



CITY OF HUGHSON
SPECIAL
CITY COUNCIL MEETING
CITY HALL COUNCIL CHAMBERS
7018 Pine Street, Hughson, CA

AGENDA
MONDAY, MAY 20, 2013 – 6:00 P.M.

CALL TO ORDER: Mayor Matt Beekman

ROLL CALL: Mayor Matt Beekman
Mayor Pro Tem Jeramy Young
Councilmember Jill Silva
Councilmember George Carr
Councilmember Harold Hill

FLAG SALUTE: Mayor Matt Beekman

1. PUBLIC BUSINESS FROM THE FLOOR (No Action Can Be Taken):

Members of the audience may address the City Council on any item of interest to the public pertaining to the City and may step to the podium, state their name and city of residence for the record (requirement of name and city of residence is optional) and make their presentation. Please limit presentations to five minutes. Since the City Council cannot take action on matters not on the Agenda, unless the action is authorized by Section 54954.2 of the Government Code, items of concern, which are not urgent in nature can be resolved more expeditiously by completing and submitting to the City Clerk a "Citizen Request Form" which may be obtained from the City Clerk.

2. UNFINISHED BUSINESS:

2.1: Consideration of an Exclusive Engagement Agreement with Terra Verde Renewable Partners.

ADJOURNMENT:

**AMERICANS WITH DISABILITIES ACT/CALIFORNIA BROWN ACT
NOTIFICATION FOR THE CITY OF HUGHSON**

This Agenda shall be made available upon request in alternative formats to persons with a disability; as required by the Americans with Disabilities Act of 1990 (42 U.S.C. Section 12132) and the Ralph M. Brown Act (California Government Code Section 54954.2).

Disabled or Special needs Accommodation: In compliance with the Americans with Disabilities Act, persons requesting a disability related modification or accommodation in order to participate in the meeting and/or if you need assistance to attend or participate in a City Council meeting, please contact the City Clerk's office at (209) 883-4054. Notification at least 48-hours prior to the meeting will assist the City Clerk in assuring that reasonable accommodations are made to provide accessibility to the meeting.

AFFIDAVIT OF POSTING

DATE: May 17, 2013 **TIME:** 4:00pm
NAME: Sandy Cortes **TITLE:** Office Assistant II

Notice Regarding Non-English Speakers:

Pursuant to California Constitution Article III, Section IV, establishing English as the official language for the State of California, and in accordance with California Code of Civil Procedures Section 185, which requires proceedings before any State Court to be in English, notice is hereby given that all proceedings before the City of Hughson City Council shall be in English and anyone wishing to address the Council is required to have a translator present who will take an oath to make an accurate translation from any language not English into the English language.

General Information: The Hughson City Council meets in the Council Chambers on the second and fourth Mondays of each month at 7:00 p.m., unless otherwise noticed.

Council Agendas: The City Council agenda is now available for public review at the City's website at www.hughson.org and City Clerk's Office, 7018 Pine Street, Hughson, California on the Friday, prior to the scheduled meeting. Copies and/or subscriptions can be purchased for a nominal fee through the City Clerk's Office.

Questions: Contact the City Clerk at (209) 883-4054



CITY OF HUGHSON AGENDA ITEM NO. 2.1

SECTION 2: UNFINISHED BUSINESS

Meeting Date: May 20, 2013

Subject: Consideration of a an Exclusive Engagement Agreement with Terra Verde Renewable Partners

Enclosures:

1. Letter from Siemens
2. PowerPoint presentation from Terra Verde.
3. Pro Forma and Contract from Terra Verde (previously presented)

Presented By: Thom Clark, Community Development Director

Approved By: _____

BACKGROUND AND OVERVIEW:

The City Council has been studying different proposals in an effort to ascertain whether or not a Power Purchase Agreement (PPA) could be effective as a hedge against future electric rate increases at the wastewater treatment plant.

The PPA would contractually obligate the City and the PPA provider for a period of 20 to 25 years to an approximately five acre field of photovoltaic solar panels. The panels would be installed, owned, and maintained by the PPA provider upon land owned by the City and leased to the PPA provider for a nominal fee.

Entering into a PPA provides the City the opportunity to install solar panels with little to no out-of-pocket expense. The initial investment by the PPA provider to install a field of solar panels would likely be in the \$2 million range. The provider would off-set most of the initial cost in the first five to six years through the 8 cent per kilowatt hour (kWh) rebate they would receive from Turlock Irrigation District (TID), as well as tax credits and depreciation. The TID rebate is only good through the end of July and is secured by the City Council taking a positive action to move forward with the installation of solar panels at the site.

The City Council has reviewed two very different proposals to get to the point where we are today. Briefly, Terra Verde has proposed to act as our agent to manage a competitive bid process which would result in a negotiated PPA with the lowest, most responsive and reliable power provider. Siemens had originally proposed a sole source contract with the City relying on their long standing reputation in the industry. However, after a thorough analysis into the project numbers, they have decided to withdraw from the project.

With the withdrawal from the project by Siemens, we are left with the Terra Verde option. Since the City Council directed staff to prepare this project as an action item, approval of the contract with Terra Verde is the only action we have available.

FISCAL IMPACT

The driving force behind the assessment of solar power is the possibility of saving rate payers energy costs in the future. If the project does not save the rate payers money, it's not worth doing - unless the City Council thinks it's important to make a "green" statement.

It's very difficult for staff to tell you what the fiscal impacts of the project may be because the Terra Verde pro forma is a model. If the assumptions in the model are good, we could end up saving rate payers power costs in the long run. On a year by year basis, especially in the first five to ten years, it is very possible that the TID rates will not go up 5% per year. So expectations that this will save us lots of money quickly are not practical.

RECOMMENDATION:

Consider the exclusive engagement agreement with Terra Verde Renewable Partners.

