

[H.P.G.C.L.]

Petition for Determination of Tariff for power from 2 x 0.2 MW Kakroi Mini Hydel Plant

Submitted to
Haryana Electricity Regulatory Commission

April 2017



Haryana Power Generation Corporation Ltd

(An ISO:9001, ISO:14001 and OHSAS: 18001 Certified Company)

Corporate Identity Number: U45207HR1997SGC033517

Urja Bhawan, C-7, Sector-6, Panchkula, Haryana

HARYANA POWER GENERATION CORPORATION LIMITED

Urja Bhawan, Sector-6, Panchkula, Haryana

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From

The Managing Director,
HPGCL, Panchkula

To,

The Secretary,
Haryana Electricity Regulatory Commission
Bays 33-36, Sector 4,
Panchkula-134112 Haryana

Memo. No. HPGC/FIN/Reg-468

Dated : 06/04/2017

Sub: **Submission of Petition for determination of tariff for power from 2 x 0.2 MW Kakroi Mini Hydrel Plant.**

Sir,

In exercise of its powers conferred under section 181 (zf) and 62 of the Electricity Act, 2003, the Hon'ble Commission has issued the HERC (Terms and Conditions for Determination of Tariff from renewable energy sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2010.

In compliance, HPGCL is herewith submitting the Petition for determination of tariff for power from 0.2 x 2 MW Kakroi Mini Hydrel Plant. The following documents are enclosed here for the kind perusal and approval by the Hon'ble Commission:

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Petition Fee of Rs.15,000 /- (Rupees Fifteen Thousand only) has been paid in Bank Account of Hon'ble Commission vide UTR no. STBP217095006527 dated 05th April 2017.

Copy of DPR is also being sent in soft copy along with soft copy of the Petition. We request the Hon'ble Commission to kindly admit the aforesaid petition and proceed further in the matter. It is further requested to the Hon'ble Commission to provide us an opportunity of personal hearing in the matter to further clarify/explain our submissions in the enclosed petition.

Thanking You

(B.B.Gupta)
Controller Finance
HPGCL, Panchkula

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BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION, PANCHKULA

Filing No _____

Case No _____

IN THE MATTER OF: **Filing of the Petition for determination of tariff for power from 2 x 0.2 MW Kakroi Mini Hydel Plant**

AND

IN THE MATTER OF: Haryana Power Generation Corporation Limited (hereinafter referred as "HPGCL" or "the petitioner")

The Petitioner respectfully submits as under: -

1. Haryana Power Generation Corporation Limited (HPGCL) is a Company incorporated under the provisions of the Companies Act, 1956 and is wholly owned by the Government of Haryana.
2. Regulation 6 (1) (i) and 7 (3)HERC (Terms and Conditions for Determination of Tariff from renewable energy sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2010 requires generator to file a Petition for determination of project specific tariff for power from Hydel Power projects below 25 MW.
3. Additionally Hon'ble Commission in its Order dated 25th January 2012 regarding determination of tariff for supply of electricity from 6.5 MW solar power project to be set up by HPGCL at Powerhouse – D, WYC Hydel, Yamunanagar in Case No. HERC / PRO - 12 of 2011 passed following order:

"The Commission observes that the tariff for small hydro projects in Haryana determined vide order dated 15th May, 2007 currently in vogue, has been estimated on the basis of Rs. 10.2 Crore MW and CUF of 70% given the small hydro projects in Haryana are basically canal based having very low head and require substantial civil work. Whereas the benchmark capital cost as per CERC Regulations adopted by HERC is substantially lower than the capital cost considered by the Commission while determining generic tariff in 2007. Thus given the asymmetry the Commission is of the considered view that the potential for hydro power projects in Haryana is low and there could be significant variation in project cost as well as CUF at different locations. Hence the Commission would decide / review the tariff for small hydro projects in Haryana on a case to case basis after obtaining data on water flow as well as capital cost for the projects already commissioned in Haryana."

4. From the above reference to Regulation and order it is aptly clear that HPGCL needs to file project specific tariff petition for determination of tariff for power from 2 x 0.2 MW Kakroi Mini hydel plant by submitting project specific capital cost and CUF.

