

**UNION COUNTY IMPROVEMENT  
AUTHORITY**

**FINAL REPORT: UCIA RENEWABLE  
ENERGY PROGRAM – PHASE I**

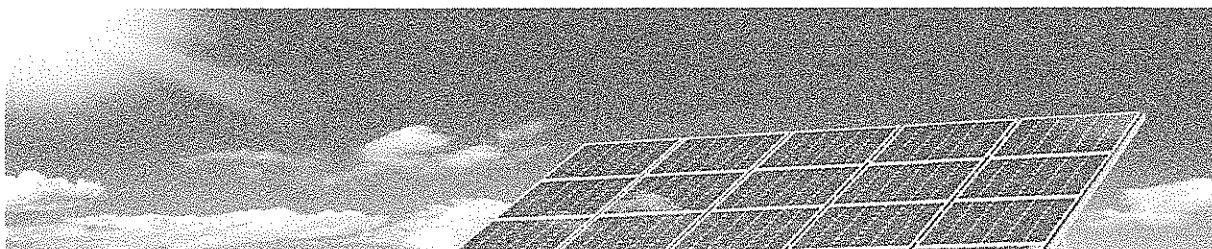
**SEPTEMBER 2012**



**UNION COUNTY IMPROVEMENT AUTHORITY**

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**FINAL REPORT: UCIA RENEWABLE ENERGY  
PROGRAM– PHASE I**

**SEPTEMBER 2012**

**I. Introduction**

In 2010, the UCIA released the Solar Proposal Evaluation Report, in anticipation of issuing a Request for Proposal (“RFP”) pursuant to the competitive contracting provisions of the N.J. Local Public Contracts Law and the N.J. Public Schools Contracts Law, in connection with the UCIA’s Series 2010 Renewable Energy Program (“Program”). The UCIA, in combination with Union County, sought to develop photovoltaic and other renewable energy systems for certain local government and school buildings, structures and lands owned or controlled by local governments (“Local Units”) within Union County.

On November 2, 2010, the UCIA received a proposal in response to the RFP from Tioga Energy, Inc.. That proposal received a comprehensive evaluation by the UCIA evaluation team in accordance with the aforementioned New Jersey Contract laws and pursuant to a series of notices and directives by the N.J. Local Finance Board and the N.J. Board of Public Utilities. As a result of that evaluation, Tioga Energy, Inc. was recommended to the UCIA as the contractor for the Program. Accordingly, the UCIA entered into a series of agreements with Tioga Energy, Inc. including, but not limited to, a Power Purchase Agreement (“PPA”) and a Company Lease Agreement. Subsequent to these agreements, Tioga Energy, Inc. also entered into a Turnkey Engineering, Procurement and Construction Agreement with its turnkey contractor, Huen/Pro-Tech Solar JV, LLC. Additionally, as the facility evaluation progressed, a number of Local Units in Union County entered into three-party PPA’s and Site License Agreements with the UCIA and Tioga Energy, Inc.

Financing for the Program was secured through the issuance of the County of Union Guaranteed Renewable Energy Program Lease Bonds, Series 2011 (the “Series 2011 Bonds”). Tioga Energy, Inc. designed and constructed the various facilities in the Program, while proceeds of the Series 2011 Bonds were drawn down on a requisition basis to pay the costs. The UCIA retained title to the projects but leased same to Tioga Energy, Inc via the Company Lease Agreement. Lease payments payable by Tioga Energy, Inc. are a pass through of the UCIA’s financing costs for its Series 2011 Bonds. The resulting savings on the financing results in a lower PPA price for the Local Units. Additionally, it should be noted that Tioga Energy, Inc. reimbursed the UCIA, at closing, for professional fees incurred for project development.

**II. Union County Participants (“Local Units”)**

During the initial round of the Program introduction and facility evaluation, the UCIA entered into agreements with sixteen (16) Local Units for installation of solar power units. The majority of the installations were to be roof-top, but there were several carport installations contemplated. During the secondary level of facility evaluation and engineering, several of the

Local Units were dropped due to a variety of structural and/or site concerns. However, two Local Units were also added to the Program during the process. There are fifteen (15) Local Units participating in the Program.

