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
# California Energy Commission

**PON-14-303**

*Advancing Cleaner, Less Costly, More Reliable Distributed Generation*

to Enable Customer Solutions and Zero-Net Energy Communities

**Project Group 1 - Develop Modular Bioenergy Systems for Forest/Urban Interface Areas**

**Notice of Proposed Awards**

January 23, 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>West Biofuels, LLC</td>
<td>Modular Biomass Power Systems to Facilitate Forest Fuel Reduction Treatments</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
<td>$539,914</td>
<td>85.36</td>
<td>Awardee</td>
</tr>
<tr>
<td>2</td>
<td>Interra Energy</td>
<td>Interra Reciprocating Reactor for Low-Cost &amp; Carbon Negative Bioenergy</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
<td>$4,627,400</td>
<td>81.80</td>
<td>Awardee</td>
</tr>
<tr>
<td>3</td>
<td>All Power Labs Inc.</td>
<td>Cleaner Air, Cleaner Energy: Converting Forest Fire Management Waste to On Demand Renewable Energy</td>
<td>$1,990,071</td>
<td>$1,990,071</td>
<td>$476,250</td>
<td>81.07</td>
<td>Awardee</td>
</tr>
</tbody>
</table>

**Total Funding Recommended**

$5,990,071  $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

---

Page 1 of 1
## Notice of Proposed Awards

**California Energy Commission**  
**PON-14-303**  
*Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions and Zero-Net Energy Communities*

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

**January 23, 2015**

### Proposed Awards

<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taylor Energy</td>
<td>Advanced Recycling of MSW</td>
<td>$1,499,481</td>
<td>$1,499,481</td>
<td>$46,616</td>
<td>83.57</td>
<td>Awardee</td>
</tr>
<tr>
<td>2</td>
<td>The Southern California Gas Company</td>
<td>The SoCalGas Waste-to-Bioenergy Applied R&amp;D Project</td>
<td>$1,494,736</td>
<td>$1,494,736</td>
<td>$600,000</td>
<td>82.60</td>
<td>Awardee</td>
</tr>
<tr>
<td>3</td>
<td>Lawrence Berkeley National Laboratory</td>
<td>Paths to Sustainable Distributed Generation through 2050: Matching Local Waste Biomass Resources with Grid, Industrial, and Community Needs</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
<td>$282,000</td>
<td>81.24</td>
<td>Awardee</td>
</tr>
<tr>
<td>4</td>
<td>InnoSepra, LLC</td>
<td>Low Cost Biogas Power Generation with Increased Efficiency and Lower Emissions</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
<td>$720,150</td>
<td>80.76</td>
<td>Awardee</td>
</tr>
</tbody>
</table>

**Total Funding Recommended**  
$5,994,217  
$5,994,217  
$1,657,766

### Did Not Pass

<table>
<thead>
<tr>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, San Diego</td>
<td>Pilot Scale Power Production from Forest and Agricultural Biomass</td>
<td>$1,500,000</td>
<td>$0</td>
<td>$1,060,000</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>Palo Alto Research Center, Inc.</td>
<td>Energy Positive Wastewater Treatment: Activated Sludge/Membrane/Algal Photosynthesis (ASMAP) Bioreactor</td>
<td>$1,499,237</td>
<td>$0</td>
<td>$512,864</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>Whole Energy Pacifica</td>
<td>Whole Energy Glycerin Based Emissions Reduction System</td>
<td>$1,043,800</td>
<td>$0</td>
<td>$166,000</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>The Regents of the University of California, Merced</td>
<td>Electricity Generation from Electrothermal Chemiconversion of High-moisture Byproducts from MSW Anaerobic Fermentation</td>
<td>$503,842</td>
<td>$0</td>
<td>$15,000</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>University of California, Riverside</td>
<td>Electricity from Wet Organic Wastes through Steam Hydrogasification</td>
<td>$808,823</td>
<td>$0</td>
<td>$152,845</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>San Diego State University Research Foundation</td>
<td>Development of Next-Generation Biomass Waste Fuel Sources as Feedstock for Bioenergy Production</td>
<td>$1,499,998</td>
<td>$0</td>
<td>$519,460</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>Wadham Energy LP</td>
<td>Biogenic Silicon - Process Development Program</td>
<td>$800,000</td>
<td>$0</td>
<td>$0</td>
<td>Did Not Pass</td>
</tr>
</tbody>
</table>
# California Energy Commission