5. The Control period as defined in HERC (Tariff from Renewable Energy Sources) Regulations 2010 is ending on 31st March 2017. However as per Regulation 4 of HERC (Tariff from Renewable Energy Sources) Regulations 2010, in case Regulations for the next Control Period are not notified until commencement of next Control Period, the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustments as per revised Regulations. Hence the present petition is being submitted as per HERC (Tariff from Renewable Energy Sources) Regulations 2010.

6. In accordance with the statutory requirements under the provisions of Section 61 and 62 of Electricity Act, 2003, HPGCL hereby submits this petition for determination of tariff for power from 2 x 0.2 MW Kakroi Mini hydel plant based on the HERC (Tariff from Renewable Energy Sources) Regulations 2010 and Principles laid down in the National Tariff Policy 2016.

Date : 06/04/2017

(Petitioner)
Controller Finance
HPGCL, Panchkula
(Authorised Signatory)

NOTES AND ABBREVIATIONS

In this Petition:

- ✓ *Second Control Period is defined as Financial Year 2013-14 to 2016-17*
- ✓ *First Year is defined as Financial Year 2018-19*
- ✓ *Current Year is defined as Financial Year 2017-18*

Abbreviation	Full Description
AHEC	Alternate Hydro Electric Centre
CLC	Carrier Lined Channel
CUF	Capacity Utilization Factor
DPR	Detailed Project Report
DCRTPP	Deen Bandhu Chotu Ram Thermal Power Plant
FY	Financial Year
GFA	Gross Fixed Assets
GoH	Government of Haryana
Gol	Government of India
HERC	Haryana Electricity Regulatory Commission
HPGCL	Haryana Power Generation Corporation Limited
MHP	Mini Hydel Plant
MoP	Ministry of Power, Government of India
MNRE	Ministry of New and Renewable Energy, Government of India
MU	Million Units
MYT	Multi Year Tariff
O&M	Operation & Maintenance
PLF	Plant Load Factor
PTPS	Panipat Thermal Power Station
RGTPP	Rajiv Gandhi Thermal Power Plant
R&M	Renovation and Modernization
RPO	Renewable Purchase Obligation
WYC	West Yamuna Canal

A1: BRIEF PROFILE OF THE COMPANY

- 1.1 Haryana Power Generation Corporation Ltd. (HPGCL), hereinafter also referred to as the “Petitioner”, is a company registered under the Indian Companies Act, 1956 and is wholly owned by the Government of Haryana. HPGCL was incorporated as a company on 17th March 1997 and was given the responsibility of operating and maintaining State’s own generation projects. The business of generation of power of erstwhile Haryana State Electricity Board (HSEB) was transferred to HPGCL on 14th August 1998. In addition, it has been entrusted with the responsibility of setting up of new generating stations in order to keep pace with the ever increasing demand of power.
- 1.2 HPGCL is engaged in the business of generation of power in the state through Thermal Generating Stations, located at Panipat, Yamuna Nagar and Hisar and Hydroelectric stations located at Western Yamuna Canal (WYC) Bhudkalan, Yamuna Nagar.
- 1.3 HPGCL, which started with a modest installed generation capacity of 863.3MW, presently has an installed generation capacity of 2792.4 MW even after the closure of PTPS Units I to IV (447.8 MW) and FTPS (165 MW). The electricity generated at these power stations is evacuated and transmitted through the transmission network of Haryana Vidyut Prasaran Nigam Ltd. (HVPNL) to the Distribution Companies i.e. Uttar Haryana Bijli Vitran Nigam Ltd (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Ltd (DHBVNL) who are the distribution licensee(s) for the State of Haryana.
- 1.4 HPGCL owns and operates the following power plants in the state as mentioned in Table 1 below:

