

Expo Snapshots

- **First slide** about company/product/service
- **Second slide** with example of program/project with Western U.S. utility/government agency
- **Third slide** with example of program/project utility/government agency anywhere

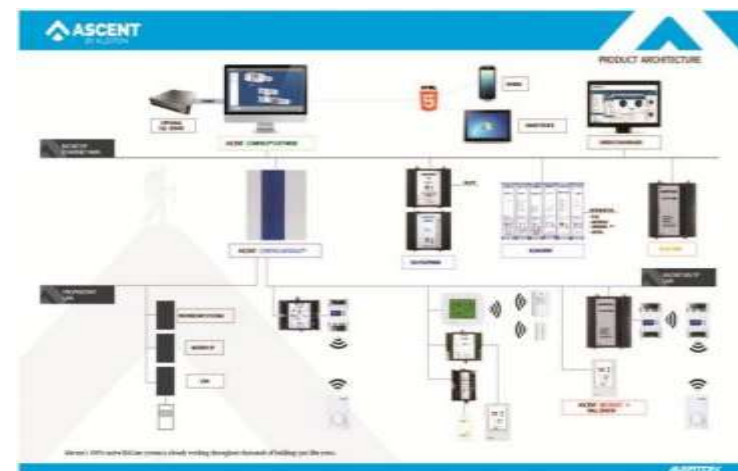
*Co-Chairs: Dennis Guido, Staples & Associates
and Ed Thomas, Utility Energy Forum*





L&H AIRCO
SACRAMENTO - FRESNO - SAN DIEGO

- Covering California since 1968
-  Air Conditioning
- Automated Demand Response
- Open Energy Management Systems



SMUD R&D Projects

Climate Wizard Air Conditioning

Tri Tool Manufacturing

- 24,800 cfm unit
- 100% OSA
- Uses 34 Amps Max



Synectics

- (5) 2400 cfm units
- 100% OSA
- Uses 2.6 Amps @ 480



PG&E Projects

Climate Wizard Air Conditioning

Big Box Retail

- (3) 2400 cfm units
- Cold Front Cooling
- Uses 2.6 Amps @ 480V



Venita Rheas Restaurant

- (1) 2400 cfm units
- Direct 100% OSA
- Uses 4.5 Amps @ 230V



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Established 1996



POWERSMITHS





Transformer Replacement Program for Low-Voltage Dry-Type Transformers Implemented April 2013

nationalgrid  provides incentives to commercial and industrial customers for replacement of low-voltage dry-type transformers, with transformers that meet or exceed the current TP-1 standard

Incentive rate provide for Harvard Science Center project \$0.15 based on first year annual kWh savings, \$7,256.60



Powersmiths is the industry pioneer and leader in providing Lowest Life Cycle Cost ultra-efficient transformers.

- 2005 E-Saver C3-L was introduced to follow Department of Energy recommendations to “Go Beyond” TP-1 legislation
- 2014 E-Saver 2016 & E-Saver 2016 HP introduced to exceed Department of Energy “Final Rule” mandating EL-3
- Under new DOE mandates, TP-1 will be illegal to manufacturer after December 31, 2015
- E-Saver 2016 meets/exceeds Consortium for Energy Efficiency Tier 1 efficiency requirements
- E-Saver 2016-HP meets/exceeds Consortium for Energy Efficiency Tier 2 efficiency requirements (up to 150-kVA)



Harvard Science Center

Seven transformers were replaced & “right sized” with Powersmiths E-Saver C3-L models exceeding DOE CSL-3 class efficiency. NSTAR Utility Rate \$0.126 /kWh

Existing kVA:	75	30	225	75	225	75	30	25	Avg. %	Load	8-12%
Right Sized:	45	30	150	45	150	45	30	25	Avg. %	Load	25-30%

Annual
Operating Cost
Savings

\$6,100

Life Cycle
Cost Savings
32-years

\$502,358

Annual GHG
reduction
Coal

115.5 tons
(per EPA)

