

**Petition for  
Aggregate Revenue Requirement (ARR) and Tariff  
for FY 2022-23 for  
Mahi Hydel Power Station (MAHI HYDEL)**

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

December 2021

## Contents

A1:	BACKGROUND .....	7
A2:	GENERATION FORECAST.....	7
A3:	MAHI HYDEL ANNUAL CAPACITY (FIXED) CHARGES FOR 2022-23.....	8
	DEPRECIATION:- .....	9
	INTEREST ON LOANS:-.....	9
	INTEREST ON WORKING CAPITAL .....	9
	OPERATION & MAINTENANCE EXPENSES .....	10
	INSURANCE CHARGES .....	10
	RETURN ON EQUITY (ROE) .....	10
	NON-TARIFF INCOME.....	12
A4:	MAHI HYDEL ESTIMATED CAPACITY CHARGES (FIXED).....	12
A5:	ESTIMATED ARR FOR MAHI HYDEL .....	12
A6:	MAHI HYDEL ESTIMATED TARIFF .....	13
A7:	FUEL COST ADJUSTMENT .....	13
A8:	RESPONDENTS:-.....	13
A9:	PRAYER.....	13

## LIST OF TABLES

TABLE 1: GROSS GENERATION, PLF & EX-BUS ENERGY SALE FROM MAHI HYDEL .....	7
TABLE 2: DEPRECIATION (RS. IN CRORE).....	9
TABLE 3: INTEREST ON LOANS AND FINANCE CHARGES (RS. IN CRORE) .....	9
TABLE 4: INTEREST ON WORKING CAPITAL (RS. IN CRORE) .....	10
TABLE 5: O & M EXPENSES (RS. IN CRORE).....	10
TABLE 6: INSURANCE CHARGES (RS. IN CRORE) .....	10
TABLE 7: RETURN ON EQUITY (RS. IN CRORE) .....	11
TABLE 8: TAX ON ROE (RS. IN CRORE).....	11
TABLE 9: TOWARDS TERMINAL BENEFIT (RS. IN CRORE) .....	11
TABLE 10: NON-TARIFF INCOME (RS. IN CRORE) .....	12
TABLE 11: NET CAPACITY CHARGES FOR MAHI HYDEL (RS. IN CRORE) .....	12
TABLE 12: ARR FOR MAHI HYDEL (RS. IN CRORES) .....	12
TABLE 13: MAHI HYDEL ESTIMATED TARIFF .....	13

Formats

<b>Form No.</b>	<b>Particulars</b>	<b>Page</b>
Form G 1.1	Summary of Tariff proposal	
Form G 1.2	Aggregate Revenue Requirement	
Form G 2.1	Plant characteristics	
Form G 2.2	Operational Parameters - Generation	
Form G 3.1	Revenue from sale of power	
Form G 3.2	Non-tariff income	
Form G 3.3	Revenue Subsidies & grants	
Form G 3.4	Capital Subsidies & grants	
Form G 4.1	O&M Expenses	
Form G 5.1	Details/ Information in respect of fuel for computation of Energy charges (Coal and Oil)	
Form G 5.2	Limestone for computation of Energy Rate	
Form G 5.3	Energy Charges for Thermal Generation	
Form G 6.1	Fixed assets & provisions for depreciation	
Form G 6.2a	Calculation of Interest on Normative Loan	
Form G 6.2b	Calculation of Weighted Average Rate of Interest on Actual Loans	
Form G 6.3	Consolidated report on addition to Fixed Assets during the year	
Form G 6.4	Return on Equity	
Form G 6.5	Statement of additional capitalization after COD	
Form G 6.6	Interest on Working capital	
Form G 6.7	Insurance Expenses	
Form G 6.8	Tax on ROE	
Form G 7.1	Proposed improvement in performance	
Form G 8.1	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects	
Form G 8.2	Break-up of Capital Cost for Coal/ Lignite/ gas/ liquid fuel based projects	
Form G 8.3	Break-up of construction/ Supply/ Service packages	
Form G 8.4	Details of Project Specific Loans	
Form G 8.5	Draw Down Schedule for calculation of IDC & Financing Charges (year wise from commencement of works to COD)	

## Definitions

<b>Act</b>	The Electricity Act, 2003
<b>Application</b>	This ARR and Tariff Petition for FY-2022-23 for Mahi Hydel 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 2019.
<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, 2019 notified by RERC on May- 27, 2019
<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 – 21	Financial Year 2020-21
FY – 22	Financial Year 2021-22
FY – 23	Financial Year 2022-23
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
Gol	Government of India
GoR	Government of Rajasthan
Jaipur Discom	Jaipur Vidyut Vitran Nigam Limited
Jodhpur Discom	Jodhpur Vidyut Vitran Nigam Limited
KWh	Kilo Watt Hour or Unit
MU	Million Units
MW	Megawatts
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repairs and Maintenance
RERC/ Commission	Rajasthan Electricity Regulatory Commission
RUVN	Rajasthan Urja Vikas Nigam Limited
RVUN	Rajasthan Vidyut Utpadan Nigam Limited
RVPN	Rajasthan 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 40.27:27.14:32.59 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 Hydel (140MW).
- 1.3 RVUN have to file its petition for determination of Tariff and ARR Petition for FY 2022-23 in accordance with provision of Regulation 6(1) of RERC Tariff Regulations 2019. Accordingly, this petition is being submitted for Mahi Hydel Hydel for FY 2022-23 before RERC for ARR and Tariff determination.

## A2: GENERATION FORECAST

- 2.1 The installed capacity of Mahi Hydel is 140 MW. The estimated figures of Gross generation, PLF & net energy sale to three Discoms from Mahi Hydel of RVUN for the period FY FY 2020-21, FY 2021-22 and 2022-23 are as shown in table below:

**Table 1: Gross generation, PLF & Ex-bus energy sale from Mahi Hydel**

Particulars	Units	FY 20-21	FY 21-22	FY 22-23
Total Capacity	MW	140	140	140
Capacity Index	%	82.99	85.00	85.00
Design Energy	MU	288.66	288.66	288.66
Gross Generation	MU	202.43	111.74	140.00
Auxiliary Energy Consumption	%	0.67	4.67	1.00
Auxiliary Energy Consumption	MU	1.36	5.22	1.40
Net Generation	MU	201.07	106.52	138.60

- 2.2 The fixed cost elements are detailed hereunder for Mahi Hydel for the FY 2020-21 ,FY 2021-22 and 2022-23 are as below.