Similarly, the original evaluation listed forty-seven (47) potential facilities for installation wherein, upon further investigation and consideration thirty-one (31) facilities are or will be operating within the Program.

Below is a list of the participating Local Units and the corresponding number of facilities within that Local Unit (see also notations as to Local Units dropped or added):

<u>LOCAL UNITS</u>	<u>NUMBER OF FACILITIES</u>
Cranford Township [see "Open Issues"]	2
Linden	6
Morris-Union Joint Commission	1
Plainfield	1
Rahway	1
Roselle	1
Berkeley Heights BOE [added]	2
Garwood BOE	1
Hillside BOE	3
New Providence BOE	2
Roselle BOE	1
Roselle Park BOE	4
Winfield Township BOE	1
Union County Community College (Cranford)	1
Union County Vo-Tech Schools [added]	4
<b>TOTAL: 15 Local Units</b>	<b>31 Facilities</b>
<u>Local Units Dropped</u>	

- Hillside (site shading and structural issues)
- Springfield (site and structural issues)
- Union County Arts Center (historical status issues; withdrawn)

### III. Savings; Solar Renewable Energy Credits ("SREC") Purchase Option

See the attached Savings Report (Ex. A) by Local Unit and facility. The system-wide total for savings over the fifteen year term is \$4,910,612.00, which exceeds the original savings rate estimate. The total SREC values for the entire system (years 11-15) are estimated at \$166,470, assuming a projection of \$350 SREC price. The UCIA has the option of purchasing a portion of the SREC's at \$200 each and then selling above that price if the SREC market permits.

#### **IV. Final System Size(s); Site Costs**

The original target system size was 3,367 kilowatts; the final system size is projected to be 3,369 kilowatts. See Exhibit B which breaks down the sizing by facility with site costs. Total site costs are \$19,505,400.00.

#### **V. Open Issue**

One matter remains an “Open Issue” for the Program. The UCIA remains in the status of “Dispute”, per the terms of the PPA with Cranford, due to the Township’s “withdrawal” of the Cranford Library Carport facility, causing costs to be incurred by Tioga Energy, Inc. and the Program. Recommendations and evaluations of this open matter will be addressed by the Program team and the UCIA.

#### **VI. On-Line Monitoring of the UCIA Solar Program**

The public is invited to monitor the energy production and output for the UCIA system by logging on to <http://surepathprofile.tiogaenergy.com/entry>. The screen will present a map view of the various facilities within the Program, allowing the viewer to click on any given facility to gauge the status and data for that particular facility.

#### **VII. New Solar Energy Law in New Jersey**

A recently enacted law in New Jersey will encourage the continued growth of the solar industry while protecting ratepayers from increased costs. The new law, signed in July, couples an acceleration of the renewable portfolio standard with a reduction of the solar alternate compliance payments. The Division of Rate Counsel estimates that the new law will save ratepayers approximately \$1.06 billion over the next 15 years as compared to the current solar subsidy schedule. These additional subsidies and cost reductions will also serve as an additional financial support for TIOGA’s repayment of the Program’s bonds.

#### **VIII. Next Steps; Closing**

As the facility installation and construction enters its final weeks (estimated to be complete in October 2012), the UCIA, Tioga Energy, Inc. and the Local Units must complete a series of Program Document Amendments for the purpose of updating the designated facilities and system sizing, among other items. These amendments will also address the dropped and added Local Units within the Program.

