

CALIFORNIA ENERGY COMMISSION

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



REVISED NOTICE OF PROPOSED AWARD (NOPA)

Demonstrate Business Case for Advanced Microgrids in Support of California's Energy and GHG Policies GFO-17-302

May 30, 2018

On August 4, 2017, the California Energy Commission (Energy Commission) released a competitive solicitation to fund technology demonstration and deployment projects with Electric Program Investment Charge (EPIC) funding. These projects would deploy field examples of advanced microgrids and produce business cases for scalable and repeatable standardized commercial-scale microgrid configurations with measurable benefits for end users of the selected market segments. These microgrid projects would also support California's energy policies, reduce greenhouse gases, and attract non-EPIC funding opportunities for future microgrids.

Up to \$44,700,000 in EPIC funding was available to fund applications in:

- Group 1: Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Commercially Viable Microgrids Located at California Military Bases, Ports, and Native American Tribes within IOU Service Territories (\$22,000,000)
- Group 2: Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Functional Microgrids Located at California Disadvantaged Communities within IOU Service Territories (\$11,700,000)
- Group 3: Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Commercially Viable Microgrids in IOU Territories that are not Proposed Either Under Group 1 or Group 2 Projects and Where Microgrids Provide Clear and Definable Added Value to the Selected End User of IOU Customers (\$11,000,000)

The Energy Commission received 60 proposals by the due date of November 9, 2017. Each proposal was screened, reviewed, evaluated, and scored using the criteria in the solicitation. Six proposals did not pass the Stage One Application Screening, and 54 proposals did pass.

The first NOPA was released on January 19, 2018, and covered results for only Group 1:

- Total funding was \$22,000,000 with four applicants recommended for funding.

The second NOPA was released on February 20, 2018, added \$7,273,622 to this solicitation, and covered results for all three groups:

- Total funding was \$51,973,622, of which \$26,985,272 was for Group 1, \$9,995,498 for Group 2, and \$14,992,852 for Group 3, with 10 applicants recommended for funding.

The third NOPA was released on March 14, 2018, and covered results for all three groups:

- One of the awardees in Group 1 declined a \$7,000,000 award.
- One proposal in Group 3 moved from disqualified status to finalist status.
- Total funding was \$44,973,622, of which \$19,985,272 was for Group 1, \$9,995,498 for Group 2, and \$14,992,852 for Group 3, with nine applicants recommended for funding.

The fourth NOPA was released on May 8, 2018, added \$9,990,704 to this solicitation, and covered results for all three groups:

- The two next highest scored proposals were recommended for funding.
- Total funding was \$54,964,326, of which \$29,975,976 is for Group 1, \$9,995,498 for Group 2, and \$14,992,852 for Group 3, with 11 applicants recommended for funding.

This NOPA covers results for all three groups:

- **One of the awardees in Group 3 declined a \$4,993,847 award.**
- **Total funding is now \$49,970,479, of which \$29,975,976 is for Group 1, \$9,995,498 for Group 2, and \$9,999,005 for Group 3, with 10 applicants recommended for funding.**

The attached revised “Notice of Proposed Award” table identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score.

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, or award the funds to another applicant.

In addition, the Energy Commission reserves the right to: 1) increase, reduce, or shift funding among the groups to make additional awards, and 2) negotiate with successful applicants to modify the project scope, schedule, or level of funding.

This notice is being emailed 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 Crystal Presley-Willis at Crystal.Presley-Willis@energy.ca.gov or (916) 653-6110.

Crystal Presley-Willis
Commission Agreement Officer



California Energy Commission

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Project Group 1 - Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Commercially Viable Microgrids Located at California Military Bases, Ports, and Native American Tribes within IOU Service Territories