Table 1: Plants Operated by HPGCL

Particulars	Installed Capacity as on 31.03.2015	Date of Commissioning / COD
Panipat Thermal Power Station, Panipat	Unit No-5: 210 MW	28/03/1989
	Unit No-6: 210 MW	31/03/2001
	Unit No-7: 250 MW	28/09/2004
	Unit No-8: 250 MW	08/04/2005
	Solar Plant: 10 MW	25/11/2016
DCRTPP, Yamuna Nagar	Unit No-1: 300 MW	14/04/2008
	Unit No-2: 300 MW	24/06/2008
RGTPP, Hisar	Unit No-1: 600 MW	24/08/2010
	Unit No-2: 600 MW	01/03/2011
Western Yamuna Canal Hydro Project (Yamuna Nagar)	Power House A	
	Unit No-1: 8 MW	29/05/1986
	Unit No-2: 8 MW	13/06/1986
	Power House B	
	Unit No-1: 8 MW	15/05/1987
	Unit No-2: 8 MW	01/06/1987
	Power House C	
	Unit No-1: 8 MW	27/03/1989
	Unit No-2: 8 MW	18/04/1989
	Power House D	
Unit No-1: 7.2 MW	16/04/2004	
Unit No-2: 7.2 MW	12/05/2004	
Total Capacity	2792.4 MW	

A2: BACKGROUND OF KAKROI MINI HYDEL PLANT

- 2.1 The Kakroi MHP, is located on the Kakroi Fall of the Delhi Branch, called the Carrier Lined Channel (CLC) branch of the WYC Canal, at Kakroi village in Sonapat district of Haryana. The site is about 10 kms from the main Delhi – Ambala NH1 on the Sonapat – Kakroi Road. The Full supply discharge of the CLC canal is 40.36 cusec. The canal meets the drinking water requirements of Delhi partially.
- 2.2 The original project was selected as national demonstration Project for ultra-low head Hydro Energy by Alternate Hydro Electric Centre (AHEC), Roorkee and was developed in the year 1988. The same envisaged the installation of 4 Units of 100 KW each. However, three units of 100 KW each were installed at the Project. Although the bay for the fourth unit was in position but the Unit was not been installed due to non-availability of water as it was linked with construction of SYL Canal.
- 2.3 Kakroi Mini hydro site was established in Haryana, to compare an indigenous unit to an American and an Austrian unit, using propeller turbines in different configurations S-type, Bulb and Split flow, respectively. Each of the turbines was of 100kW capacity and operates on a 1.778 meter head.
- 2.4 The project was de-commissioned in 2014 September due to ageing. However it has again been decided by HPGCL to construct new 2 x 0.2 MW plant at the original site using some of the civil structure of the scrapped project. The project is connected to the UHBVNL grid through 33/11 kV Harsana Sub-station.
- 2.5 Detailed Project Report (DPR) of the project has been prepared by Virender Dogra Power Projects Pvt. Ltd and has been submitted as Annexure-A for purview of Hon'ble Commission.
- 2.6 The power produced from the proposed plant shall have a very low generating cost in the long run and is a form of clean energy. As the Civil works are already exist at the power house, the plant maybe brought into running condition with merely replacing the ill units with fresh ones and by incorporating the latest technologies to ensure maximum efficiency.

- 2.7 The power from the project can also be used by the Discoms of Haryana for fulfilment of their Renewable Purchase Obligation (RPO). In FY 2016-17 the discoms of Haryana have to procure 2.75% of their energy sales from non-solar renewable sources which is estimated to be 1287 Mus. Further there has been cumulative shortfall of 2180 MUs in meeting Non-Solar RPO till June 2015. However yearly procurement of Haryana Discoms are even less than 1000 MUs from non-solar renewable sources. Therefore power from WYV Kakroi Mini Hydel would reduce purchase of RE Certificates by Discoms.

A3: CAPITAL COST AND TARIFF DETERMINATION FOR THE PROJECT

Capital Cost

- 3.1 The total project cost including IDC and Financial Charges is estimated as Rs. 552.92 Lac comprising Rs. 102.81Lac for Civil Works including Hydro Mechanical Works, Rs. 425.75Lac for Electro-Mechanical Works and Rs. 24.36 Lac for IDC and FC. The installation cost is worked out Rs. 13.82 Crore/MW. The detail of plant/machinery and various works in given in Chapter no. 5-8 of attached DPR.
- 3.2 The phasing of cost considering the delivery schedule worked out, can be fairly be split into four parts i.e. 15% advance against work order, 35% on delivery of E&M components at site, 40% on completion of erection, successful trial run and testing i.e. on COD. Balance 10% on completion of defect liability period. The project completion would take 10 months from allotment of work to contractor with active execution team and is expected to start generation from FY 2018-19.
- 3.3 It is worth mentioning that, Kakroi MHP is an Ultra-Low Head scheme and first of its type to have been developed in India. Standard low head machines do not run below a head of 2 meters. So, the Ultra-Low Head, i.e. 1.778 m, has made the power development from this site, a challenge to the usual available technology in the market and not much E&M suppliers are able to provide an installation for such facility.
- 3.4 The Capital Cost will be funded using 70% debt and 30% equity in line with Regulation 12 of HERC (Tariff from Renewable Energy Sources) Regulations 2010