Annual GHG
reduction
Co2

35.7 tons
(per EPA)



kW Losses
Before
7.68

kW Losses
After
1.80
(-76.5%)

kWh losses
Before
62,259

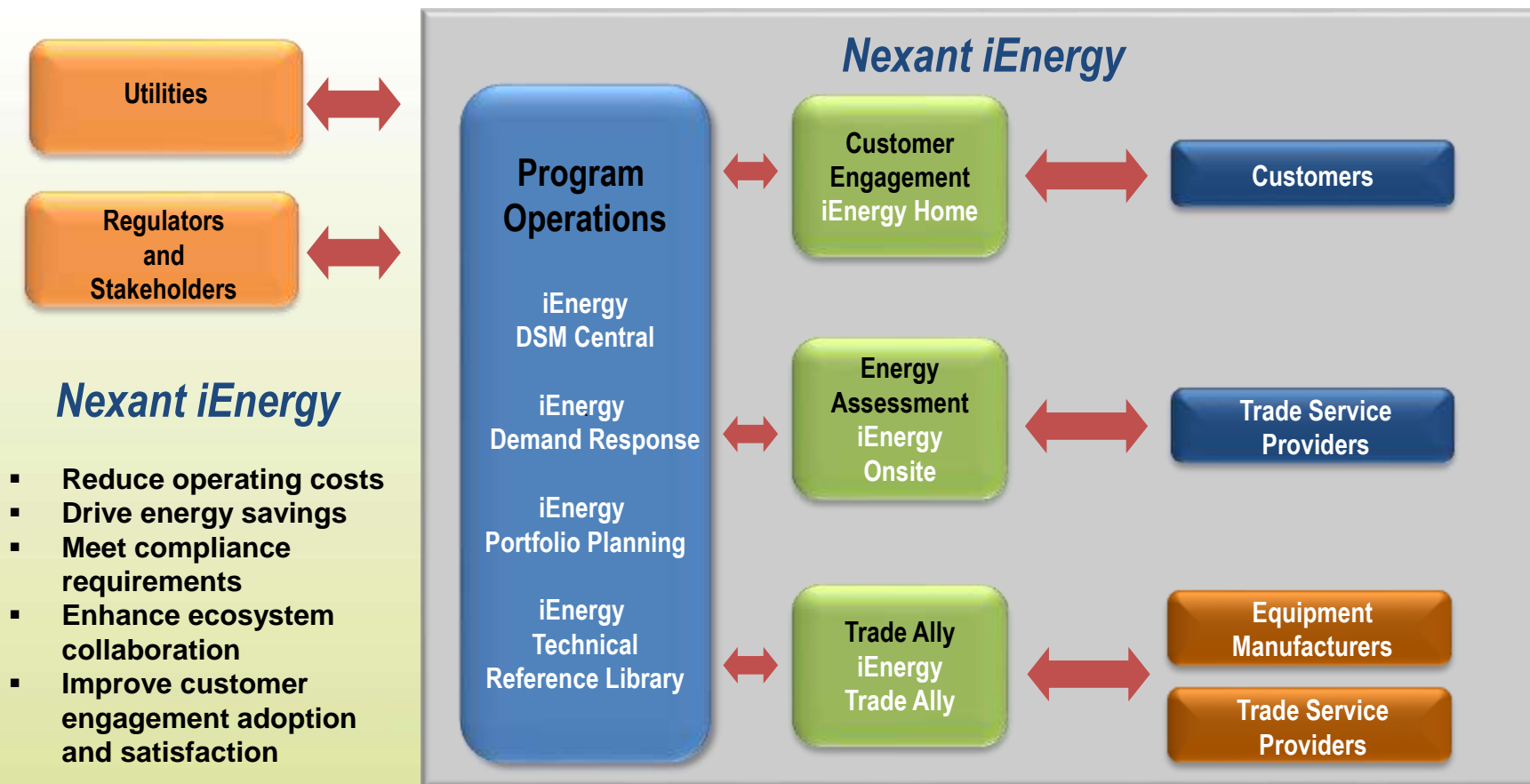
kWh losses
After
13,875
(-77.7%)

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Company snapshot - Nexant iEnergy®

Nexant iEnergy is a purpose-built, data management, analytics and customer engagement platform that fundamentally changes how utilities manage EE, renewable energy and DR business processes.



