

CALIFORNIA ENERGY COMMISSION

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

**NOTICE OF PROPOSED AWARDS (NOPA)**

**Advance the Resilience and Environmental Performance of California's
Electricity System
GFO-16-311
Groups 1, 3, and 4
January 11, 2017**

On July 7, 2017, the California Energy Commission (Energy Commission) released a competitive solicitation to fund Applied Research and Development (AR&D) projects that advance actionable energy-related science with the focus on understanding and mitigation of climate change consequences for hydropower generation; identification of opportunities for building retrofit and expansion of renewable distributed generation microgrid; advancement of Cal-Adapt platform to improve resilience and environmental performance of California's electricity sector; and development of innovative solutions addressing environmental aspects of electricity generation and distribution. Up to \$6.4 million Electric Program Investment Charge (EPIC) funding is available to fund applications in four project groups:

- **Group 1:** Empirical Studies of Aerosols to Boost Precipitation Enhancement Programs of Investor Owned Utilities
- **Group 2:** Air Quality and Climate Benefits of Targeted Retrofit Buildings and Renewable Distributed Generation (DG) in Dense Urban Areas Including Disadvantaged Communities
- **Group 3:** Building on the Cal-Adapt Platform to Deliver Actionable Information in Support of Electricity Sector Resilience
- **Group 4:** Small Grants

This NOPA covers only Group 1, 3, and 4. The NOPA for Group 2 will be released separately. For Groups 1, 3, and 4 the anticipated total funding available was \$3.1 million. The Energy Commission received seventeen proposals for Groups 1, 3, and 4 by the due date of October 9, 2017. One submitted proposal did not pass the Stage One Application Screening and five submitted proposals did not pass the Stage Two Scoring Criteria. Each of the passing eleven proposals was screened, reviewed, evaluated, and scored according to the solicitation's criteria.

The attached "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff under Groups 1, 3, and 4 respectively and includes the recommended funding amount and score. The total amount recommended for Groups 1, 3, and 4 is \$1,499,978.

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 add to, remove, or shift funding to make additional awards; negotiate with successful applicants to modify the project scope, schedule, and 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 Commission Agreement Officer Crystal Presley-Willis at (916) 653-6110 or Crystal.Presley-Willis@energy.ca.gov.



California Energy Commission

GFO-16-311

Advancing the Resilience and Environmental Performance of California's Electricity System

Notice of Proposed Awards

Project Group 1: Empirical Studies of Aerosols to Boost Precipitation Enhancement Programs of Investor Owned Utilities

1/11/2018

| Rank Number | Project Applicant | Title | Energy Commission Funds Requested | Energy Commission Funds Recommended | Match Funds | Score | Award Status |
|---------------------|--|--|-----------------------------------|-------------------------------------|-------------|-------|---------------------|
| Disqualified | | | | | | | |
| | The Regents of the University of California, San Diego | Impacts of Cloud Seeding and Background Ice Nuclei on Orographic Forming Processes in California | \$1,400,000 | \$0 | \$0 | N/A | Disqualified |
| Grand Total | | | \$1,400,000 | \$0 | \$0 | | |



California Energy Commission

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Advancing the Resilience and Environmental Performance of California's Electricity System

Notice of Proposed Awards

Project Group 3: Building on the Cal-Adapt platform to Deliver Actionable Information in Support of Electricity Sector Resilience

1/11/2018

| Rank Number | Project Applicant | Title | Energy Commission Funds Requested | Energy Commission Funds Recommended | Match Funds | Score | Award Status |
|------------------------------|---|--|-----------------------------------|-------------------------------------|-------------|-------|-----------------|
| Proposed Awards | | | | | | | |
| 1 | The Regents of the University of California, Berkeley | Building on the Cal-Adapt Platform to Deliver Actionable Information in Support of Electricity Sector Resilience | \$900,000 | \$900,000 | \$0 | 81.33 | Awardee |
| Subtotal | | | \$900,000 | \$900,000 | \$0 | | |
| Passed But Not Funded | | | | | | | |
| 2 | Eagle Rock Analytics | Building on the Cal-Adapt Platform to Deliver Actionable Information in Support of Electricity Sector Resilience | \$900,000 | \$0 | \$0 | 77.50 | Finalist |
| Grand Total | | | \$1,800,000 | \$900,000 | \$0 | | |



California Energy Commission GFO-16-311

Advancing the Resilience and Environmental Performance of California's Electricity System

Notice of Proposed Awards

Project Group 4: Small Grants (with Project Sites in Southern California)