**EXHIBIT A**  
**SAVINGS REPORT**

UCIA Series 2010 Renewable Energy  
Program

6/29/2012

Location	Total kW	Year 1 Annual Savings (\$)	Year 15 Annual Savings (\$)	Year 15 Total Savings (\$)
All Locations	3369.66	\$251,662	\$406,917	\$4,910,612

**Berkeley Heights BOE - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
Gov. Livingston HS	Roof	1,058,272	12.9%	121.73	136,338	122,704	\$50,613	\$0.114	\$4,233	\$8,591	\$95,230
Woodruff Elementary School	Roof	142,560	71.9%	88.60	102,504	92,254	\$38,053	\$0.114	\$3,183	\$6,459	\$71,598
	<b>Total</b>			<b>210.33</b>	<b>238,842</b>	<b>214,958</b>	<b>\$88,666</b>		<b>\$7,416</b>	<b>\$15,050</b>	<b>\$166,828</b>

Percentage of Total UCIA Project (based on kWh) **6.48%**

Roselle BOE Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (YRS 11-15) (\$)	Total SREC Value (YRS 11-15) (\$)
\$250		\$3,822
\$350		\$11,467
\$450		\$19,111

**Union County - Photovoltaic System Summary**  
UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Utility Co	Annual Savings (\$)	Year 15		
							NPV @ 8%	\$/kwh			Annual Savings (\$)	Annual Savings Total Savings (\$)	
Vo-Tech - West Hall	Roof	497.25		497.25	546,975	492,278	\$ 300,475	\$ 0.1350	\$	27,321	\$ 47,536	\$ 556,868	
Vo-Tech - Baxel Hall	Roof	106.93		106.93	117,618	105,856	\$ 64,612	\$ 0.1350	\$	5,875	\$ 10,222	\$ 119,745	
Vo-Tech - Bistocci Hall	Roof	45.83		45.83	50,527	45,474	\$ 27,756	\$ 0.1350	\$	2,524	\$ 4,391	\$ 51,441	
Vo-Tech - Mancuso Hall	Roof	96.14		96.14	104,787	95,356	\$ 58,203	\$ 0.1350	\$	5,292	\$ 9,208	\$ 107,867	
<b>Total</b>		<b>746.14</b>		<b>746.14</b>	<b>819,907</b>	<b>738,965</b>	<b>\$451,046</b>			<b>\$41,013</b>	<b>\$71,356</b>	<b>\$635,922</b>	
												<b>Percentage of Total UCIA Project (based on kWh)</b>	<b>22.25%</b>

Vo-Tech Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$12,299
\$350		\$36,896
\$450		\$61,493

**Winfield Township BOE - Photovoltaic System Summary**

UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	¢/kWh	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co \$/kWh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
Winfield Township School	Roof	193,440	30.4%	54.99	58,852	52,967	\$43,130	\$0.157	\$4,086	\$6,564	\$79,297
<b>Total</b>				<b>54.99</b>	<b>58,852</b>	<b>52,967</b>	<b>\$43,130</b>		<b>\$4,086</b>	<b>\$6,564</b>	<b>\$79,297</b>

Percentage of Total UCIA Project (based on kWh) **1.60%**

Winfield Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$983
\$350		\$2,648
\$450		\$4,414



**Union County Community College - Photovoltaic System Summary**  
 UCJA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	NPV @ 8%	Utility Co S/kwh	Year 1		Year 15	
									Annual Savings (\$)	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
UCC Cranford Campus	Roof	7,114,707	2.7%	173.20	191,606	172,445	\$131,579	\$0.151	\$12,364	\$20,183	\$242,305	
<b>Total</b>				<b>173.20</b>	<b>191,606</b>	<b>172,445</b>	<b>\$131,579</b>		<b>\$12,364</b>	<b>\$20,183</b>	<b>\$242,305</b>	

Percentage of Total UCJA Project (based on kWh) **5.20%**

UCC Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$2,874
\$350		\$8,622
\$450		\$14,370

