



MEETING DATE: 04/04/11
ITEM NO: 8
DESK ITEM

COUNCIL AGENDA REPORT

DATE: APRIL 4, 2011
TO: MAYOR AND TOWN COUNCIL
FROM: GREG LARSON, TOWN MANAGER

SUBJECT: SOLAR POWER PURCHASE AGREEMENT

- A. AUTHORIZE THE TOWN MANAGER TO EXECUTE A SOLAR POWER PURCHASE AGREEMENT BETWEEN THE TOWN OF LOS GATOS AND FRESH AIR ENERGY-II, LLC. IN ORDER TO PROVIDE SOLAR POWER FOR THE TOWN SERVICE CENTER AT 41 MILES AVENUE, AND THE POLICE OPERATIONS BUILDING AT 15900 LOS GATOS BOULEVARD.
- B. AUTHORIZE THE TOWN MANAGER TO EXECUTE FUTURE AMENDMENTS TO THE POWER PURCHASE AGREEMENT THAT DO NOT EXTEND THE TERM OF THE AGREEMENT OR RESULT IN A RATE INCREASE OF MORE THAN 1%.

Three revised attachments are provided for this item as described below:

Attachment 1 (Solar Power Purchase Agreement):

Revisions were made to Attachment 1, Exhibit 2, Exhibit 5, and Exhibit 6 to reflect system size changes for the proposed solar power system at the Police Operations Building. The revised Exhibits reflect the new proposed system size of approximately 64 KW. There are no fiscal impacts associated with these revisions. Replacement Exhibits are provided as follows;

- Exhibit 2 – Description of Generating Facilities
- Exhibit 5 – Expected Annual Contract Quantity Form
- Exhibit 6 – Form of Attestation

Attachment 2 (Estimated Cost Savings per site):

A replacement Attachment 2 is provided, the second page of Attachment 2 was omitted from the agenda packet.

Attachment 3 (Image of the Proposed Service Center Installation):

Also provided is a replacement Attachment 3 which includes a second image that had been omitted from the staff report. The second image depicts the proposed panel layout for the Service Center installation.

PREPARED BY: TODD CAPURSO
Director of Parks and Public Works

Reviewed by: 5 Assistant Town Manager _____ Town Attorney _____ Clerk Administrator
_____ Finance _____ Community Development

Exhibit 2

Description of Generating Facilities

The Generating Facilities consist of the following:

1. An approx. 66KW solar photovoltaic roof and parking canopy Generating Facility, consisting of approx. of 236 panels, inverters, and racking, for LG-02, located at 41 Miles Avenue, Los Gatos, CA 95030.
2. An approx. 64KW solar photovoltaic rooftop Generating Facility for LG-03, consisting of approx. 229 panels, inverters, and racking, located at 15900 Los Gatos Blvd., Los Gatos, CA 95032.

NOTE: Generating Facility sizes may change subject to final system design.

Exhibit 5

Expected Annual Contract Quantity Form

(Annual KWH projected output)

	LG-02	LG-03
YR 1	95,700	91,440
YR 2	95,222	90,983
YR 3	94,743	90,526
YR 4	94,265	90,068
YR 5	93,786	89,611
YR 6	93,308	89,154
YR 7	92,829	88,697
YR 8	92,351	88,240
YR 9	91,872	87,782
YR 10	91,394	87,325
YR 11	90,915	86,868
YR 12	90,437	86,411
YR 13	89,958	85,954
YR 14	89,480	85,496
YR 15	89,001	85,039
YR 16	88,523	84,582
YR 17	88,044	84,125
YR 18	87,566	83,668
YR 19	87,087	83,210
YR 20	86,609	82,753
TOTAL	1,823,085	1,741,932

NOTE: Expected Contract Quantity is subject to change pro-rata, based on final system sizes identified in Exhibit 2.

