

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

**REVISED**

NOTICE OF PROPOSED AWARDS
Community Scale Renewable Energy Development, Deployment, and Integration
Grant Solicitation PON-12-502
May 9, 2013

On October 16, 2012, the California Energy Commission's Public Interest Energy Research (PIER) Program released a Program Opportunity Notice (PON) titled "Community Scale Renewable Energy Development, Deployment and Integration (REDDI)" RD&D Grant Solicitation. The PON announced that up to \$8.95 million in grant funding was available to accelerate research, development, and demonstration of community scale renewable energy in three distinct funding categories:

- A. **Community Scale Renewable Energy Integration Demonstration** – sought proposals that aim to demonstrate the cost-efficient integration of high-penetrations of renewable energy within a given community based on the locally-available renewable energy potential, and to increase energy security for that community.
- B. **Community Scale Renewable Energy Integration Exploration** – sought proposals to formulate community-specific renewable energy development plans, including the tools and methodologies necessary to do so.
- C. **Breakthrough Community Scale Renewable Energy Technology Development** – sought proposals that aim to develop renewable energy technologies that offer breakthrough potential in the commercial energy market, and will provide a significant contribution towards California's 2020 renewables.

The proposals were screened, reviewed, evaluated, and scored using the criteria prescribed in the PON. Based on the Review Team's scores and suggested funding levels, the Energy Commission released a Notice of Proposed Awards (NOPA) on February 20, 2013 to award \$8,950,000 and fund ten of the thirty-five passing projects in the solicitation. On March 1, 2013, the Energy Commission issued a Revised NOPA and proposed to award \$8,911,219 and fund ten of the thirty five passing projects under the PON. On May 3, 2013, a second Revised NOPA was issued to recommend award to the Rank 5 project in Research Area A after the award to the Rank 4 project was withdrawn.

Since the release of the second Revised NOPA, the recommended award to the Rank 5 project under Research Area A has been cancelled and the funding for the project has been made available to the next highest- ranked project. The Energy Commission proposes to award partial funding to Harper Construction Company, Inc, the Rank 6 project in Research Area A. The project is titled "Camp Pendelton Area 52 FractalGrid Demonstration Project."

This third Revised NOPA is being issued in accordance with these recommendations. The Energy Commission proposes to award \$8,988,253 to ten of the thirty five passing projects under the solicitation, as follows:

- For Research Area A, “Community Scale Renewable Energy Integration Demonstration,” four projects are recommended for funding for a total of \$6,948,328. Seventeen proposals received a passing score.
- For Research Area B, “Community Scale Renewable Energy Integration Exploration,” four projects are recommended for funding for a total of \$1,039,830. Seven proposals received a passing score.
- For Research Area C, “Breakthrough Community Scale Renewable Energy Technology,” two projects are recommended for funding for a total of \$1,000,095. Eleven proposals received a passing score.

The attached table titled “Revised Notice of Proposal Awards and Results of Submitted Proposals” identifies: each of the applicants recommended to receive funding, the project title, the recommended amount of Energy Commission funding, and scoring information.

Final approval of these awards rests with the Energy Commission, which will consider each project at a publicly noticed Business Meeting at the Energy Commission in Sacramento, California.

This notice is being mailed to all parties who submitted a proposal to this solicitation and is also posted on the Energy Commission website at: <http://www.energy.ca.gov/contracts/>.

For further information about this matter, contact Crystal Presley-Willis at (916) 654-5067 or at Crystal.Presley-Willis@energy.state.ca.us.



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA A - Community Scale Renewable Energy Integration Demonstration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
Proposed Awards - Research Area A							
1	Foresight Renewable Solutions	Integrated Solar PV, Advanced Compressed Air Energy Storage, and Microgrid Demonstration Project	\$1,749,000	\$1,749,000	\$1,244,000	78.12	Awardee
2	Cool Earth Solar, Inc.	Predictable Solar Power and Smart Building Management for California Communities	\$1,726,438	\$1,726,438	\$1,025,822	77.92	Awardee
3	Redwood Coast Energy Authority	Repowering Humboldt with Community Scale Renewable Energy	\$1,750,000	\$1,750,000	\$1,793,762	77.35	Awardee
4	Calnetix Technologies, LLC.	Calnetix Technologies Community Renewable Power Plant Demonstration	\$1,645,856	\$0	\$876,266	76.41	Withdrawn
5	County of Yolo	Yolo County Renewable BioGreen Digester Demonstration Project for Energy Production	\$1,749,684	\$0	\$4,741,749	76.14	Withdrawn
6	Harper Construction Company, Inc	Camp Pendelton Area 52 FractalGrid Demonstration Project	\$1,735,219	\$1,722,890	\$1,172,428	76.09	Awardee
Total Funding Recommended			\$10,356,196	\$6,948,328	\$10,854,027		
Passed But Not Funded							
7	The Regents of the University of California; University of California, San Diego	Community- Scale Renewable Energy Research, Development, Demonstration and Integration for an Intelligent Microgrid with Nine Enabling Technologies	\$1,749,000	\$0	\$1,098,250	74.95	Finalist
8	University of California, Riverside	Community Scale Renewable Energy Smart Grid Deployment and Integration with Stationary Storage Electric Transit	\$1,731,199	\$0	\$593,520	74.65	Finalist