### **FIXED CHARGES**

#### **A3: MAHI HYDEL ANNUAL CAPACITY (FIXED) CHARGES FOR 2022-23**

- 3.1 Mahi Hydel Power House -I is located on a saddle dam of Mahi Hydel Dam periphery. The Mahi Hydel Dam is the property of Water Resources Dept. 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 Hydel 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 Hydel 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 Hydel PH-I is not purely run of river power station with pondage and storage type because the storage of water (Mahi Hydel 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. The schedule of declared capacity of the machines is provided day ahead.
- 3.3 Mahi Hydel 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 Hydel PH-II. So at Mahi Hydel 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 2019 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 11.09.2020. Accordingly, the opening capital cost of Mahi Hydel has been considered as Rs. 259.02 crore for FY 2020-21.
- 3.7 The additional capitalisation has been incurred in FY 20-21, Rs. 0.07 crore, under the head of furniture & fixtures as per Regulation 17(5)(e) of RERC Tariff Regulation 2019, which requires 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.
- 3.8 Considering the above approved capital cost, figures of depreciation for FY 2020-21 ,FY 2021-22 and 2022-23 as computed under format 6.1 are summarised in table below:

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

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Depreciation	4.42	4.43	4.43

## Interest on Loans:-

- 3.9 The loan-wise interest expenses & finance charges which include term loans have been worked-out and taken as part of fixed cost. The loan repayment amount for term loans combined has been taken equal to the depreciation figure envisaged for FY 2020-21, FY 2021-22 and 2022-23.
- 3.10 Estimated figures for interest on term loan and finance charges are computed as per regulation 21 of RERC, Tariff Regulations, 2019 and are summarised in table below:

**Table 3: Interest on Loans and finance charges (Rs. in Crore)**

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Interest on term Loan & Finance charges	0.01	0.01	0.01

## Interest on working Capital

- 3.11 The interest on working capital loan for FY 2020-21, FY 2021-22 and 2022-23 has been computed as per the norms defined under Regulation 27 of RERC Tariff regulation 2019. For FY 2020-21, FY 2021-22 and 2022-23, rate of interest has been taken 300 basis points higher than the average Base Rate prevalent during first six months of the year previous to the relevant year. Estimated figure of Interest on Working Capital is summarised as below:

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

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Interest on Working Capital	0.96	0.88	1.21

**Operation & Maintenance Expenses**

3.12 The Operation & Maintenance Expenses have been computed as per the norms prescribed under Regulation 47 of RERC Tariff Regulations 2019.

3.13 Estimated figures for the period FY 2020-21 ,FY 2021-22 and 2022-23 are summarised in Table below.

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

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
O & M Expenses	18.04	18.68	19.33

**Insurance Charges**

3.14 RVUN is claiming the insurance charges as per Regulation 25 of RERC Tariff Regulations 2019 for Mahi Hydel for the year 2022-23 on the basis of actual insurance charges paid in preceding year. The details are shown in the table below.

**Table 6: Insurance Charges (Rs. in Crore)**

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Insurance Charges	0.00	0.00	0.00

**Return on Equity (ROE)**

3.15 It is submitted that Gov. Of Rajasthan has withdrawn ROE for FY 2019-20 and FY 2020-21 and allowed ROE for RVUN FY 2021-22 onwards vide letter dated 17.09.2021 as reproduced below:

“Looking to the severe affect of COVID on the revenue stream of DISCOMS , it has been decided that ROE charged by RVUNL in the year 2019-20 and 2020-21 which is yet to be truing up by RERC be withdrawn. However, from year 2021-22 onwards the ROE continues to be charged by RVUNL.”

Further, GOR withdrawn ROE for FY 2021-22 vide letter dated. 16.11.2021 reproduced as below:

“As ROE for the year 2021-22 will not be charged by RVUNL”

It is pertinent here to mention that ROE for RVUN was allowed for FY 2021-22 onwards and withdrawn only for FY 2021-22. Therefore, RVUN is calming ROE for FY 2022-23 as per GOR direction and Regulation 20 of RERC Tariff Regulation 2019. The GOR letter dated 17.09.2021 & 16.11.2021 is enclosed as **Annexure-M**.

3.16 The Return on Equity has been computed as per the norms prescribed under Regulation 20 of RERC Tariff Regulation 2019.

3.17 The Return on Equity (ROE) of FY 2020-21 ,FY 2021-22 and 2022-23 are summarised in Table below:

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

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Return on Equity	0.00	0.00	25.56

### **Tax on ROE**

3.18 The Tax on Return on Equity has been computed as per the norms prescribed under Regulation 29 of RERC Tariff Regulation 2019.

3.19 The Tax on Return on Equity (ROE) for FY 2020-21 ,FY 2021-22 and 2022-23 are summarised in Table below:

**Table 8: Tax on RoE (Rs. in Crore)**

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Tax on ROE	0.00	0.00	0.00

### **Toward Terminal Benefit**

3.20 The Terminal Benefits has been separately allowed over and above the normative O&M expenses as per Regulation 47(7) of RERC Regulations, 2019 which is reproduced as below:

" ....Provided that terminal liabilities based on actuarial valuation, over and above the normative O&M Expenses, subject to prudence check shall be allowed through tariff separately."

It is submitted that RVUN has computed terminal benefits on the basis of actuarial valuation of previous year audited accounts of FY 20-21.

3.21 The estimated benefits for FY 2020-21 ,FY 2021-22 and 2022-23 are summarised in Table below:

**Table 9: Towards Terminal Benefit (Rs. in Crore)**

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Towards Terminal Benefits	10.59	10.59	10.59

## Non-Tariff Income

3.22 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)

3.23 Estimated figures of Non Tariff Income for FY 2020-21 ,FY 2021-22 and 2022-23 are summarised in table below:

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

Particulars	FY 20-21 (Audited)	FY 21-22 (Unaudited)	FY 22-23 (Anticipated)
Non Tariff Income	0.11	0.11	0.12

3.24 As per Regulation 36 of RERC Tariff Regulations 2019, 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: MAHI HYDEL ESTIMATED CAPACITY CHARGES (FIXED)

4.1 The net fixed charges is computed for FY 2020-21, FY 2021-22 and 2022-23 in the Table below:

**Table 11: Net Capacity Charges for Mahi Hydel (Rs. in Crore)**

Particulars	FY 20-21	FY 21-22	FY 22-23
Depreciation	4.42	4.43	4.43
Interest on Loan	0.01	0.01	0.01
Return on Equity	0.00	0.00	25.56
Interest on Working Capital	0.96	0.88	1.21
O & M Expenses	18.04	18.68	19.33
Insurance Charges	0.00	0.00	0.00
Amortization	0.01	0.01	0.01
Towards Terminal Benefits	10.59	10.59	10.59
Total Fixed Charges	34.04	34.59	61.15
Less: Non-Tariff income	0.11	0.11	0.12
Net Fixed Charges	33.93	34.48	61.03

