



# The Nuclear Option - Clean, Safe, Reliable & Affordable

August 6-9, 2017 Omni Amelia Island Plantation Amelia Island, FL









August 6-9, 2017 Omni Amelia Island Plantation Amelia Island, FL



# 2017 Utility Working Conference and Vendor Technology Expo

Our most sincere thanks to our sponsors for their support!



# Exhibit Hall Passbook

#### PASSPORT TO PRIZES

All attendees will receive a passport game card with participating sponsor logos and exhibit booth numbers. During exhibit hall hours, attendees must visit each booth to get their passbook stamped. Completed passbooks will be entered into a drawing during Tuesday's Vendor Reception for a chance at the grand prize! Passbooks must be completed and submitted by Tuesday at 7:00 pm at the Nuclear News booth 514. Winners will be announced at 7:30 pm. See page 10 for prizes.



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# **Program Committee**

## Meeting Organizers

GENERAL CHAIR Brad Adams, Southern Nuclear

ASSISTANT GENERAL CHAIR Donald R. Hoffman, EXCEL Services Corporation

TECHNICAL PROGRAM CHAIR Dan Churchman, *Southern Nuclear* 

# Track Leaders and Organizers

#### BUSINESS/ECONOMIC PERFORMANCE

Tim Schlimpert, *Vice President, MCR Performance Solutions* Adam Dow, *Lead Consultant, MCR Performance Solutions* Jordan Gillis, *Director, ScottMadden* 

#### ENGINEERING & EQUIPMENT RELIABILITY

Ted Quinn, President, Technology Resources, ANS Past President Ray Herb, Digital Principal Engineer, Fleet Design, I&C, Southern Nuclear

#### EXECUTIVE/LEADERSHIP

Sean Clark, Business Development Manager and Senior Consultant Engineer, Atkins Nuclear Solutions Marlon Merritt, Business Development Manager, Duke Energy

#### MAINTENANCE

Bryant Hearne, Principal Evaluator - MA, INPO Gwen Bookheimer, Planning Manager, Electrical and I&C, TVA

#### **OPERATIONS/OPS TRAINING**

Clint Six, Director, Corporate Operations, Exelon Gary Dudek, Operations CFAM, Southern Nuclear Mike Spellman, Control Room Supervisor, Shearon Harris, Duke Energy

#### PERFORMANCE IMPROVEMENT

Ludwig (T-Bow) Thibault, Team Leader, WD Associates, INPO (retired) Reiko Perleberg, Corporate Performance Improvement Supervisor, Southern Nuclear

## Knowledge Managers

Saieed Ahmed, Exelon Hanna Arrington, Areva Anthony Chang, Areva Timothy Crook, Transatomic Power Emory Fields, Fluor Benjamin Hansen, Xcel Energy Franklin Hope, Jensen Hughes Sarah Lynn, Luminant John McLean, Southern Company Will Powers, Fluor Brett Rampal, NuScale Power Sanjay Sah, GE Hitachi Stephen Schnelker, Southern Company Courtney Tampas, SCANA Matthew Wargon, SCANA

#### ASSISTANT TECHNICAL PROGRAM CHAIRS Dan Doran, Exelon Vince Gilbert, EXCEL Services Corporation

INTERN & KNOWLEDGE MANAGER COORDINATOR Vince Gilbert, EXCEL Services Corporation

GOLF CHAIR Jeff Mosses, *American Nuclear Society* 

#### **REGULATORY RELATIONS**

Pareez Golub, Vice President, New Nuclear Build, EXCEL Services Corporation Trent Wertz, Technical Assistant, Office of Nuclear Reactor Regulation, US NRC Ken McElroy, Manager, Regulatory Affairs, Southern Nuclear

#### **RISK MANAGEMENT**

Gene Kelly, Sr Engineering Manager, Corporate Engineering and Risk, Exelon Owen Scott, Manager of Risk Informed Programs, Southern Nuclear

#### SUPPLY CHAIN

Jim Ripple, *Supply Chain Director, Southern Nuclear* Bill Fry, *Duke Energy* Greg Keller, *President, AZZ* 

