



# 2015 Utility Working Conference and Vendor Technology Expo Special Edition



## Message from the General Chair

The 2015 ANS Utility Working Conference's theme, "Nuclear Sustainability - Rising to the Challenge," gives us an opportunity to look for ways to truly transform our chosen profession whether it is improving our business model for nuclear operations, adjusting to and learning from international nuclear growth, or expanding the potential of the next generation of nuclear leaders and technical experts. We have an urgent need to develop and implement plans to ensure nuclear thrives in this changing environment.

For our industry to thrive, we must look for new ways to conduct business while also embracing the lessons of the past. For example, the current challenge of developing the next generation of nuclear leaders, operators and technical experts means adapting our training and communications methods to take advantage of a technically savvy younger generation while increasing our proficiency in operating and maintaining an aging fleet of nuclear plants.

Being sustainable in our energy and political environment means finding innovative and effective ways to maintain excellent, safe operations while improving efficiency and reducing operating costs. This must be accomplished within a changing U.S. energy landscape that is becoming less predictable. And finally, operating in a world where nuclear program growth is evolving and presents opportunities that can benefit us and our rate-payers.

The nuclear industry is well known for its ability to work together to solve problems. This conference is an additional way to do just that for our key issues and to develop concrete action plans to ensure we thrive. I look forward to seeing you there.

Ben Waldrep  
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## Message from the Technical Program Chairs

"Nuclear Sustainability - Rising to the Challenge" is a theme that touches every facet of how we design, operate and maintain our nuclear plants. The issues range from creating a lasting safety culture and developing effective knowledge transfer, to utilizing our resources more efficiently and executing our work as planned. For example, the largest age group in the U.S. includes individuals from 18 to 44 years of age. This group represents 36.5 percent of the total population, and that younger employees ("Generation X" and "Millennials") are a growing portion of our workforce—from 32 percent in 2009 to 42.3 percent in 2012. How we transfer our industry and institutional knowledge will help prepare our industry for long-term sustainability.

Since 2000, the Nuclear Regulatory Commission has approved license renewal applications for 73 of the nation's 100 reactors. In the 2005-2007 timeframe, the combination of relatively strong load growth, increasing natural gas prices, and low estimates of the capital costs to construct new nuclear stations led to what has been popularly described as the "nuclear renaissance." Today, many of these factors have changed due to significant transformations in the energy sector: discovery of shale gas and horizontal drilling, smart grid technology, regulatory policies driving the expansion of renewables, significant new environmental requirements, the Fukushima nuclear accident, and flat electricity demand due to the stagnant economy.

With the landscape detailed above, gaining preventative maintenance efficiency, developing a strong safety and financial culture (even recognizing that a strong financial culture will provide for an improved safety culture....you put your money ONLY where it is needed), minimizing rework and guarding against the effects of burden reduction are all goals that sound conflicting but that we all work toward. These are just some of the sustainability challenges we are facing.

To address these industry challenges, the goal and final conclusion of the 2015 UWC will be to generate recommendations for the nuclear industry that will provide nuclear power plant professionals with options and techniques for improving their business model and the way we do business. Without the final product, the work we are doing has no value.



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Gather Data    Extract Facts    Derive Information    Evaluate and Discuss    **Generate Recommendations**

To that end, we are gathering the raw data from plants that can be used to extract facts. These facts, providing real information about our industry's challenges, can be analyzed and evaluated to generate recommendations. This is the method used at the UWC. No guess work. No feel-good discussions about the way things 'ought to be'.

The 2015 UWC's 11 tracks:

- Business
- Engineering
- Equipment Innovations/Supply Chain
- Equipment Reliability
- Executive
- Maintenance
- Operations/Operations Training
- Performance Improvement
- Regulatory Relations
- Risk Management
- Work Management

The organizers for each track will facilitate break-out sessions during the three days of the conference that will tackle the challenges of sustainability.

If you would like to be involved in creating the recommendations to support sustainability, contact us by e-mail.

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**Save the Date!**  
**August 9-12, 2015**  
**Utility Working Conference  
and Vendor Technology Expo**  
Omni Amelia Island Plantation  
Amelia Island, FL