



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**



PON-11-501  
 Stage 1 Results

Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
ADI Solar Corp.	7	24/7 Baseload Solar Storage System	Pass
Advanced Rail Energy Storage LLC	35	ARES, LLC Regulation Energy Management Demonstration Project	Not Pass
AG Power Company LLC	91	CHP System with Thermal Storage for the Fruit Packing Industry	Not Pass
Altex Technologies Corporation	16	Advanced Boiler Economizer Technology	Not Pass
Altex Technologies Corporation	40	Demonstration of full scale BBADS desensification system	Pass
Altex Technologies Corporation	56	Energy Efficient, Compact, Lightweight and Low cost Condenser for Air-cooled Chillers	Not Pass
Altex Technologies Corporation	64	High Efficiency and Low Cost Cooling Coil for Data Center Server Racks	Not Pass
Altex Technologies Corporation	17	Highly Efficient NISHEX for ICT Center Cooling	Not Pass
Altex Technologies Corporation	39	Low Cost and High Efficiency Microchannel Heat Exchanger for Data Center	Not Pass
AMPAC Fine Chemicals LLC	73	Demonstrate a CHP System Using Byproduct Solvent to Replace Natural Gas	Not Pass
Aqua-Jet Low-Head Hydropower Company	90	Demonstration of a 500kW Undershot Impulse-Jet Hydroturbine at a 13 Foot Sloping Drop on the Intake Channel of the Semitropic Water Storage District in Lost Hills, Kern County, California	Not Pass
AutoGrid Systems, Inc.	74	Low-cost, Scalable, Fast Demand Response for Municipal Wastewater and Recycling	Pass
Berkeley Energy Sciences Corporation	15	Peak Shaving with Flywheel Energy Storage Device	Pass
Beuhler & Associates, LLC	22	GWP Customer-Based Energy Savings Demonstration Project	Not Pass



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**



PON-11-501  
 Stage 1 Results

Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
Biodiesel Industries of Ventura, LLC	31	Solar Power, and Gasification and Anaerobic Digestion of Raw Glycerin and Agriculture Waste, to Produce Combined Heat and Power for Biorefineries	Pass
Biodiesel Industries of Ventura, LLC	61*	Solar Power, and Gasification and Anaerobic Digestion of Raw Glycerin and Agriculture Waste, to Produce Combined Heat and Power for Biorefineries	
BioFuels Energy, LLC	60	BioFuels AgDiary Recovery Project	Not Pass
Biogas & Electric LLC	21	Emissions Control for Biogas Engines at a Wastewater Treatment Plants	Not Pass
Black & Veatch	3	Full-scale Demonstration of an Innovative Electrodialysis technology for Zero Liquid Discharge Desalination	Pass
Bosch Solar Energy	86	KRAFT Foods Waster Water Treatment	Not Pass
Boulder Electric Vehicle, Inc.	38	Boulder Electric Vehicle Industrial Scale Vehicle to Grid Energy Storage	Not Pass
California Bioenergy LLC	82	Affordable 600 kW Ultra Low NOx Biogas Fueled Electric Generator for CA	Not Pass
CE-CERT	62	Electrical Efficiency and Demand Reduction in Industrial and Water Supply Motor	Not Pass
Clean World Partners	88	Demler Eggelectricity Project	Not Pass
Clean World Partners	89	SATS Phase II	Not Pass
Clustered Systems Company, Inc.	87	Demonstration of Cost Efficient Liquid Cooling of 1U servers	Not Pass
Combined Power Cooperative	57	Low-Cost Solar Technology for Process Heat in Food Processing	Not Pass
Coulomb Technologies, Inc.	78	ChargePoint Energy Storage	Not Pass
Dehlsen Associates, LLC	34	Wave Energy Power Generation and Reverse Osmosis Plant	Not Pass
E&J Gallo Winery	28	Livingston Water Innovation and Energy (L-WINE) Facility	Not Pass
East Penn Manufacturing Co Inc	72	Ecoul/East Penn Dual Proposed Data Center Project	Not Pass
El Dorado Irrigation District	25	El Dorado Irrigation District's Pleasant Oak Main Tank 7 Variable Speed Regenerative Drive In-Conduit Hydroelectric Project	Not Pass