#### **TECHNOLOGY & INNOVATION**

Chris Comfort, Technology & Innovation Manager, Southern Nuclear Vincent Williams, Innovation & Technology Lead, General Electric

#### WORK MANAGEMENT

Jon Anderson, *Chief Executive Officer, ACA Incorporated* Pete Arthur, *Principal Evaluator - MA/WM, INPO* 

### Interns

Antonio D Tahhan Acosta, Idaho State Univ Julie Bosley, Colorado School of Mines Ramda, Galo Mairena, Univ of New Mexico Robert Heath, Texas A&M Univ Gabrielle M Leblanc, Oregon State Univ Joseph Steiner, Louisina State Univ

# Daily Schedule

# Saturday, August 5

4:00-6:00 pmExhibitor Move-InExpo Hall4:00-6:00 pmExhibitor Registration ONLYMagnolia Foyer

## Sunday, August 6

6:30-7:45 am	Golf Tournament "Grab & Go" Breakfast	Marsh View Terrace
	Sponsored by System one	
8:00 am-1:30 pm	UWC Golf Tournament	Oak Marsh Golf Course
8:00 am-5:00 pm	Exhibitor Move-In	Expo Hall
1:30-3:00 pm	UWC Golf Tournament Awards Luncheon	Cumberland BC
	Sponsored by Schneider	
2:00-7:00 pm	Registration	Magnolia Foyer
6:00-8:00 pm	Opening Reception in the Vendor Technology Expo	Expo Hall
6:00-8:00 pm	Vendor Technology Expo	Expo Hall

# Daily Schedule

## Monday, August 7

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7:00 am-4:00 pm	Registration	Magnolia Foyer
7:00-8:00 am	Continental Breakfast in the Vendor Technology Expo 🥥	Expo Hall
	Sponsored by JENSEN HUGHES	
7:30 am-4:30 pm	Vendor Technology Expo Advancing the Science of Safety	Expo Hall
8:00-10:00 am	Industry Awards Presentation & Opening Plenary: The Case for Nuclear in the Nation and the States	Amelia Ballroom 1-4
	Sponsored by <b>Exelon</b> Generation.	
10:00-10:30 am	Refreshment Break in the Vendor Technology Expo	Expo Hall
	Sponsored by	
10:30 am-12:00 pm	<ul> <li>Educational Sessions 1</li> <li>Macro Energy Market Trends, Current/Future Impacts and DNP Feasibility</li> <li>Think Smart Think Digital: Digital I&amp;C Regulatory Modernization</li> <li>INPO Review of 2016 &amp; 2017 Trends in Work Management and Maintenance</li> <li>Crew Performance Evaluation</li> <li>Finding Value in PI Processes in the New Business Landscape</li> <li>Challenges in Implementing Risk Insights Across the Fleet</li> <li>"Billions and Billions, and Nothing to Wear" - Leveraging Risk Based Decision Making for Effective Inventory Management</li> <li>Seamless Digital Environment for Nuclear Power Plants</li> </ul>	Talbot A Cumberland B Amelia Ballroom 1 Cumberland C Ossabaw B Talbot B Cumberland A Amelia Ballroom 4
12:00-1:30 pm	Walk-Around Lunch in the Vendor Technology Expo	Expo Hall
1:30-3:00 pm	<ul> <li>Educational Sessions 2</li> <li>Nuclear Financial Post-Mortem - Lessons Learned and Strategies Going Forward</li> <li>Advanced Non-LWR Reactor Design</li> <li>Technology-Enabled Business Improvement</li> <li>Direction of Delivering the Nuclear Promise Work Management Planning and Execution Team</li> <li>Pre-Approval Criteria for Work Execution</li> <li>Industry Regulatory Leaders Q&amp;A</li> <li>Why Efficient Human Performance Saves Money</li> <li>FLEX in Plant Operations</li> <li>Supply Chain Online and Outage Excellence, Accountability and Communication</li> <li>Big Data / Artificial Intelligence for Nuclear</li> </ul>	Talbot A Cumberland B Conference Room 2/3 Amelia Ballroom 1 Cumberland C Amelia Ballroom 2/3 Ossabaw B Talbot B Cumberland A Amelia Ballroom 4
3:00-3:30 pm	Refreshment Break in the Vendor Technology Expo	Expo Hall
3:30-5:00 pm	Educational Sessions 3 • Realizing the Promise of 50.69 Risk Informed Component Categorization • Westinghouse – State of the Business • Measuring Cost Savings from Work Management / Maintenance Efficiency Bulletins • Training to Improve Operator Performance • The 'How to' on Improving Organizational Effectiveness and Leadership Behaviors • Advanced non-LWR Licensing Challenges - Transitioning Barriers to Bridges • Counterfeit, Fraudulent and Suspect Items (CFSI) • Digital / Wired Worker	Cumberland B Conference Room 2/3 Amelia Ballroom 1 Cumberland C Ossabaw B Amelia Ballroom 2/3 Cumberland A Amelia Ballroom 4