## A5: ESTIMATED ARR FOR MAHI HYDEL

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

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

Particulars	FY 20-21	FY 21-22	FY 22-23
Fixed Charges (Rs. in Cr.)	33.93	34.48	61.03
Variable Charges (Rs. in Cr.)	0.00	0.00	0.00
Total Aggregate Revenue Requirement (Rs. in Cr.)	33.93	34.48	61.03

## **A6: MAHI HYDEL ESTIMATED TARIFF**

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

**Table 13: Mahi Hydel Estimated Tariff**

Particulars	FY 20-21	FY 21-22	FY 22-23
Net Generation (MU)	201.07	106.52	138.60
Fixed Charges (Rs. in Cr.)	33.93	34.48	61.03
Variable Charges (Rs. in Cr.)	0.00	0.00	0.00
Total Aggregate Revenue Requirement (Rs. in Cr.)	33.93	34.48	61.03
Rate of Fixed Charges (Rs./kWh)	1.69	3.24	4.40
Rate of Variable Charges (Rs./kWh)	0.00	0.00	0.00
Rate of Sale of Energy (Rs./kWh)	1.69	3.24	4.40

## **A7: FUEL COST ADJUSTMENT**

7.1 As per RERC Tariff Regulation 2019, 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.

## **A8: RESPONDENTS:-**

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

## **A9: PRAYER**

9.1 RVUN humbly request the Hon'ble Commission for :

- ◆ Allow adhoc tariff w.e.f. 01.04.2022 till finalisation of the order.
- ◆ Approval of ARR & Tariff for FY-2022-23.
- ◆ Condoning 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
- ◆ Passing such other further orders as are deemed fit and proper in the facts and circumstances of the case.

(Rekha Agarwal)  
Chief Accounts Officer  
(Accts, Comml. &Tax)  
RVUN, Jaipur.

(C.L.Koli)  
Dy.Chief Engineer  
(PPC,IT,PTD&Trg)  
RVUN, Jaipur

## Form G 1.1

## Summary of Tariff Proposal

Name of the Company

RVUN

Name of the Power Station :

MAHI

(Rs. Crore)

S.No.	Particulars	Ref.of Form No	FY 20-21	FY 21-22			FY 22-23	Remark
			Actual/Audited	Approved By Commission	April to Sep ( unaudited)	Oct to March (Unaudited)	Anticipated	
1	2	3	4	5		6	7	8
<b>1</b>	<b>Capacity (Fixed) Charge</b>							
1.1	Depreciation	6.1	4.42		2.21	2.21	4.43	
1.2	Interest on term Loan & Finance charges	6.2a	0.01		0.01	0.01	0.01	
1.3	Return on Equity	6.4	0.00		0.00	0.00	25.56	
1.4	Interest on Working Capital	6.6	0.96		0.44	0.44	1.21	
1.5	O & M Expenses	4.1	18.04		9.34	9.34	19.33	
1.6	Insurance Charges	6.70	0.00		0.00	0.00	0.00	
1.7	Tax on ROE	6.8	0.00		0.00	0.00	0.00	
1.8	Amortization		0.01		0.00	0.00	0.01	
1.9	Towards Terminal Benefits		10.59		5.30	5.30	10.59	
1.10	Less Adjustment of excess depreciation		0.00		0	0	0	
1.11	Less: Non-Tariff income	3.2	0.11		0.06	0.06	0.12	
	<b>Total (1)- Capacity (Fixed Charges)</b>		<b>33.93</b>		<b>17.24</b>	<b>17.24</b>	<b>61.03</b>	
<b>2</b>	<b>Total- Energy (variable ) charges</b>		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
<b>3</b>	<b>Units sold to Discoms (MU)</b>		<b>201.07</b>		<b>26.47</b>	<b>83.88</b>	<b>138.60</b>	
<b>4</b>	<b>Rate of Fixed Charges. ( 1/3)</b>		<b>1.69</b>		<b>6.51</b>	<b>2.06</b>	<b>4.40</b>	
<b>5</b>	<b>Rate of Variable Charges.</b>	<b>5.3</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
	(i) Coal/ Lignite		<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
	(ii) Imported Coal		0.00		0.00	0.00	0.00	
	(iii) Any Other fuel		0.00		0.00	0.00	0.00	
	Total 2.1		0.00		0.00	0.00	0.00	
5.2	Rate of Energy Charge from Secondary Fuel (REC) <sub>s</sub>	5.3	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
5.3	Total-(2) Rate of Energy Charge ex-bus(REC) <sup>3A,3B,3C</sup>	5.3	<b>1.69</b>		<b>6.51</b>	<b>2.06</b>	<b>4.40</b>	

## Form G 1.2

## Aggregate Revenue Requirement

Name of the Company  
Name of the Power Station :

RVUN  
MAHI

(Rs. Crore)

S.No.	Particulars	Reference Form	FY 20-21	FY 21-22			FY 22-23
			Actual/Audited	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)	Anticipated
1	2	3	4	5		6	7
<b>A</b>	<b>Receipts</b>						
1	Revenue from Sale of Power (Tariff income)	3.1	33.93		17.24	17.24	61.03
2	Non Tariff income		0.11		0.06	0.06	0.12
3	Revenue Subsidies, Grants & Subvention from State Government		0.00		0.00	0.00	0.00
	Total- (A)		34.04		17.30	17.30	61.15
<b>B</b>	<b>Expenditure</b>						
1	Variable Costs, including Fuel Cost	5.3	0.00		0.00	0.00	0.00
2	Depreciation	6.1	4.42		2.21	2.21	4.43
3	Interest on term Loan & Finance charges	6.2a	0.01		0.01	0.01	0.01
4	Return on Equity	6.4	0.00		0.00	0.00	25.56
5	Interest on Working Capital	6.6	0.96		0.44	0.44	1.21
6	O & M Expenses	4.1	18.04		9.34	9.34	19.33
7	Insurance Charges	6.7	0.00		0.00	0.00	0.00
8	Tax on ROE	6.8	0.00		0.00	0.00	0.00
9	Amortization		0.01		0.00	0.00	0.01
9	Towards Terminal Benefits		10.59		5.30	5.30	10.59
<b>C</b>	<b>Total- (B) Expenditure</b>		34.04		17.30	17.30	61.15
<b>D</b>	<b>A.R.R. (C-A.2)</b>		33.93		17.24	17.24	61.03

## Plant Characteristics

Name of the Petitioner

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

Name of the Power Station/Unit:

Mahi Hydel

Basic characteristics of the plant <sup>1</sup>	Hydel Power Station					
<b>Special Features of the Plant</b>						
Site Specific Features <sup>2</sup>	Canal Based Power Station					
Special Technological Features <sup>3</sup>	Semi Kaplan (Horizontal)					
Environmental Regulation related features <sup>4</sup>						
Any other special features						
Fuel Details <sup>5</sup>	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 <sup>6</sup>						
Type of Boiler Feed Pump <sup>7</sup>						
Pressure (kg/cm <sup>2</sup> )						
Temperature 0C						
-At Superheater Outlet						
-At Reheater Outlet						
<b>Turbine Cycle heat Rate(Kcal/ Kwh)</b>						
<b>Boiler Efficiency (%)</b>						
<b>Guaranteed Design Heat rate (kCal/kWh)<sub>s</sub></b>						
<b>Conditions on which guaranteed</b>						
% MCR						
% Makeup						
Design Fuel						
Design cooling water Temperature						
Back Pressure						



## Form G 2.2

## Operational Parameters - Generation

Name of the Company

RVUN

Name of the Power Station :

MAHI

Rs in Cr.

