38	0.00	0.00	26.384	19.307	0.00	0.00	19.307	7.08	7.08
6	Vehicles	9.5	0.48	0.00	0.00	0.485	0.355	0.00	0.00	0.355	0.13	0.13
7	Furniture & fixtures	6.33	0.17	0.00	0.00	0.171	0.133	0.00	0.00	0.136	0.04	0.03
8	Office Equipments	6.33	0.10	0.00	0.00	0.105	0.085	0.00	0.00	0.089	0.02	0.02
9	Capital spares	5.28	0.00	0.00	0.00	0.000	0.000	0.00	0.00	0.000	0.00	0.00
	Total (1) to (11)	0	259.07	0.00	0.00	259.07	197.97	4.19	0.00	202.16	61.10	56.91

LOAN REPAYMENT & INTREST LIABILITY

Name of the Petitioner
Name of the Power Station :

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydrel Power Station

Name of the Petitioner
Name of the Power Station :

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 + Transitional Loan	Indian	0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil
2	Finance changes																	
	Total (for Station)		0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	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 + Transitional Loan	Indian	0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil
	Total (for Station)		0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	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 + Transitional Loan	Indian	0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil
	Total (for Station)		0.00	0.00	0.00			0.00		0.00	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil

Form G 6.3

Details of Project Specific Loans

Name of the Petitioner
Name of the Power Station
Commercial Operation Date

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydel Power Station

Particulars	Year (n-1)*						Rs. Crore
	Package1	Package2	Package3	Package4	Package5	Package6	
1	2	3	4	5	6	7	
Source of Loan ¹	NA						
Currency ²	NA						
Amount of Loan sanctioned	NA						
Amount of Gross Loan drawn upto previos year/during current/ensuing year/COD ^{3,4,5,13,15}	NA						
Interest Type ⁶	NA						
Fixed Interest Rate, if applicable	NA						
Base Rate, if Floating Interest ⁷	NA						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹	NA						
If above is yes,specify caps/floor	NA						
Moratorium Period ¹⁰	NA						
Moratorium effective from	NA						
Repayment Period ¹¹	NA						
Repayment effective from	NA						
Repayment Frequency ¹²	NA						
Repayment Instalment ^{13,14}	NA						
Base Exchange Rate ¹⁶	NA						

Consolidated report on additions to Fixed Assets during the year

Name of the Petitioner

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station :

Mahi Hydel Power Station

(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	
1	Land & land rights	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Building & Civil works of Power	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Hydraulic works	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Other Civil works	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Plant & machinery	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Lines and Cable Networks	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Vehicles	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Furniture & fixtures	NIL	0.02	NIL	NIL	NIL	NIL	0.02	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Office Equipments	NIL	0.03	NIL	NIL	NIL	NIL	0.03	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Capital spares	NIL	0.00	NIL	NIL	NIL	NIL	0.00	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Total (1) to (11)	NIL	0.05	NIL	NIL	NIL	NIL	0.05	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

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 :	Mahi Hydel Power Station						
New Projects							
Capital Cost Estimates							
Board of Director/ Agency approving the Capital cost estimates:							
Date of approval of the Capital cost estimates:							
	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 the Capital cost estimates	NA	NA	NA	NA	NA	NA	NA
Capital Cost excluding IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant Currency)	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Capital cost excluding IDC & FC (Rs. Cr)	NA	NA	NA	NA	NA	NA	NA
IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant Currency)	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Total IDC & FC (Rs.Cr.)	NA	NA	NA	NA	NA	NA	NA
Rate of taxes & duties considered	NA	NA	NA	NA	NA	NA	NA
Capital cost Including IDC & FC	NA	NA	NA	NA	NA	NA	NA
Foreign Component, if any (In Million US \$ or the relevant Currency)	NA	NA	NA	NA	NA	NA	NA
Domestic Component (Rs. Cr.)	NA	NA	NA	NA	NA	NA	NA
Capital cost Including IDC & FC (Rs. Cr)	NA	NA	NA	NA	NA	NA	NA
Schedule of Commissioning	NA	NA	NA	NA	NA	NA	NA
COD of Unit-I/Block-I	NA	NA	NA	NA	NA	NA	NA
COD of Unit-II/Block-II	NA	NA	NA	NA	NA	NA	NA
-----	NA	NA	NA	NA	NA	NA	NA
-----	NA	NA	NA	NA	NA	NA	NA
COD of last Unit/Block	NA	NA	NA	NA	NA	NA	NA

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

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station :

Mahi Hydel Power Station

Rs. Crore.