Nexant iEnergy Customer Example—NV Energy



Business Challenge

- Managing complex and changing energy efficiency and DSM programs using spreadsheets and limited database
- Cumbersome tracking and reporting of programs
- Lack of flexibility to run and manage multiple programs in different ways
- Program deployment and modifications with more speed and accuracy

Nexant's Solution

- Comprehensive and proven solution and experience
- Efficient launch, implementation and management of programs via configurable, cloud-based solution
- Central system of record to enforce business rules
- Single repository of all validated program data

Key Benefits

- Ability to aggregate data allowing secure access to the latest portfolio performance metrics
- Comprehensive management and tracking
- Streamlined report generation and distribution
- Easy upload of data from third party implementers
- Facilitates data validation and review

Nexant helped NV Energy implement a new system of record to enable effective management and tracking of the DSM portfolio. Through this central platform, NV Energy is able to put into effect business rules across programs and leverage a single data repository to efficiently manage programs as well as streamline visibility and reporting.



Nexant iEnergy Customer Example—JEA

Business Challenge

- Diverse economy (i.e. tourism, transportation, commercial, industry, etc.)
- Develop and effectively manage a portfolio of energy efficiency programs to serve a diverse small business customer base while keeping administrative costs low.
- High administrative time and costs associated with managing DSM portfolio.

Nexant's Solution

- Small business program administration costs were kept low by effectively engaging and training JEA's trade ally network
- Integrated all program needs into one solution, including tracking and reporting, application and rebate processing, and call center support, powered by the Nexant iEnergy® DSM business process management platform.

Key Benefits

- In the first year of operation, the small business program came in under budget on administrative costs while exceeding its energy savings target by more than 30%.
- This achieved JEA's goal of ensuring offerings were included that addressed the majority of its customer base, while streamlining administration and tracking costs.

JEA leveraged Nexant purpose-built software and solutions for its small business program management, resulting in nearly 4,600 megawatt hours of energy savings, exceeding savings targets by more than 30%.

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ENERGY FEDERATION, INC. EST. 1982



Your Trusted Advisor for energy efficiency products and
program fulfillment.

We help utilities exceed their energy efficiency/savings goals by:



Marketing Tools



Customer Engagement



Rewarding Customers



Reach “Hard to Reach” Customers

Client list



40 Washington Street, Suite 2000 | Westborough, MA 01581 | t 508.870.2277 | efi.org

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Richard Heath and Associates, Inc.



Splash Program – SDG&E

- **Basis of Program Design**
 - Customers with pools are high energy users
 - Current rebate programs claim limited savings
- **Splash program trade allies are...**
 - Trained to communicate value proposition
 - Trained to install per program specifications
 - Inspected for quality control
- **Novel program**
 - Offers pool owners another cost effective way to save energy
 - Delivers more energy and demand savings than rebate model



Federal Weatherization Programs -



- Diverse workforce must quickly adapt to evolving program requirements and standards
- RHA Field Process Automation empowers the workforce to consistently perform high quality work in customers' homes



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Experienced help when you need it!

.....providing a full array of cost-effective energy-efficiency program services for electric/gas utilities, public agencies municipal governments, electric cooperatives, public utility districts, investor-owned utilities and end-use customers in:

- * **California**
- * **Nevada**
- * **Idaho**
- * **Oregon**
- * **Washington**





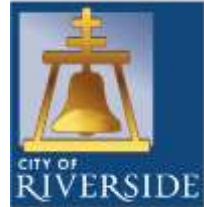
Redding Electric Utility

Energy Audits – In-field auditing to augment utility staff

Paperless Solutions– Allows REU staff to perform residential Snapshot audits and data collection

Keep Your Cool – Installing highly cost-effective refrigeration measures to commercial customers





Riverside Public Utility

Installing **Keep Your Cool** measures
for small to mid-sized commercial customers

Anti-sweat Heater Controllers

Automatic Door Closers

Door Gaskets

EC Motor Controllers

LED Case Lighting

Programmable EC motors

Strip Curtains



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CLEARResult - *Helping utilities, businesses and individuals make the wise use of energy a way of life*

We support residential, commercial, industrial and agricultural customers with our depth of knowledge, industry and technical expertise, and quality service

45⁺ offices
in cities across
North America

1,200⁺ full-
time equivalent
employees

Service Offerings

Program Planning, Design and Evaluation
Benchmarking
Energy Master Planning
Auditing/Engineering
Incentive Processing
Emerging Technologies
Trade Ally Management
Project Implement and Management
Data Analytics/Data Management
Market Strategy/Research/Branding
Creative PR and Outreach
Media Strategy
Website Design and Development
Market-Based Training
Call Center Services