S. No.	Particulars	Units	FY 20-21	FY 21-22			FY 22-23
			Actual/Audited	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)	Anticipated
1	2	3	4	5		6	7
<b>1</b>	<b>Operational Parameters - Hydel</b>						
1.1	Total Capacity	MW	140		140	140	140
1.2	Capacity Index	%	82.99		85.00	85.00	85.00
1.3	Design Energy	MU	288.66		144.33	144.33	288.66
1.4	Gross Generation	MU	202.43		26.86	84.88	140.00
1.5	Auxiliary Energy Consumption	MU	1.36		0.39	1.00	1.00
1.6	Auxiliary Energy Consumption	%	0.67		4.37	0.85	1.40
1.7	Net Generation	MU	201.07		26.47	83.88	138.60
<b>2</b>	<b>Operational Parameters - Thermal</b>						
2.1	Total Capacity	MW					
2.2	Availability	%					
2.3	Plant Load Factor	%					
2.4	Gross Generation	MU					
2.5	Auxiliary Energy Consumption	%					
2.6	Auxiliary Energy Consumption	MU					
2.7	Net Generation	MU					
2.8	Heat Rate	Kcal/Kwh)					

Form G 3.1

**Revenue from Sale of Power**

Name of the Company  
Name of the Power Station :  
FY 20-21

RVUN  
MAHI

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)		201.07		33.93	0.00		33.93	168.76	
1	Distribution Licensee/Trader/ Consumers									
(a)	JVVNL	40.27	80.97	40.27	13.67	0.00		13.67	168.76	
(b)	AVVNL	27.14	54.57	27.14	9.21	0.00		9.21	168.76	
(c)	IdVVNL	32.59	65.53	32.59	11.06	0.00		11.06	168.76	
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>									
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	<b>Net revenue</b>		<b>201.07</b>		<b>33.93</b>	<b>0.00</b>		<b>33.93</b>	<b>168.76</b>	

Form G 3.1

**Revenue from Sale of Power**

Name of the Company  
Name of the Power Station :  
FY 21-22

RVUN  
MAHI

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)		110.35		34.48	0.00		34.48	312.50	
1	Distribution Licensee/Trader/ Consumers									
(a)	JVVNL	40.27	44.44	40.27	13.89	0.00		13.89	312.50	
(b)	AVVNL	27.14	29.95	27.14	9.36	0.00		9.36	312.50	
(c)	IdVVNL	32.59	35.96	32.59	11.24	0.00		11.24	312.50	
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>									
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	<b>Net revenue</b>		<b>110.35</b>		<b>34.48</b>	<b>0.00</b>		<b>34.48</b>	<b>312.50</b>	

Form G 3.1

**Revenue from Sale of Power**

Name of the Company  
Name of the Power Station :  
FY 22-23

RVUN  
MAHI

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)		138.60		61.03	0.00		61.03	440.33	
1	Distribution Licensee/Trader/ Consumers									
(a)	JVVNL	40.27	55.81	40.27	24.58	0.00		24.58	440.33	
(b)	AVVNL	27.14	37.62	27.14	16.56	0.00		16.56	440.33	
(c)	IdVVNL	32.59	45.17	32.59	19.89	0.00		19.89	440.33	
2	Other recoveries									
3	<b>Gross Revenue From Sale of Power</b>									
4	less: i) State Levies Payable to Govt.									
5	Less. : ii) Revenue during trial runs (capitalised)									
6	<b>Net revenue</b>		<b>138.60</b>		<b>61.03</b>	<b>0.00</b>		<b>61.03</b>	<b>440.33</b>	

## Form G 3.2

## NON-TARIFF INCOME

Name of the Company RVUN  
 Name of the Power Station : MAHI

Rs. Crore

S.No	Particulars	FY 20-21	FY 21-22			FY 22-23	Remarks
		(Actuals/audited)	Approved By Commission	April to Sep ( unaudited)	Oct to March (Unaudited)	(Anticipated)	
1	2	3	4		5	6	7
	<b>Non-tariff income</b>						
i.	Interest on loans and advances to employees						
ii.	Interest on loans and advances to suppliers/contractors						
iii.	Interest and other income from investments and deposits						
iv.	Income from rent on land/building						
v.	Income from sale of scrap						
vi.	Interest on subvention received from govt.						
vii.	Net Income from sale of power to housing colony/ township for its staff						
viii.	Income from sale of ash/rejected coal						
ix.	Rebate for early payment						
x.	Income from advertisement						
xi.	Other miscellaneous receipts						
	<b>Total non-tariff income</b>	0.11	0.00	0.06	0.06	0.12	



## Form G 3.4

## Capital Subsidies and Grants

Name of the Company  
Name of the Power Station :

RVUN  
MAHI

Rs. Crore

S. No.	Particulars	FY 20-21	FY 21-22			FY 22-23	Remarks
		(Actuals / audited)	Approved By Commission	April to Sep ( unaudited)	Oct to March (Unaudited)	(Anticipated)	
1	2	3	4		5	6	7
A	Capital Cost						
	Subsidy towards cost of Capitals Asset						
	Grant towards cost of Capitals Assets						
	Receipts from State Govt. under any scheme as grant/subsidy						
	<b>Total</b>	0	0		0	0	

**Form G 4.1**  
**O&M Expenses**

**Name of the Company**  
**Name of the Power Station :**

**RVUN**  
**MAHI**

(Rs. Crore)