May 16, 2013

SIEMENS Industry, Inc.
25821 Industrial Pkwy
Suite 300
Hayward, CA 94545

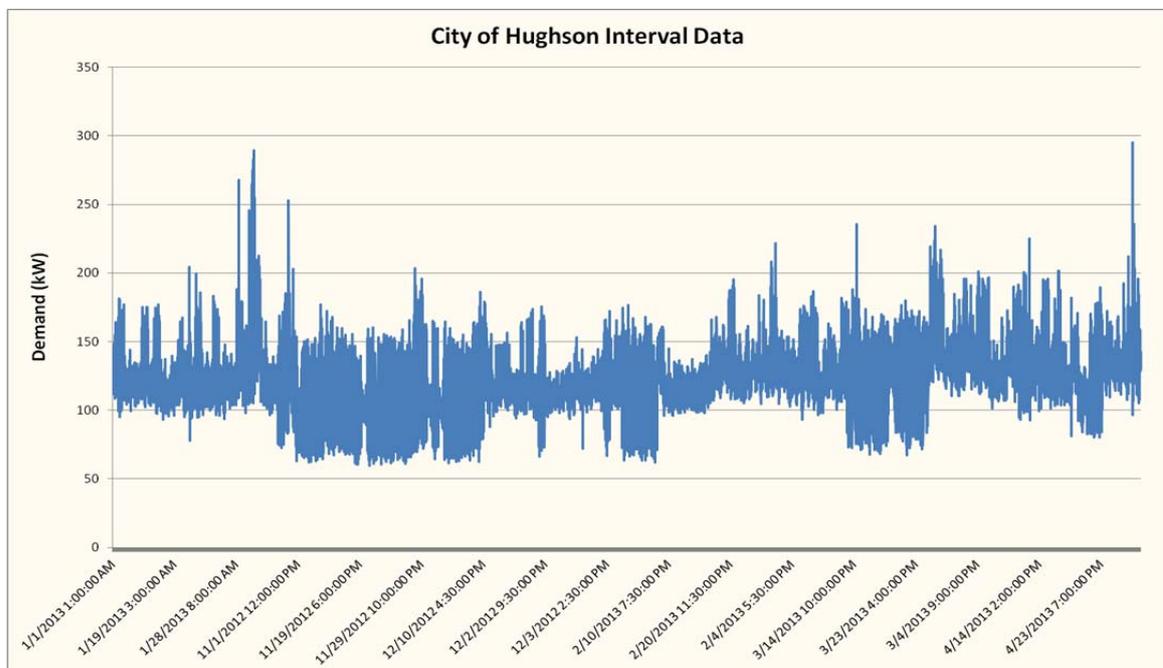
To Whom It Concerns:

Siemens has recently been working with the City of Hughson to explore the opportunity for a Solar Power Purchase Agreement (PPA) and solar array to be constructed at the City's Waste Water Treatment Plant (WWTP) located at 7700 Leedom Rd, Hughson, CA. Siemens participated in a site walk at the WWTP, analyzed 12 months worth of utility data from the WWTP and analyzed 3 years of audited financial statements for the City.

Siemens would like to make mention that the staff of the City has been very helpful in gathering information as well as helping to escort our staff during the site walk. It should also be noted that the new WWTP is operationally very sound and the design is to be commended.

Two challenges have presented themselves during this process:

- 1) The City currently pays a blended kWh rate for electricity (energy only) of approximately \$0.085. These costs do not include the demand charges associated with that energy. It is important to note that interval electrical data was provided to Siemens for approximately 2 months of time, which allowed for a specific analysis showing that the demand charges would not be offset by solar. This again is the reason why energy-only rates would be offset by a solar project, not the demand charges. Please see the graph below to view the City's interval data showing a consistent demand day and night at the WWTP.



Initially, Siemens discussed with the Staff and Council that it will be very difficult to structure a PPA to be lower than \$0.085/kWh in order to save the City money by installing solar and entering into a Solar PPA agreement. The goal set forth was to aim for a \$0.085/kWh PPA with a 4% escalator.

Siemens invited 7 subcontractors to walk the WWTP to bid on the solar project. Of those 7 subcontractors, 4 attended the mandatory site walk and only 1 subcontractor bid on the project. While this bid was competitive, it was not what Siemens was initially aiming for.

- 2) Siemens internal funding group Siemens Financial Services who funds the PPA had not yet seen any financial information in order to determine their interest in funding this project with the City. Three years of audited financial statements was provided to Siemens and SFS after the council meeting on April 22nd, 2013.

The Results:

- 1) Currently, Siemens is unable to meet the \$0.085/kWh PPA rate in year one with a 4% escalator. Pricing came back to be almost 10% higher than necessary to meet this target amount. Therefore, the project would not allow as much savings to the City as originally projected.
- 2) SFS is taking a conservative stance towards the credit and financials of the City and is currently not interested in funding a Solar PPA agreement for the City of Hughson. Upon speaking with multiple other PPA funding providers, Siemens has been unable to locate an alternative funding source for the PPA.

Additional Information to be noted:

In Siemens' efforts to explore all options for the City, they have identified another funding vehicle that will allow the City to procure Solar without upfront capital. This option is not outlined in this proposal, and if more information is desired regarding this method, please contact the Business Development Manager at the information below.

In addition, Siemens would like to make it known that any additional project development fees agreed to by the City would not be feasibly housed in any of the financial analysis Siemens has explored. Any additional development fees would have to be covered solely by the City.

It is with sincere regret that Siemens will not be submitting a formal proposal for the City of Hughson because of the above mentioned reasons. In the event that the City is interested in the additional funding mechanism, we would be grateful to continue working with the City in securing the incentives from TID and developing this project.

Personally, I would like to offer my expertise and advice as you explore any and all other options if it should be so desired. Thank you very much for the opportunity to meet with each of you and to present to you this information.

Best Regards,

Lisa Reddinger

Lisa Reddinger
Business Development Manager
510-206-5059
Lisa.reddinger@siemens.com



City of Hughson Solar Project

May 20, 2013

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- 1. The Challenge and the Process**
- 2. Who We are and What We Do**
- 3. Background on How the Numbers Work**
- 4. Summary**
- 5. Background on Our Team**

The Challenge

- **Enable California Cities to implement a comprehensive program for energy conservation for all of its facilities, including renewable energy**
- **Achieve actual cost savings results that match original expectations**
- **Manage the process in a transparent way using competitive bidding**
- **Make 100% financing a realistic option – providing net positive cash flow savings to the City at completion of the project**

How the Model Works

● **No sole sourcing**

- ↳ Competitive bidding

● **Pre-qualified bidders**

- ↳ Bidders have proven competency in the type of work being sought

● **Independent third party verification**

- ↳ Bid awarded based on independent third party verification of the bid that delivers the best long term results

Government Code 4217

- **Government code Section 4217 grants authority to public agencies, including cities, to enter into energy services contracts.**
- **4217 defines and “energy conservation facility” as “alternate energy equipment, cogeneration equipment or conservation measures located in public buildings or on land owned by public agencies.”**
- **4217 enables public agencies to enter into an “energy services contract” without going through a formal public bid process.**
- **We recommend using 4217 in conjunction with a managed bid process, but to use the 4217 powers to award the bid based on “highest value,” including greatest long term cost savings to the City.**