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA A - Community Scale Renewable Energy Integration Demonstration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
9	Encina Wastewater Authority	Encina Bio-Solids PyroBioMethane Demonstration Project	\$1,749,503	\$0	\$922,470	74.56	Finalist
10	Encina Wastewater Authority	NOxRx Wet Exhaust Scrubber Pilot	\$671,688	\$0	\$576,372	73.95	Finalist
11	Monterey Regional Waste Management District	Monterey Regional Bio-Energy Portfolio Project	\$1,749,366	\$0	\$8,083,102	72.58	Finalist
12	Institute of Gas Technology Institute	Community Scale Renewable Solar Power	\$1,191,706	\$0	\$425,776	71.22	Finalist
13	UC Irvine	Demonstrating a Renewable Enabled Secure Community	\$1,542,343	\$0	\$1,962,453	71.09	Finalist
14	City of Napa	Napa Renewable Resources Project	\$1,750,000	\$0	\$4,419,377	70.54	Finalist
15	KEMA Services Inc	Urban Discovery Academy Net Zero Campus	\$1,504,560	\$0	\$542,661	70.24	Finalist
16	CanbyGeo LLC	Canby Cascaded Geothermal Development Project	\$1,340,700	\$0	\$2,000,000	70.07	Finalist
17	Solar Sonoma County	Solar Electric Vehicle Deomonstration Project: Riding on Sunshine	\$1,509,974	\$0	\$492,263	70.06	Finalist
Did not Pass							
18	Infigen Energy U.S. Develoment LLC	Buena Vista Community Scale Renewable Energy Integration Demonstration	\$1,750,000	\$0	\$437,500	68.30	Did Not Pass
19	Redwood Renewables LLC	Pilot Installation & Manufacture of Roof Integrated SolTiles on 25 Roofs	\$1,728,065	\$0	\$1,059,137	68.26	Did Not Pass



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA A - Community Scale Renewable Energy Integration Demonstration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
20	Recycling Energy Systems	Biogas from industrial wastewater to generate electricity on CHP unit	\$1,750,000	\$0	\$1,451,000	68.00	Did Not Pass
21	KEMA Services Inc	High Tech High Microgrid Deployment	\$1,733,582	\$0	\$815,305	67.62	Did Not Pass
22	Aegis Technology Inc	High-efficiency Scalable Energy Storage System for Community Renewable Energy Applications	\$1,056,891	\$0	\$352,297	67.55	Did Not Pass
23	McCalmont Corporation dba McCalmont Engineering	SBWMA Energy Storage/Photovoltaic (SBWMA ES/PV) Project	\$541,279	\$0	\$180,427	65.98	Did Not Pass
24	Omnitrans	Solar Powered Transit System	\$1,495,684	\$0	\$444,804	65.09	Did Not Pass
25	Kennedy/Jenks Consultants	A 'Hybrid' Co-digestion Process for Cost Effective Biogas Production from WWTP Digesters	\$921,269	\$0	\$254,000	64.67	Did Not Pass
26	Henry Hutton	City of Tracy Community Scale Renewable Energy Integration Demonstration	\$1,055,000	\$0	\$0	61.70	Did Not Pass
27	EnerNex LLC	City of Lancaster Net Zero Energy Community	\$1,749,656	\$0	\$450,000	61.43	Did Not Pass
28	Primus Power Corporation	MCAS Miramar Demonstration of Energy Security with Renewable Energy and Storage	\$1,741,127	\$0	\$504,314	58.97	Did Not Pass
29	Solana Energy	Dual-Axis Tracking PV Demonstration	\$689,325	\$0	\$1,280,175	57.80	Did Not Pass



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA A - Community Scale Renewable Energy Integration Demonstration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
Disqualified							
DQ	City of Davis	Davis Renewable Energy Development, Deployment, and Integration Program	\$1,749,980	\$0	\$1,160,000	N/A	Disqualified



