

**Form 1.1 Form Template for (Solar Thermal Power Projects) Parameters Assumptions**

S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Assumptions
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	1
			Capacity Utilization Factor	%	23.0%
			Auxiliary Consumption Factor	%	10.0%
			Useful Life	Years	25
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	1300
3	Sources of Fund		Tariff Period	Years	25
			<u>Debt: Equity</u>		
			Debt	%	70%
			Equity	%	30%
			Total Debt Amount	Rs Lacs	910
			Total Equity Amount	Rs Lacs	390
			<u>Debt Component</u>		
			Loan Amount	Rs Lacs	910
			Moratorium Period	years	0
			Repayment Period(incld Moratorium)	years	10
			Interest Rate	%	14.29%
			<u>Equity Component</u>		
			Equity amount	Rs Lacs	390
Return on Equity for first 10 years	% p.a	19.00%			
RoE Period	Year	10			
Return on Equity 11th year onwards	% p.a	24.00%			
Weighted average of ROE		22.00%			
Discount Rate		16.60%			
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	%	1.33%
Years for 7% rate		10			
5	Working Capital		<u>For Fixed Charges</u>		
			O&M Charges	Months	1
			Maintenance Spare (% of O&M exepenses)		15%
			Receivables for Debtors	Months	2
			<u>For Variable Charges</u>		
Interest On Working Capital	%	13.79%			
7	Operation & Maintenance		power plant	Rs Lakh	13
			<u>Total O &amp; M Expenses Escalation</u>	%	5.72%



10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
21.45	22.67	23.97	25.34	26.79	28.32	29.94	31.66	33.47	35.38	37.40	39.54	41.81	44.20	46.73	49.40
91.00	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33	17.33
6.50	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
5.25	3.89	3.96	4.04	4.12	4.21	4.30	4.40	4.50	4.61	4.72	4.84	4.97	5.10	5.25	5.40
74.10	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60	93.60
<b>198.30</b>	<b>137.50</b>	<b>138.87</b>	<b>140.31</b>	<b>141.85</b>	<b>143.47</b>	<b>145.18</b>	<b>146.99</b>	<b>148.90</b>	<b>150.92</b>	<b>153.06</b>	<b>155.32</b>	<b>157.71</b>	<b>160.24</b>	<b>162.91</b>	<b>165.73</b>

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1.18	1.25	1.32	1.40	1.48	1.56	1.65	1.75	1.85	1.95	2.06	2.18	2.31	2.44	2.58	2.72
5.02	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
0.36	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
0.29	0.21	0.22	0.22	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.29	0.30
4.09	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16
<b>10.94</b>	<b>7.58</b>	<b>7.66</b>	<b>7.74</b>	<b>7.82</b>	<b>7.91</b>	<b>8.01</b>	<b>8.11</b>	<b>8.21</b>	<b>8.32</b>	<b>8.44</b>	<b>8.57</b>	<b>8.70</b>	<b>8.84</b>	<b>8.98</b>	<b>9.14</b>

0.251	0.215	0.185	0.158	0.136	0.116	0.100	0.086	0.073	0.063	0.054	0.046	0.040	0.034	0.029	0.025
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**Determination of Accelerated Depreciation Benefit for Solar Thermal Power Projects**

Depreciation amount	90%
Book Depreciation rate	5.28%
Tax Depreciation rate	80%
Income Tax (MAT)	16.995%
Income Tax (Normal Rates)	33.99%
Capital Cost	1300.0

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	68.64	68.64	68.64	68.64	68.64	68.64	68.64	68.64	68.64	68.64

**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	520.00	624.00	124.80	24.96	4.99	1.00	0.20	0.04	0.01	0.00

Net Depreciation Benefit	Rs Lakh	451.36	555.36	56.16	-43.68	-63.65	-67.64	-68.44	-68.60	-68.63	-68.64
Tax Benefit	Rs Lakh	76.71	94.38	9.54	-7.42	-10.82	-11.50	-11.63	-11.66	-11.66	-11.67
Energy generation	MU	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81
Per unit benefit	Rs/Unit	4.23	5.21	0.53	-0.41	-0.60	-0.63	-0.64	-0.64	-0.64	-0.64
Discounting Factor		1.00	0.86	0.74	0.63	0.54	0.46	0.40	0.34	0.29	0.25

<b>Levellised benefit</b>	<b>0.91</b>	Rs/Unit
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11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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%
68.64	68.64	68.64	68.64	68.64	68.64	68.64	3.12	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%
0.00%	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

-68.64	-68.64	-68.64	-68.64	-68.64	-68.64	-68.64	-3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-23.33	-23.33	-23.33	-23.33	-23.33	-23.33	-23.33	-1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81
-1.29	-1.29	-1.29	-1.29	-1.29	-1.29	-1.29	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.22	0.18	0.16	0.14	0.12	0.10	0.09	0.07	0.06	0.05	0.05	0.04	0.03	0.03	0.03