CALIFORNIA ENERGY COMMISSION

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



NOTICE OF PROPOSED AWARDS (NOPA)

Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions and Zero-Net Energy Communities PON-14-303 January 23, 2015

On August 12, 2014, the California Energy Commission (Energy Commission) released a competitive solicitation to fund applied research and development activities that will increase the technical performance and value of distributed biopower and photovoltaic technologies. Up to \$19,500,000 in Electric Program Investment Charge (EPIC) funding is available to fund applications in:

- Group 1: Develop Modular Bioenergy Systems for Forest/Urban Interface Areas
- Group 2: Develop Waste-to-Energy Bioenergy Systems
- Group 3: Evaluate Advanced Inverter Functionality and Interoperability to Enable High-Penetration Distributed Photovoltaics
- Group 4: Develop Advanced Distributed Photovoltaic Systems

The Energy Commission received 27 proposals by the due date of November 13, 2014. Each proposal was screened, reviewed, evaluated and scored using the criteria in the solicitation. Twenty-five proposals passed the Stage One Application Screening.

The attached "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount. The total amount recommended is \$18,689,769.

Funding of proposed projects resulting from this solicitation is contingent upon the approval of these projects at a publicly noticed Energy Commission Business Meeting and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel or otherwise modify the pending award, and award the funds to another applicant.

In addition, the Energy Commission reserves the right to: 1) remove or shift funding between the different groups if there are insufficient passing proposals in one group and 2) negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

This notice is being mailed to all parties who submitted an application to this solicitation and is also posted on the Energy Commission's website at: www.energy.ca.gov/contracts/.

For information, please contact Tonya Heron: (916) 654-4484, Tonya.Heron@energy.ca.gov.

Tonya Heron Commission Agreement Officer

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Project Group 1 - Develop Modular Bioenergy Systems for Forest/Urban Interface Areas Notice of Proposed Awards

Rank	Project Applicant	Title	Funds Requested	Funds Recommended	Match Funds	Score	Award Status	
Proposed Awards								
1	West Biofuels, LLC	Modular Biomass Power Systems to Facilitate Forest Fuel Reduction Treatments	\$2,000,000	\$2,000,000	\$539,914	85.36	Awardee	
2	Interra Energy	Interra Reciprocating Reactor for Low-Cost & Carbon Negative Bioenergy	\$2,000,000	\$2,000,000	\$4,627,400	81.80	Awardee	
3	All Power Labs Inc.	Cleaner Air, Cleaner Energy: Converting Forest Fire Management Waste to On Demand Renewable Energy	\$1,990,071	\$1,990,071	\$476,250	81.07	Awardee	
Total Fund	Total Funding Recommended			\$5,990,071	\$5,643,564			
Did Not Pass								
	University of California, Riverside	Convert Forest Waste into Electricity with Modular, Transportable and Cost Effective Bioenergy System	\$1,990,090	\$0	\$1,402,786		Did Not Pass	
	Altex Technologies Corporation	Modular and Efficient Forest Slash to Power System	\$1,999,539	\$0	\$250,000		Did Not Pass	
	Lawrence Berkeley National Laboratory	Forest BioPower Solid Oxide Fuel Cell Generator	\$2,000,000	\$0	\$5,000		Did Not Pass	

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Project Group 2 - Develop Waste-to-Energy Bioenergy Systems