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**



PON-11-501  
 Stage 1 Results

Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
Engine, Fuel, and Emissions, Engineering	69	Advanced Waste Heat Recovery and Emission Controls for Biogas CHP	Not Pass
Engsysco, Inc.	43	Demonstration of Airflow Rate Reduction and Energy Conservation Technologies for California Cleanroom Facilities	Not Pass
enMole Inc.	1	Industrial Energy Efficiency & Demand Management Using Real-Time Data	Not Pass
Environmental Energy & Engineering, Co.	8	Biomethane Production and Ammonia Recovery from High Solids Substrates	Pass
FeyeCon USA Inc.	58	Food Pasteurization/Sterilization with Carbon Dioxide	Not Pass
Gas Technology Institute	66	Demonstration of Advanced Heat and Water Recovery for Industrial Air Pollution Control Equipment Exhausts	Not Pass
Gas Technology Institute	18	Demonstration of Gas/Solar Hybrid Industrial Cooling	Not Pass
Gas Technology Institute	20	Demonstration of Waste Heat Recovery for Power Generation	Pass
Gas Technology Institute	19	Energy Efficiency Increase Using Oxygen-Enriched Combustion	Pass
Gate 5 Energy Partners, Inc.	14	Gate 5 Energy Partners, Inc. Sludge Energy Recuperator Transformer Demonstration Project	Pass
GEI Consultants, Inc.	80	Advanced Gas Quality Sampling, Measurement and Control System	Pass
GEI Consultants, Inc.	81	Demonstration of Ultra Lean Burn Engine Technology Using Plasma Reformer	Pass
Genergy LLC	52	Gravity Small Hydroelectric Generator - Zero Carbon Emissions	Not Pass
G-Energy Technologies, LLC	37	Solicitation No. PON-11-501 Renewable Biomass to Torrified Pellets	Not Pass
Georgetown Divide Public Utility District	24	Georgetown Divide Public Utility District Sandtrap Siphon IN-Conduit Hydro Project	Not Pass
Great Circles Industries, Inc.	5	Demonstration of i50 Decentralized Wastewater Treatment/Water Recycling	Pass
Hazen and Sawyer, P.C.	9	Innovative Ion Exchange Technology to Provide Two Far-Reaching and Widely Applicable Energy Reduction Benefits in Wastewater Treatment and Water Reuse	Pass



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**



PON-11-501  
 Stage 1 Results

Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
ICF International	70	Data Center Demonstration with Combined Heat and Power Technology	Pass
ICF International	71	Flex Energy Turbine FT33™ & Organic Rankine Cycle with Load Matching Capability	Pass
Intelligent Energy, Inc.	33	Innovative CHP Technology with Improved Energy Efficiency & CO2 Reduction	Pass
Irrigation Training and Research Center	30	Demonstration of Emerging Technologies for Energy Efficient Subsurface Drip Irrigation System on Alfalfa	Not Pass
Kennedy/Jenks Consultants	29	Enhancing the Benefits of Co-Digestion through Concurrent Improvements to Biosolids	Not Pass
Kennedy/Jenks Consultants	36	Primary Effluent Filtration as an Intermediary Wastewater Treatment Step	Pass
Lawrence Berkeley National Laboratory	76	Demonstration of Solar Thermal Heating and Cooling in a California Industrial Facility	Not Pass
Lawrence Berkeley National Laboratory	75	High Efficiency Cooling of Power-Dense IT Equipment in Any Climate	Pass
Leva Energy	47	Demonstration of Power Burner 200	Not Pass
Maxwell Technologies	41	Economic Benefits of Firm Concentrated PV Energy for the Grid	Pass
MicroBio Engineering, Inc.	55	Low-Energy Nutrient Recovery and Energy Production from Wastewater	Not Pass
Micromidas Inc	77	Energy Production from the Conversion of Biomass to Terephthalic acid	Not Pass
mOasis Inc.	6	Agriculture Hydrogel	Not Pass
MT-Energie USA	2	Bidart Dairy	Not Pass
New Age Hygienic Systems, Inc.	44	1 Liter (2 Pints) of flush water Radical Water Saving Toilet	Not Pass
NLine Energy, Inc.	32	SGVWC Sandhill In-Conduit Hydroelectric & EV Charging Station	Not Pass
Omnitek Engineering Corporation	10	Demonstration of Lean-burn EGR (Renewable) Natural Gas Engine/Genset	Not Pass