1/11/2018

| Rank Number | Project Applicant | Title | Energy Commission Funds Requested | Energy Commission Funds Recommended | Match Funds | Score | Award Status | Study Region |
|---------------------|---|---|-----------------------------------|-------------------------------------|------------------|-------|---------------------|--------------|
| Did Not Pass | | | | | | | | |
| | Altostratus Inc. | Creating Fine-scale Climate Zones and Generating Site-specific Weather for Energy Modeling and Electric-demand Forecasting in Southern California in a Changing Climate | \$196,348 | \$0 | \$0 | N/A | Did Not Pass | SoCal |
| | Ventura County Regional Energy Alliance | Oxnard Resilient Energy Innovation (OREI) Project: Clean, Community-driven Solutions to Enhance Grid Reliability | \$198,836 | \$0 | \$0 | N/A | Did Not Pass | SoCal |
| | U.S. Geological Survey, Southwest Biological Science Center | Evaluating Ground-based Trail Cameras as a Method for Estimating Risk to Birds at Wind Energy Facilities | \$153,280 | \$0 | \$29,000 | N/A | Did Not Pass | SoCal |
| Disqualified | | | | | | | | |
| | Nativus, Inc. | Rotary Heat Exchanger for Energy Reduction in Residential and Commercial HVAC Applications | \$200,000 | \$0 | \$0 | N/A | Disqualified | SoCal |
| | The Regents of the University of California, Los Angeles | Assessing the Effectiveness of Energy Efficiency Programs among Disadvantaged Communities | \$199,988 | \$0 | \$161,035 | N/A | Disqualified | SoCal |
| Grand Total | | | \$948,452 | \$0 | \$190,035 | | | |



California Energy Commission

GFO-16-311

Advancing the Resilience and Environmental Performance of California's Electricity System

Notice of Proposed Awards

Project Group 4: Small Grants (with Project Sites in San Joaquin Valley)

1/11/2018

| Rank Number | Project Applicant | Title | Energy Commission Funds Requested | Energy Commission Funds Recommended | Match Funds | Score | Award Status | Study Region |
|------------------------|---------------------------------------|---|-----------------------------------|-------------------------------------|-------------|-------|---------------------|--------------|
| Proposed Awards | | | | | | | | |
| 1 | Lawrence Berkeley National Laboratory | High Resolution Source Importance Mapping to Minimize Impacts of Waste Biomass Distributed Generation on Ozone Air Quality in Disadvantaged Communities in the San Joaquin Valley | \$200,000 | \$200,000 | \$0 | 77.70 | Awardee | SJV |
| Subtotal | | | \$200,000 | \$200,000 | \$0 | | | |
| Did Not Pass | | | | | | | | |
| | RAND Corporation | Assessing the Role of California's Sustainable Groundwater Management Act in Achieving Energy Resilience in California's San Joaquin Valley | \$199,786 | \$0 | \$0 | N/A | Did Not Pass | SJV |
| Grand Total | | | \$399,786 | \$200,000 | \$0 | | | |



California Energy Commission

GFO-16-311

Advancing the Resilience and Environmental Performance of California's Electricity System

Notice of Proposed Awards

Project Group 4: Small Grants (with Project Sites other than Southern California or San Joaquin Valley)

1/11/2018

| Rank Number | Project Applicant | Title | Energy Commission Funds Requested | Energy Commission Funds Recommended | Match Funds | Score | Award Status | Study Region |
|------------------------|--|--|-----------------------------------|-------------------------------------|------------------|-------|--------------|--------------|
| Proposed Awards | | | | | | | | |
| 1 | Cal Poly State University | Marine Bio Artificial Intelligence Project | \$199,978 | \$199,978 | \$36,748 | 81.50 | Awardee | Other |
| 2 | The Regents of the University of California, Berkeley | The Distributional Climate Change Impacts on and from Electricity Consumption on California's Communities at High Spatial Resolution | \$200,000 | \$200,000 | \$0 | 80.00 | Awardee | Other |
| Subtotal | | | \$399,978 | \$399,978 | \$36,748 | | | |
| Did Not Pass | | | | | | | | |
| | The Regents of the University of California, Davis | Solar Energy Potential of the Largest Commercial Buildings in California: Net Avoided Greenhouse Gas Emissions, Land Sparing, and Rooftop Topography Impacts on Generation | \$199,966 | \$0 | \$0 | N/A | Did Not Pass | Other |
| | U.S. Geological Survey (Forest and Rangeland Ecosystem Science Center – FRESC) | Assessing Effects to Wildlife of Distributed Solar on Large Buildings and Parking Lots | \$200,000 | \$0 | \$0 | N/A | Did Not Pass | Other |
| | The Regents of the University of California, Los Angeles | Incorporating Avian Migratory Hotspots into the Prioritization of Alternative Energy Siting | \$200,000 | \$0 | \$30,610 | N/A | Did Not Pass | Other |
| Disqualified | | | | | | | | |
| | Humboldt State University Sponsored Programs Foundation | Microgrids for Clean Mobility | \$200,000 | \$0 | \$101,782 | N/A | Disqualified | Other |
| | Irimedia | Medium Scale Solar Thermal Storage for Ancillary Grid Services Provision | \$200,000 | \$0 | \$33,540 | N/A | Disqualified | Other |
| Grand Total | | | \$1,399,944 | \$399,978 | \$202,680 | | | |