100⁺
clients

225⁺
programs



Western U.S. Regional Utility Partnership

- Develop and Implement K-12 energy efficiency programs since 2002
- Performance-based energy savings programs to 250+ public school districts, 24 college and university campuses, and 38 private schools since 2006
- Prop 39 planning and implementation services through utility and direct to districts
- CLEAResult has and can provide schools with:
 - ✓ Energy efficiency curriculum meeting CA accreditation standards
 - ✓ Workshops for teachers, facilities managers
 - ✓ Comprehensive energy audits and audit reports with prioritized recommendations, estimated costs, incentives/financing support, return on investment, and cost of delay analysis
 - ✓ School site energy demonstration projects
 - ✓ Comprehensive energy, solar and water recommendations
 - ✓ Ratepayer-funded rebates and support to obtain on-bill or other financing
 - ✓ Administrative and technical support to analyze and qualify savings and manage incentive process
 - ✓ Installation support services to participants, including development of bid specifications, bid review criteria, QA/QC during implementation, and site inspection following installations
 - ✓ Benchmarking and Strategic Master Planning services
 - ✓ Analytics-Enabled data and facility evaluation services
 - ✓ Prop 39 Energy Expenditure Plan development
 - ✓ Prop 39 implementation
 - ✓ Prop 39 ongoing energy management services



National Utility Partnerships

Residential and Business Gas Energy Efficiency Program



Program Objectives

- Educate and motivate consumers to be more energy efficient
 - Provides rebates for energy efficient gas equipment and services
- Influence market towards energy efficiency
 - Develop strong network of manufacturers, distributors, contractors
- Opportunity for contractor business expansion
 - All contractors and trade allies can participate
 - Provide program sales and marketing tools to streamline and simplify process

Trade Ally Involvement

- Trade Allies are the key to our success
 - Residential and commercial trade ally focus groups, training workshops
 - Help us improve the program
 - Understand product availability and sales process
 - Make application process and incentive check distribution easier
- During Pilot Program:
 - Over 1,800 contractors participated
 - Customers received nearly \$5 million in rebates
 - Saved over 1.6 million therms of natural gas



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Resource Action Programs

School Education and Direct-to-Customer Programs

- 20 years - 32 states
- All-Inclusive Program Delivery
- Measure Based EducationSM
- National Recognized Programs
- Average TRC of 2.1



K-12 School Education Program

Water-Energy Nexus

Southern California Partnerships

- Southern California Edison
- Southern California Gas
- California Investor owned Water Utilities
- 23 Municipal Utilities



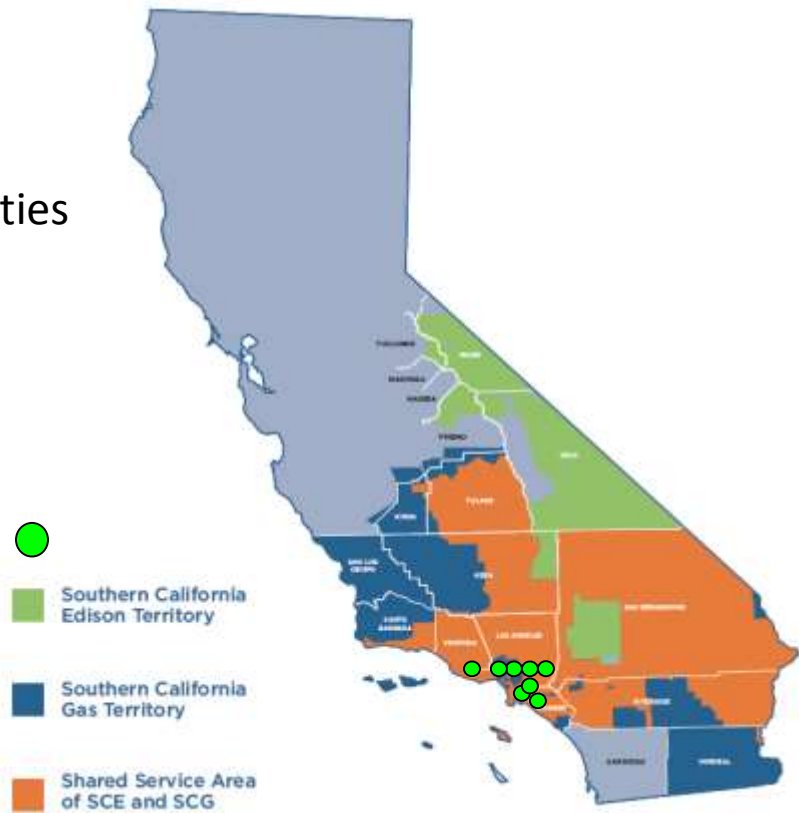
SOUTHERN CALIFORNIA
EDISON®

An EDISON INTERNATIONAL® Company



Southern
California
Gas Company

A  Sempra Energy utility®



Direct-to-Customer Program

Innovative Customer Engagement Program Efficiency Vermont

- Multi-Channel Direct-to-Customer Program
- 285 cities and towns
- 16 utilities
- More than half a million kWh saved