The Process – The Steps

- **Step 1 – Energy Audit/Project Feasibility Analysis:**
 - Conduct systems audit and usage/cost analyses to determine the potential for cost savings
- **Step 2 – Project Objectives:**
 - Determine Client's project objectives and requirements
- **Step 3 – Project Scope:**
 - Determine optimal project scope to best meet Client's objectives and requirements
- **Step 4 – Competitive Bid/Selection of Installation, Procurement and Financing:**
 - Conduct a competitive bid process to identify and select among best options for project installation, procurement and financing
- **Step 5 – Installation:**
 - Oversee on-site construction and installation of the systems
- **Step 6 – Long Term Energy Management Services:**
 - Monitor systems performance, collect and analyze data and conduct necessary O&M services

Our Role in the Process

- **Our team prepares the initial energy usage analysis**
- **Our team develops a list of bidders and a bid process to best accomplish the business plan**
- **Our team assists staff in selecting the most responsive bid**
- **Our team monitors the construction process**

Proposal Evaluation

There are two key comparison categories:

1. Cost

- Year 1 Price
- Annual Price Escalator

2. Project Execution Capability

Cost Evaluation Matrix: Example

		Bidder 1	Bidder 2	Bidder 3	Bidder 4	Bidder 5	Bidder 6
Starting Price		\$0.1540	\$0.1695	\$0.1770	\$0.1713	\$0.1790	\$0.1790
Annual Escalator		3.00%	3.50%	3.50%	4.25%	3.95%	4.00%
1	2,099,446	\$0.1540	\$0.1695	\$0.1770	\$0.1713	\$0.1790	\$0.1790
2	2,088,949	\$0.1586	\$0.1754	\$0.1832	\$0.1786	\$0.1861	\$0.1862
3	2,078,504	\$0.1634	\$0.1816	\$0.1896	\$0.1862	\$0.1934	\$0.1936
4	2,068,111	\$0.1683	\$0.1879	\$0.1962	\$0.1941	\$0.2011	\$0.2014
5	2,057,771	\$0.1733	\$0.1945	\$0.2031	\$0.2023	\$0.2090	\$0.2094
6	2,047,482	\$0.1785	\$0.2013	\$0.2102	\$0.2109	\$0.2173	\$0.2178
7	2,037,244	\$0.1839	\$0.2084	\$0.2176	\$0.2199	\$0.2258	\$0.2265
8	2,027,058	\$0.1894	\$0.2157	\$0.2252	\$0.2292	\$0.2348	\$0.2356
9	2,016,923	\$0.1951	\$0.2232	\$0.2331	\$0.2390	\$0.2440	\$0.2450
10	2,006,838	\$0.2009	\$0.2310	\$0.2412	\$0.2491	\$0.2537	\$0.2548
11	1,996,804	\$0.2070	\$0.2391	\$0.2497	\$0.2597	\$0.2637	\$0.2650
12	1,986,820	\$0.2132	\$0.2475	\$0.2584	\$0.2708	\$0.2741	\$0.2756
13	1,976,886	\$0.2196	\$0.2561	\$0.2675	\$0.2823	\$0.2849	\$0.2866
14	1,967,002	\$0.2262	\$0.2651	\$0.2768	\$0.2943	\$0.2962	\$0.2980
15	1,957,167	\$0.2329	\$0.2744	\$0.2865	\$0.3068	\$0.3079	\$0.3100
16	1,947,381	\$0.2399	\$0.2840	\$0.2965	\$0.3198	\$0.3201	\$0.3224
17	1,937,644	\$0.2471	\$0.2939	\$0.3069	\$0.3334	\$0.3327	\$0.3353
18	1,927,956	\$0.2545	\$0.3042	\$0.3177	\$0.3476	\$0.3458	\$0.3487
19	1,918,316	\$0.2622	\$0.3148	\$0.3288	\$0.3623	\$0.3595	\$0.3626
20	1,908,724	\$0.2700	\$0.3259	\$0.3403	\$0.3777	\$0.3737	\$0.3771
21	1,899,181	\$0.2781	\$0.3373	\$0.3522	\$0.3938	\$0.3885	\$0.3922
22	1,889,685	\$0.2865	\$0.3491	\$0.3645	\$0.4105	\$0.4038	\$0.4079
23	1,880,236	\$0.2951	\$0.3613	\$0.3773	\$0.4280	\$0.4198	\$0.4242
24	1,870,835	\$0.3039	\$0.3739	\$0.3905	\$0.4462	\$0.4363	\$0.4412
25	1,861,481	\$0.3131	\$0.3870	\$0.4041	\$0.4651	\$0.4536	\$0.4588

Project Execution Capability

Client References – performance on previous projects and responsiveness in solving problems

Financial Wherewithal – general financial strength of the enterprise and ability to uphold all obligations, guarantees, warranties, and promises for the respective stated durations of each agreement

Project Team – qualifications and experience of the proposed team (including Subcontractors) in completing projects with similar scope

Construction Site Safety Plan – quality and completeness of safety plan and procedures

Project Management and Execution – capabilities in project planning, coordination, execution, cost control, quality control, and completing projects on schedule

Corrective Maintenance – capabilities and track record in conducting necessary corrective maintenance in a timely manner

Warranties – warranties, quality of proposed equipment, and financial stability of the original equipment manufacturers

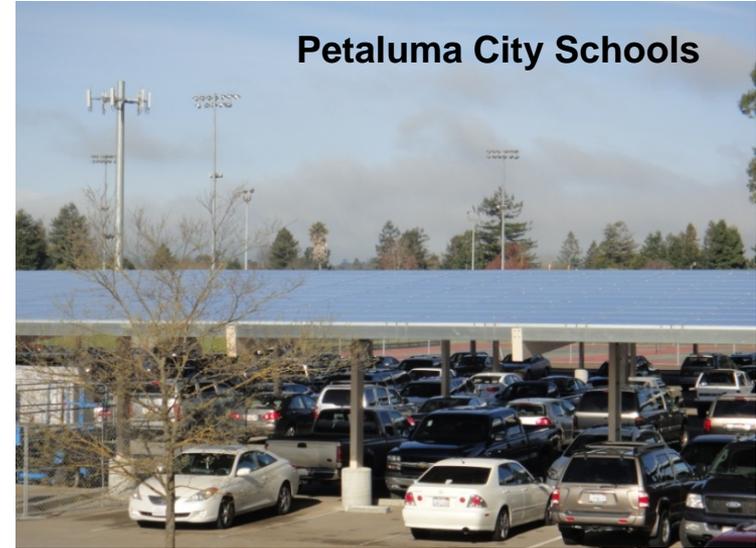
Clarity and Completeness – responses shall be clear, concise, and complete



