

18th Annual Water Conference



**ENERGY EDUCATION CENTER
IRWINDALE**

Monday, September 26 – Wednesday, September 28, 2011
Southern California Edison's **Energy Education Center – Irwindale**

SCE is proud to sponsor the 18th Annual Water Conference. Please join us as we focus on educating water and wastewater agencies on how to save energy, money and the environment.

MONDAY, SEPTEMBER 26

18th Annual Water Conference General Session EVENT # 27797

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| 8:00 a.m. – 9:30 a.m. | Registration, Continental Breakfast & Networking |
| 9:30 a.m. – 11:45 a.m. | General Session |
| 11:45 a.m. – 1:00 p.m. | Hosted Lunch |
| 1:00 p.m. – 3:00 p.m. | General Session |
| 3:00 p.m. – 4:30 p.m. | Tour of the EEC - Irwindale |

Join us for a frank and relevant discussion of California's current water situation and an update on efforts underway to advance energy, water, and climate change initiatives.

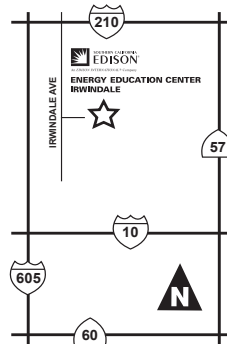
For more information, or to register, call or visit us online:



626.812.7537 or
800.336.2822



www.sce.com/workshops



Keynote Speaker

Timothy Quinn
Executive Director
Association of California Water Agencies (ACWA)

Timothy Quinn is executive director of the Association of California Water Agencies (ACWA), a statewide association whose 450 local public water agency members are responsible for about 90% of the water delivered in California. Quinn became executive director in July 2007 and has more than 25 years of experience in California water issues. Prior to joining ACWA, he served as deputy general manager of the Metropolitan Water District of Southern California.

TUESDAY, SEPTEMBER 27

An Energy Tools Workshop for the Water Industry NEW EVENT #29902

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| INSTRUCTOR | James Fitch |
| TIME | 8:30 a.m. – 12:00 p.m. with lunch |

This hands-on workshop is designed for the water manager, engineer, and technician responsible for managing energy costs, performing energy audits, identifying energy saving projects, and validating system performance. Tools from Edison's Tool Lending Library will be showcased, including loggers and analyzers that water industry professionals can borrow for free to identify and collect data for motor loading, demand, energy usage, inrush current, VFD outputs, frequency, harmonics, and system disturbances. Other tools and instruments will also be demonstrated that measure flow, pressure, speed, amps, volts, vibration, ground resistance and heat. Come prepared to operate the tools and software. This workshop is 50% hands-on, 25% demonstration, and 25% lecture and discussion.

3.5 Contact Hours, California Department of Public Health

Getting the Most from Your Electric Motor and VFD NEW EVENT #29904

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| INSTRUCTOR | Wallace Brithinee |
| TIME | 8:30 a.m. – 11:30 a.m. with lunch |

Water professionals are encouraged to take advantage of this opportunity to learn the value of making quality motor decisions from leaders in the electric motor industry. Attendees will be given a view into current energy legislation and how those rules will affect their choices and strategies in operating water plants. Learn how motors and VFDs work; which mechanical, electrical, and efficiency characteristics affect decisions regarding good applications and proper replacements; and the effects of electronics on the life of an electric motor. Get a glimpse of what the future holds in motor designs, protective devices, and tests.

