



OSIsoft®

Projects in California

Presented by **Chuck Wells, OSIsoft, LLC**

CEC Project Projects

- **California Energy Commission EPIC Funding by Program Element 2015-2017 (million)**
- Applied Research and Development \$151.63
- Technology Demonstration and Deployment \$145.02
- Market Facilitation \$53.27
- New Solar Homes Partnership (Market Support) *
- Program Administration \$38.88
- **Grand Total** \$388.8**

Funding available for

- Projects that provide a reasonable likelihood of ratepayer benefits.
- Minimizing projects with a low probability of success.
- Projects consistent with the utility corporation's resource plan.
- Projects that do not duplicate previous or current research by other electrical or gas corporations or research organizations.

Types of projects

- Environmental improvement.
- Public and employee safety.
- Conservation by efficient resource use or by reducing or shifting system load.
- Developing new resources and processes, particularly renewable resources and processes that further energy supply technologies.
- Improve operating efficiency and reliability or otherwise reduce operating costs.

EPIC Funding to date

Solicitation Title	Release Date	Program Area/Strategic Objective	Funding Amount
Developing a Portfolio of Advanced Efficiency Solutions: Technologies and Approaches for More Affordable and Comfortable Buildings (PON-13-301)	Closed	Applied Research and Development (S1)	\$25 million
Developing Advanced Energy Storage Technology Solutions to Lower Costs and Achieve Policy Goals (PON-13-302)	Closed	Applied Research and Development (S8)	\$6 million
Advancing Utility-Scale Clean Energy Generation (PON-13-303)	Closed	Applied Research and Development (S4)	\$10 million
Demonstrating Secure, Reliable Microgrids and Grid-Linked Electric Vehicles to Build Resilient, Low-Carbon Facilities and Communities (PON-14-301)	Closed	Technology Demonstration and Deployment (S14)	\$26.5 million
Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions and Zero-Net Energy Communities (PON-14-303)	Closed	Applied Research and Development (S3)	\$19.5 million
Demonstrating Bioenergy Solutions That Support California's Industries, the Environment, and the Grid (PON-14-305)	Closed	Technology Demonstration and Deployment (S13)	\$27 million
Bringing Energy Efficiency Solutions to California's Industrial, Agriculture and Water Sectors (PON-14-304)	Closed	Technology Demonstration and Deployment (S12)	\$27.3 million
Analysis of Social, Cultural, and Behavioral Aspects of Achieving Energy Efficiency Potential (Phase 1: Residential Sector) (PON-14-306)	Closed	Market Facilitation (S18)	\$1 million
Demonstrating Clean Energy Solutions That Support California's Industries, the Environment, and the Electrical Grid (PON-14-307)	Closed	Technology Demonstration and Deployment (S13)	\$21 million
Reduce the Environmental and Public Health Impacts of Electricity Generation and Make the Electricity System Less Vulnerable to Climate Impacts: Phase I (PON-14-309)	Closed	Applied Research and Development (S5)	\$7.4 million
Driving the Integration of Electric Vehicles to Maximize Benefits to the Grid (PON-14-310)	Closed	Applied Research and Development (S9)	\$4 million