Project Examples



Sonoma County YMCA



Petaluma City Schools



Firebaugh Las Deltas USD

TerraVerde Clients

- **City of Davis**
- **City of Lathrop**
- **Sonoma County Family YMCA**
- **Petaluma City Schools**
- **Inyo County**
- **Big Pine School District**
- **Corcoran Unified School District**
- **Clovis Unified School District**
- **Monterey Peninsula Unified School District**
- **Fowler Unified School District**
- **Firebaugh Unified School District**
- **Golden Valley Unified School District**
- **Visalia Unified School District**
- **16 MWs over \$80 Million in Projects**

Benefits

- **A credible and transparent process to achieve energy cost savings**
- **100% financing to generate cash flow savings as soon as the project is complete**
- **Expert management of the process from start to finish, including verification of actual results**
- **No financial risk to City unless after receiving bids if it chooses to not go through with the project**

How Our Team Gets Paid

- **Fee Amount:** \$0.22.6/kWh produced as projected in Year 1
- **Performance Based Compensation:** TerraVerde only earns a fee if a project is developed that meets the City's financial objectives; with one exception...
- **Service Fee:** If the City agrees to release an RFP to vendors/providers (installation or financing) and proposals comes in that meet the City's savings objectives, but the City then decides to cancel, TerraVerde gets paid a Service fee (up to \$20,000) for its efforts to that point.

Contact Information

Rick Brown, PhD, President
TerraVerde Renewable Partners, LLC
1100 Larkspur Landing Circle, Suite 155
Larkspur, CA 94939

T: 707-953-2885

Rick.Brown@TVRPLLC.com

www.TVRPLLC.com

What Our Clients Say

“TerraVerde emphasizes education and transparency. We feel confident that they provide us an unbiased assessment of the risks and benefits.”

- Don Ulrich, Assistant Superintendant, Clovis USD

“TVRP paid special attention to the Client’s unique needs and requirements throughout the development and implementation process. Most importantly, they have worked as a true partner, providing information in a fully transparent manner and have worked collaboratively with us to address issues and problems that inevitably arise during the development process.”

- Steve Bolman, Superintendant, Petaluma City Schools



City of Hughson

Solar Project Pro Forma: Feasibility Study

2/21/2013



Scenarios included in this report:

Scenario 1: Power Purchase Agreement (PPA)

Project Qualification Model

Project Name: City of Hughson
 Scenario #1: Power Purchase Agreement (PPA)



Electricity Assumptions			Avoided Cost		Financing Outflows		Results	
Year	Annual Solar Generation (kWh)	Savings Per kWh of Solar Generation	Avoided Cost from Solar Generation	Subtotal: Annual Solar Benefit	PPA Payments	Subtotal: Financing Outflows	Annual Net Savings / Avoided Cost	Cumulative Net Savings / Avoided Cost
1	1,108,250	\$0.0996	\$110,362	\$110,362	(\$96,418)	(\$96,418)	\$13,944	\$13,944
2	1,099,938	\$0.1046	\$115,011	\$115,011	(\$98,326)	(\$98,326)	\$16,685	\$30,629
3	1,091,688	\$0.1098	\$119,856	\$119,856	(\$100,272)	(\$100,272)	\$19,584	\$50,213
4	1,083,501	\$0.1153	\$124,905	\$124,905	(\$102,257)	(\$102,257)	\$22,648	\$72,860
5	1,075,374	\$0.1210	\$130,167	\$130,167	(\$104,281)	(\$104,281)	\$25,885	\$98,746
6	1,067,309	\$0.1271	\$135,650	\$135,650	(\$106,345)	(\$106,345)	\$29,304	\$128,050
7	1,059,304	\$0.1334	\$141,364	\$141,364	(\$108,450)	(\$108,450)	\$32,914	\$160,964
8	1,051,360	\$0.1401	\$147,319	\$147,319	(\$110,597)	(\$110,597)	\$36,722	\$197,686
9	1,043,474	\$0.1471	\$153,525	\$153,525	(\$112,786)	(\$112,786)	\$40,739	\$238,424
10	1,035,648	\$0.1545	\$159,992	\$159,992	(\$115,019)	(\$115,019)	\$44,973	\$283,398
11	1,027,881	\$0.1622	\$166,732	\$166,732	(\$117,295)	(\$117,295)	\$49,436	\$332,834
12	1,020,172	\$0.1703	\$173,755	\$173,755	(\$119,617)	(\$119,617)	\$54,138	\$386,973
13	1,012,521	\$0.1788	\$181,075	\$181,075	(\$121,985)	(\$121,985)	\$59,090	\$446,063
14	1,004,927	\$0.1878	\$188,702	\$188,702	(\$124,399)	(\$124,399)	\$64,303	\$510,366
15	997,390	\$0.1972	\$196,652	\$196,652	(\$126,861)	(\$126,861)	\$69,790	\$580,156
16	989,909	\$0.2070	\$204,935	\$204,935	(\$129,373)	(\$129,373)	\$75,563	\$655,719
17	982,485	\$0.2174	\$213,568	\$213,568	(\$131,933)	(\$131,933)	\$81,635	\$737,354
18	975,116	\$0.2282	\$222,565	\$222,565	(\$134,545)	(\$134,545)	\$88,020	\$825,374
19	967,803	\$0.2397	\$231,941	\$231,941	(\$137,208)	(\$137,208)	\$94,733	\$920,107
20	960,544	\$0.2516	\$241,711	\$241,711	(\$139,924)	(\$139,924)	\$101,787	\$1,021,894
21	953,340	\$0.2642	\$251,893	\$251,893	(\$142,693)	(\$142,693)	\$109,200	\$1,131,094
22	946,190	\$0.2774	\$262,504	\$262,504	(\$145,518)	(\$145,518)	\$116,986	\$1,248,080
23	939,094	\$0.2913		\$0	(\$148,398)	(\$148,398)	(\$148,398)	\$1,099,682
24	932,051	\$0.3059	\$285,086	\$285,086	(\$151,336)	(\$151,336)	\$133,750	\$1,233,432
25	925,060	\$0.3212	\$297,095	\$297,095	(\$154,331)	(\$154,331)	\$142,764	\$1,376,196
Totals	25,350,330	n/a	\$4,456,364	\$4,456,364	(\$3,080,168)	(\$3,080,168)	\$1,376,196	\$1,376,196

Key Assumptions	
Avoided Cost of Current Electricity (\$/kWh)	\$0.0925
TID Utility Price Escalator	5.00%
Starting PPA Price (year-1)	\$0.0870
PPA Price Escalator	2.75%

Disclaimer: Energy Cost Savings estimates are projections based on assumptions of future electricity prices in TID territory, future performance of the photovoltaic energy generating facilities as well as the assumption that future electricity patterns are indicative of historical data (to the extent it is available).