# Daily Schedule

# Tuesday, August 8

7:00 am-5:30 pm 7:00-8:30 amRegistration Sunrise BreakfastMagnolia Foyer7:30 am-7:30 pm 8:30-10:00 amSunrise BreakfastSponsored by <b>Sargent S Lundy</b> LieExpo Hall8:30-10:00 am 10:30 am-12:00 pmTuesday Plenary: Implementing the Nuclear Promise, Challenges and SuccessesAmelia Ballroom 1.410:30 am-12:00 pmEducational Sessions 4 • DNP Status and Overview • The System Engineering Role in Business and Plant Process • The System Engineering Role in Business and Plant Process • The System Engineering Com WG Back to "Good Enough?" • Proposed Simplified Work Management Process • Licent Review Process • Using HU Tools? Prove it! • Restoring Regulatory Confidence in Risk-Informed: What Happened? • Warehouse of the FutureCumberland C Comberland A Cumberland A12:00-1:30 pmWalk-Around Lunch in the Vendor Technology Expo • Standard Design Process Update • Proficiency & Trajectory- Taking this Initiative from Theory to Practical Application • Shift Manager Leadership • Proficiency & Trajectory- Taking this Initiative from Theory to Practical Application • Shift Manager Leadership • Proficiency & Trajectory- Taking this Initiative from Theory to Practical Application • Shift Manager Leadership • Proficiency & Trajectory- Taking this Initiatives • Applications of Seismic PRA • Junintended Consequences of Well Meaning Initiatives • Standard Design Process Index ow need to do to Prepare for it? • Practical Implementation Resulting in Big Savings from the CAP Efficiency Bulletins • Select Owner's Group Topics • Characterization of Risk and Safety Benefits of Advanced • Characterization of Risk and Safety Benefits of Advanced • Characterization of Risk and Safety Benefits of Advanced • Characterization of Risk and Safety Benefits			
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1:30-3:00 pmEducational Sessions 5 • Standard Design Process Update • Preserving Nuclear Competitiveness Amid Technological Disruption • Prerequisites for Cost Reductions 	12:00-1:30 pm	Walk-Around Lunch in the Vendor Technology Expo	Expo Hall
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<ul> <li>License Amendment Process and Process Improvements</li> <li>Applications of Seismic PRA</li> <li>Unintended Consequences of Well Meaning Initiatives</li> <li>Robotics, Unmanned Aerial Vehicles (UAVs) and Remote Systems</li> <li>Refreshment Break in the Vendor Technology Expo</li> <li>Educational Sessions 6</li> <li>Value Based Maintenance (VBM), What it is and What do we need to do to Prepare for it?</li> <li>Practical Implementation Resulting in Big Savings from the CAP Efficiency Bulletins</li> <li>Select Owner's Group Topics</li> <li>Characterization of Risk and Safety Benefits of Advanced</li> <li>Contracting Best Practices</li> <li>New Technology</li> <li>Scoo-7:30 pm</li> <li>Cocktail Reception &amp; Vendor Raffle in the Vendor Technology Expo</li> <li>Expo Hall</li> <li>Amelia Ballroom 4</li> </ul>		<ul> <li>Proficiency &amp; Trajectory – Taking this Initiative from Theory to Practical Application</li> </ul>	Ossabaw B
<ul> <li>Applications of Seismic PRA</li> <li>Unintended Consequences of Well Meaning Initiatives</li> <li>Robotics, Unmanned Aerial Vehicles (UAVs) and Remote Systems</li> <li>Refreshment Break in the Vendor Technology Expo</li> <li>Educational Sessions 6</li> <li>Value Based Maintenance (VBM), What it is and What do we need to do to Prepare for it?</li> <li>Practical Implementation Resulting in Big Savings from the CAP Efficiency Bulletins</li> <li>Select Owner's Group Topics</li> <li>Characterization of Risk and Safety Benefits of Advanced</li> <li>Contracting Best Practices</li> <li>New Technology</li> <li>Cocktail Reception &amp; Vendor Raffle in the Vendor Technology Expo</li> <li>Expo Hall</li> <li>Expo Hall</li> <li>Dosabaw B</li> <li>Amelia Ballroom 1</li> <li>Ossabaw B</li> <li>Amelia Ballroom 2/3</li> <li>Talbot B</li> <li>Cumberland A</li> <li>Amelia Ballroom 4</li> </ul>		License Amendment Process and Process Improvements	Amelia Ballroom 2/3
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	7:30-10:00 pm	Tuesday Evening Event	Amelia Ballroom 1-4