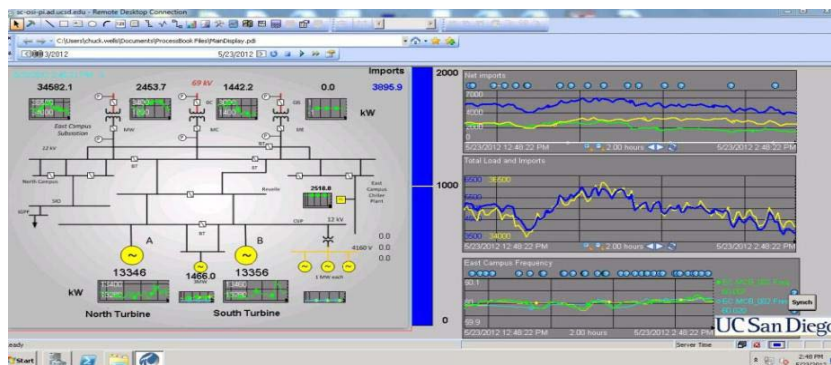
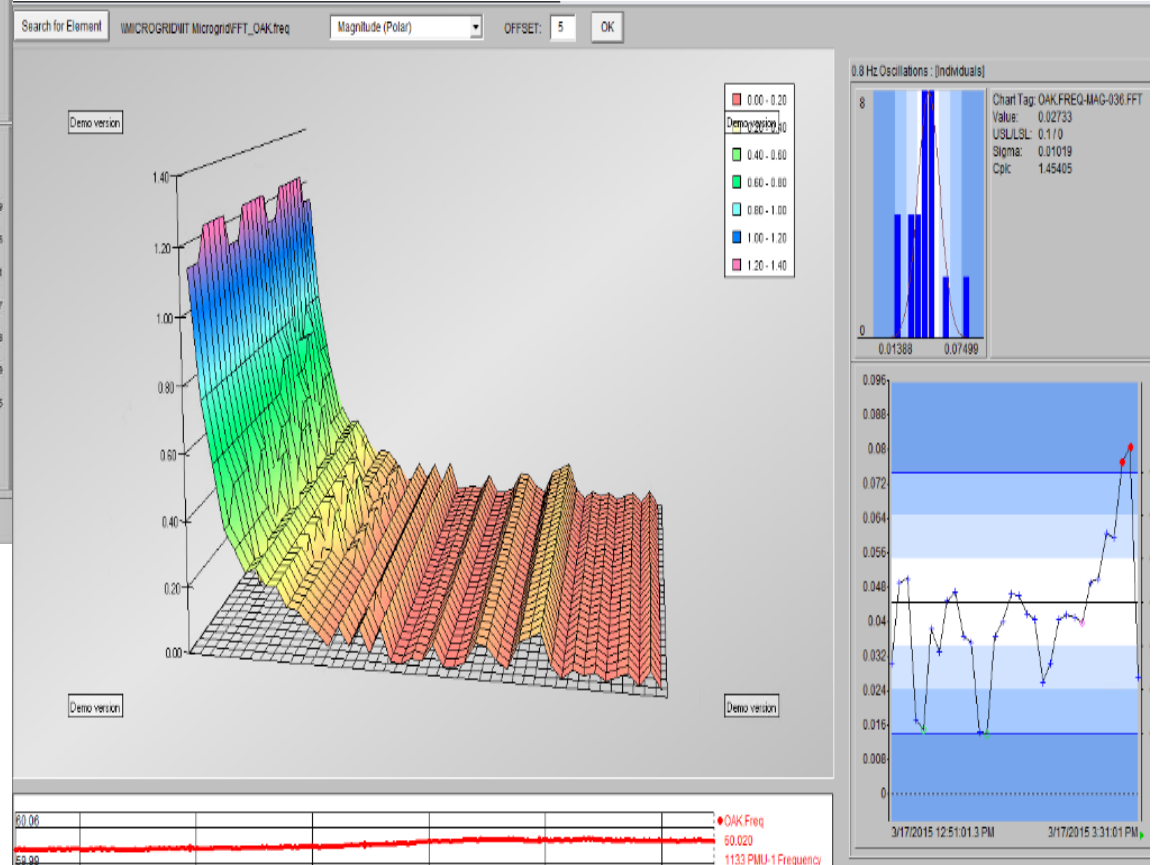
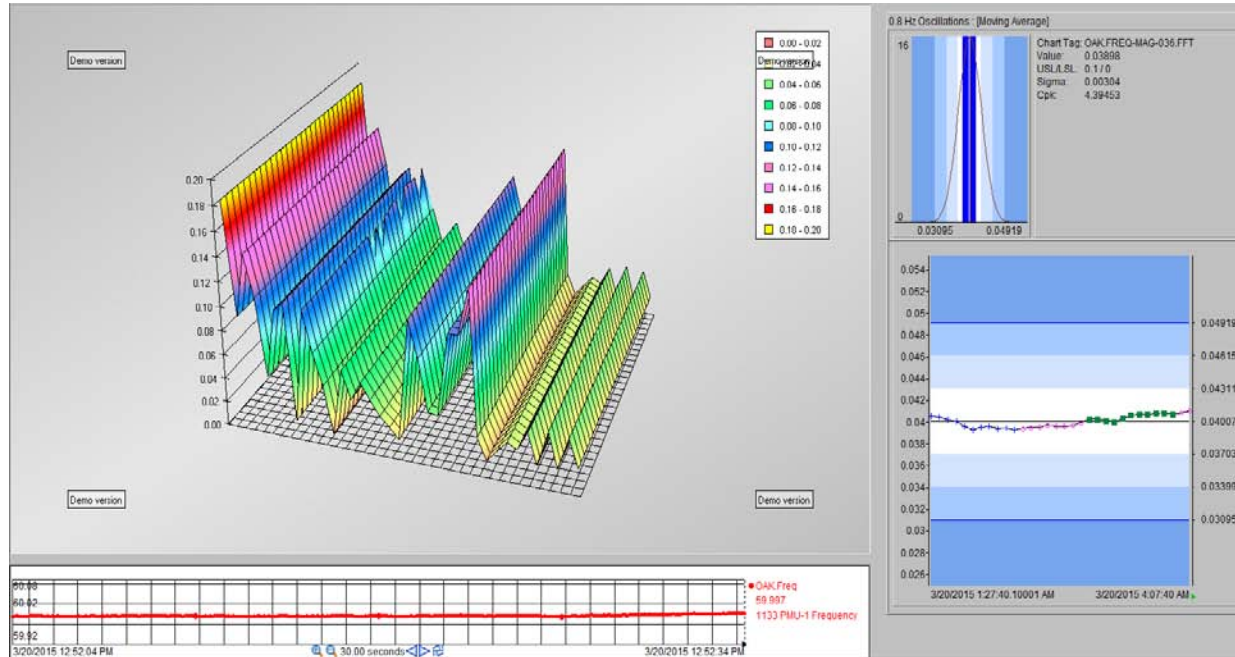
OSIsoft involvement

- 301 SDGE, Borrego Springs
- 301 John Muir Hospital
- 307 UC Davis Winery
- 307 UC Riverside, Indian Reservation
- 304 UC Riverside, Energy efficiency wastewater
- 303 Sunspec/UC San Diego Inverters

Recent OSIsoft innovations

- Unwrapped angles
- Angle differences
- Event detection without threshold crossings
- Moving window FFT visualizations
- CIM-MMP (CIM-XML files to PI)

Examples



Thank you