Project Qualification Model
Project Name: City of Hughson
Scenario #1



Key Assumptions:

Technical Assumptions

Total Project Size (MW, DC)	0.74 MW
Yield (kWh/kW/yr)	1,500.00
Year-1 Solar Production (kWh)	1,108,250
System Cost (\$/Wp)	\$3.27
Annual Degradation Factor	0.75%
Number of Sites	1

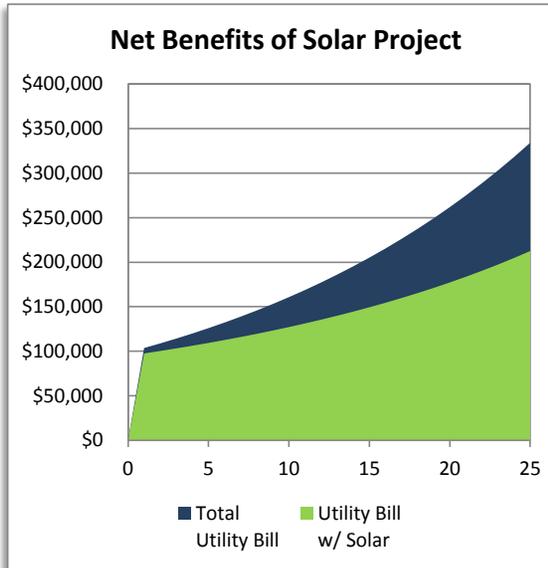
Avoided Cost & Revenue Sources

Avoided Cost of Current Electricity (\$/kWh)	\$0.0925
Estimated Utility Cost Escalator (%)	5.00%
REC Value (\$/kWh)	\$0.0000
Estimated REC Value Escalator (%)	0.00%

PPA Assumptions

PPA Rate	\$0.0870
PPA Annual Escalator (%)	2.75%

Benefits of: Power Purchase Agreement (PPA)



Total Net Benefit (25 years)

Gross Project Benefit	\$4,456,364
Total Initial Project Cost	n/a
Operating Expenses	n/a
Power Purchase Payments (PPA)	(\$3,080,168)
Total Net Benefit	\$1,376,196

Savings & Cost Avoidance (after Financing)

Savings	Years 1	\$13,944
Cost Avoidance	Years 1 - 5	\$98,746
Cost Avoidance	Years 1 - 25	\$1,376,196

Environmental Benefits (per year)

Sulfur Dioxide	SO2	7 lbs
Oxides of Nitrogen	NOX	1,327 lbs
Particulate Matter	PM10	47 lbs
Carbon Dioxide	CO2	1,489,488 lbs
Volatile Compounds	VOCs	116 lbs
Water	H2O (gallons)	872,747



1100 Larkspur Landing, Suite 155
Larkspur, CA 94939

EXCLUSIVE ENGAGEMENT AGREEMENT

THIS EXCLUSIVE ENGAGEMENT AGREEMENT (this “**Agreement**”) is made as of **April** ____, **2013** between TERRAVERDE RENEWABLE PARTNERS, LLC, a Delaware limited liability company (“**TerraVerde**”), and the City of Hughson, a California Municipality (“**Client**” and each of TerraVerde and Client, being a “**Party**”, and together the “**Parties**”).

RECITALS

A. Client is considering the feasibility of implementing Energy Management programs and measures (“**Energy Management Program**”), including installing photovoltaic electric systems (“**Solar Project**”), and evaluating a power purchase arrangement for such Energy Management programs, (“**Project Financing**”) and desires to engage TerraVerde to assist it in evaluating potential transactions for Energy Management Programs and/or Solar Projects (each such transaction, an “**Energy Management Transaction**”) as permitted under California Government Code Section 4217.12.

B. Client desires that TerraVerde assist Client in analyzing, evaluating and developing one or more Energy Management Transactions in consideration for the development fees described herein.

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Services Provided/Client Responsibilities.

(a) During the Project Development Term, TerraVerde shall provide the following Project Development Services to Client:

- i. Evaluate/analyze Client’s electricity usage and rates/costs;
- ii. Produce project cash flow scenario(s);
- iii. Develop preliminary project sizing, production and savings assumptions;
- iv. Explore **Project Financing** options (including power purchase arrangements, if appropriate);

- v. If appropriate, assist Client in conducting a bidding process (ref. GC 4217.12) for Power Purchase Agreement proposals; and
- vi. Serve as liaison/facilitate business negotiations with third parties (as requested and needed)
- vii. Oversee project implementation, contract compliance, systems commissioning and documentation.

(b) If Client enters into an Energy Management Transaction, then TerraVerde will provide the further following services with respect to such Energy Management Transaction:

- i. Assist Client in applying for applicable project incentives and subsidies for the Energy Management Program (as requested and needed).
- ii. If Client enters into a Power Purchase Agreement, TerraVerde may, with Client's written consent (at Client's expense) select an independent engineer, who will review the installation work, verify that such work conforms to the plans and specifications, perform any applicable performance tests and perform such other tasks as TerraVerde deems necessary or useful.
- iii. Monitor progress under any Power Purchase Agreement and recommend approval of any requests for payment under the Power Purchase Agreement consistent with the requirements of such agreement.
- iv. Assist Client with general oversight of construction/installation of the Energy Management Program (as requested/needed).

(c) The Client makes the following acknowledgements and has the following responsibilities in connection with the services provided by TerraVerde under this Agreement:

- i. The Client has ultimate responsibility for any decision to proceed with an Energy Management Transaction and to negotiate and enter into any contracts with third parties.
- ii. The Client is responsible for ensuring that any bidding process complies with applicable law.
- iii. The Client may elect to include any additional bidders in the bidding process.
- iv. The Client is responsible for ensuring that the Energy Management Program, any Energy Management Transaction and entering into any arrangements or contracts with third parties complies with applicable laws and Client's other obligations.