# Wednesday, August 9

7:00-11:00 am	Registration	Magnolia Foyer
7:30-8:30 am	Continental Breakfast in the Vendor Technology Expo	Expo Hall
7:30-9:00 am	Vendor Technology Expo	Expo Hall
8:30-10:00 am	Wednesday Plenary: Back to the Future, Building the Next Generation of	
	Nuclear Technology and Professionals	Amelia Ballroom 1-4
10:00-10:30 am	Refreshment Break	
10:30 am-12:00 pm	Educational Sessions 7	
	<ul> <li>Utility Response to an NRC Concern Related to the Use of Silicone Foam</li> </ul>	
	(Dow Corning 6548) as an Electrical Conduit Internal Seal	Cumberland B
	Centralized Monitoring	Amelia Ballroom 4
	Open Discussion & Future DNP activities for Work Management and Maintenance	Amelia Ballroom 1
	New Build Initial License Training	Cumberland C
	What Success Looks Like	Ossabaw B
	<ul> <li>Second License Renewal: Delivering the Nuclear Promise from 60 to 80 Years</li> </ul>	Amelia Ballroom 2/3
	<ul> <li>What's Next in Probabilistic Risk Assessment (PRA)?</li> </ul>	Talbot B
	<ul> <li>Contract Forensics/Supplemental Supplier Contracts (In-processing)</li> </ul>	Cumberland A
12:30-2:00 pm	UWC 2017 Wrap-up/2018 Planning Meeting	Talbot A-B

# **General Information**

# MEETING INFORMATION

The Utility Working Conference and Technology Expo (UWC) is an annual meeting of the minds that consistently generates strong, practical recommendations designed to address the industry's most pressing needs. The focus of the 2017 UWC is to analyze cost drivers common to all nuclear power plants and recommend programs and processes to improve their efficiency and effectiveness and to provide innovative solutions that enable a significant reduction in operating expenses.

# ABOUT UWC

For more information about the UWC, make sure to visit http://uwc.ans.org/.

## REGISTRATION

Location: Magnolia Foyer Name badges must be worn during all sessions, in the expo and events. Certain events require a ticket, and may entail an additional cost.

## **REGISTRATION HOURS**

Sunday, August 6	2:00-7:00 pm
Monday, August 7	7:00 am-4:00 pm
Tuesday, August 8	7:00 am-5:30 pm
Wednesday, August 9	7:00-11:00 am

## ATTENDEE WIFI

Wifi at the UWC is proudly sponsored by



For log-in information, visit them at Booth 09!

## ANS MEETINGS APP

sponsored by



Scan this code or type in American Nuclear Society to your app store and download the app and login to the ANS Meetings App to experience all of the app features! **NOTE: All session evaluations will be done in the app only.** 



Sunday, August 6

Monday, August 7

Tuesday, August 8

Wednesday, August 9

# If you still have the email invitation sent to you by ANS Meetings:

1. Open the invitation in your inbox. Tap Verify Account.

Build your network: make sure to stop by and visit UWC's 90+ Exhibitors!