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**



PON-11-501  
 Stage 1 Results

Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
One-Cycle Control, Inc.	59	1MW Constellation of Distributed Customer-Side OCC-Energy Storage Devices	Not Pass
Palo Alto Research Center, Incorporated	49	Combined Photovoltaic/heat pump system for cost-effective recovery of solar energy	Not Pass
Palo Alto Research Center, Incorporated	4	Novel Hydrodynamic Separation Technology Provides a Low-Energy-Consumptive Alternative for Sludge Clarification & Storm Surge Rescue	Pass
PAX Scientific, Inc.	83	High Efficiency Heating, Ventilation, & Air Conditioning Fans	Not Pass
Premium Power Corporation	11	Energy Storage for Premium Load Shift and Demand Response	Not Pass
PureSense Environmental, Inc.	23	Demonstration of AutoDR Technology & Decision Support Tools for Agriculture	Pass
Pyron Solar III, LLC	48	Demonstration of PowerReef™ Photovoltaic System in Waste Water Treatment Lagoons	Not Pass
Quantitative BioSciences, Inc.	79	Algae-based treatment of dairy wastewater & generation of renewable energy	Pass
Recycling Energy Systems LLC	63	Wastewater sludge drying using renewable energy from CHP genset and solar	Not Pass
Redwood Renewables, LLC	85	Manufacturing BIPV Roofing Without Glass Encapsulant	Not Pass
San Diego Supercomputer Center	13	Green Queue: Reducing Energy Usage in Data Intensive Computing through Application Aware Dynamic Voltage Frequency Scaling	Pass
Seasonal Energy, Inc.	45	Smart Thermosiphon Array Cooling Demonstration	Not Pass
South Tahoe Public Utility District	26	South Tahoe Public Utility District's Diamond Valley Variable Speed Regenerative Drive In-Conduit Hydroelectric Project	Not Pass
Southern California Gas Company	65	Combined Heat and Power for Modern Greenhouses	Not Pass
Stanford University	42	Towards Scalable High-Efficiency High-Performance Mid-Size Data Centers	Pass
Thermata, Inc.	46	Rooftop Solar Steam to Demonstrate Ultra-Low Cost Heliostats	Not Pass
Transportation Power, Inc.	54	Grid Energy Storage Using Heavy Electric Vehicles (GESUHEV)	Not Pass



**California Energy Commission**  
**PIER Industrial, Agriculture and Water Program**  
**2011 Emerging Technology Demonstration Grants Program (ETDG II)**  
**PON-11-501**  
**Stage 1 Results**



Name of Organization	Abstract Number <sup>1</sup>	Project Title	Pass/Not Pass
TSS Consultants	27	North Fork Combined Heat and Power Demonstration Project	Not Pass
UCLA MAE	53	Demonstration of Smart Grid-Enabled Electric Vehicle Battery Systems for Customer Side Energy Storage Applications	Not Pass
University of California, Irvine	50	Fuel Flexible Rotary Engine DG/CHP for Wastewater Facility Applications	Pass
UTS Bioenergy LLC	51	Municipal Digester Repowering Demonstration Project	Pass
Viridity Energy, Inc.	68	Dynamic Load Control in Data Center	Not Pass
Viridity Energy, Inc.	67	Water System Pump Optimization for Energy Efficiency and Demand Response	Not Pass
West Biofuels, LLC	84	Demonstration of Advanced Biomass Combined Heat and Power Systems in the Agricultural Processing Sector	Pass
Western Municipal Water District	12	Chino Brine Concentrate Reduction	Not Pass

<sup>1</sup>Abstract Number is used for internal tracking and does not represent ranking of the submitted abstracts.

\*Abstract 31 and 61 are identical, numbered twice--so only Abstract 31 was scored.