

1.1 Form Template for (HP, Uttarakhand and NE states SHP 5MW to 25 MW SHP) Assumptions Parameters

S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	HP, Uttarakhand, NE States 5 MW to 25 MW	
1	Power Generation	<u>Capacity</u>	Installed Power Generation Capacity	MW	1	
			Capacity Utilization Factor	%	45%	
			Auxiliary Consumption	%	1%	
			Deration Factor	%	0.00%	
			Useful Life	Years	35	
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	630	
3	Financial Assumption	<u>Debt: Equity</u>	Tariff Period	Years	13	
			Debt	%	70%	
			Equity	%	30%	
			Total Debt Amount	Rs Lacs	441	
			Total Equity Amount	Rs Lacs	189	
			<u>Debt Component</u>	Loan Amount	Rs Lacs	441
				Moratorium Period	years	0
				Repayment Period(incld Moratorium)	years	10
				Intrest Rate	%	14.29%
			<u>Equity Component</u>	Equity amount	Rs Lacs	189
				Return on Equity for first 10 years	% p.a	19%
				RoE Period	Year	10
				Return on Equity 11th year onwards	% p.a	24.00%
Weighted average of ROE	%	22.57%				
Discount Rate (equiv. to WACC) 11th year onwards	%	16.8%				
4	Financial Assumptions	<u>Fiscal Assumptions</u>	Income Tax	%	33.99%	
			MAT Rate (for first 10 years)	%	16.995%	
			80 IA benefits	Yes/No	Yes	
			<u>Depreciation</u>	Depreciation Rate for first 10 years	%	7.00%
				Depreciation Rate 11th year onwards	%	0.80%
				Years for 7% rate		10
5	Working Capital	<u>For Fixed Charges</u>	O&M Charges	Months	1	
			Maintenance Spare	(% of O&M expenses)	15%	
			Receivables for Debtors	Months	2	
			<u>For Variable Charges</u>	Intrest On Working Capital	%	13.79%
7	Operation & Maintenance	<u>O&M Expense</u>	power plant	% of base capital cost	0%	
			Total O & M Expenses	Lakh	15	
			Escalation	%	5.72%	

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
24.75	26.16	27.66	29.24	30.91	32.68	34.55	36.53	38.62	40.82	43.16	45.63	48.24	51.00	53.91
44.10	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04
3.15	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
3.35	2.66	2.75	2.84	2.93	3.03	3.14	3.25	3.37	3.49	3.62	3.76	3.91	4.06	4.23
35.91	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36
111.26	79.22	80.81	82.48	84.24	86.11	88.09	90.17	92.38	94.71	97.18	99.79	102.55	105.46	108.54

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0.63	0.67	0.71	0.75	0.79	0.84	0.89	0.94	0.99	1.05	1.11	1.17	1.24	1.31	1.38
1.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.08	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
0.09	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11
0.92	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
2.85	2.03	2.07	2.11	2.16	2.21	2.26	2.31	2.37	2.43	2.49	2.56	2.63	2.70	2.78

0.248	0.212	0.182	0.156	0.133	0.114	0.098	0.084	0.072	0.061	0.053	0.045	0.039	0.033	0.028
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25	26	27	28	29	30	31	32	33	34	35
1	1	1	1	1	1	1	1	1	1	1
3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90

25	26	27	28	29	30	31	32	33	34	35
57.00	60.26	63.71	67.35	71.20	75.27	79.58	84.13	88.94	94.03	99.41
5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.40	4.59	4.78	4.99	5.21	5.44	5.68	5.94	6.21	6.49	6.80
45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36	45.36
111.80	115.25	118.89	122.74	126.81	131.11	135.66	140.47	145.55	150.93	156.61

25	26	27	28	29	30	31	32	33	34	35
1.46	1.54	1.63	1.73	1.82	1.93	2.04	2.16	2.28	2.41	2.55
0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.17	0.17
1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
2.86	2.95	3.05	3.15	3.25	3.36	3.48	3.60	3.73	3.87	4.01

0.024	0.021	0.018	0.015	0.013	0.011	0.010	0.008	0.007	0.006	0.005
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Determination of Accelerated Depreciation for (HP, Uttarakhand and NE states SHP 5MW To 25 MW)

Depreciation amount	90%
Book Depreciation rate	5.28%
Tax Depreciation rate	80%
Income Tax (MAT)	17%
Income Tax (Normal Rates)	33.99%
Capital Cost	630.0

Years ----->	Unit	1	2	3	4	5	6	7	8	9	10
Book Depreciation	%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%
Book Depreciation	Rs Lakh	33.26	33.26	33.26	33.26	33.26	33.26	33.26	33.26	33.26	33.26

Accelerated Depreciation											
Opening	%	100%	60%	12%	2%	0%	0%	0%	0%	0%	0%
Allowed during the year	%	40%	48.00%	9.60%	1.92%	0.38%	0.08%	0.02%	0.00%	0.00%	0.00%
Closing	%	60%	12%	2.40%	0.48%	0.10%	0.02%	0.00%	0.00%	0.00%	0.00%
Accelerated Deprn.	Rs Lakh	252.00	302.40	60.48	12.10	2.42	0.48	0.10	0.02	0.00	0.00

Net Depreciation Benefit	Rs Lakh	218.74	269.14	27.22	-21.17	-30.84	-32.78	-33.17	-33.24	-33.26	-33.26
Tax Benefit	Rs Lakh	37.17	45.74	4.63	-3.60	-5.24	-5.57	-5.64	-5.65	-5.65	-5.65
Energy generation	MU	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Per unit benefit	Rs/Unit	0.95	1.17	0.12	-0.09	-0.13	-0.14	-0.14	-0.14	-0.14	-0.14
Discounting Factor		1.00	0.86	0.73	0.63	0.54	0.46	0.39	0.34	0.29	0.25

Levellised benefit	0.21	Rs/Unit
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11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
33.26	33.26	33.26	33.26	33.26	33.26	33.26	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
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%	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	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

-33.26	-33.26	-33.26	-33.26	-33.26	-33.26	-33.26	-1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-11.31	-11.31	-11.31	-11.31	-11.31	-11.31	-11.31	-0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.21	0.18	0.16	0.13	0.11	0.10	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.02	0.02