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Fueled by
creativity and
efficiency,
Staples &
Associates
delivers dynamic
solutions in the
fields of energy,
golf and
entertainment



Making energy
and water
efficiency a
way of life



Driving
profitability and
playability
through
innovative and
sustainable
design



Producing
celebrity
content for the
digital
generation

ARIZONA - CALIFORNIA - WISCONSIN

www.StaplesAndAssociates.com

Roseville Electric Rapid Audit Program

- Rapid audit of businesses below 250kW
- No cost to customer
- Paperless report delivered through Energy SnapShot™
- Immediate savings through installation of LED open signs and CFLs
- Talk to Mike Ward to learn more!

Energy SnapShot™

- Energy assessment and workflow management tool
- Used for programs conducted on behalf of PG&E, Roseville Electric, Turlock Irrigation, Focus on Energy and Ameren IL
- Robust and customizable
- Talk to Scott Landrum to learn more!

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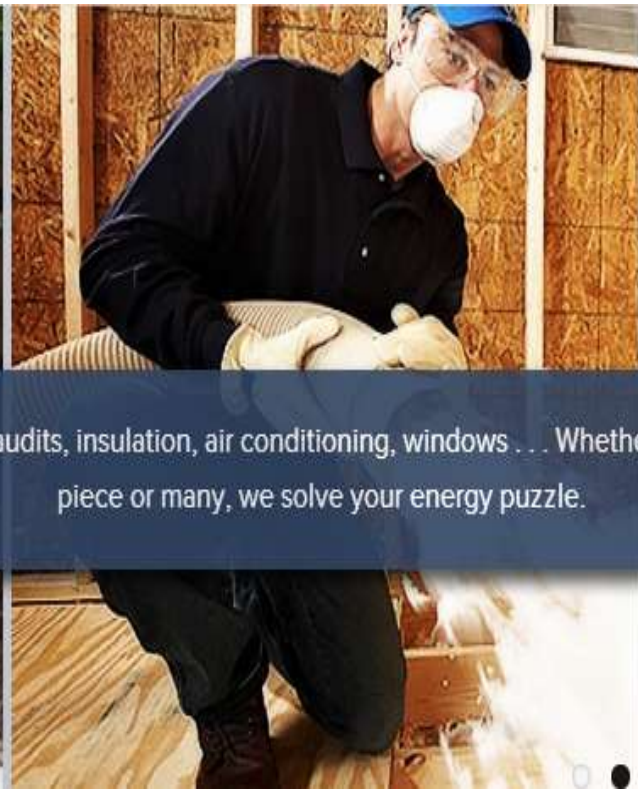


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ESCO specializing in the California utility markets



- Energy Efficiency and Demand Response
- Solar PV and Solar Hot Water
- Asbestos and Hazardous Waste Removal
- Title 24 Verification Services



Energy audits, insulation, air conditioning, windows . . . Whether its one piece or many, we solve your energy puzzle.



- A premier Residential Contractor in EE programs
 - California Mobile Home Program - Statewide
 - Over 100,000 customers served in last 10 years
 - Low-Income Weatherization Programs - Statewide
 - Over 250,000 customers served in last 10 years
 - Energy Upgrade California - Statewide
 - Low-Income Verification – Silicon Valley Power
 - SMUD Smart Thermostat Pilot Program
- Leveraging opportunities among utilities

- Small Commercial Retrofit with SDG&E and IID
 - Over 15,000 customers served
 - Comprehensive Lighting, HVAC, and ADR
- School Retrofits
 - QM Servicing with several hundred schools
 - Comprehensive Lighting, HVAC, and ADR
- Leveraging opportunities among utilities
 - Gas, Electric, and Water
 - Prop 39 with existing QM Contracts

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Vast Product Fulfillment Offering