Notice of Proposed Awards

Rank	Project Applicant	Title	Funds Requested	Funds Recommended	Match Funds	Score	Award Status	
Proposed	Proposed Awards							
1	Taylor Energy	Advanced Recycling of MSW	\$1,499,481	\$1,499,481	\$46,616	83.57	Awardee	
2	The Southern California Gas Company	The SoCalGas Waste-to-Bioenergy Applied R&D Project	\$1,494,736	\$1,494,736	\$600,000	82.60	Awardee	
3	Lawrence Berkeley National Laboratory	Paths to Sustainable Distributed Generation through 2050: Matching Local Waste Biomass Resources with Grid, Industrial, and Community Needs	\$1,500,000	\$1,500,000	\$282,000	81.24	Awardee	
4	InnoSepra, LLC	Low Cost Biogas Power Generation with Increased Efficiency and Lower Emissions	\$1,500,000	\$1,500,000	\$729,150	80.76	Awardee	
Total Fun	ding Recommended		\$5,994,217	\$5,994,217	\$1,657,766			
Did Not P	Did Not Pass							
	University of California, San Diego	Pilot Scale Power Production from Forest and Agricultural Biomass	\$1,500,000	\$0	\$1,060,000		Did Not Pass	
	Palo Alto Research Center, Inc.	Energy Positive Wastewater Treatment: Activated Sludge/Membrane/Algal Photosynthesis (ASMAP) Bioreactor	\$1,499,237	\$0	\$512,864		Did Not Pass	
	Whole Energy Pacifica	Whole Energy Glycerin Based Emissions Reduction System	\$1,043,800	\$0	\$166,000		Did Not Pass	
	The Regents of the University of California, Merced	Electricity Generation from Electrothermal Chemiconversion of High-moisture Byproducts from MSW Anaerobic Fermentation	\$503,842	\$0	\$15,000		Did Not Pass	
	University of California, Riverside	Electricity from Wet Organic Wastes through Steam Hydrogasification	\$808,823	\$0	\$152,845		Did Not Pass	
	San Diego State University Research Foundation	Development of Next-Generation Biomass Waste Fuel Sources as Feedstock for Bioenergy Production	\$1,499,998	\$0	\$519,460		Did Not Pass	
	Wadham Energy LP	Biogenic Silicon - Process Development Program	\$800,000	\$0	\$0		Did Not Pass	

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Project Group 3 - Evaluate Advanced Inverter functionality and Interoperability to Enable High Penetration Distributed Photovoltaics

Notice of Proposed Awards

Rank	Project Applicant	Title	Funds Requested	Funds Recommended	Match Funds	Score	Award Status			
Proposed Awards										
1	SunSpec Alliance	Smart Inverter Interoperability Standards	\$2,000,000	\$2,000,000	\$2,066,875	92.77	Awardee			
2	EPRI	Assessing Smart Inverters and Consumer Devices to Enable more Residential Solar Energy	\$1,705,487	\$1,705,487	\$891,414	80.03	Awardee			
Total Funding Recommended			\$3,705,487	\$3,705,487	\$2,958,289					
Did Not Pa	Did Not Pass									
	The University Corporation (CSU Northridge Foundation)	Advanced Inverter Evaluation for Distributed PV	\$1,496,015	\$0	\$1,496,015		Did Not Pass			
	University Enterprises (CSU Sacramento Foundation)	Deployment of Smart Inverters at West Villiage	\$2,000,000	\$0	\$841,970		Did Not Pass			
	The Regents of the University of California, Irvine	Advancing and Demonstrating Smart Inverter Features in a Utility Circuit with High Renewable Penetration	\$1,230,587	\$0	\$359,652		Disqualified			

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Project Group 4 - Develop Advanced Distributed Photovoltaic Systems Notice of Proposed Awards

Rank	Project Applicant	Title	Funds Requested	Funds Recommended	Match Funds	Score	Award Status		
Proposed	Proposed Awards								
1	Sunfolding, Inc.	Mass-manufactured, Air Driven Trackers for Low Cost, High Performance Photovoltaic Systems	\$1,000,000	\$1,000,000	\$1,171,565	91.78	Awardee		
2	Glint Photonics, Inc.	Self-Tracking Concentrator Photovoltaics for Distributed Generation	\$999,994	\$999,994	\$0	82.76	Awardee		
3	Lawrence Berkeley National Laboratory	Demonstration of integrated photovoltaic systems and smart inverter functionality utilizing advanced distribution systems	\$1,000,000	\$1,000,000	\$25,000	76.46	Awardee		
Total Fund	Total Funding Recommended			\$2,999,994	\$1,196,565				
Did Not Pa	Did Not Pass								
	NEXTracker Inc.	Development of Performance Optimization Technology for Hyper-Responsive, Single-Axis PV Tracking Systems	\$979,302	\$0	\$652,868		Did Not Pass		
	Arzon Solar, LLC	Revolutionary Daylighting and BIPV CPV concept for new levels of building energy efficiency and solar energy generation	\$1,000,000.00	\$0	\$200,000.00		Disqualified		