**City of Rahway - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Annual Savings (\$)	Year 15	
							NPV @ 8%	Utility Co \$/kwh		Annual Savings (\$)	Annual Savings Total Savings (\$)
Rahway DPW	Roof	75,311	57.1%	33.94	43,033	38,730	\$28,750	\$0.149	\$2,692	\$4,425	\$52,981
<b>Total</b>				<b>33.94</b>	<b>43,033</b>	<b>38,730</b>			<b>\$2,692</b>	<b>\$4,425</b>	<b>\$52,981</b>
		Percentage of Total UCIA Project (based on kWh)		1.17%							
Rahway Possible Annual SREC Revenue (Yrs 11-15)											
			SREC Trading Price (\$)		SREC NPV 8% Value (Yrs 11-15) (\$)		Total SREC Value (Yrs 11-15) (\$)				
			\$250		\$645						
			\$350		\$1,936						
			\$450		\$3,227						

**Township of Cranford - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	¢/PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co S/kwh	Annual Savings (\$)	Annual Savings (\$)	Annual Savings (\$)
Cranford Community Center	Roof	398,720	16.4%	59.22	65,515	58,964	\$52,364	\$0.164	\$5,010	\$7,890	\$96,082
Cranford Public Library	Roof	244,640	14.0%	32.90	34,145	30,731	\$33,611	\$0.179	\$3,263	\$4,990	\$61,489
<b>Total</b>				<b>92.12</b>	<b>99,660</b>	<b>89,694</b>	<b>\$85,975</b>		<b>\$8,273</b>	<b>\$12,880</b>	<b>\$157,572</b>

Percentage of Total UCIA Project (based on kWh) **2.70%**

Cranford Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$1,495
\$350		\$4,485
\$450		\$7,475

**Garwood Board of Education - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Annual Savings (\$)	Year 15	
							NPV @ 8%	Utility Co \$/kwh		Annual Savings (\$)	Annual Savings Total Savings (\$)
Garwood BOE Lincoln Franklin School	Roof	687,400	10.6%	65.80	72,795	65,515	\$58,311	\$0.165	\$5,580	\$8,784	\$106,989
<b>Total</b>				<b>65.8</b>	<b>72,795</b>	<b>65,515</b>	<b>\$58,311</b>		<b>\$5,580</b>	<b>\$8,784</b>	<b>\$106,989</b>

Percentage of Total UCIA Project (based on kWh) **1.98%**

Garwood Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15)/(\$)	Total SREC Value (Yrs 11-15)/(\$)
\$250		\$1,092
\$350		\$3,276
\$450		\$5,460

**Hillside Board of Education - Photovoltaic System Summary**  
UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
Hillside BOE Calvin Coolidge	Roof	187,051	19.2%	33.61	35,841	32,257	\$30,477	\$0.170	\$2,935	\$4,562	\$55,848
Hillside BOE -APM-ECC	Roof	453,566	41.1%	174.37	186,454	167,808	\$207,895	\$0.202	\$20,505	\$30,354	\$379,084
Hillside High School	Roof	727,983	51.2%	174.37	186,615	167,954	\$160,638	\$0.172	\$15,489	\$24,016	\$294,288
<b>Total</b>				<b>382.35</b>	<b>408,910</b>	<b>368,019</b>	<b>\$399,010</b>		<b>\$38,930</b>	<b>\$58,932</b>	<b>\$729,221</b>

Percentage of Total UCIA Project (based on kWh) **11.09%**

Hillside Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$6,134
\$350		\$18,401
\$450		\$30,668

**Morris-Union Jointure Commission - Photovoltaic System Summary**  
 UCJA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Year 1		Year 15			
						Guaranteed Output (kWh)	NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
MUUC Transportation Department	Roof	139,560	55.5%	72.38	77,463	69,717	\$50,076	\$0.146	\$4,668	\$7,741	\$92,362
<b>Total</b>				<b>72.38</b>	<b>77,463</b>	<b>69,717</b>	<b>\$50,076</b>		<b>\$4,668</b>	<b>\$7,741</b>	<b>\$92,362</b>

Percentage of Total UCJA Project (based on kWh) **2.10%**

MUUC Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$1,162
\$350		\$3,486
\$450		\$5,810