3.0 Contact Hours, California Department of Public Health

SCADA for Managers NEW
EVENT #29906

INSTRUCTOR Byron Postma
TIME 8:30 a.m. – 12:00 p.m. with lunch

This course covers the “why” and “how” of establishing a SCADA system capable of enabling efficient operation of water, waste water, and the overall industrial plant; saving energy and the environment. This seminar covers SCADA technology, SCADA benefits, procurement options, the design process, design products, and the role of the client during design. “Must-have” commercial contract provisions are also discussed, including testing, documentation, and warranty. Relevant SCE IDSM program solutions are discussed, including the role of SCADA in implementation of automatic demand response technology. This seminar is designed for plant supervisors, managers, lead operators, utility managers, plant engineers, lead I&C technicians, and municipal engineering directors.
3.5 Contact Hours, California Department of Public Health

Outage Communication and Power Quality Mitigation for Water Customers NEW
EVENT #29910

INSTRUCTORS Tomaso Giannelli, Matthew Norwalk, David Viveros
TIME 8:30 a.m. – 3:30 p.m. with lunch

This informative seminar will provide our water customers a better understanding of utility outages and power quality issues. The seminar will cover SCE processes that take place for both planned and unplanned outages and the most effective means for communicating with SCE during outages. The seminar will also cover the daily operating environment that affects power quality at your plant. Power quality topics will include voltage sags, harmonics, flicker, voltage imbalance, and grounding. Case studies, lab demonstrations, and discussions will address the complexity of preparing for and executing planned outages, SCE resources available during unplanned outage events, and mitigating power quality issues in your plant.
6.0 Contact Hours, California Department of Public Health

The Water-Energy-Carbon Footprint Connection
EVENT #29911

INSTRUCTOR Gary Klein
TIME 8:30 a.m. – 12:30 p.m. with lunch

This class for facility managers and engineers takes a serious look at the water-energy-carbon footprint relationship. Attendees will learn how to calculate the ratio and magnitude of the water-energy-carbon footprint connection for their facilities and see how these compare to local and national benchmarks. In addition, discussion will explore the potential unintended consequences to water and waste water distribution systems as water use continues to be reduced. Learn how to plan system improvements to be more resilient to increasing levels of water use efficiency.
4.0 Contact Hours, California Department of Public Health

An Energy Tools Workshop for the Water Industry NEW
EVENT #29903

INSTRUCTOR James Fitch
TIME 1:00 p.m. – 4:30 p.m.

This hands-on workshop is designed for the water manager, engineer, and technician responsible for managing energy costs, performing energy audits, identifying energy saving projects, and validating system performance. Tools from Edison’s Tool Lending Library will be showcased, including loggers and analyzers that water industry professionals can borrow for free to identify and collect data for motor loading, demand, energy usage, inrush current, VFD outputs, frequency, harmonics, and system disturbances. Other tools and instruments will also be demonstrated that measure flow, pressure, speed, amps, volts, vibration, ground resistance and heat. Come prepared to operate the tools and software. This workshop is 50% hands-on, 25% demonstration, and 25% lecture and discussion.
3.5 Contact Hours, California Department of Public Health

Getting the Most from Your New SCADA System
EVENT #29905

INSTRUCTOR Dr. Beau Freeman
TIME 1:00 p.m. – 5:00 p.m.

Learn about state-of-the-art supervisory control and data acquisition (SCADA) systems for remote monitoring, remote manual control, and automatic control with specific recommendations. Case studies will be used to show system design and utilization.
4.0 Contact Hours, California Department of Public Health from California Polytechnic State University, San Luis Obispo Irrigation Training and Research Center (ITRC).

Improving Pump Plant Efficiency to Lower Energy Cost
EVENT #29909

INSTRUCTORS Bill O’Neil, Steve Villegas
TIME 1:00 p.m. – 5:00 p.m.

This half-day workshop is aimed at the water manager, engineer and technician responsible for managing energy costs, identifying energy saving projects, and validating system performance. Water management professionals will learn practical issues and choices available regarding efficient pumping systems, and effective management practices that ensure pumping efficiency, as well as understanding pump efficiency results.
4.0 Contact Hours, California Department of Public Health

All Things Renewable NEW
EVENT #29908

INSTRUCTORS Bruce Delling, Gerome Torribio, George Wiltsee
TIME 1:00 p.m. – 4:00 p.m.