- v. The Client acknowledges that TerraVerde is not providing any legal advice to Client.
- vi. TerraVerde is not providing any advice to or on behalf of Client with respect to any municipal financial products or the issuance of municipal securities and is not undertaking any solicitation of Client with respect to municipal financial products or the issuance of municipal securities.
- vii. The Client is responsible for performing its obligations under any contracts with third parties.
- viii. The Client acknowledges that TerraVerde does not control and is not responsible for third parties performing their obligations under any contracts with Client.
- ix. The Client shall provide TerraVerde (and its agents) and any independent engineer access to the Energy Management Program facilities, sites or data at reasonable times and on reasonable advance notice.
- x. The Client has ultimate responsibility for applying for any applicable incentives and subsidies for the Energy Management Program and satisfying the requirements of such incentives and subsidies.
- xi. The Client agrees to complete, execute and deliver a Notice of Minimum Bid Criteria in the form set forth on *Exhibit A* (a “Notice of Minimum Bid Criteria”) prior to TerraVerde assisting Client with any formal bidding process.

2. Term.

(a) The project development term shall commence on the date of this Agreement and shall, subject to Section 3(b), expire on the later of (i) date which is twelve (12) months after the date of this Agreement, (ii) the expiration of incentive reservations made during the such 12 month period, or (iii) the date on which the last Energy Management Transaction has been completed and all payments have been made to TerraVerde with respect to such Energy Management Transaction, whichever is longer (the "***Project Development Term***"). The Parties may extend the Term by a mutual written agreement.

3. Exclusive Development Rights.

(a) During the Project Development Term, TerraVerde shall have exclusive rights to develop all Energy Management Programs, Solar Projects and Energy Management Transactions for Client.

(b) Client recognizes that TerraVerde will invest substantial time and money in performing the work hereunder for Client and such work may benefit Client on future Energy Management Programs, Solar Projects and Energy Management Transactions. In consideration of such facts and the other agreements and obligations of TerraVerde hereunder, Client agrees to

grant TerraVerde the rights set forth in this Section 3(b). During the twelve (12) month period of time beginning upon the expiration of the Term (the "**Exclusivity Period**"), TerraVerde shall also have exclusive rights to develop all Energy Management Programs, Solar Projects and Energy Management Transactions for Client. This Section 3(b) shall survive the termination of this Agreement.

(c) Notwithstanding the foregoing, Section 3(b) shall not apply to any Solar Project or Energy Management Program or any Energy Management Transaction developed by Client.

4. Ownership of Written Products.

(a) All reports, documents or other written material ("Written Products") developed for Client by TerraVerde in the performance of this Agreement shall be and remain the property of the Client without restriction or limitation upon its use or dissemination by Client. TerraVerde may take and retain copies of such Written Products as desired, but no such Written Products shall be the subject of a copyright application by TerraVerde. This Section 4(a) shall survive the termination of this Agreement.

5. Compensation of TerraVerde.

(a) For Project Development Services provided hereunder with respect to any Energy Management Transaction entered into by Client hereunder, the Client shall pay to TerraVerde a fee equal to 22.6 cents per kilowatt hour (\$0.226/kWH) projected to be produced or saved within the first year of operation for any Energy Management Transaction (a "**Development Fee**") not to exceed the amount of Two Hundred Fifty Thousand Dollars (\$250,000.00).

(b) To the extent that (i) TerraVerde assists Client in conducting a bidding process for Power Purchase Agreement proposals and/or project financing for a proposed Solar Project under Government Code 4217.12 and (ii) such bidding process results in Client receiving one or more bids meeting the minimum criteria identified on the applicable Notice of Minimum Bid Criteria, and (iii) notwithstanding (ii), Client elects not to close a Solar Project with any bidder submitting a qualifying bid within ninety (90) days of the deadline for receipt of bids, for reasons other than the bidder was not responsive and/or responsible, then Client shall pay to TerraVerde, for its services provided hereunder, a fee of twenty-thousand dollars (\$20,000) (the "**Service Fee**"). The Service Fee shall be payable within ninety (90) days of the deadline for receipt of bids. Both parties shall work together in good faith to determine in a timely manner whether such thresholds have been met. Notwithstanding the foregoing, if the Client makes good faith diligent efforts to obtain financing for the Solar Installation and is unable to obtain such financing per the minimum terms described in the Notice of Minimum Bid Criteria and Client elects not to proceed with such Energy Management Transaction solely because of such failure to obtain such financing, then Client shall not be obligated to pay the Service Fee to TerraVerde, provided that Client provides written notice to TerraVerde of such facts along with supporting documentation.

(c) Client further agrees that if it enters into an Energy Management Transaction in contravention of Sections 3(a) or 3(b) then Client shall, upon entering into such Energy Management Transaction, pay TerraVerde a Development Fee for such Energy Management Transaction as calculated under Section 5(a), whether or not TerraVerde provides any services with respect to such Energy Management Transaction.

(d) The Development Fee for any Energy Management Transaction shall be paid to TerraVerde as follows:

- i. A first installment of 35% of the Development Fee shall be due to TerraVerde on the date on which Client issues Notice to Proceed with Construction to power provider under the Power Purchase Agreement; and
- ii. 40% of the Development Fee shall be paid at the time the applicable Energy Management Program begins generating power or energy savings for the Client on a continuous and regular basis (pro rating such payment as appropriate if portions of the Energy Management Program are implemented at different times); and
- iii. 25% of the Development Fee shall be paid upon final completion of any remaining punchlist items with respect to the Energy Management Program.

If, after entering into a Power Purchase Agreement or any other definitive agreement for an Energy Management Transaction, the Client either (1) terminates such Power Purchase Agreement or other agreement for any reason or (2) materially breaches such Power Purchase Agreement or other agreement resulting in the termination of such Power Purchase Agreement or other agreement by the counterparty, then Client shall, within thirty (30) business days of such termination pay to TerraVerde any unpaid portion of the Development Fee then currently due.

If, after entering into this Agreement, Terra Verde materially breaches and terminates the Agreement, the Client shall only be required to pay the portion of the Development Fee due to TerraVerde at that time together with a pro-rated payment for work completed towards the next milestone in i, ii, or iii above.