Exhibit 6

Form of Attestation

Environmental Attribute Attestation and Bill of Sale

Fresh Air Energy – II LLC. (“Seller”) hereby sells, transfers and delivers to the Town of Los Gatos (“Buyer”) the Environmental Attributes and Environmental Attributes Reporting Rights associated with the generation of the indicated energy for delivery to the grid (as such terms are defined in the Power Purchase Agreement (“Agreement”) dated January 20, 2011 between Buyer and Seller) arising from the generation for delivery to the grid of the energy by the Generating Facility described below:

Facility name and location: LG-02 at : 41 Miles Avenue, Los Gatos, CA 95030 and LG-03 at : 15900 Los Gatos Blvd., Los Gatos, CA 95032

Project Name: LG-02 and LG-03 _____
EIA ID #: _____ TBD _____
CEC ID#: _____ TBD _____
Meter ID#: _____ TBD _____
Fuel Type: _____ Solar Photovoltaic _____
Capacity (KW): LG-02 – approx. 66 KW and LG-03 – approx. 64 KW

Commercial Operation Date: _____ TBD _____
Dates MWhs generated _____ Dates MWhs generated _____
TBD _____

In the amount of one Environmental Attribute for each megawatt hour generated; and Seller further attests, warrants and represents as follows:

1. To the best of its knowledge, the information provided herein is true and correct;
2. This transfer to Buyer is the one and only sale of the Environmental Attributes and associated Environmental Attributes Reporting Rights referenced herein;
3. The Facility generated and delivered to the grid the energy in the amount indicated as undifferentiated energy; and

(Check one)

X Seller owns the facility.

_____ To the best of Seller’s knowledge, each of the Environmental Attributes associated with the generation of the indicated energy for delivery to the grid have been generated and sold by the Facility.

3/25/11

LG02 - CORP YARD A10 METER - 66 KW OPTIMAL SYSTEM A6													
SYSTEM & BILL SUMMARY													
	YR.1	YR.2	YR.3	YR.4	YR.5	YR.6	YR.7	YR.8	YR.9	YR.10	YR.20	TOTAL	
Total Customer kWhs Consumption	103,600	103,600	103,600	103,600	103,600	103,600	103,600	103,600	103,600	103,600	103,600	2,072,000	
Solar System kWhs Output	95,700	95,222	94,743	94,265	93,786	93,308	92,829	92,351	91,872	91,394	86,609	1,823,085	
Annual System Degradation	100%	99.50%	99.00%	98.50%	98.00%	97.50%	97.00%	96.50%	96.00%	95.50%	90.50%		
Solar Output as % of Consumption	92%	92%	91%	91%	91%	90%	90%	89%	89%	88%	84%		
Projected Annual Utility Price Increase												4.5%	
Electricity Bills/Pre-Solar	\$ 17,500	\$ 18,288	\$ 19,110	\$ 19,970	\$ 20,869	\$ 21,808	\$ 22,790	\$ 23,815	\$ 24,887	\$ 26,007	\$ 40,388	\$ 549,000	
Solar Output Value TOU	\$ 18,192	\$ 18,916	\$ 19,668	\$ 20,451	\$ 21,264	\$ 22,110	\$ 22,989	\$ 23,904	\$ 24,854	\$ 25,843	\$ 38,171	\$ 540,467	
Electricity Bills/Post-Solar- TOU	\$ (692)	\$ (628)	\$ (558)	\$ (480)	\$ (395)	\$ (302)	\$ (200)	\$ (88)	\$ 32	\$ 164	\$ 2,216	\$ 8,533	
% Bill Shaved - TOU	104%	103%	103%	102%	102%	101%	101%	100%	100%	99%	95%		
PPA SUMMARY - without REGS													
Price per KWH with escalation	\$ 0.170	\$ 0.175	\$ 0.180	\$ 0.186	\$ 0.191	\$ 0.197	\$ 0.203	\$ 0.209	\$ 0.215	\$ 0.222	\$ 0.298		
PPA Charges	\$ 16,269	\$ 16,673	\$ 17,087	\$ 17,511	\$ 17,945	\$ 18,389	\$ 18,843	\$ 19,309	\$ 19,785	\$ 20,272	\$ 25,818	\$ 414,254	
Total Customer Savings - TOU	\$ 1,923	\$ 2,243	\$ 2,581	\$ 2,940	\$ 3,319	\$ 3,721	\$ 4,146	\$ 4,595	\$ 5,070	\$ 5,571	\$ 12,353	\$ 126,213	
% Savings - Yearly & Avg over Life	11%	12%	14%	15%	16%	17%	18%	19%	20%	21%	31%		
Total Savings over System Life	\$ 126,213												
PPA SUMMARY - with REGS													
Price per KWH with escalation	\$ 0.185	\$ 0.191	\$ 0.196	\$ 0.202	\$ 0.208	\$ 0.214	\$ 0.221	\$ 0.228	\$ 0.234	\$ 0.241	\$ 0.324		
PPA Charges	\$ 17,705	\$ 18,144	\$ 18,595	\$ 19,056	\$ 19,528	\$ 20,011	\$ 20,506	\$ 21,012	\$ 21,530	\$ 22,061	\$ 28,096	\$ 450,805	
Total Customer Savings - TOU	\$ 488	\$ 771	\$ 1,073	\$ 1,395	\$ 1,736	\$ 2,098	\$ 2,483	\$ 2,891	\$ 3,324	\$ 3,782	\$ 10,075	\$ 89,662	
% Savings - Yearly & Avg over Life	3%	4%	6%	7%	8%	10%	11%	12%	13%	15%	25%		
Total Savings over System Life	\$ 89,662												

NOTE: Actual savings are subject to a number of factors including, but not limited to, weather, utility rate changes, and final system design.