Installed Capacity and CUF

- 3.5 As per feasibility study conducted by consultant (Chapter 4 of attached DPR) installed capacity of 0.4 MW capacity has been derived as optimum capacity for generation of power at project site.

- 3.6 The design discharge for generation at installed capacity is 29.18 Cusec. The flow in the canal is above the level for 62% of the period in an average year mainly in June to October period of the year when there is monsoon.
- 3.7 The energy per kW for a 400 kW installation is expected to be about 6504 unit per year i.e. about 75% CUF can be expected from the Kakroi MHP.
- 3.8 Installed capacity of 400 kW will comprise of two units each of 200 kW. Installing two units of 200 kW would be optimum as by installing two units energy loss due to break downs can be avoided. Moreover one unit shall be taken at planned shut down for maintenance during lean period. Installations of more than two units shall beget high cost as the runner cost / kW, for such low head installations is comparatively very high.
- 3.9 Installing higher number of units of lower capacity is also not recommended as the same will lead to higher installation and operational cost.

Loan and Finance Charges

- 3.10 HPGCL as per Regulation 13 (1) of HERC (Tariff from Renewable Energy Sources) Regulations 2010 has calculated tariff by assuming 10 years loan repayment period with no moratorium.
- 3.11 Further as per Regulation 13 2 (b) the interest rate on the loan has been considered equal to average SBI base rate with suitable margin in previous year of expected commission date of the plant i.e 10% as applicable till date in FY 2016-17.
- 3.12 Discount factor for calculation of levellized tariff has also been considered equal to interest rate on long-term loan

Life of the Project

- 3.13 The life of the project would be 35 years in consonance withHERC (Tariff from Renewable Energy Sources) Regulations 2010.

Depreciation

- 3.14 As per Regulation 14 (1) of HERC (Tariff from Renewable Energy Sources) Regulations 2010 HPGCL has depreciated 90% of capital cost of Rs 497.66 Lac. The asset has been depreciated as per Regulation 14 (2) of HERC (Tariff from Renewable Energy Sources) Regulations 2010 as per Straight line Method i.e at 7% in first 10 years and remaining depreciation is spread over the remaining useful life of the project from 11th year onwards till completion of life i.e 35 years i.e 0.8% each year.

Return on Equity

3.15 HPGCL has calculated Return on Equity as per Regulation 15 of HERC (Tariff from Renewable Energy Sources) Regulations 2010 reproduced below:

(2) The normative Return on Equity shall be:

(a) 16% per annum on normative equity capital.

3.16 Further as per Regulation 15 (b) Applicable MAT/Corporate Tax shall be separately invoiced as per the applicable tax rate as declared by the Income Tax Department in 12 equal instalments

Interest on Working Capital

3.17 HPGCL has calculated Interest on Working Capital as per Regulation 16 (1) and 16 (3) of HERC (Tariff from Renewable Energy Sources) Regulations, 2010; reproduced below:

“16. Interest on Working Capital. -(1) The Working Capital requirement in respect of wind energy projects, small hydro power, solar PV and Solar thermal power projects shall be computed in accordance with the following :

a) Operation & Maintenance expenses for one month;

b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative CUF;

c) Maintenance spare @ 15% of operation and maintenance expenses.

.....

16(3) Interest on Working Capital for any financial year shall be computed at the average of the base rate of SBI prevailing during the first six months of the previous year plus 300 basis points.”

3.18 However HPGCL has considered receivables equivalent to one month of energy charge, keeping in view Hon'ble Commission Order dated 22nd November, 2016 in Petition no. HERC/PRO- 20 of 2016 regarding fixation of Tariff for power from 10 MW Solar Power Plant at PTPS.