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	Balance of Plant						
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	Overheads						
17.0	Capital cost excluding IDC & FC						
18	Interest During Construction (IDC)						
19	Financing Charges (FC)						
20.0	Capital cost including IDC & FC						
21	Cost per MW						

NA

Break-up of Construction / Supply / Service packages

Name of the Petitioner :

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station :

Mahi Hydel Power Station

S.No.	Name/No. of Construction / Supply / Service Package	Scope of works ¹ (in line with head of cost break-ups as applicable)	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award ² in (Rs. Cr.)	Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier (Rs. Cr.)	Taxes & Duties and Pre-operative Expenses	IDC, FC, FERV & Hedging cost	Variation (Rs. Cr.)	Variation on account of change in Price (Rs. Cr.)	Reason for change in Price	Variation on account of change in Scope of Work (Rs. Cr.)	Reason for Change in Scope of Work
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1										NA							

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

Name of the Petitioner:
Name of the Power Station

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydel 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	Foreign Loans												
1.1	Total Foreign Loans												
	Draw down Amount												
	IDC												
	Financing charges												
1.2	Indian Loans												
1	Total of Loans drawn												
	IDC												
	Financing charges												
2	Equity												
2.1	Foreign equity drawn												
2.2	Indian equity drawn												
	Total equity deployed												

NA

RETURN ON EQUITY

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

Name of the Power Station : Mahi Hydrel Power Station

Rs. Crore

S.No.	Particulars	Reference	2015-16	2016-17			2017-18	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		170.40			170.45	170.45	
2	Capitalisation		0.05			0	0	
3	Equity portion of capitalisation		0.05			0	0	
4	Equity at the end of the year		170.45			170.45	170.45	
	Return Computation							
5	Return on Equity at the beginning of the year	15.50% for 2016-17 & 15.50% for 2015-16	8.52			26.42	26.42	
6	Return on Equity portion of capitalisation (on pro-rata basis)	15.50% for 2016-17 & 15.50% for 2015-16	0.0025			0.00	0.00	
7	Total Return on Equity	(5)+(6)	8.52	26.41	0	26.42	26.42	

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: Mahi Hydel 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 during FY 2015-16	Justification	Regulations under which such additional capitalisation has been claimed	Source of Finance					Admitted Cost ¹
					Loan 1	Loan 2 and so on	Total Loan	Equity	Internal Sources or Others (mention details)	
	Land & land rights	0.00								
	Building & Civil works	0.00								
	Hydraulic works	0.00								
	Other Civil works	0.00								
	Plant & machinery	0.00								
	Lines and Cable Network	0.00								
	Vehicles	0.00								
	Furniture & fixtures	0.02								
	Office Equipments	0.03								
	Capital spares	0.00								
	Total (1) to (11)	0.05								

Interest on Working Capital

Name of the Petitioner
Name of the Power Station

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydel Power Station

Rs. Crore

S. No.	Particulars		FY 2015-16	FY 2016-17			FY 2017-18	Remarks
			(Actuals / audited)	Approved by the Commission	Apr-Sep (Actual)	Oct-March (Estimated)	(Anticipated)	
1	2		3	4	5	6 = 4+5	7	8
1	Coal Cost (Non pit head)	1½ Month	NA	NA	NA	NA	NA	
2	Coal Cost (Pit head)	Half month	NA	NA	NA	NA	NA	
3	Cost of Gas	Half month	NA	NA	NA	NA	NA	
4	Sec.Fuel Oil	Two month	NA	NA	NA	NA	NA	
5	Liquid Fuel Stock	Half month	NA	NA	NA	NA	NA	
6	O & M expenses	One month	1.78		0.94	0.94	1.37	
7	Maintenance Spares	15% of O&M	3.20		1.69	1.69	2.47	
8	Recievables	1½ Month	4.52		3.38	3.38	5.96	
	Total Working Capital		9.49		6.01	6.01	9.80	
	Rate of Interest (as per norms)		12.50%		12.26%	12.26%	11.80%	
	Interest on Working Capital		1.19	1.17	0.74	0.74	1.16	

Insurance Expenses

Name of the Petitioner: Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
 Name of the Power Station : Mahi Hydel Power Station

Rs. Crore

S. No.	Particulars	Previous Year	Current Year (n)			Ensuing Year	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	8	9
	Insurance Expenses	0.000	0.02	0.000	0.000	0.000	
a)	Provision made/ proposed for the year						
b)	Actual insurance expenses incurred	0.000		0.000	0.000		
c)	Average Net Fixed Assets	67.37		31.60	31.60	59.00	

Tax on R.O.E.

Name of the Petitioner:

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.

Name of the Power Station :

Mahi Hydel Power Station

Rs.

S. No.	Particulars	2015-16	2016-17	2017-18	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)	0.00	0.00	0.00	
B)	Deffered tax liability before 01.04.2009				

Form G 7.1

Proposed improvement in performance

Name of the Petitioner
Name of the Power Station :

Rajasthan Rajya Vidhyut Utpadan Nigam Ltd.
Mahi Hydrel Power Station

Rs. Crore

S.No	Particulars	Previous year	Current year			MYT Control Period					Remarks
		FY 2015-16	FY 2016-17			FY 2017-18	n+2	n+3	n+4	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	13.69%	7.92%	15.34%		12.23%					
2	Auxiliary consumption	0.63%	0.62%	1.14%		1.00%					
3	Specific fuel consumption										
(I)	coal, kg / kWh										
ii)	gas, SCM / kWh										
(iii)	oil, ml / kwh										
(iv)	Limestone kg / kWh										
(v)	any other fuel										
4	Station heat rate, kcal / kwh										
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	81.68%	83.64%	96.00%		89.00%					