

**Stratham
Solar PV Facility
Total Resource Cost Test
20 Year Analysis**

	<u>Benefits/ Costs</u>
<u>Benefits</u>	
Capacity	
Generation	\$57,144
Transmission	\$64,350
Distribution	\$64,005
DRIPE	\$6,624
Localized Distribution	\$0
Total Capacity	\$192,123
Energy	
Winter	
Peak	\$16,975
Off Peak	\$22,075
Summer	
Peak	\$8,905
Off Peak	\$10,643
Total Energy	\$58,597
Other	
Energy DRIPE	\$12,023
CO2	\$0
REC Value	\$52,372
Total Other	\$64,395
Local Economic Dev	\$0
Total Benefits	\$315,115
Total Costs	\$482,871
Benefit/Cost Ratio	0.65

Stratham
Solar PV Facility
Revenue Requirement
20 Yr Analysis

Assumptions

UES Investment	\$279,212
Depreciable Basis	\$237,331
Book Life	20
Capacity (kW)	40.00
Capacity Factor (%)	13.50%
Annual Production (kWh)	47,304
Lifetime Production (kWh)	946,080
Initial Lease Payment (\$/Yr)	4600.00
Inflation Rate (%)	1.98%
Initial O&M Expense (\$/Yr)	1400.00
Monitoring & Verification (%)	2.00%
Working Capital (days)	12
Tax Rate (%)	39.61%
Real Discount Rate (%)	1.66%
Federal Tax Credit	30.00%
Depreciable Basis Adj	50.00%

Revenue Requirements Analysis

Year	Rate Base (BoY)	Rate Base (EoY)	Rate Base (Avg)	Return on Rate Base	Tax Depreciation	Book Depreciation Unadj	Tax Adj. Book Depreciation	Deferred Tax	Amort of Tax Credit	Amort Gross Up	Grossed Up Amort	Lease Payments	O&M	Monitoring & Verification	Working Capital	Annual Rev Req	PV Factor	PV Rev Req
1	\$279,212	\$251,151	\$265,182	\$28,757	\$47,466	\$13,961	\$11,867	\$14,101	\$4,188	\$2,747	\$6,935	\$4,600	\$1,400	\$5,304	\$998	\$45,990	0.983671	\$45,238.97
2	\$251,151	\$211,808	\$231,480	\$24,252	\$75,946	\$13,961	\$11,867	\$25,382	\$4,188	\$2,747	\$6,935	\$4,691	\$1,428	\$4,630	\$871	\$40,803	0.967609	\$39,481.46
3	\$211,808	\$184,499	\$198,154	\$21,125	\$45,567	\$13,961	\$11,867	\$13,349	\$4,188	\$2,747	\$6,935	\$4,784	\$1,456	\$3,963	\$746	\$37,005	0.951809	\$35,222.03
4	\$184,499	\$164,409	\$174,454	\$18,825	\$27,340	\$13,961	\$11,867	\$6,129	\$4,188	\$2,747	\$6,935	\$4,879	\$1,485	\$3,489	\$657	\$34,265	0.936267	\$32,081.57
5	\$164,409	\$144,319	\$154,364	\$16,525	\$27,340	\$13,961	\$11,867	\$6,129	\$4,188	\$2,747	\$6,935	\$4,975	\$1,514	\$3,087	\$581	\$31,614	0.920978	\$29,115.54
6	\$144,319	\$129,644	\$136,982	\$14,844	\$13,670	\$13,961	\$11,867	\$714	\$4,188	\$2,747	\$6,935	\$5,074	\$1,544	\$2,740	\$516	\$29,649	0.905940	\$26,860.04
7	\$129,644	\$120,384	\$125,014	\$13,784	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,174	\$1,575	\$2,500	\$471	\$28,435	0.891147	\$25,339.89
8	\$120,384	\$111,123	\$115,754	\$12,724	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,277	\$1,606	\$2,315	\$436	\$27,288	0.876595	\$23,920.89
9	\$111,123	\$101,863	\$106,493	\$11,663	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,381	\$1,638	\$2,130	\$401	\$26,144	0.862281	\$22,543.76
10	\$101,863	\$92,603	\$97,233	\$10,603	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,488	\$1,670	\$1,945	\$366	\$25,003	0.848201	\$21,207.51
11	\$92,603	\$83,343	\$87,973	\$9,543	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,596	\$43,585	\$1,759	\$331	\$65,746	0.834351	\$54,855.36
12	\$83,343	\$74,082	\$78,712	\$8,482	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,707	\$1,737	\$1,574	\$296	\$22,728	0.820727	\$18,653.85
13	\$74,082	\$64,822	\$69,452	\$7,422	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,820	\$1,771	\$1,389	\$261	\$21,595	0.807325	\$17,434.57
14	\$64,822	\$55,562	\$60,192	\$6,362	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$5,935	\$1,806	\$1,204	\$227	\$20,465	0.794143	\$16,252.46
15	\$55,562	\$46,301	\$50,932	\$5,302	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,053	\$1,842	\$1,019	\$192	\$19,338	0.781175	\$15,106.63
16	\$46,301	\$37,041	\$41,671	\$4,241	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,173	\$1,879	\$833	\$157	\$18,214	0.768419	\$13,996.22
17	\$37,041	\$27,781	\$32,411	\$3,181	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,295	\$1,916	\$648	\$122	\$17,093	0.755872	\$12,920.38
18	\$27,781	\$18,521	\$23,151	\$2,121	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,420	\$1,954	\$463	\$87	\$15,976	0.743529	\$11,878.29
19	\$18,521	\$9,260	\$13,890	\$1,060	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,547	\$1,992	\$278	\$52	\$14,861	0.731388	\$10,869.15
20	\$9,260	\$0	\$4,630	\$0	\$0	\$13,961	\$11,867	(\$4,700)	\$4,188	\$2,747	\$6,935	\$6,676	\$2,032	\$93	\$17	\$13,750	0.719445	\$9,892.15
				\$220,815	\$237,331	\$279,212	\$237,331	\$0	\$83,764	\$54,941	\$138,705	\$111,546	\$75,831	\$41,362	\$7,785	\$555,965		\$482,871