S.No.	Particulars	FY 20-21	FY 21-22			FY 22-23
		(Actuals/audited)	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)	(Anticipated)
1	2	3	4		5	6
1	O&M Expense norms (Rs. lakh per MW)	12.89		13.34	13.34	13.81
2	Total Capacity in MW	140.00		140.00	140.00	140.00
3	O&M expense	18.04		9.34	9.34	19.33
4	Special O&M expense for Water pipe lines>50 km					
a	Details of Water pumping Stations beyond 50 K.M. from Water intake point					
b	<b><u>Pumping Station No.1 :-</u></b>					
b.1	Power consumption Cost					
b.2	Repair / Maintenance / Employee / other Cost					
b.3	Sub total (b)					
c	<b><u>Pumping Station No.2 :-</u></b>					
	and so on .....					
d	Total (4) Special O&M Expenses					
5	<b>Totsl O&amp;M expenses</b>	18.04		9.34	9.34	19.33

Form G 5.1 coal

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges<sup>1</sup> for FPA

Name of the Company  
Name of the Power Station

RVUN  
MAHI

S.No	Particulars	Unit	NIL																	
1	Quantity of coal/lignite in stock at the beginning of the month	(MT)																		
2	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MT)																		
3	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company for diversion of wagons etc.	(MT)																		
4	Coal supplied by Coal/Lignite Company (2+3)	(MT)																		
5	Actual Transit & Handling Losses (For coal/Lignite based Projects)	(MT)																		
6	Net coal / Lignite Supplied (4-5)	(MT)																		
7	Total coal (Receipts & Opening Stock) (1)+(6)	(MT)																		
8	Coal/lignite burnt/consumed	(MT)																		
9	Coal/lignite in stock at the end of the month (7)-(8)	(MT)																		
10	Value of coal/lignite in stock	(Rs. in lac)																		
11	Amount charged by the Coal /Lignite Company	(Rs. in lac)																		
12	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs. in lac)																		
13	Total amount Charged (11+12)	(Rs. in lac)																		
14	Transportation charges by rail/ship/road transport	(Rs. in lac)																		
15	Adjustment (+/-) in amount charged made by Railways/Transport Company for Diverted from other TPS	(Rs. in lac)																		
16	Demurrage Charges, if any	(Rs. in lac)																		
17	Cost of diesel in transporting coal through MGR system, if applicable	(Rs. in lac)																		
18	Total Transportation Charges (14+15+16+17)	(Rs. in lac)																		
19	Total amount Charged for coal/lignite supplied including Transportation (13+19)	(Rs. in lac)																		
20	Average cost of coal/lignite (Opening stock + receipts) $((10+19)/7)*10^5$	(Rs/MT)																		
21	Cost of coal in stock at the end of the month $(21) \times (9) / 10^5$	(Rs. in lac)																		
22	Weighted average GCV of coal/ Lignite as ARB	(kCal/Kg)																		

## Form G 5.1 oil

Details/Information to be Submitted in respect of Fuel for Computation of Energy Charges<sup>1</sup> for FPAName of the Company  
Name of the Power StationRVUN  
MAHI

S.No	Particulars	Unit	Apr-18		May-18		Jun-18		Jul-18		Aug-18		Sep-18	
			HFO	LDO	HFO	LDO	HFO	LDO	HFO	LDO	HFO	LDO	HFO	LDO
1	Quantity of oil in stock at the beginning of the month	(KL)		NIL										
2	Quantity of oil supplied by oil Company	(KL)												
3	Adjustment (+/-) in quantity supplied made by oil Company for diversion of wagons etc.	(KL)												
4	oil supplied by oil Company (2+3)	(KL)												
5	Actual Transit & Handling Losses	(KL)												
6	Net oil Supplied (4-5)	(KL)												
7	Total oil (Receipts & Opening Stock) (1)+(6)	(KL)												
8	oil burnt/consumed	(KL)												
9	oil in stock at the end of the month (7)-(8)	(KL)												
10	Value of oil in stock at the beginning	(Rs.)												
11	Amount charged by the oil Company	(Rs.)												
12	Adjustment (+/-) in amount charged made by oil Company	(Rs.)												
13	Total amount Charged (10+11+12)	(Rs.)												
14	Transportation charges by rail/ship/road transport	(Rs.)												
15	Adjustment (+/-) in amount charged made by Railways/Transport Company for Diverted from other TPS	(Rs.)												
16	Demurrage Charges, if any	(Rs.)												
17	Any other charges	(Rs.)												
18	Total Transportation Charges (14+15+16+17)	(Rs.)												
19	Total amount Charged for oil supplied including Transportation (13+18)	(Rs.)												
20	Average cost of coal/lignite (Opening stock + receipts) ((19)/7)	(Rs./KL)												
21	Cost of coal in stock at the end of the month (20)x(9)	(Rs.)												
22	Weighted average GCV of oil as ARB	(kCal/Ltr)												



Form G 5.2

Limestone for computation of Energy Rate

Name of the Company

RVUN

Name of the Power Station :

Mahi

S. No.	Month	Unit	For preceeding 3rd Month	For preceeding 2nd Month	For preceeding 1st Month
1	2	3	4	5	6
1	Quantity of Limestone supplied by limestone Supply Company	(MMT)			
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.)		NA	
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	<b>Total amount Charged for Limestone supplied including Transportation (6+10)</b>	<b>( Rs.)</b>			

Form G 5.3

Energy Charges for Thermal Generation

Name of the Company  
Name of the Power Station :

RVUN  
MAHI

S.No.	Particulars	Units	FY 20-21	Approved By Commission	FY 21-22	Oct to March (Unaudited)	FY 22-23	Remarks
			April-March (Audited)		April to Sep ( unaudited)		Anticipated	
1	2	3	4	5	6	7	8	
<b>1</b>	<b>Operational Parameters</b>							
1.1	Total Capacity	MW	140		140	140.00	140	
1.2	Capacity Index (%)	%	82.99		85.00	85.00	85.00	
1.3	Design Energy (MU)	%	288.66		144.33	144.33	288.66	
1.4	Gross Generation (MU)	MU	202.43		26.86	84.88	140.00	
1.5	Auxiliary Energy Consumption (MU0)	%	0.67		0.39	1.00	1.00	
1.6	Auxiliary Energy Consumption (%)	MU	1.36		4.37	0.85	1.40	
1.7	Net Generation	MU	201.07		26.47	83.88	138.60	
1.8	Heat Rate	kcal/kWh						
<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	Indian Coal	kcal/kg						
2.1.2	Imported Coal	kcal/kg						
2.1.3	HFO	kcal/Ltr						
2.1.4	LDO	kcal/Ltr						
2.2	Landed Fuel Price per unit (Please specify the fuel)							
2.2.1	Indian Coal	Rs/MT						
2.2.2	Imported Coal	Rs/MT						
2.2.3	HFO	Rs/KL						
2.2.4	LDO	Rs/KL						
<b>3</b>	<b>Fuel Consumption and Heat Contribution (for each fuel separately)</b>							
3.1	Specific Fuel Consumption							
3.1.1	Indian Coal	Kg/kWh						
3.1.2	Imported Coal	Kg/kWh						
3.1.3	HFO	ml/kWh						
3.1.4	LDO	ml/kWh						
3.2	Total Fuel Consumption							
3.2.1	Indian Coal	MT						
3.2.2	Imported Coal	MT						
3.2.3	HFO	KL						
3.2.4	LDO	KL						
3.3	Heat Content (each fuel separately)							
3.3.1	Indian Coal	Million kcal						
3.3.2	Imported Coal	Million kcal						
3.3.3	HFO	Million kcal						
3.3.4	LDO	Million kcal						
	Total Heat Content							
4	Total Fuel Cost							
4.1.1	Indian Coal	Rs Crore						
4.1.2	Imported Coal	Rs Crore						
4.1.3	HFO	Rs Crore						
4.1.4	LDO	Rs Crore						
	Total Fuel Cost	Rs Crore						
6	Other Charges and Adjustments							
6.1.1	Other Charges (pl. specify details)	Rs Crore						
6.1.2	Other Adjustments (Pl. specify details)	Rs Crore						
	Total Other Charges and Adjustments	Rs Crore						
7	Total Cost (4+5+6)	Rs Crore						
8	Cost of Generation per unit (at Generation Terminal) (7/1.4)	Rs/kWh						
9	Energy Charge per unit (ex-bus) (7/1.7)	Rs/kWh						