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA B - Community Scale Renewable Energy Integration Exploration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
Proposed Awards - Research Area B							
1	City of Davis	Davis Future Renewable Energy and Efficiency ("Davis FREE")	\$300,000	\$300,000	\$75,000	78.50	Awardee
2	Sierra Institute for Community and Environment	Plumas Energy Efficiency and Renewable Management Action Plan (PEER MAP)	\$300,000	\$300,000	\$75,000	75.25	Awardee
3	South Tahoe Public Utility District	Renewable Energy Regional Exploration Project	\$139,830	\$139,830	\$72,353	72.60	Awardee
4*	Department of the Environment-City and County of San Francisco	Energyizing Our Future: Community Integrated Renewable Energy (CIRE) Assessment	\$300,000	\$300,000	\$300,000	72.44	Awardee - Partial Funding
Total Funding Recommended			\$1,039,830	\$1,039,830	\$522,353		
Passed But Not Funded							
5	Lawrence Berkeley National Laboratory	Optimal Planning of Community-scale Thermal Systems via DER-CAM	\$300,000	\$0	\$75,000	71.51	Finalist
6	University of California, Merced	Forecast-based optimal integration of renewable energy at the UC Merced community	\$293,146	\$0	\$295,470	71.39	Finalist
7	Clean Coalition	San Francisco Hunters Point Project	\$300,000	\$0	\$126,250	70.40	Finalist
Did not Pass							
8	California Center for Sustainable Energy	California Advanced Clean Energy Neighborhood	\$299,512	\$0	\$75,000	69.86	Did Not Pass



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA B - Community Scale Renewable Energy Integration Exploration

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
9	Optony Inc.	Generating Renewables, Efficiency and Transformation (GREAT) for Communities in California	\$299,845	\$0	\$75,000	69.13	Did Not Pass
10	Energy and Environmental Economics, Inc (E3)	Reaching Carbon Neutrality Across the University of California System	\$300,000	\$0	\$250,000	68.80	Did Not Pass
11	Alameda County Waste Management Authority	Enabling Open Market PACE Financing for Small Commercial and Multi-Family Projects	\$300,000	\$0	\$148,425	68.54	Did Not Pass
12	Clean Coalition	Stanford Community Renewable Energy Project	\$249,400	\$0	\$62,350	68.10	Did Not Pass
13	The Regents of the University of California	An Integrated Optimization Tool for Developing Cost Effective Renewable Installations based on California Specific Regulatory Frameworks: A Focus on Los Angeles County	\$300,000	\$0	\$75,930	67.96	Did Not Pass



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA C - Breakthrough Community Scale Renewable Energy Technology Development

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
Proposed Awards - Research Area C							
1	Sun Synchrony	Breakthrough Power Density for Rooftop PV Applications	\$475,095	\$475,095	\$325,692	89.83	Awardee
2	Cogenra Solar, Inc	MaxSun - a novel community-scale renewable solar power system for California	\$525,000	\$525,000	\$155,659	85.02	Awardee
Total Funding Recommended			\$1,000,095	\$1,000,095	\$481,351		
Passed But Not Funded							
3	The Wind Turbine Company	Low Cost of Electricity, Low Widn Speed Wind Turbine & Air Circulation Machine	\$500,000	\$0	\$554,017	83.10	Finalist
4	Amonix, Inc	High Efficiency Concentrator Photovoltaic (CPV) for California Parking Lots	\$518,207	\$0	\$317,345	82.50	Finalist
5	Kiverdi, Inc	Community Scale Carbon Negative Renewable Power and Biodiesel Generation System	\$524,695	\$0	\$131,555	82.10	Finalist
6	University of California Los Angeles	Green Hydrogen/Electricity Cogeneration from Concentrated Solar Power (CSP)	\$524,935	\$0	\$181,153	81.68	Finalist
7	TSS Renewables, Inc. d.b.a. TSS Consultants	North Fork Forest Bioenergy Gasification Research and Demonstration Project	\$510,324	\$0	\$200,211	76.63	Finalist
8	Bay Area Air Quality Management District	Solar Thermal for Preheating of Emergency Backup Generators	\$525,000	\$0	\$224,778	76.02	Finalist
9	FAFCO, Inc	FAFCO FUSION: Breakthrough Community Scale Photovoltaic-Thermal Technology	\$514,595	\$0	\$155,870	75.82	Finalist



California Energy Commission PON-12-502



Revised Notice of Proposed Awards and Results of Submitted Proposals
Community Scale Renewable Energy Development, Deployment, and Integration
RESEARCH AREA C - Breakthrough Community Scale Renewable Energy Technology Development

May 7th, 2013

Rank	Prime Applicant	Title	PIER Funds Requested	PIER Funds Recommended	Match Funds	Score	Award Status
10	Terrafore, Inc.	TerraKline Thermal Storage for Community Scale Renewable Energy System	\$523,711	\$0	\$156,620	74.30	Finalist
11	Wadham Energy LP	Biogenic Silicon- Process Development Program	\$500,000	\$0	\$125,000	72.85	Finalist
Did not Pass							
12	Interra Energy, Inc.	Interra Reciprocating Reactor for Low-Cost & Carbon Negative Energy	\$525,000	\$0	\$369,957	62.97	Did Not Pass