**New Providence Board of Education - Photovoltaic System Summary**

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co. Savings (\$)	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
New Providence High School	Roof	1,055,120	44.3%	434.27	467,489	420,740	\$401,395	\$0.171	\$38,694	\$60,025	\$735,394
New Providence Allen W. Roberts School	Roof	354,600	23.5%	75.67	83,434	75,090	\$63,885	\$0.161	\$6,083	\$9,673	\$117,335
<b>Total</b>				<b>509.94</b>	<b>550,922</b>	<b>495,830</b>	<b>\$465,279</b>		<b>\$44,777</b>	<b>\$69,698</b>	<b>\$852,729</b>
		<b>Percentage of Total UCIA Project (based on kWh)</b>		<b>14.95%</b>							

**New Providence Possible Annual SREC Revenue (Yrs 11-15)**

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$8,264
\$350		\$24,792
\$450		\$41,319

**Roselle Board of Education - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Annual Savings (\$)	Year 15	
							Utility Co	Annual Savings (\$)		Annual Savings (\$)	Total Savings (\$)
Roselle BOE Charles Grace Wilday	Roof	384,273	66.3%	240.17	254,814	229,333	\$161,591	\$0.145	\$15,021	\$25,044	\$298,203
<b>Total</b>				<b>240.17</b>	<b>254,814</b>	<b>229,333</b>	<b>\$161,591</b>		<b>\$15,021</b>	<b>\$25,044</b>	<b>\$298,203</b>

Percentage of Total UCIA Profit (based on kWh) 6.91%

Roselle BOE Possible Annual SREC Revenue (Yrs 1-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 1-15) (\$)	Total SREC Value (Yrs 1-15) (\$)
\$250		\$3,822
\$350		\$11,467
\$450		\$19,111



**Roselle Park Board of Education - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
Roselle Park High School	Roof	788,640	30.9%	220.43	243,862	219,476	\$182,171	\$0.158	\$17,297	\$27,661	\$334,780
Roselle Park Middle School	Roof	695,640	1.9%	12.22	13,497	12,147	\$10,081	\$0.158	\$957	\$1,531	\$18,525
Roselle Park Sherman Elem School	Roof	131,200	19.2%	23.03	25,180	22,662	\$20,668	\$0.167	\$1,983	\$3,105	\$37,901
Roselle Park E/JF Aldene Elem School	Roof	153,520	14.6%	20.45	22,490	20,241	\$18,130	\$0.165	\$1,736	\$2,729	\$33,261
<b>Total</b>				<b>276.13</b>	<b>305,028</b>	<b>274,526</b>	<b>\$231,050</b>		<b>\$21,973</b>	<b>\$35,026</b>	<b>\$424,468</b>

Percentage of Total UCIA Project (based on kWh) **8.28%**

Roselle Park BOE Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$4,575
\$350		\$13,726
\$450		\$22,877

**Borough of Roselle - Photovoltaic System Summary**  
UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15		
							NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)	Total Savings (\$)
Roselle Borough Hall	Roof	492,675	8.8%	39.48	43,531	39,178	\$33,739	\$0.162	\$3,217	\$5,101	\$61,950
Total				39.48	43,531	39,178	\$33,739		\$3,217	\$5,101	\$61,950
		Percentage of Total UCIA Project (based on kWh)		1.18%							

Roselle Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$653
\$350		\$1,959
\$450		\$3,285

**City of Linden - Photovoltaic System Summary**  
UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	NPV @ 8%	Utility Co	Annual Savings (\$)	Year 1	Year 15
										Skwh	Annual Savings (\$)
Linden Senior Center	Roof	517,800	3.0%	9.95	10,846	9,761	\$ 9,545	\$ 0.17	\$ 0	\$ 1,424	\$ 17,479
Linden Public Library	Roof	14,10		14.10	15,599	14,039	\$9,892	\$0.145	\$920	\$1,533	\$18,255
Linden Public Works	Roof	389,344	82.2%	288.41	319,959	287,945	\$219,063	\$0.151	\$20,577	\$33,615	\$403,439
Linden Municipal Garage Bld. 1	Roof	137,280	50.1%	65.80	68,717	61,845	\$60,397	\$0.174	\$5,836	\$9,010	\$110,601
Linden Municipal Garage Bld. 2 Butler	Roof	52.64		52.64	54,973	49,476	\$48,318	\$0.174	\$4,669	\$7,208	\$88,480
Linden Memorial Field Down	Pole	128,842	27.2%	29.61	35,058	31,552	\$83,186	\$0.350	\$8,535	\$11,623	\$150,406
<b>Total</b>		<b>460.5</b>		<b>505.132</b>	<b>454,619</b>	<b>\$430,401</b>			<b>\$40,536</b>	<b>\$64,414</b>	<b>\$788,650</b>