Form G 6.1  
Fixed assets & provisions for depreciation

Name of the Company                   RVUN  
Name of the Power Station :         MAHI

FY 20-21

S.NO.	ASSETS GROUP	RATE OF DEPRICIATION	Gross Fixed Assets				Provisions for Depreciation				Net Fixed Assets		
			At the beginning of the year	Additions during the year	Adjust. & Deductions	At the end of the year	Cummulative up to the beginning of the year	Additions during the year	Adjust. During the Year	Cummulative at the end of the year	At the Beginning of the Year	At the End of the Year	
1	Land & land rights	0	0.87			0.87			0.00				
2	Building & Civil Works of power plant	3.34	38.16			38.16			0.00				
3	Hydraulic Works	5.28	121.29			121.29			0.00				
4	Other Civil Works	3.34	1.13			1.13			0.00				
5	Plant & Machinery	5.28	70.46			70.46			0.00				
6	lines & Cable Net Work	5.28	26.38			26.38			0.00				
7	Vechiles	6.33	0.48			0.48			0.00				
8	Furniture & fixtures	6.33	0.17	0.07		0.24			0.00				
9	Office Equipments	6.33	0.14			0.14			0.00				
10	Capital spares	5.28	0.00			0.00			0.00				
11	IT Equipments	15.00											
12	IT/ SCADA Software	9.00											
13	Any other items	5.28				0.00					0.00		
	<b>TOTAL</b>		259.10	0.07	0.00	259.17	<b>219.86</b>	4.42	<b>0.0000</b>		224.28	34.82	30.47

FY 21-22

S.NO.	ASSETS GROUP	RATE OF DEPRICIATION	Gross Fixed Assets				Provisions for Depreciation				Net Fixed Assets		
			At the beginning of the year	Additions during the year	Adjust. & Deductions	At the end of the year	Cummulative up to the beginning of the year	Additions during the year	Adjust. During the Year	Cummulative at the end of the year	At the Beginning of the Year	At the End of the Year	
1	Land & land rights	0	0.87	0.00	0.00	0.87		0.00	0.00	0.00			
2	Building & Civil Works of power plant	3.34	38.16	0.00	0.00	38.16		0.00	0.00	0.00			
3	Hydraulic Works	5.28	121.29	0.00	0.00	121.29		0.00	0.00	0.00			
4	Other Civil Works	3.34	1.13	0.00	0.00	1.13		0.00	0.00	0.00			
5	Plant & Machinery	5.28	70.46	0.00	0.00	70.46		0.00	0.00	0.00			
6	lines & Cable Net Work	5.28	26.38	0.00	0.00	26.38		0.00	0.00	0.00			
7	Vechiles	6.33	0.48	0.00	0.00	0.48		0.00	0.00	0.00			
8	Furniture & fixtures	6.33	0.24	0.00	0.00	0.24		0.01	0.00	0.01			
9	Office Equipments	6.33	0.14	0.00	0.00	0.14		0.00	0.00	0.00			
10	Capital spares	5.28	0.00	0.00	0.00	0.00		0.00	0.00	0.00			
11	IT Equipments	15.00											
12	IT/ SCADA Software	9.00											
13	Any other items	5.28	0.00			0.00				0.00			
	<b>TOTAL</b>		259.17	0.00	0.00	259.17	224.28	4.43	<b>0.0000</b>		228.71	34.89	30.46

FY 22-23

S.NO.	ASSETS GROUP	RATE OF DEPRICIATION	Gross Fixed Assets				Provisions for Depreciation				Net Fixed Assets		
			At the beginning of the year	Additions during the year	Adjust. & Deductions	At the end of the year	Cummulative up to the beginning of the year	Additions during the year	Adjust. During the Year	Cummulative at the end of the year	At the Beginning of the Year	At the End of the Year	
1	Land & land rights	0	0.87	0.00	0.00	0.87		0.00	0.00	0.00			
2	Building & Civil Works of power plant	3.34	38.16	0.00	0.00	38.16		0.00	0.00	0.00			
3	Hydraulic Works	5.28	121.29	0.00	0.00	121.29		0.00	0.00	0.00			
4	Other Civil Works	3.34	1.13	0.00	0.00	1.13		0.00	0.00	0.00			
5	Plant & Machinery	5.28	70.46	0.00	0.00	70.46		0.00	0.00	0.00			
6	lines & Cable Net Work	5.28	26.38	0.00	0.00	26.38		0.00	0.00	0.00			
7	Vechiles	6.33	0.48	0.00	0.00	0.48		0.00	0.00	0.00			
8	Furniture & fixtures	6.33	0.24	0.00	0.00	0.24		0.01	0.00	0.01			
9	Office Equipments	6.33	0.14	0.00	0.00	0.14		0.00	0.00	0.00			
10	Capital spares	5.28	0.00	0.00	0.00	0.00		0.00	0.00	0.00			
11	IT Equipments	15.00											
12	IT/ SCADA Software	9.00											
13	Any other items	5.28	0.00			0.00				0.00			
	<b>TOTAL</b>		259.17	0.00	0.00	259.17	228.71	4.43	<b>0.0000</b>		233.14	30.46	26.03

## Form G 6.2a

### Calculation of Interest on Normative Loan

Name of the Company  
Name of the Power Station :