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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed Awards							
1	Pala Band of Mission Indians	Pala Microgrid Project	\$7,000,000	7,000,000	\$8,750,000	90.95	Declined
2	City of Long Beach Harbor Department (Port of Long Beach)	Project RIZE: Resiliency in a Zero Emissions Future	\$5,000,000	\$5,000,000	\$2,120,000	90.22	Awardee
3	Lawrence Berkeley National Laboratory	Power Begins at Home – R2M2 Resilient Replicable Modular Microgrids: Assured Energy Security for Military Bases	\$5,000,000	\$5,000,000	\$11,410,900	88.60	Awardee
4	The Regents of the University of California; University of California San Diego	SemperGRID: Phase II Scale-Up and Business Case Demonstration of Advanced Microgrid Deployment at Marine Corps Air Station Miramar	\$5,000,000	\$5,000,000	\$6,002,320	88.05	Awardee
5	San Diego Unified Port District	Tenth Avenue Marine Terminal Renewable Microgrid Project	\$4,985,272	\$4,985,272	\$4,629,936	87.84	Awardee
6	Electric Power Research Institute	Adaptive Microgrid (AM) with Energy Storage, Synchronous Condenser, and with AC and DC Outputs	\$4,998,345	\$4,998,345	\$3,502,754	87.55	Awardee
7	Handbook Holdings, LLC	Chemehuevi Indian Reservation Microgrid	\$4,992,359	\$4,992,359	\$8,401,154	87.25	Awardee
Total Funding Recommended			\$29,975,976	\$29,975,976	\$36,067,064		



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<i>Passed but Not Funded</i>							
8	SIA Solutions 8(a) SDB, MBE, DBE	Edwards Air Force Base-West Wolfe Advanced Microgrid	\$4,999,995	\$0	\$6,663,802	87.10	Finalist
9	TRC Engineers, Inc.	Beale Microgrid Resiliency Project (BMRP)	\$4,999,986	\$0	\$6,206,412	82.90	Finalist
10	The Pechanga Band of Luiseno Indians	Tribal Energy Adoptive Microgrid System (TEAMS) – Pechanga Tribal Utility Microgrid	\$5,000,000	\$0	\$1,050,000	79.45	Finalist
11	San Manuel Band of Mission Indians	High-Penetration Renewable Microgrids and DER for Community Service Infrastructure at the San Manuel Band of Mission Indians Reservation	\$5,000,000	\$0	\$1,000,000	74.50	Finalist
Total			\$19,999,981	\$0	\$14,920,214		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Did Not Pass							
	GRID Alternatives	The Renewable-Sourced Microgrid at San Pasqual Band of Mission Indians	\$2,880,330	\$0	\$854,510		Did Not Pass
	Consolidated Edison Solutions	Marine Corps Western Regional Energy Initiative (MCWREI)	\$5,000,000	\$0	\$1,257,600		Did Not Pass
	Ameresco, Inc.	Fort Irwin National Training Center Advanced Microgrids Project	\$4,940,062	\$0	\$4,442,565		Did Not Pass
	Rincon Band of Luiseño Indians	Rincon Tribal Microgrid Demonstration Project	\$4,995,000	\$0	\$1,300,000		Did not pass
Total			\$17,815,392	\$0	\$7,854,675		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Disqualified							
	TechFlow, Inc.	Demonstration of a Standardized, Scalable, High-DER Penetration, Renewable-Based, Resilient Microgrid Through the Application of TechFlow’s Secure G.R.I.D Solution at Naval Base San Diego	\$2,982,181	\$0	\$308,891		Disqualified
Total			\$2,982,181	\$0	\$308,891		
Grand Total for Group 1			\$70,773,530	\$29,975,976	\$59,150,844		



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Project Group 2 - Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Functional Microgrids located at California Disadvantaged Communities within IOU Service Territories