**PON-14-303**

Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions and Zero-Net Energy Communities

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

## Notice of Proposed Awards

### January 23, 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SunSpec Alliance</td>
<td>Smart Inverter Interoperability Standards</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
<td>$2,066,875</td>
<td>92.77</td>
<td>Awardee</td>
</tr>
<tr>
<td>2</td>
<td>EPRI</td>
<td>Assessing Smart Inverters and Consumer Devices to Enable more Residential Solar Energy</td>
<td>$1,705,487</td>
<td>$1,705,487</td>
<td>$891,414</td>
<td>80.03</td>
<td>Awardee</td>
</tr>
</tbody>
</table>

**Total Funding Recommended**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3,705,487</td>
<td>$3,705,487</td>
<td>$2,958,289</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Did Not Pass

- **The University Corporation (CSU Northridge Foundation)**
  - Advanced Inverter Evaluation for Distributed PV
    - Funds Requested: $1,496,015
    - Funds Recommended: $0
    - Match Funds: $1,496,015
    - Award Status: Did Not Pass

- **University Enterprises (CSU Sacramento Foundation)**
  - Deployment of Smart Inverters at West Villiage
    - Funds Requested: $2,000,000
    - Funds Recommended: $0
    - Match Funds: $841,970
    - Award Status: 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
    - Funds Requested: $1,230,587
    - Funds Recommended: $0
    - Match Funds: $359,652
    - Award Status: Disqualified
## Notice of Proposed Awards

**Project Group 4 - Develop Advanced Distributed Photovoltaic Systems**

**January 23, 2015**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Funds Recommended</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sunfolding, Inc.</td>
<td>Mass-manufactured, Air Driven Trackers for Low Cost, High Performance Photovoltaic Systems</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,171,565</td>
<td>91.78</td>
<td>Awardee</td>
</tr>
<tr>
<td>2</td>
<td>Glint Photonics, Inc.</td>
<td>Self-Tracking Concentrator Photovoltaics for Distributed Generation</td>
<td>$999,994</td>
<td>$999,994</td>
<td>$0</td>
<td>82.76</td>
<td>Awardee</td>
</tr>
<tr>
<td>3</td>
<td>Lawrence Berkeley National Laboratory</td>
<td>Demonstration of integrated photovoltaic systems and smart inverter functionality utilizing advanced distribution systems</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$25,000</td>
<td>76.46</td>
<td>Awardee</td>
</tr>
</tbody>
</table>

**Total Funding Recommended**

- $2,999,994
- $2,999,994
- $1,196,565

**Did Not Pass**

<table>
<thead>
<tr>
<th>Project Applicant</th>
<th>Title</th>
<th>Funds Requested</th>
<th>Match Funds</th>
<th>Score</th>
<th>Award Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEXTracker Inc.</td>
<td>Development of Performance Optimization Technology for Hyper-Responsive, Single-Axis PV Tracking Systems</td>
<td>$979,302</td>
<td>$0</td>
<td>$652,868</td>
<td>Did Not Pass</td>
</tr>
<tr>
<td>Arzon Solar, LLC</td>
<td>Revolutionary Daylighting and BIPV CPV concept for new levels of building energy efficiency and solar energy generation</td>
<td>$1,000,000.00</td>
<td>$0</td>
<td>$200,000.00</td>
<td>Disqualified</td>
</tr>
</tbody>
</table>