3.19 In order to reduce the tariff from the plant HPGCL has also proposed interest on working capital at 10% despite the normative working out to be 12.3% as per Regulation 16 (3) of HERC (Tariff from Renewable Energy Sources) Regulations, 2010

Operation and Maintenance Expense

3.20 HPGCL has calculated O&M Expenditure as per Regulation 31 of HERC Renewable Tariff Regulations, 2010 reproduced below:

“ 31 Operation and Maintenance Expenses. -(1) Normative O&M expenses for the first year of the Control period (i.e. FY 2010- 11) shall be as follows.

Project Size	O&M Expense (Rs in Lakhs)
Below 5 MW	17
5 MW to 25 MW	12

(2) Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 5.72% per annum for the Tariff Period for the purpose of determination of levellised tariff.”

3.21 It is expected that Kakroi Mini Hydel Plant will start operation from FY 2018-19. The base O&M expense has been escalated at rate of 5.72% to arrive at annual O&M Expenditure of Rs 2.61 Million/MW for Kakroi Mini hydel plant. Due to small capacity of the plant in absolute term the same comes to be Rs 10.4 lakhs/annum

3.22 However it is not possible to operate and maintain the plant by spending measly amount of Rs 10 lakhs/annum. A basic analysis of expected O&M Expense is tabulated below:

Particulars	Rate (Rs/Month)	Monthly Expenses (Rs.)
7 No. Plant Operator	9,000	63000
4 No. Trash Removal Staff	7,000	28000
1 No. Project Manger	40,000	40,000
Major/Minor Overhauling	30,000	30,000
Travel and Office Expense	5,700	5,700
Total		1,66,700

3.23 Hence the Total Monthly Expense is expected to be Rs.1,66,700 which translates into annual expense of Rs 20 Lakhs. Hence it is prayed to Hon'ble Commission to approve normative O&M Expense of Rs 5 Million/MW for the 0.400 MW hydel plant with normative annual escalation of 5.72%.

A4: FORM 1.1

Table 2 Form-1.1: Form Template for (Wind Power or Small Hydro Project or Solar PV/Solar Thermal

S. No	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Values
1	Power Generation	Capacity	Installed Capacity	MW	0.4
			Capacity Utilization Factor	%	75
			Commercial Operation Date	MM/YY	04/18
			Useful Life	Years	35
2	Project Cost	Capital Cost/MW	Normative Capital Cost	Rs. Lakhs/MW	1382.3
			Capital Cost	Rs. Lakhs	552.92
			Capital Subsidy	Rs. Lakhs	-
			Net Capital Cost	Rs. Lakhs	552.92
3	Financial Assumptions	Debt: Equity	Tariff Period	Years	35
			Debt	%	70
			Equity	%	30
			Total Debt Amount	Rs Lakhs	387.04
			Total Equity Amount	Rs Lakhs	165.88
		Debt Component	Loan Amount	Rs Lakhs	387.04
			Moratorium Period	Years	0
			Repayment Period	Years	10
			Interest Rate	%	10
		Equity Component	Equity Amount	Rs Lakhs	165.88
			Return on equity for first 10 years	% P.a	16
			Return on equity 11th year onwards	% P.a	16
			Discount Rate	%	10
		Depreciation	Depreciation Rate for first 10 years	%	7
			Depreciation Rate 11 th year onwards	%	0.8
		Incentive	Generation Based Incentives, if any Period for GBI	Rs Lakhs	0
4	Operation & Maintenance	Operation & Maintenance	O&M expense	Rs Lakhs/MW	50
			O&M expense per annum	Rs Lakhs	20
			Escalation factor for O&M expense	%	5.72
			O&M expense	Months	1
5	Interest on Working Capital	Interest on Working Capital	Maintenance Spare (% of O&M expenses)	%	15
			Receivables	Months	1
			Interest on Working Capital	% p.a	10%

