

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

<u>Benefits</u>	<u>Benefits/ Costs</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	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

**Stratham
Solar PV Facility
REC Benefit
20 Year Analysis**

		Annual Escalation 1.03988	Demand Reduction 47.30		Discount Rate 0.0166		
		REC Price	Demand Reduction (MWh)	REC Cost	PV Factor	Discounted Cost	
1	2009	\$159.98	na	na	na		
2	2010	\$166.36	47.30	\$2,129	0.98367	\$2,094	
3	2011		47.30	\$2,214	0.96761	\$2,142	
4	2012		47.30	\$2,302	0.95181	\$2,191	
5	2013		47.30	\$2,394	0.93627	\$2,241	
6	2014		47.30	\$2,489	0.92098	\$2,292	
7	2015		47.30	\$2,588	0.90594	\$2,345	
8	2016		47.30	\$2,692	0.89115	\$2,399	
9	2017		47.30	\$2,799	0.87660	\$2,454	
10	2018		47.30	\$2,911	0.86228	\$2,510	
11	2019		47.30	\$3,027	0.84820	\$2,567	
12	2020		47.30	\$3,147	0.83435	\$2,626	
13	2021		47.30	\$3,273	0.82073	\$2,686	
14	2022		47.30	\$3,403	0.80733	\$2,748	
15	2023		47.30	\$3,539	0.79414	\$2,811	
16	2024		47.30	\$3,680	0.78118	\$2,875	
17	2025		47.30	\$3,827	0.76842	\$2,941	
18	2026		47.30	\$3,980	0.75587	\$3,008	
19	2027		47.30	\$4,138	0.74353	\$3,077	
20	2028		47.30	\$4,303	0.73139	\$3,147	
21	2029		47.30	\$4,475	0.71945	\$3,220	
					NPV	\$52,372	