UWC VENDOR TECHNOLOGY EXPO

2. Tap Open App. to complete the verification via your brand new mobile app.

6:00-8:00 pm

7:30-9:00 am

7:30 am-4:30 pm

7:30 am-7:30 pm

# 1. From the event homescreen, tap the hamburger icon (three white lines) at the top left of the screen.

- 2. Tap Log in for more features!
- 3. Enter your first and last name and tap Next.
  - 4. Tap Resend Code to have your verification code sent to your preferred email address.

If you need to retrieve your Verification Code:

## 2017 WRAP UP/ 2018 PLANNING MEETING

Anyone interested in organizing and planning the 2018 UWC is welcome to attend. Wednesday, August 9, 12:30-2:00 pm, Talbot A-B.

**Consent To Use Photographs And Videos:** All attendance of registered participants, attendees, exhibitors, sponsors and guests ("you") at American Nuclear Society ("ANS") meetings, courses, conventions, conferences, or related activities ("Events") constitutes an agreement between you and ANS regarding the use and distribution of your image, including but not limited to your name, voice and likeness ("Image"). By attending the ANS Events, you acknowledge and agree that photographs, video, and/or audio recordings may be taken of you and you grant ANS the right to use, in perpetuity, your Image in any electronic or print distribution, or by other means hereinafter created, both now and in the future, for media, art, entertainment, promotional, marketing, advertising, trade, internal use, educational purposes or any other lawful purpose. For any questions or concerns about the use of your Image, please contact the ANS Meetings & Exhibits Department at meetings@ans.org.

## ABOUT ANS

#### Mission

ANS provides its members with opportunities for professional development. It also serves the nuclear community by creating a forum for sharing information and advancements in technology, and by engaging the public and policymakers through communication outreach.

#### Code of Ethics

Recognizing the profound importance of nuclear science and technology in affecting the quality of life throughout the world, members of the American Nuclear Society (ANS) are committed to the highest ethical and professional conduct.

ANS members as professionals are dedicated to improving the understanding of nuclear science and technology, appropriate applications, and potential consequences of their use.

To that end, ANS members uphold and advance the integrity and honor of their professions by using their knowledge and skill for the enhancement of human welfare and the environment; being honest and impartial; serving with fidelity the public, their employers, and their clients; and striving to continuously improve the competence and prestige of their various professions. The Code of Ethics can be found at www.ans.org/about/coe.

#### Statement on Diversity

The American Nuclear Society (ANS) is committed, in principle and in practice, to creating a diverse and welcoming environment for everyone interested in nuclear science and technology. Diversity means creating an environment – both in ANS and in the profession – in which all members are valued equitably for their skills and abilities and respected equally for their unique perspectives and experiences. Diverse backgrounds foster unique contributions and capabilities, and so creation of an inclusive Society ultimately leads to a more creative, effective, and technically respected Society.

ANS believes that everyone deserves opportunities for learning, networking, leadership, training, recognition, volunteering in Society activities, and all the other benefits that involvement in the Society brings, regardless of age, color, creed, disability, ethnicity, gender identity and expression, marital status, military service status, national origin, parental status, physical appearance, race, religion, sex, or sexual orientation. The selection of a member to serve in ANS's volunteer leadership structure shall be based solely on the member's ability, interest and commitment to serve. In particular, ANS encourages members at each level of the Society and in each Professional Division and Technical Group to make special efforts to recruit underrepresented minorities and women to ensure that they are adequately represented in the Society.

#### Respectful Behavior Policy (Abbreviated)

The open exchange of ideas, freedom of thought and expression, and productive scientific debate are central to the mission of the American Nuclear Society (ANS). These require an open and diverse environment that is built on dignity and mutual respect for all participants and ANS staff members, and is free of bias and intimidation.

ANS is dedicated to providing a safe, welcoming, and productive experience for everyone participating in Society events and other Society activities regardless of age, color, creed, disability, ethnicity, gender identity and expression, marital status, military service status, national origin, parental status, physical appearance, race, religion, sex, or sexual orientation. Creation of a safe and welcoming environment is a shared responsibility held by all participants. Therefore, ANS will not tolerate harassment of or by participants (including ANS volunteer leaders and staff members) in any form. Disciplinary action for participants found to have violated this principle may include reprimand, expulsion from an event or activity with or without a refund, temporary or permanent exclusion from all ANS events and activities, suspension or expulsion from volunteer leadership positions or groups, and/ or suspension or expulsion from Society membership, as appropriate.