A5: FORM 2.1

Units Generation	Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Installed Capacity	MW	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Net Generation	MU	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Tariff Component (Fixed Charges)																			
O&M Expense	Rs. Lacs	20.0	21.1	22.4	23.6	25.0	26.4	27.9	29.5	31.2	33.0	34.9	36.9	39.0	41.2	43.6	46.1	48.7	51.5
Depreciation	Rs. Lacs	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Interest on Loan	Rs. Lacs	36.8	32.9	29.0	25.2	21.3	17.4	13.5	9.7	5.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest on WC	Rs. Lacs	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9
Return on Equity	Rs. Lacs	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Total Fixed Cost	Rs. Lacs	119.6	116.9	114.2	111.6	109.1	106.7	104.4	102.1	100.0	97.9	68.8	70.8	73.0	75.3	77.8	80.3	83.0	85.9
Per Unit Tariff Components																			
PUO&M Expense	Rs./kWh	0.77	0.81	0.86	0.91	0.96	1.02	1.07	1.13	1.20	1.27	1.34	1.42	1.50	1.58	1.67	1.77	1.87	1.98
PU Depreciation	Rs./kWh	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
PU Interest o	Rs./kWh	1.41	1.26	1.12	0.97	0.82	0.67	0.52	0.37	0.22	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PU Interest on WC	Rs./kWh	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07
PU RoE	Rs./kWh	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PU Tariff Components	Rs./kWh	4.60	4.49	4.39	4.29	4.19	4.10	4.01	3.92	3.84	3.76	2.64	2.72	2.81	2.89	2.99	3.09	3.19	3.30
Levelised Tariff																			
Discount Factor		1.00	0.91	0.83	0.75	0.68	0.62	0.56	0.51	0.47	0.42	0.39	0.35	0.32	0.29	0.26	0.24	0.22	0.20
Discounted Tariff Component	Rs./kWh	4.60	4.08	3.63	3.22	2.87	2.55	2.26	2.01	1.79	1.60	1.02	0.95	0.89	0.84	0.79	0.74	0.69	0.65
Levelised Tariff	Rs./kWh	3.97																	

Units Generation		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Installed Capacity	MW	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Net Generation	MU	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Tariff Component (Fixed Charges)																		
O&M Expense	Rs. Lacs	54.4	57.5	60.8	64.3	68.0	71.9	76.0	80.3	84.9	89.8	94.9	100.4	106.1	112.2	118.6	125.4	132.5
Depreciation	Rs. Lacs	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Interest on Loan	Rs. Lacs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest on WC	Rs. Lacs	2.0	2.1	2.2	2.3	2.4	2.6	2.7	2.8	3.0	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5
Return on Equity	Rs. Lacs	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
Total Fixed Cost	Rs. Lacs	89.0	92.2	95.6	99.2	103.0	107.0	111.2	115.7	120.4	125.5	130.8	136.4	142.3	148.5	155.2	162.2	169.6
Per Unit Tariff Components																		
PUO&M Expense	Rs./kWh	2.09	2.21	2.34	2.47	2.61	2.76	2.92	3.09	3.26	3.45	3.65	3.86	4.08	4.31	4.56	4.82	5.09
PU Depreciation	Rs./kWh	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
PU Interest o	Rs./kWh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PU Interest on WC	Rs./kWh	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17
PU RoE	Rs./kWh	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
PU Tariff Components	Rs./kWh	3.42	3.54	3.67	3.81	3.96	4.11	4.27	4.45	4.63	4.82	5.03	5.24	5.47	5.71	5.96	6.23	6.52
Levelised Tariff																		
Discount Factor		0.18	0.16	0.15	0.14	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.04	0.04
Discounted Tariff Component	Rs./kWh	0.61	0.58	0.55	0.52	0.49	0.46	0.43	0.41	0.39	0.37	0.35	0.33	0.31	0.30	0.28	0.27	0.26
Levelised Tariff	Rs./kWh	3.97																

A6: PRAYER

- a) Admit This Petition

- b) Allow recovery of levelised tariff of Rs 3.97/Unit for Tariff Period (35 years) of the plant

- c) Allow separate recovery of MAT/Income-Tax as per actual rate applied by Income Tax Department

- d) Condone any inadvertent omissions / errors / delays / short comings and permit the applicant to add/ change/modify/ alter this filing and make further submissions as may be required at later stage as the filing is being done based on the best available information.

- e) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record.