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LG03 - POLICE OPS AT METER - 64KW OPTIMAL SYSTEM A6

	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 20	TOTAL
SYSTEM & BILL SUMMARY												
Total Customer kWhs Consumption	154,400	154,400	154,400	154,400	154,400	154,400	154,400	154,400	154,400	154,400	154,400	3,088,000
Solar System kWhs Output	91,440	90,983	90,526	90,068	89,611	89,154	88,697	88,240	87,782	87,325	82,753	1,741,932
Annual System Degradation	100%	99.50%	99.00%	98.50%	98.00%	97.50%	97.00%	96.50%	96.00%	95.50%	90.50%	
Solar Output as % of Consumption	59%	59%	59%	59%	58%	58%	57%	57%	57%	57%	54%	

0.50%

4.5%

Projected Annual Utility Price Increases												
Electricity Bills/Pre-Solar	\$ 27,422	\$ 28,656	\$ 29,946	\$ 31,293	\$ 32,701	\$ 34,173	\$ 35,711	\$ 37,318	\$ 38,997	\$ 40,752	\$ 63,287	\$ 860,272
Solar Output Value TOU	\$ 21,664	\$ 22,526	\$ 23,422	\$ 24,354	\$ 25,322	\$ 26,330	\$ 27,377	\$ 28,466	\$ 29,598	\$ 30,775	\$ 45,457	\$ 643,623
Electricity Bills/post-Solar- TOU	\$ 5,758	\$ 6,130	\$ 6,524	\$ 6,939	\$ 7,379	\$ 7,843	\$ 8,334	\$ 8,852	\$ 9,399	\$ 9,977	\$ 17,830	\$ 216,649
% Bill Shaved - TOU	79%	79%	78%	78%	77%	77%	77%	76%	76%	76%	72%	