RVUN  
MAHI

(Rs. Crore)

S. No.	Particular	FY 20-21		Approved By Commission	FY 21-22		FY 22-23		Remarks
		Actual/Audited			April to March		Anticipated		
		Term Loan	Transitional Loan		Term Loan	Transitional Loan	Term Loan	Transitional Loan	
1	2	3	4	5	6	7	8	9	10
1	Gross Normative loan - Opening								
2	Cumulative repayment of Normative Loan upto previous year								
3	Net Normative loan - Opening	0.00	0.00		0.00	0.00	0	0	
4	Increase/Decrease due to ACE/de-capitalization during the Year	0.06	0.00		0.00	0.00	0.00	0	
5	Repayments of Normative Loan during the year	4.42	0.00		4.43	0	4.43	0	
6	Net Normative loan - Closing	0.00	0.00		0.00	0.00	0.00	0.00	
7	Gross Normative loan - Closing								
8	Average Net Normative Loan	0.00	0.00		0.00	0.00	0.00	0.00	
9	Weighted average Rate of Interest of actual Loans (Form 6.2b)	10.75	9.90%		10.75	9.90	10.75	9.90	
10	Interest on Normative loan	0.00	0.00		0.00	0.00	0.00	0.00	
11	Finance Charges	0.01	0.00		0.01	0.00	0.01	0.00	
12	Total	0.01			0.01		0.01		

Form G 6.2b

Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Company

RVUN

Name of the Power Station :

MAHI

(Rs. Crore)

S. No.	Particular	FY 20-21	FY 21-22	FY 22-23	Remarks
		Actual/ Audited	Total	n+1	
1	2	3	4	5	6
<b>1</b>	<b>Loan 1</b>		<b>NIL</b>		
i.	Gross Loan -Opening				
ii.	Cumulative repayments of Loans upto previous year				
iii.	Net loan-Opening				
iv.	Add: Drawal(s) during the Year				
v.	Less: Repayment (s) of Loans during the year				
vi.	Net loan - Closing				
vii.	Average Net Loan				
viii.	Rate of Interest on Loan on annual basis				
ix.	Interest on loan				
x.	Loan repayment effective from (date to be indicated)				
<b>2</b>	<b>Loan 2</b>				
i.	Gross Loan -Opening				
ii.	Cumulative repayments of Loans upto previous year				
iii.	Net loan-Opening				
iv.	Add: Drawal(s) during the Year				
v.	Less: Repayment (s) of Loans during the year				
vi.	Net loan - Closing				
vii.	Average Net Loan				
viii.	Rate of Interest on Loan on annual basis				
ix.	Interest on loan				
x.	Loan repayment effective from (date to be indicated)				
<b>3</b>	<b>Loan 3</b>				
..	...				
..	...				
<b>4</b>	<b>Total Loan</b>				
i.	Gross Loan -Opening				
ii.	Cumulative repayments of Loans upto previous year				
iii.	Net loan-Opening				
iv.	Add: Drawal(s) during the Year				
v.	Less: Repayment (s) of Loans during the year				
vi.	Net loan - Closing				
vii.	Average Net Loan				
viii.	Interest on Loan				
ix.	Weighted average Rate of Interest on Loans				

Form G 6.3

Consolidated report on additions to Fixed Assets during the year

Name of the Company           RVUN  
 Name of the Power Station :   MAHI

Rs. Crore

S.No.	Asset Description	Asset Code	FY 20-21									FY 21-22						FY 22-23					
			(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	18	19	20	21	22	23	24
1	Land & land rights							0.00							0.00								0.00
2	Building & Civil Works of power plant							0.00							0.00								0.00
3	Hydraulic Works							0.00							0.00								0.00
4	Other Civil Works							0.00							0.00								0.00
5	Plant & Machinery							0.00							0.00								0.00
6	lines & Cable Net Work							0.00							0.00								0.00
7	Vehicles							0.00							0.00								0.00
8	Furniture & fixtures							0.07							0.00								0.00
9	Office Equipments							0.00							0.00								0.00
10	Capital spares							0.00							0.00								0.00
11	IT Equipments							0.00							0.00								0.00
12	IT/ SCADA Software							0.00							0.00								0.00
13	Any other items							0.00							0.00								0.00
	Total							0.07							0.00								0.00

## Form G 6.4

## RETURN ON EQUITY

Name of the Company

RVUN

Name of the Power Station :

MAHI

Rs. Crore

S.No.	Particulars	Reference	FY 20-21	FY 21-22		FY 22-23	Remarks	
			(Actuals/audited)	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)		(Anticipated)
1	2	3	4	5		6	7	8
1	Equity at the beginning of the year		170.38		170.39	170.39	170.39	
2	Capitalisation		0.07		0.00	0.00	0.00	
3	Equity portion of capitalisation		0.01		0.00	0	0	
4	Equity at the end of the year		170.39		170.39	170.39	170.39	
	<b>Return Computation</b>							
5	Return on Equity at the beginning of the year	15%*(1)	0.00		0.00	0.00	25.56	
6	Return on Equity portion of capitalisation (on pro-rata basis)	15%*(3)/(n/12)	0.00		0.00	0.00	0.00	
7	<b>Total Return on Equity</b>	(5)+(6)	0.00	0.00	0.00	0.00	25.56	

## Statement of Additional Capitalisation after COD and Details for Financing

Name of the Petitioner: RVUN

Name of the Power Station: MAHI

(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	Furniture & fixtures	0.07	Necessary for efficient and successful operation of a generating station	Clause No. 17 (5) (e) RERC Regulation, 2019 under RERC approved Scheme	0.06	0.00	0.06	0.01		
2	Office Equipments	0.00	Necessary for efficient and successful operation of a generating station	Clause No. 17 (5) (e) RERC Regulation, 2019 under RERC approved Scheme	0.00	0.00	0.00	0.00		
	Total	0.07			0.06	0.00	0.06	0.01		



Form G 6.6

Interest on Working Capital

Name of the Company  
Name of the Power Station

RVUN  
MAHI

Rs. Crore

S. No.	Particulars	FY 20-21	FY 21-22		FY 22-23	Remarks
		(Actuals / audited)	Approved By Commission	April to Sep ( unaudited)	Oct to March (Unaudited)	
1	2	3	4	5	6	7
1	Coal Stock (as per norms)			0.00	0.00	0.00
2	Secondary fuel stock (as per norms)			0.00	0.00	0.00
3	O & M expenses (as per norms)			0.78	0.78	1.61
4	Maintenance Spares (as per norms)			1.40	1.40	2.90
5	Receivables (as per norms)			2.16	2.16	7.63
6	limestone, if applicable (as per norms)					
	<b>Total Working Capital</b>			<b>4.33</b>	<b>4.33</b>	<b>12.14</b>
	Rate of Interest			10.14	10.14	10.00
	<b>Interest on Working Capital</b>	<b>0.96</b>		<b>0.44</b>	<b>0.44</b>	<b>1.21</b>