Water Conservation



Energy Efficient Lighting



Energy Conservation



Kits



Weatherization



Promotional



Western U.S. Regional Utility Programs



Leading Material Supplier to Direct Install Programs



One stop shop

Same day shipping

Competitive pricing



Turnkey Kit Fulfillment Program

Top 5 U.S. Utility

Largest Kit Program in US

- Millions of CFLs
- Hundreds of thousands of other energy efficiency products

Inventory

- Reliable supply allows 24 hour ship times
- Dedicated program inventory

Call Center

- 24/7 customer support
- Detailed call summary reporting
- Call recording

Packaging

- Customized kit creation
- Private label packaging
- Insertion of educational material

Shipping

- Direct to customer homes
- Tracking delivery verification

Reporting

- Web-based real-time monitoring
- Custom Pre-Defined Reports
- Ad hoc reporting



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Embertec's Dynamic Duo



Emberplug AV

- UL-1449-Surge protected and warranty
- 5th generation product
- Senses IR signals and turns off connected electronics in 1 or 2 hours, when there is no IR activity. Music mode available.
- Automatic adjustment to new connected equipment and uses customers existing power-strip
- 64k Intelligent Micro Processor
- Independent Field Trials support 486 kWh pa savings
- **2014 Calplug Evaluated 346 kWh pa**



Emberplug PC+

- UL-1449-Surge protected and warranty
- Desktop & Laptop compatible
- Senses user activity and places computer into sleep mode disabling peripherals when no user activity is sensed
- No threshold adjustments on setup (automatic)
- 64k Intelligent Micro Processor
- Vermont Field Trial supports 408 kWh pa
- **2014 Calplug Evaluated 350kWh pa**

West Coast Program



- ④ NW utilities installing Ember Plugs after BPA-RTF Tier 2 APS certification in September 2013
- ④ Multiple Co-Op Utilities rolling out Embertec Tier 2 APS
- ④ Puget Sound is running a hand out program through the Multi Family program (over 15k units annually)
- ④ SVP has just concluded a field trial on Embertec Tier 2 APS
- ④ CalPlug releasing work paper on Tier 2 APS product class
- ④ <http://embertec.com/video-av.html>

International Experience



🇦🇺 Australia

- Embertec is the Inventor of Tier 2 APS
- Stand alone Direct Install Tier 2 APS program
- Great Total Resource Cost (TRC) contributor as a bundled measure for low income direct install programs
- Dominant Market Leader – Millions installed
- 98% retention through Embertec

🇨🇦 Canada

- Pilot in 2013
- Efficiency Nova Scotia has now included the EmberPlug AV in their Direct Install program and implementers added our device with great success in their bundled program.

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Property Assessed Clean Energy

PACE is a financing option that allows property owners to install energy efficient retrofits and alternative energy generation equipment, such as solar, on commercial & Residential buildings.

Repayment is made on the property tax bill.

Applications Received	460	\$20.34 million
Residential	440	
Non-residential	20	
Applications Approved		\$ 11.13 million
Applications Funded		\$ 7.4 million
Contractors with Funded or Active Applications	118	
Jobs created	36*	

*American Council for an energy-Efficient Economy (20 jobs/million)



Development of RFQ

- Identified obstacles for large commercial property owners to perform energy efficiency (EE) retrofits
 - Property owners recognize the need for EE improvements but lack knowledge on where to begin
 - Lack of upfront funding
- Partnered with Sierra Business Council to facilitate and provide a pathway for large commercial PACE projects in Tahoe
 - Conferred with local utility providers (water, gas and electricity) for support, input and available incentives
- RFQ was developed to create a template for large commercial property owners
 - RFQ Process
 - Initial Request for Qualifications
 - Preliminary Firm Selection and Project Site Walk Through
 - Preliminary audit provided with presentation of recommendations
 - Final selection of the Firm
 - Technical investment grade audit
 - Installation of conservation measures
- Financed entire project (no money down) with mPOWER to be repaid on the property tax bill



mPOWER

Granlibakken

- Unique project
 - Mixed-use multiple building facility with multiple owners
 - Built in stages over a 45 year span
 - Tahoe Basin environmental restrictions
 - Maintain current operations during renovation
- RFQ process created affordable means for Granlibakken to obtain preliminary and investment grade audit which identified the most necessary and cost effective energy improvements
- Process identified several qualified contractors
 - Allowed Granlibakken opportunity to make final contractor selection
- Financing provided for entire process by mPOWER

Visit our table to hear more....

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