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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed Awards							
1	Gridscape Solutions, Inc.	Commercializing Virtual Wide Area Urban Microgrids for Grid Resilience & Disaster Readiness	\$4,995,498	\$4,995,498	\$3,281,992	90.38	Awardee
2	Rialto Bioenergy Facility LLC	Rialto Resilient Clean Power Microgrid	\$5,000,000	\$5,000,000	\$6,663,000	88.70	Awardee
Total Funding Recommended			\$9,995,498	\$9,995,498	\$9,944,992		
Passed but Not Funded							
3	Climatec, llc	Net-zero Energy Advanced Microgrid Demonstration Critical Infrastructure Project	\$3,816,398	\$0	\$3,466,005	85.99	Finalist
4	CALSTART, llc	RTD Battery Electric Transit Bus – Multi-location Microgrid	\$4,952,544	\$0	\$3,625,000	82.41	Finalist
5	The Regents of the University of California; University of California Los Angeles	Cooperative Microgrids Enabled Via Integrated Distributed Energy Resources as Applied to Disadvantaged Communities	\$4,999,858	\$0	\$1,092,562	81.84	Finalist
Total			\$13,768,800	\$0	\$8,183,567		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Did Not Pass							
	All Power Labs, Inc	Carbon-Negative Energy for Disadvantaged Communities: The Business Case for a Biomass-Powered Microgrid	\$3,211,219	\$0	\$4,505,319		Did Not Pass
	Edisun Microgrids	Empower California: A Cooperative Partnership Demonstration Project to Advance Clean Energy Microgrids in Rural Disadvantaged Communities	\$4,792,744	\$0	\$2,369,990		Did Not Pass
	Open Access Technology International	Community Microgrids for a Resilient Oakland Chinatown	\$5,209,834	\$0	\$2,358,116		Did Not Pass
	Biodico	Biodico Zero Net Energy Farm Microgrid(s)	\$5,000,000	\$0	\$5,000,000		Did not pass
Total			\$18,213,797	\$0	\$14,233,425		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
<i>Disqualified</i>							
	USA Microgrids, Inc.	Demonstration of Microgrid Benefits for Disadvantage Communities: High Place, Santa Monica	\$4,893,228	\$0	\$1,768,040		Disqualified
	C3 CA 23rd District Energy, LLC	Microgrid for Contra Costa County Fairground	\$1,190,000	\$0	\$510,000		Disqualified
Total			\$6,083,228	\$0	\$2,278,040		
Grand Total for Group 2			\$48,061,323	\$9,995,498	\$34,640,024		



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Project Group 3 - Demonstration of Standardized High-DER Penetration, Renewable-Based, Resilient and Commercially Viable Microgrids in IOU Territories that are not Proposed Either Under Group 1 or Group 2 Projects and Where Microgrids Provide Clear and Definable Added Value to the Selected End User of IOU Customers

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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed Awards							
1	Willdan Energy Solutions	San Jose Community Microgrid	\$4,993,847	\$4,993,847	\$13,996,648	94.10	<u>Awardee Declined</u>
2	Humboldt State University Sponsored Programs Foundation/ Schatz Energy Research Center	ACV Airport Renewable Energy Microgrid: Demonstrating a Business Case	\$5,000,000	\$5,000,000	\$6,322,728	93.25	Awardee
3	Sonoma County Junior College District/ Santa Rosa Junior College	Santa Rosa Junior College Urban Microgrid Project	\$4,999,005	\$4,999,005	\$8,689,759	89.00	Awardee
Total Funding Recommended			\$14,992,852 \$9,999,005	\$14,992,852 9,999,005	\$29,009,135 \$15,012,487		
Passed but Not Funded							
4	InTech Energy, Inc.	Commercializing a Cost-Effective, Standardized, and Replicable Small-Scale Microgrid for Schools at the Ocean View School District in Oxnard, CA	\$4,373,332	\$0	\$2,858,166	86.25	Finalist
5	California State University - The California Maritime Academy Campus	Demonstrating a Modular and Commercially Viable Design for DER Rich Microgrids Enabling Sustainable and Resilient Communities	\$4,999,845	\$0	\$1,482,939	84.58	Finalist



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Passed but Not Funded (continued)							
6	Prospect Silicon Valley	Whole Foods Market Distribution Center Microgrid Project	\$2,843,821	\$0	\$1,000,000	84.56	Finalist
7	City of Chowchilla	Transforming Disadvantaged Communities into Safe and Thriving Communities: The City of Chowchilla’s Microgrid Project	\$4,951,654	\$0	\$3,975,948	84.42	Finalist
8	MOEV Inc.	Virtual Battery Energy Storage System (VBESS) Advanced Microgrid Technology Applied to Fleet Yards	\$2,124,668	\$0	\$827,770.00	83.15	Finalist
9	The Regents of the University of California (Santa Barbara campus)	Integrated Demand Side Management Commercial Microgrid with Enhanced Revenue Generation Capability	\$5,000,000	\$0	\$3,282,317	82.08	Finalist
10	The Regents of the University of California, Irvine	Microgrid Commercialization in California	\$4,233,003	\$0	\$1,766,474	80.99	Finalist
11	Cleantech San Diego Association	Carlsbad Emergency Services Advanced Microgrid (CESAM)	\$4,996,822	\$0	\$2,095,991	80.30	Finalist