*If you or someone else experiences harassment, regardless of how you otherwise choose to initially handle the situation,* you are encouraged to report the situation to ANS. It is possible that the behavior you experienced is part of a larger pattern of repeated harassment. Please alert ANS to behavior you feel to be harassment regardless of the offender's identity or standing in the Society.

The designated contact person for reports at the 2017 Utility Working Conference is ANS Executive Director Robert C. Fine, JD, CAE during or after the event at 708-476-7096. In addition, you many contact ANS President Robert N. Coward, PE, during or after the event at rcoward@mpr.com.

The complete Respectful Behavior Policy can be found at www.ans.org/about/rbp. If you have questions about the policy, please contact ANS Executive Director Robert C. Fine at 708-579-8200 or *rfine@ans.org*.

#### **GOLF TOURNAMENT "GRAB & GO" BREAKFAST**

**Location:** Marsh View Terrace 6:30-7:45 am

The shuttle will pick up from the main hotel lobby between 6:30-7:15 am dropping off for breakfast from 6:30-7:30 am at the Marsh View Bar and Terrace. Check in at the UWC Golf Registration desk to receive your foursome assignment and other materials. Grab & Go Breakfast is proudly sponsored by **System One** 

#### **UWC GOLF TOURNAMENT**

**Location:** Oak Marsh Golf Course

8:00 am-1:30 pm

The 2017 ANS Utility Working Conference (UWC) Golf Tournament will be held at the Oak Marsh Golf Course starting at 8 am This tournament is open to all conference attendees and guests. However, attendees must pay the appropriate fee to participate. When submitting your registration for the UWC, you must check the appropriate box on the registration form and make sure the golf fee is included in the "Grand Total" section.

#### **UWC GOLF TOURNAMENT AWARDS LUNCHEON**

**Location:** Cumberland BC 1:30-3:00 pm

The shuttle will pick-up from the golf course and return to the hotel from 1:00-2:00 pm The Awards Luncheon will take place at the hotel in Cumberland BC. The Awards Luncheon is proudly sponsored by

#### **OPENING RECEPTION IN THE VENDOR TECHNOLOGY EXPO**

Location: Expo Hall 6:00-8:00 pm

Join UWC attendees and vendors for a reception to celebrate the opening of the Vendor Technology Expo and to kick off yet another great Utility Working Conference! Heavy hors d'oeuvres, desserts and beverages will be provided. We look forward to seeing you there!

This event is included in a full registration or an Adult or Child Meal Pass. Additional tickets are available for purchase on-site. All attendees will need a badge to enter the Expo Hall.

### **MONDAY, AUGUST 7**

# INDUSTRY AWARDS PRESENTATION & OPENING PLENARY: THE CASE FOR NUCLEAR IN THE NATION AND THE STATES

Location: Amelia Ballroom 8:00-10:00 am

The assets used to generate electricity have been influenced by the abundance of natural gas, environmental impacts, government subsidies, and deregulation. This session will examine the complex energy industry and the role nuclear power should play. Industry Awards Presentation by Brad Adams *(Southern Nuclear) and* Bob Coward *(ANS President)* Speakers: Steve Kuczynski, President of Southern Nuclear, Shane Johnson, Deputy Assistant Secretary for Nuclear Energy Innovation and Application, Department of Energy, Mr. Boyd Rutherford, Lt. Governor of Maryland, Cholly Smith, Executive Director Illinois Commerce Commission. The Opening Plenary is proudly sponsored by

**Exelon** Generation.

### **TUESDAY, AUGUST 8**

#### TUESDAY PLENARY: IMPLEMENTING THE NUCLEAR PROMISE, CHALLENGES AND SUCCESSES

**Location:** Amelia Ballroom 8:30-10:00 am

Over the last couple of years, we have seen nuclear plant closures based on economic conditions. In 2016, the industry launched a new initiative to make nuclear power competitive in the market. Many efficiency bulletins have been published. This session will share insights on the challenges and successes we've seen with implementing the Nuclear Promise. Speakers: Danny Bost, Chief Nuclear Officer of Southern Nuclear, Kim Maza, Vice President of INPO, Joe Pollock, Chief Nuclear Officer of NEI, Gary Cokins, President of Analytics Based Performance Management