(e) Client acknowledges that in addition to the fees payable to TerraVerde, it will be responsible for (a) all project development & installation costs in connection with any Energy Management Transaction, including without limitation, all PV system installation cost, other systems costs, construction contingency, third party engineering, third party inspection & permitting (including DSA), third party commissioning, inspection & testing, third party consulting & underwriting costs, client-side contract legal costs, transmission network upgrade costs, registration costs of environmental attributes, insurance costs, and other development costs, (b) any and all, financing costs & reserves, construction debt legal, permanent debt legal, third party financial consulting, principal & interest reserve funds, capitalized interest funds, capital costs of issuance, underwriter's discounts & fees, bond insurance, escrow or trustee costs,

6. No Additional Agreements; Definitive Documentation. Neither the execution of this Agreement, the holding of discussions, negotiations nor the exchange of material or information shall be construed as creating a binding obligation on Client to enter into any definitive agreement with respect to or otherwise consummate any Energy Management Transaction. Client reserves the right, in its sole discretion, to reject any and all proposals made by any third party with regard to any Energy Management Transaction and to terminate discussions and negotiations of definitive documentation at any time. Such a termination of discussions or negotiations regarding definitive documentation will not affect any of the obligations of the Parties under this Agreement. Client acknowledges and agrees that if it decides to proceed with any Energy Management Transaction, it will be required to document the terms of it through execution of definitive documentation (including, for example, a Power Purchase Agreement, a site or equipment lease, an engineering, procurement and construction contract and/or other project and financing documents) as negotiated by the Client and any applicable third parties, which shall contain the economic and other material terms of the Energy Management Transaction. Client acknowledges that it is solely responsible for negotiating any definitive documents with any third parties and ensuring that such documents adequately protect Client and satisfy the Client's economic, power and other requirements. Client acknowledges that TerraVerde does not control and is not responsible for the performance or conduct of any third parties dealing with the Client.

7. Confidentiality

(a) Confidential Information. TerraVerde may, from time to time, disclose trade secrets, including without limitation, financial tools, formulas and models marked as confidential ("***TerraVerde Confidential Information***") to the Client or its representatives for the purpose of evaluating the Energy Management Transaction. All information relating to Client which is clearly marked as such, including but not limited to, information relating in any way to Client's internal business model and methods of organization and operations, or any other aspect of Client's business (whether protected by patent, copyright, trade secret or any other forms of commercial protection ("***Client's Confidential Information***")) provided to TerraVerde or its representatives under this Agreement.

(b) No Disclosure. Client acknowledges that the TerraVerde Confidential Information is known only to certain individuals at TerraVerde who are using it to produce a service of commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it and, as such, the Confidential Information may constitute trade secrets under California Government Code Section 6254.7(d). TerraVerde acknowledges that the Client's Confidential Information is known only to certain individuals at the City and such Client's Confidential Information shall remain confidential. Both parties and their officers, commissioners, employees, agents, council members, attorneys and directors, as those terms may apply to the Parties, use the information solely for complying and performing with the terms of the Agreement and shall not disclose any of the Confidential Information in any manner whatsoever, except as required by law, including, but not limited to, the California Public Records Act. If at any time, either Party is legally required to disclose such Confidential

Information, the disclosing Party shall give the non-disclosing Party advance notice to take action to protect such information and shall cooperate with the non-disclosing Party in such effort to the extent that the disclosing Party is legally permitted to do so. To the extent that either Party disagrees that the Confidential Information is required to be disclosed by law, the Party seeking to prevent disclosure may, at its sole expense, seek a court determination as to whether disclosure is in fact required by law. Failure of the Party seeking to prevent disclosure to obtain a court determination on the matter within thirty (30) days absolves the disclosing Party from any claims of breach under this section of this Agreement. Parties hereby agree to indemnify the other Party against any and all losses, damages, claims, and expenses incurred or suffered by the other Party as a result of a breach of this Agreement.

8. Representations of each Party. Each Party represents that: (a) it is duly authorized and empowered to enter into this binding Agreement; (b) this Agreement is a legal, valid and binding obligation of such party enforceable against such Party in accordance with its terms, subject to the qualification, however, that the enforcement of the rights and remedies herein is subject to (i) bankruptcy and other similar laws of general application affecting rights and remedies of creditors and (ii) the application of general principles of equity (regardless of whether considered in a proceeding in equity or at law); (c) it is not a party to or bound by any agreements, contracts, instruments, court orders or judgments which would conflict with or violate this Agreement; and (d) that its execution of this Agreement and performance of its obligations under this Agreement will not violate any law or regulation applicable to such Party.

9. Insurance. TerraVerde shall at all times maintain general liability insurance with coverage of at least One Million Dollars (\$1,000,000) for as long as this Agreement remains in effect. The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least A:VII in the latest edition of Best's Insurance Guide. At all times during this Agreement, TerraVerde shall maintain on file with Client a certificate of insurance showing that the aforesaid policy or policies are in effect in the required amounts and naming Client as an additional insured.

10. Limitation on Liability; Damages.

(a) Parties agrees that neither Party nor its officers, directors, members, managers, employees, agents or affiliates shall be liable, responsible or accountable in damages or otherwise to the other Party in connection with any Energy Management Program, any Solar Project, any Energy Management Transaction, the provision of any Asset Management or this Agreement, except for the Parties' own acts of intentional and willful misconduct or gross negligence. Parties acknowledge that they are not an agent or fiduciary of each other.

(b) THE LIABILITY OF EACH PARTY ARISING OUT OF OR RELATED TO THE TERMS OF THIS AGREEMENT SHALL BE LIMITED TO DIRECT, ACTUAL DAMAGES ONLY AND ALL OTHER DAMAGES AND REMEDIES ARE WAIVED. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR BUSINESS INTERRUPTION DAMAGES, WHETHER BY STATUTE, IN TORT, CONTRACT OR OTHERWISE.

(c) Client acknowledges that any breach of Section 3(a) and 3(b) (the “*Exclusivity Provisions*”) will cause TerraVerde material economic harm (including, for example, loss of Development Fees) and that adequate damages in the event of Client’s breach of Exclusivity Provisions will be difficult if not impossible to calculate. Accordingly, the Parties agree that in the event of a breach of the Exclusivity Provisions by Client, Client shall be liable to TerraVerde for the payment of the amounts described in Section 5(c). The Parties acknowledge and agree that such amounts represent a reasonable estimate of anticipated damages to TerraVerde and do not constitute a penalty.

11. Successors and Assigns. Neither party will assign this Agreement, in whole or in part, without the prior written consent of the other Party, consent not to be reasonably withheld. This Agreement will inure to the benefit of, and be binding upon, the Parties hereto, together with their respective legal representatives, successors, and assigns, as permitted herein.