Percentage of Total UCIA Project (based on kWh) **13.71%**

Linden Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$7,577
\$350		\$22,731
\$450		\$37,885

**City of Plainfield - Photovoltaic System Summary**  
 UCIA Series 2010 Renewable Energy Program

6/29/2012

Location	Type of System	Annual Usage (kWh)	% PV	Total kW	Expected Output (kWh)	Guaranteed Output (kWh)	Year 1		Year 15	
							NPV @ 8%	Utility Co \$/kwh	Annual Savings (\$)	Annual Savings (\$)
Plainfield Public Works Facility	Roof	41,640	30.9%	12.22	12,865	11,578	\$0.176	\$1,117	\$1,718	\$21,125
<b>Total</b>				<b>12.22</b>	<b>12,865</b>	<b>11,578</b>		<b>1,117</b>	<b>1,718</b>	<b>21,125</b>

Percentage of Total UCIA Project (based on kWh) **0.35%**

Plainfield Possible Annual SREC Revenue (Yrs 11-15)

SREC Trading Price (\$)	SREC NPV 8% Value (Yrs 11-15) (\$)	Total SREC Value (Yrs 11-15) (\$)
\$250		\$193
\$350		\$579
\$450		\$965

**EXHIBIT B**

**FINAL SIZING AND COST PER FACILITY**

SCHEDULE OF VALUES  
(July, 2012)

Local Unit Facility	Final System Size	Final Site Cost (\$)
Cranford Community Center	59,220	331,090.00
Cranford Public Library	32,900	195,760.00
Garwood BOE Lincoln School	65,800	370,684.00
Hillside BOE APM-EEC	174,570	934,620.00
Hillside BOE Calvin Conditge	33,605	198,606.00
Hillside High School	174,970	934,623.00
Linden Public Library	14,100	94,890.00
Linden Muni Garage - 1901 Lower Road	65,800	398,768.00
Linden Pub Prop Grge - 10 Range Road	52,640	323,210.00
Linden Public Works Garage	286,605	1,684,285.00
Linden Memorial Field	29,610	212,304.00
Linden Senior Center	9,945	71,902.00
MUUC Transportation Department	72,380	384,340.00
New Providence Allen Roberts School	75,670	420,730.00
New Providence High School Penetrating	434,265	2,644,674.00
Plainfield Public Works Facility	17,220	86,518.00
Rahway DPW	33,940	227,398.00
Roselle Borough Hall	39,480	222,270.00
Roselle BOE Charles Grace Wilday	240,170	1,258,490.00
Roselle Park EIF Aladette School	20,445	128,020.00
Roselle Park Sherman School	23,030	137,490.00
Roselle Park High School	220,430	1,155,000.00
Roselle Park Middle School	12,220	87,862.00
UCC Cranford Campus	173,195	1,037,351.00
Winfield Township School	54,990	252,550.00
Votech - Baxell Hall	106,925	605,450.00
Votech - Bisonochi Hall	45,825	305,653.00
Votech - Mancuso Hall	56,135	603,728.00
Votech - West Hall	497,250	2,725,903.00
Governor Livingston HS	121,730	797,112.00
William Woodruff School	88,595	580,139.00
<b>Total All Locations</b>	<b>3,369,680</b>	<b>19,505,400.00</b>

Flora Union County 1, LLC - HsienPro-Tsai Solar JV, LLC