Learn the latest about renewable self-generation, as well as how to sell renewable generation to SCE. Rebates and incentives will be discussed, and details about the California Solar Initiative Program and the Self-Generation Incentive Program will be covered. Other topics will include power purchase agreement opportunities for renewable energy; combined heat and power (CHP) projects; understanding the interconnection process, as well as how changes in legislation will affect renewables. This course will also include a review of customer success stories and an overview of SCE’s technical services department that can assist customers in evaluating renewable projects.

All Things Renewable NEW EVENT #29912

INSTRUCTORS Bruce Delling, Gerome Torribio, George Wiltsee
TIME 8:30 a.m. – 11:30 a.m. with lunch

Learn the latest about renewable self-generation, as well as how to sell renewable generation to SCE. Rebates and incentives will be discussed, and details about the California Solar Initiative Program and the Self-Generation Incentive Program will be covered. Other topics will include power purchase agreement opportunities for renewable energy; combined heat and power (CHP) projects; understanding the interconnection process, as well as how changes in legislation will affect renewables. This course will also include a review of customer success stories and an overview of SCE's technical services department that can assist customers in evaluating renewable projects.

State-of-the-Art Water SCADA Systems EVENT #29913

INSTRUCTOR Dr. Beau Freeman
TIME 8:30 a.m. – 5:00 p.m. with lunch

This advanced workshop covers topics such as analog and digital sensor types, remote terminal unit (RTU) / programmable logic control options (PLC), and designing human machine interface (HMI) software. Case studies from successful projects will be covered.

7.5 Contact Hours, California Department of Public Health from California Polytechnic State University, San Luis Obispo Irrigation Training and Research Center (ITRC).

The Water-Energy-Carbon Footprint Connection EVENT #29914

INSTRUCTOR Gary Klein
TIME 8:30 a.m. – 12:30 p.m. with lunch

This class for facility managers and engineers takes a serious look at the water-energy-carbon footprint relationship. Attendees will learn how to calculate the ratio and magnitude of the water-energy-carbon footprint connection for their facilities and see how these compare to local and national benchmarks. In addition, discussion will explore the potential unintended consequences to water and waste water distribution systems as water use continues to be reduced. Learn how to plan system improvements to be more resilient to increasing levels of water use efficiency.

4.0 Contact Hours, California Department of Public Health

Outage Communication and Power Quality Mitigation for Water Customers NEW EVENT #29916

INSTRUCTORS Tomaso Giannelli, Matthew Norwalk, David Viveros
TIME 8:30 a.m. – 3:30 p.m. with lunch

This informative seminar will provide our water customers a better understanding of utility outages and power quality issues. The seminar will cover SCE processes that take place for both planned and unplanned outages and the most effective means for communicating with SCE during outages. The seminar will also cover the daily operating environment that affects power quality at your plant. Power quality topics will include voltage sags, harmonics, flicker, voltage imbalance, and grounding. Case studies, lab demonstrations, and discussions will address the complexity of preparing for and executing planned outages, SCE resources available during unplanned outage events, and mitigating power quality issues in your plant.

6.0 Contact Hours, California Department of Public Health

Introduction to Programmable Logic Controllers: Energy Efficiency Applications EVENT #29917

INSTRUCTOR Ray Watkins
TIME 8:30 a.m. – 4:00 p.m. with lunch

Management, operations, and maintenance professionals will learn the basics of how programmable logic controllers (PLCs) operate in an industrial process and how they can be used for energy efficient applications. Participants will develop a basic understanding of programmable logic controller terminology, how the hardware components are used, and the basics of relay ladder logic.

Improving Pump Plant Efficiency to Lower Energy Cost EVENT #29915

INSTRUCTORS Bill O'Neil, Steve Villegas
TIME 8:30 a.m. – 12:30 p.m. with lunch

This half-day workshop is aimed at the water manager, engineer and technician responsible for managing energy costs, identifying energy saving projects, and validating system performance. Water management professionals will learn practical issues and choices available regarding efficient pumping systems, and effective management practices that ensure pumping efficiency, as well as understanding pump efficiency results.

4.0 Contact Hours, California Department of Public Health