12. Governing Law. This Agreement and all matters arising out of or relating to it shall be governed by and construed in accordance with the laws of the State of California. The Parties hereby irrevocably consent to the jurisdiction of the state courts located in Stanislaus County, California and federal courts located in the city of Sacramento, California, in any action arising out of or relating to this Agreement, and waive any other venue to which either Party might be entitled by domicile or otherwise.

13. Entire Agreement. This Agreement constitutes the final agreement between the Parties. It is the complete and exclusive expression of the Parties’ agreement on the matters contained in this Agreement. All prior and contemporaneous negotiations and agreements between the Parties on the matters contained in this Agreement are expressly merged into and superseded by this Agreement. In entering into this Agreement, neither Party has relied upon any statement, representation, warranty, or agreement of the other Party except for those expressly contained in this Agreement. There are no conditions precedent to the effectiveness of this Agreement other than those expressly stated in this Agreement.

14. Severability. If any provision of this Agreement is determined to be invalid, illegal or unenforceable, the remaining provisions of this Agreement remain in full force and effect and are not affected or impaired in any way.

15. Amendments. This Agreement may not be amended or modified except in writing signed by each of the Parties to the Agreement.

16. No Partnership/Agency. This Agreement is not intended, and shall not be construed, to create any association, joint venture, agency, employment or fiduciary relationship or partnership between the Parties or to impose any such obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act as or be an agent or representative of, or otherwise bind, the other Party.

17. No Restriction on Business of TerraVerde. Nothing contained herein shall restrict the business activities of TerraVerde and TerraVerde shall be free to enter into similar agreements and arrangements with other parties.

18. Independent Contractor. Without limiting the generality of Section 16, neither this Agreement, nor any duties or obligations under this Agreement, nor or the intentions or expectations of either Party shall create an employment relationship between Client and TerraVerde for any purpose. TerraVerde shall perform its obligations under this Agreement as an independent contractor and not as an employee of the Client. TerraVerde shall have no power or authority by this Agreement to bind the Client in any respect. Nothing in this Agreement shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by TerraVerde are employees, agents, contractors or subcontractors of TerraVerde and not of the Client. The Client shall not be obligated in any way to pay any wage claims or other claims made against TerraVerde by any such employees, agents, contractors or subcontractors, or any other person resulting from performance of this Agreement.

19. Conflicts of Interest. During the Term of this Agreement, neither TerraVerde nor its members, employees or agents shall have a financial interest, as described in Article 1 (commencing with California Government Code Section 87100) of Chapter 7 of the Political Reform Act) (a “*Financial Interest*”), in any Energy Management Transaction other than TerraVerde's rights under this Agreement. Client acknowledges that TerraVerde may have previously had or may currently have agreements or a business relationship with or received compensation from other parties to the Energy Management Transaction and TerraVerde may enter into agreements or business relationships or receive compensation from such third parties in the future, only if (i) such agreements, relationships or compensation are not related to or contingent upon Client or any Energy Management Transaction and (ii) TerraVerde does not and will not have any financial interest, as described in Article 1 (commencing with California Government Code Section 87100) of Chapter 7 of the Political Reform Act, in any Energy Management Transaction from such agreements, relationships or compensation other than TerraVerde's rights under this Agreement. TerraVerde shall comply with all applicable federal, state and local laws and regulations, including to the extent applicable the conflict of interest provisions off Government Code Section 1090 and the Political Reform Act (Government Code Section 87100 et seq.), in executing its obligations and under this Agreement.

20. Third Parties. This Agreement does not and is not intended to confer any rights or remedies upon any party other than the Parties.

21. Interpretation. This Agreement shall be construed as to its fair meaning and not strictly for or against either Party. The headings hereof are descriptive only and not to be construed in interpreting the provisions hereof.

22. Notices. All notices required or permitted under this Agreement shall be in writing and shall be deemed given on the date sent if delivered by hand or by email with an attachment in a portable document format (.pdf) or similar file format, on the next business day if sent by overnight courier or on the third business day if sent by United States mail, postage prepaid, to each party at the following address (or at such other address as a Party may specify by notice under this section:

If to TerraVerde:

TerraVerde Renewable Partners, LLC
1100 Larkspur Landing, Suite 155
Attention: Rick Brown, PhD
Email: Rick.Brown@TVRPLLC.com

If to Client:

City of Hughson
PO Box 9 (mailing)
Hughson, CA 95326
Attention: Thom Clark
Email: tclark@hughson.org

23. Counterparts. This Agreement may be signed in counterparts, which together shall constitute one agreement. The delivery of an executed counterpart of this Agreement by portable document format (.pdf) shall be deemed to be valid delivery thereof.

[SIGNATURE PAGE FOLLOWS]

The parties have entered into this Exclusive Engagement Agreement as of the date first written above.

TERRAVERDE RENEWABLE PARTNERS,
LLC,
a Delaware limited liability company

By: _____
Rick Brown, PhD
President

City of Hughson,
a California Municipality

By: _____
Name:
Title:

EXHIBIT A

Form of

Notice of Minimum Bid Criteria

Reference is made to that certain Exclusive Engagement Agreement, between TerraVerde Renewable Partners, LLC ("***TerraVerde***") and City of Hughson (the "***Client***"), dated as of April __, 2013. The undersigned Client hereby certifies to TerraVerde that a qualifying bid shall be a bid that meets the following criteria:

(1) The applicable Energy Management Transaction is projected to produce aggregate net cost savings of \$10,000 over Client's current grid-based power for the first year after the applicable Energy Management Program or Solar Project has achieved commercial operation.

(2) The applicable Energy Management Transaction is projected to produce aggregate net cost savings of \$75,000 over Client's current grid-based power for the first five (5) years after the applicable Energy Management Program or Solar Project has achieved commercial operation.

(3) The applicable Energy Management Transaction is projected to produce aggregate net cost savings of \$1,000,000 over Client's current grid-based power for the first twenty-five (25) years after the applicable Energy Management Program or Solar Project has achieved commercial operation.

TerraVerde and Client shall work together in good faith to determine in a timely manner whether such thresholds have been met.

Client acknowledges that the standards above are projections and that TerraVerde is not guaranteeing any particular level of power production, cost savings or other results.

Client acknowledges that projections of future savings are calculated based on patterns of Client's historical electricity usage, or simulated usage, and that such projection assume historical usage patterns hold at the same level for the next 25 years.

City of Hughson

TerraVerde Renewable Partners, LLC

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: _____

Title: _____