## Form G 6.7

## Insurance Expenses

Name of the Company

RVUN

Name of the Power Station :

MAHI

Rs. Crore

S. No.	Particulars	FY 20-21	FY 21-22		FY 22-23	Remarks	
		Actual/Audited	Approved By Commission	April to Sep ( unaudited)	Oct to March (Unaudited)		Anticipated
1	2	3	4		5	6	7
	<b>Insurance Expenses</b>						
a)	Provision made/ proposed for the year						
b)	Actual insurance expenses incurred	0.00		0.00	0.00	0.00	
c)	Average Net Fixed Assets	32.64		16.34	16.34	28.24	
d)	Normative Insurance charges	0.07		0.03	0.03	0.06	

## Tax on R.O.E.

Name of the Petitioner: RVUN  
 Name of the Power Station : MAHI

Rs.

S. No.	Particulars	FY 20-21	FY 21-22			FY 22-23	Remarks
		(Actuals/audited)	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)	Anticipated	
1	2	3	4		5	6	7
A)	Advance Tax assessed & deposited on----						
a)	for Quarter I & deposited on 15 th June.						
b)	for Quarter II & deposited on 15 th Sept.						
c)	for Quarter III & deposited on 15 th Dec.						
d)	for Quarter IV & deposited on 15 th March.						
	Total---(A)	0		0	0	0	
B)	Deffered tax liability before 01.04.2009						

Form G 7.1

Proposed improvement in performance

Name of the Company

RVUN

Name of the Power Station :

MAHI

Rs. Crore

S.No.	Particulars	FY 20-21	FY 21-22			FY 22-23	Remarks
		Actual/Audited	Approved By Commission	April to Sep (unaudited)	Oct to March (Unaudited)	Anticipated	
1	2	3			4	5	6
1	Desigen Energy	288.66		144.33	144.33	288.66	
2	Auxiliary consumption %	0.67		0.39	1.00	1.00	
3	Specific fuel consumption						
(I)	coal, kg / kWh	0.00		0.00	0.00	0.00	
ii)	gas, SCM / kWh						
(iii)	oil, ml / kwh	0.00		0.00	0.00	0.00	
(iv)	Limestone kg / kWh						
(v)	any other fuel						
4	Station heat rate, kcal / kwh	0.00		0.00	0.00	0.00	
5	Annual Maitenance shut down days						
6	Forced / planned shut down except annual shut down						
(I)	number / year						
(ii)	cumulative duration, hours / year						
7	Fly ash utilisation, %						
8	Other bye product utilisation(give list)						
9	Outstanding dues, days of receivables						
10	Availability	82.99		85.00	85.00	85.00	

**Form G 8.1**

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

**Name of the Company :** RVUN  
**Name of the Power Station :** MAHI  
**New Projects**  
**Capital Cost Estimates**

Board of Director/ Agency approving the Capital cost estimates:							
Date of approval of the Capital cost estimates:							
Price level of approved estimates	<b>Present Day Cost</b>			<b>Completed Cost</b>			
	As of End of _____ Qtr. Of the year _____			As on Scheduled COD of the Station			
Foreign Exchange rate considered for the Capital cost estimates							
<b>Capital Cost excluding IDC &amp; FC</b>							
Foreign Component, if any (In Million US \$ or the relevant Currency)			N/A				
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							

## Form G 8.2

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

Name of the Company : RVUN

Name of the Power Station : MAHI

S.No.	Break Down	Cost in Rs. Crores			Variation (Rs. Cr.)	Reasons for Variation	Rs. Crore.
		As per original Estimates	Actual Expenditure as on COD	Liabilities/Provisions			Admitted Cost (Rs. Cr.)
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.						
<b>9.0</b>	<b>Balance of Plant</b>						
9.1	Mechanical BOP						
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		N/A				
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						
<b>9.2</b>	<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						
<b>9.3</b>	<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)						
<b>16.0</b>	<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						
<b>17.0</b>	<b>Capital cost excluding IDC &amp; FC</b>						
18	Interest During Construction (IDC)						
19	Financing Charges (FC)						
<b>20.0</b>	<b>Capital cost including IDC &amp; FC</b>						
21	Cost per MW						

Form G 8.3

Break-up of Construction/ Supply/ Service packages

Name of the Company : RVUN  
 Name of the Power Station : MAHI

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.)	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																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13						N/A											
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	

Form G 8.4

Details of Project Specific Loans

Name of the Company RVUN

Name of the Power Station MAHI

Commercial Operation Date

Year (n-1)\*

Rs. Crore

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
1	2	3	4	5	6	7
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto previous year/during current/ensuing year/COD <sup>3,4,5,13,15</sup>						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>	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			N/A			
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>						



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

Name of the Company RVUN  
Name of the Power Station MAHI

Rs. Crore

S.No.	Draw Down Particulars	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
		Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Loans												
1.1	Foreign Loans												
1.1.1	Foreign Loan 1												
	Draw down Amount												
	IDC												
	Financing charges												
1.1.2	Foreign Loan 2												
	Draw down Amount				N/A								
	IDC												
	Financing charges												
1.1.3	Foreign Loan 3												
	Draw down Amount												
	IDC												
	Financing charges												
1.1	Total Foreign Loans												
	Draw down Amount												
	IDC												
	Financing charges												
1.2	Indian Loans												
1.2.1	Indian Loan 1												
	Draw down Amount	--	--		--	--		--	--		--	--	
	IDC	--	--		--	--		--	--		--	--	
	Financing charges	--	--		--	--		--	--		--	--	
1.2.2	Indian Loan 2												
	Draw down Amount	--	--		--	--		--	--		--	--	
	IDC	--	--		--	--		--	--		--	--	
	Financing charges	--	--		--	--		--	--		--	--	
1.2.3	Indian Loan 3												
	Draw down Amount	--	--		--	--		--	--		--	--	
	IDC	--	--		--	--		--	--		--	--	
	Financing charges	--	--		--	--		--	--		--	--	
1.2	Total Indian Loans												
	Draw down Amount	--	--		--	--		--	--		--	--	
	IDC	--	--		--	--		--	--		--	--	
	Financing charges	--	--		--	--		--	--		--	--	
1	Total of Loans drawn												
	IDC												
	Financing charges												
2	Equity												
2.1	Foreign equity drawn												
2.2	Indian equity drawn	--	--		--	--		--	--		--	--	
	Total equity deployed												