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Passed but Not Funded (continued)							
12	Green Realities, llc	Solar Emergency Microgrids for Critical Facilities & Emergency	\$4,744,000	\$0	\$2,838,055	80.14	Finalist
13	Regents of the University of California, Davis Campus	Demonstrating the Business Case for an Advanced Transportation and Parking Facilities Microgrid	\$5,000,000	\$0	\$1,190,114	78.49	Finalist
14	City of Hermosa Beach	Demonstrating Hermosa Beach’s “Adaptive Community-Renewable-Microgrid Immune System” as a Propagative Model for Vulnerable Disaster-Prone Dense Urban Areas	\$4,838,873	\$0	\$968,633	78.45	Finalist
15	The Regents of the University of California, Berkeley Campus	EcoBlock Microgrids: Block-Level, Community Energy Systems that Scale to Neighborhoods and Cities	\$5,000,000	\$0	\$1,879,096	78.35	Finalist
16	TransPower	Taking Industrial Microgrids to the Next Level	\$3,783,126	\$0	\$779,332	78.03	Finalist
17	City of Chula Vista	Smart Connected, Ongoing, Resilient, Efficient (SCORE) Emergency Hub at Chula Vista’s Civic Center	\$4,326,600	\$0	\$909,839	76.30	Finalist
Total			\$61,215,744	\$0	\$25,854,674		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Did Not Pass							
	Campbell Union High School District	Gampbell Union High School District Microgrid Project	\$4,992,522	\$0	\$3,761,503		Did Not Pass
	Zero Net Energy Alliance	Lancaster Community Resiliency Network	\$3,202,466	\$0	\$792,084		Did Not Pass
	UCLA Santa Monica Hospital	Clean-Commute Transit Hub Microgrid	\$2,915,139	\$0	\$728,785		Did Not Pass
	Lawrence Livermore National Security, LLC	Emergency Management and Mission Assurance with DER-based Microgrid at LLNL	\$5,000,000	\$0	\$3,503,000		Did Not Pass
	Los Angeles Unified School District	South East High School Advanced Microgrid Project	\$4,651,582	\$0	\$974,508		Did Not Pass
	CSULB Research Foundation	Autonomous Management and Coordination of Microgrids for Seamless Integration of Distributed Energy Resources in Academic Facilities	\$4,992,072	\$0	\$1,543,590		Did Not Pass
	California College of the Arts	California College of the Arts Microgrid	\$3,253,151		\$1,063,557		Did Not Pass



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<i>Did Not Pass (continued)</i>							
	Sonoma School District	Microgrid for Sonoma Schools District	\$3,477,221	\$0	\$1,238,020		Did Not Pass
	Ocean Breeze International	Greenhouse Microgrid for Sustainable Agriculture	\$5,000,000	\$0	\$1,600,000		Did Not Pass
	Global Energy Interconnection Research Institute North America (GEIRINA)	Provisional Hybrid Integrated Microgrid (Phi-Microgrid) for High-tech Complex	\$3,745,358	\$0	\$3,497,052		Did Not Pass
	Universal Devices, Inc.	ADAM: AI Assisted, Decentralized, and Automated Microgrid	\$4,975,405	\$0	\$2,056,400		Did Not Pass
	University of Southern California	USC Wrigley Institute Energy Independence Initiative	\$3,256,636	\$0	\$1,025,390		Did Not Pass
	Searles Valley Minerals	Solar Photovoltaic With Battery Storage Microgrid – Phase I of a Quad-Gen System	\$7,000,000		\$7,000,000		Did Not Pass
Total			\$56,461,552	\$0	\$28,783,889		



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Disqualified							
	GCL New Energy Inc	Microgrid for Car Dealership in California	\$790,000	\$0	\$330,000		Disqualified
	Microgrids, Inc.	RNode in Bodega Bay	\$3,031,770	\$0	\$1,097,814		Disqualified
	EDF Renewable Energy	Innovation Drive Microgrid	\$2,104,299	\$0	\$1,342,499		Disqualified
Total			\$5,926,069	\$0	\$2,770,313		
Grand Total for Group 3			\$138,596,217 <u>\$133,602,370</u>	\$14,992,852 <u>\$9,999,005</u>	\$86,418,011 <u>\$72,421,363</u>		
<u>Recommended Award Total for Groups 1, 2 and 3</u>				\$54,964,326 <u>\$49,970,479</u>	\$75,021,191 <u>\$61,024,543</u>		