Annual Escalation	Demand Reduction	Discount Rate		
1.03988	47.30	0.0166		
REC Price	Demand Reduction (MWh)	REC Cost	PV Factor	Discounted Cost
na	na	na	na	
\$45.00	47.30	\$2,129	0.98367	\$2,094
\$46.79	47.30	\$2,214	0.96761	\$2,142
\$48.66	47.30	\$2,302	0.95181	\$2,191
\$50.60	47.30	\$2,394	0.93627	\$2,241
\$52.62	47.30	\$2,489	0.92098	\$2,292
\$54.72	47.30	\$2,588	0.90594	\$2,345
\$56.90	47.30	\$2,692	0.89115	\$2,399
\$59.17	47.30	\$2,799	0.87660	\$2,454
\$61.53	47.30	\$2,911	0.86228	\$2,510
\$63.98	47.30	\$3,027	0.84820	\$2,567
\$66.53	47.30	\$3,147	0.83435	\$2,626
\$69.19	47.30	\$3,273	0.82073	\$2,686
\$71.95	47.30	\$3,403	0.80733	\$2,748
\$74.82	47.30	\$3,539	0.79414	\$2,811
\$77.80	47.30	\$3,680	0.78118	\$2,875
\$80.90	47.30	\$3,827	0.76842	\$2,941
\$84.13	47.30	\$3,980	0.75587	\$3,008
\$87.48	47.30	\$4,138	0.74353	\$3,077
\$90.97	47.30	\$4,303	0.73139	\$3,147
\$94.60	47.30	\$4,475	0.71945	\$3,220
			NPV	\$52,372