



**NCSL INTERNATIONAL  
WORKSHOP & SYMPOSIUM**  
Walt Disney World Swan & Dolphin Hotel  
Orlando, Florida  
**JULY 28 - 31, 2014**

July 25 - 27 Tutorial Program  
July 27 - 30 Exhibition Hall

*Join Us for* **A FOCUS ON  
ENERGY**

**MEASUREMENT SCIENCE** plays multiple roles in all aspects of the energy industry; from generation and delivery of power to the use of natural gas. This year's topics include smart energy, smart metering, infrastructure, generation and measurements in power systems. Energy leaders, accreditation bodies, National Institute of Standards and Technology (NIST), along with other National Metrology Institutes will also be presenting papers at this conference.

Please visit our website at [ncsli.org](http://ncsli.org) to view the full program.



**WIND POWER**



**GEOTHERMAL ENERGY**



**ELECTRIC ENERGY**

# WORKSHOP & SYMPOSIUM

MEASUREMENT SCIENCE  
AND THE ENVIRONMENT

## ENERGY FOCUSED PAPERS IN 2014

Metering Technology Center Values Laboratory Services  
*Edward Hass, Consumers Energy Company*

An Advanced Intelligent Electronic Device Platform  
*Roberto Piacentini, National Instruments Corporation*

Fleet Wide Monitoring: Sensors to Prognostics  
*Preston Johnson, National Instruments Corporation*

High Precision Battery Testing for Automotive and Grid Applications  
*Harold Parks, Sandia National Laboratories*

Unique Type of High Shock Calibration System Using Electromagnetic Exciter  
*Jiun-kia Che, Industrial Technology Research Institute (ITRI), Taiwan*

A Comparison of Primary Gas Flow Standards between 0.01 L/min and 10 L/min  
*Casey Rombouts, Fluke Calibration*

Ensuring Accurate and Safe Calibration of Electrical Safety Equipment  
*Michael Bailey, Transmille, Ltd*

Instrumentation and Measurement Society TC 39: Measurements in Power Systems  
*Lorenzo Peretto, University of Bologna, Italy*

The Future in Energy Efficiency  
NIST's Net-Zero Energy Residential Test Facility  
*Hunter Fanney, National Institute of Standards and Technology (NIST)*

## WHO SHOULD ATTEND

Meter shop technical staff of utilities, electric and gas meter manufacturers, suppliers of metering equipment as well as organizations working in advance metering infrastructure (AMI) and those involved in metrology in these energy fields.

## HELP US EVOLVE IN 2015!

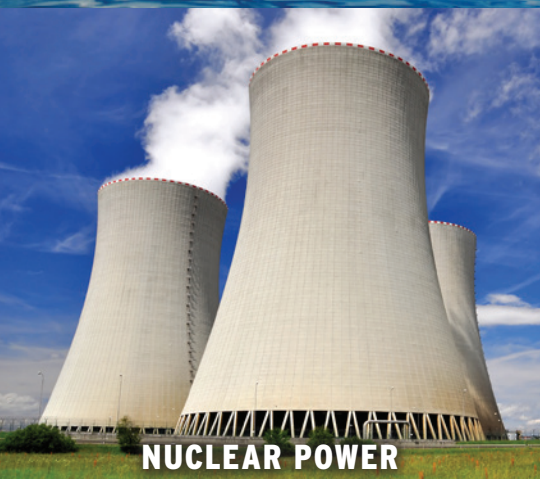
Our Energy focus is being planned long term. Join us in Orlando, Florida this year and also help influence the expansion of our Energy program for the 2015 Workshop & Symposium to be held at the Gaylord Texan Resort in Grapevine, Texas.

If you work within the energy sector, and are interested in participating on a panel discussion, presenting a technical paper, sponsoring, exhibiting or attending please contact Robert Sawyer ([Robert.Sawyer@cmsenergy.com](mailto:Robert.Sawyer@cmsenergy.com)).

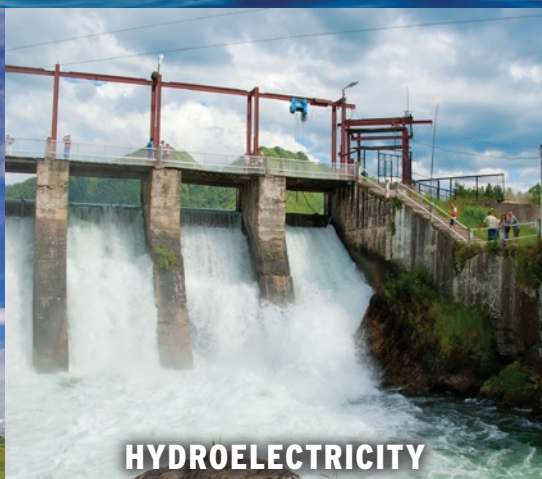
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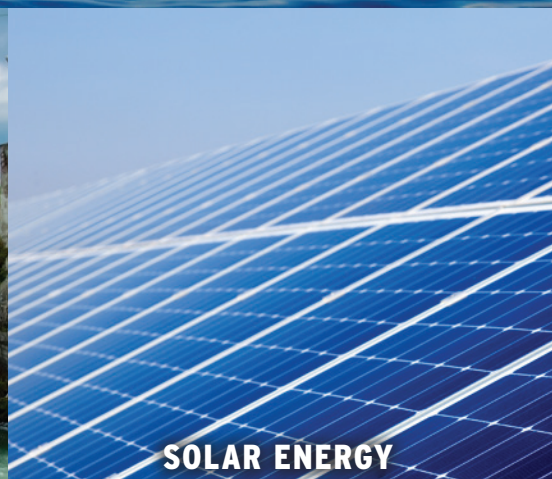
Agilent Technologies



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