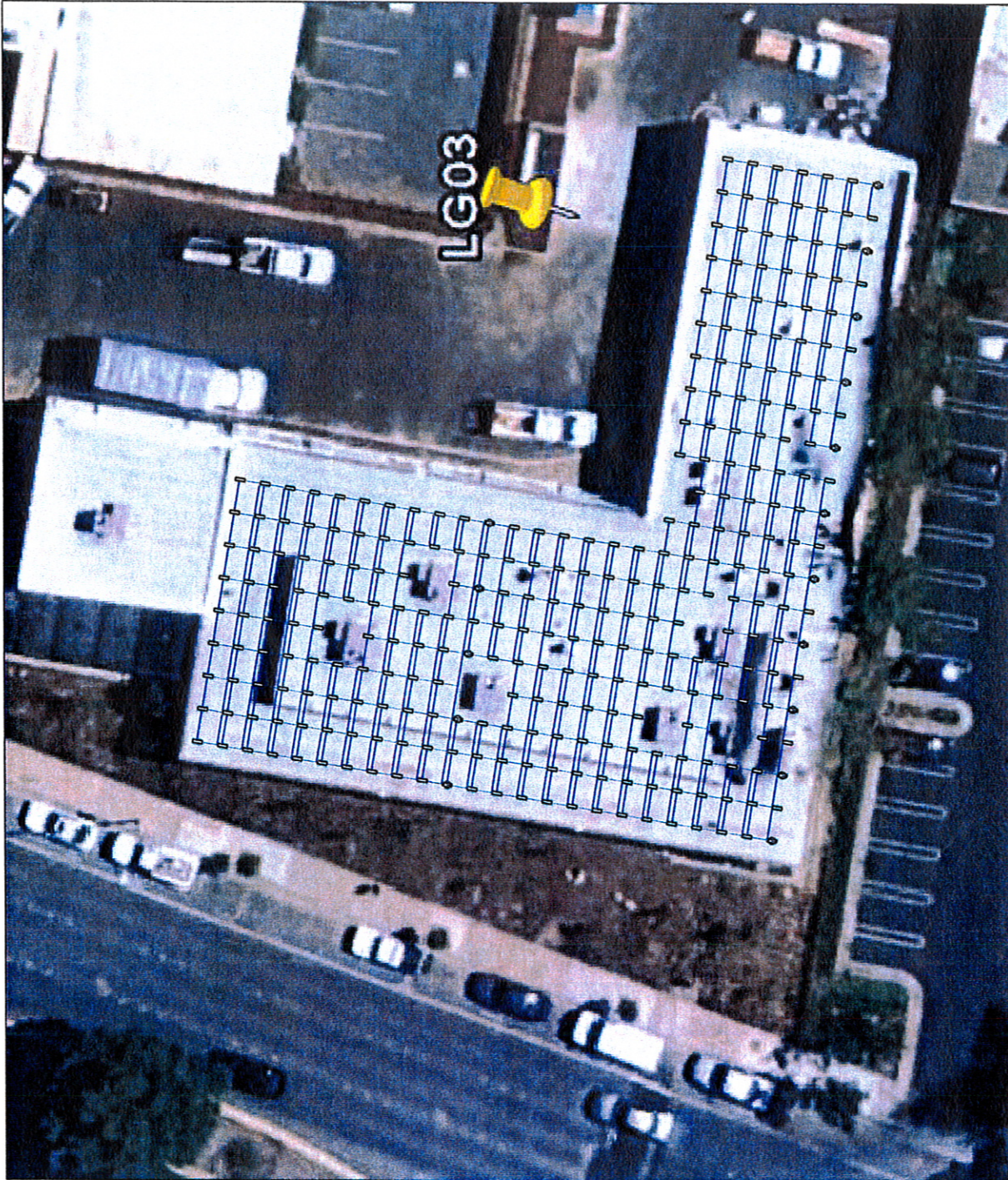
PPA SUMMARY - without REC

Price per kWh with escalation	\$ 0.180	\$ 0.185	\$ 0.191	\$ 0.197	\$ 0.203	\$ 0.209	\$ 0.215	\$ 0.221	\$ 0.228	\$ 0.235	\$ 0.316	
PPA Charges	\$ 16,459	\$ 16,868	\$ 17,287	\$ 17,716	\$ 18,154	\$ 18,604	\$ 19,064	\$ 19,534	\$ 20,016	\$ 20,509	\$ 26,119	\$ 419,097
Total Customer Savings - TOU	\$ 5,205	\$ 5,458	\$ 5,638	\$ 5,835	\$ 6,038	\$ 6,246	\$ 6,458	\$ 6,674	\$ 6,892	\$ 7,112	\$ 10,266	\$ 224,526
% Savings - Yearly & Avg over Life	19%	20%	20%	21%	22%	23%	23%	24%	25%	25%	31%	
Total Savings over System Life	\$ 25.2%											\$ 224,526

PPA SUMMARY - with REC

Price per kWh with escalation	\$ 0.195	\$ 0.201	\$ 0.207	\$ 0.213	\$ 0.219	\$ 0.226	\$ 0.233	\$ 0.240	\$ 0.247	\$ 0.254	\$ 0.342	
PPA Charges	\$ 17,831	\$ 18,274	\$ 18,728	\$ 19,192	\$ 19,667	\$ 20,154	\$ 20,652	\$ 21,162	\$ 21,684	\$ 22,218	\$ 28,296	\$ 454,021
Total Customer Savings - TOU	\$ 3,834	\$ 4,252	\$ 4,695	\$ 5,162	\$ 5,655	\$ 6,176	\$ 6,725	\$ 7,304	\$ 7,914	\$ 8,557	\$ 17,160	\$ 189,602
% Savings - Yearly & Avg over Life	14%	15%	16%	16%	17%	18%	19%	20%	20%	21%	27%	
Total Savings over System Life	\$ 21.1%											\$ 189,602

NOTE: Actual savings are subject to a number of factors including, but not limited to, weather, utility rate changes, and final system design.



Project: Police Station - LG03
15900 Los Gatos Blvd.
Los Gatos, CA

Notes: Prelim panel layout - 63.5KW
Assumptions:
1. Southern trees trimmed/removed
2. Equipment screen removed

Date	March 18, 2011
Scale	NTS
Rev.	1.0



Project: Corp Yard - LG02
41 Miles Avenue
Los Gatos, CA

Notes: Prelim panel layout - 63KW

Date	March 18, 2011
Scale	NTS
Rev.	1.0