Plenary, Special Events and Sessions

#### **TUESDAY, AUGUST 8 CONTINUED**

#### **VENDOR RECEPTION & BOOTH RAFFLE/PASSPORT TO PRIZES**

Location: Expo Hall 5:00-7:30 pm

5:00-7:50 pm

#### Vendor Technology Expo Raffle

Don't miss out on an exciting opportunity to network with exhibitors and win fantastic prizes by attending the Vendor Raffle and Reception! To participate in the raffle, drop off your business card or have your badge scanned at the participating booths before 5:15 pm on Tuesday. Winners will be posted on large screens located in the exhibit hall foyer and at registration. Prizes must be claimed from the exhibitors' booths before 7:00 pm. There will be an area set up for photographs of the winners and exhibitor reps in the exhibit hall foyer. A follow-up drawing is scheduled for 7:00 pm for any unclaimed vendor prizes. All registered attendees are invited.

#### **Passport to Prizes**

All attendees will receive a passport game card with participating sponsor logos and exhibit booth numbers. During exhibit hall hours, attendees must visit each booth to get their passbook stamped. Completed passbooks will be entered into a drawing during Tuesday's Vendor Reception for a chance at the grand prize! Passbooks must be completed and submitted by Tuesday at 7:00 pm at the ANS/Nuclear News booth 514. Winners will be announced at 7:30 pm. You must be present to win.

#### **Prizes Include:**

- Grand Prize: Complimentary Full 2018 UWC Conference Registration, and three complimentary nights in the Omni Main Hotel
- 2nd Prize: Apple I-Pro 10.5 inch with 64GB
- 3rd Prize: Fit Bit Blaze

#### **TUESDAY EVENING EVENT**

Location: Amelia Ballroom

7:30-10:00 pm

Immediately following the reception, join us to celebrate another successful conference! Event is complimentary to all full meeting registrants and Adult or Child Meal Passes. All attendees will need a ticket to enter the event. Additional tickets are available for purchase on-site. \*Ticket is required for entry\*

#### WEDNESDAY, AUGUST 9

#### WEDNESDAY PLENARY: BACK TO THE FUTURE – BUILDING THE NEXT GENERATION OF TECHNOLOGY AND NUCLEAR PROFESSIONALS

Location: Amelia Ballroom

8:30-10:00 am

The current fleet of nuclear plants were designed and built in the 70s and 80s. The professionals that have operated and maintained these plants are at the end of their careers. There are many new designs for plants and significant efforts in transferring knowledge to the new workforce. This session will discuss the challenges and opportunities to ensure our industry continues to thrive. Speakers: Brad Adams, VP of Southern Nuclear; Don Hoffman, President/ CEO of Excel Services; Hash Hashemian, President of AMS; and Stan Gibson, Wells Fargo.

Plenary, Special Events and Sessions

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 1: 10:30 AM-12:00 PM

#### **BUSINESS/ECONOMIC PERFORMANCE**

Macro Energy Market Trends, Current/Future Impacts and DNP Feasibility

Session Organizer: Jordan Gillis (ScottMadden) Participants: Tim Hanley (Exelon), Ed Baker (ScottMadden) Room: Talbot A

This session will focus on a "no-nonsense" state of the nuclear market looking at energy price trends, secondary market subsidy impacts (investment and production tax credits, zero emission credits, etc.), current fleet financial health and a cursory look at the results of the Delivering the Nuclear Promise (DNP) initiative. As the forefront of energy economics and policy continues to shift from the federal to state level, speakers will discuss how nuclear plant and fleet operators can stay competitive in this constantly changing environment.

#### ENGINEERING&EQUIPMENT RELIABILITY/REGULATORY RELATIONS Think Smart Think Digital: Digital I&C Regulatory Modernization

Session Organizer: Pareez Golub (Excel Services)

**Participants:** Raymond Herb (*Southern Nuclear*), John Connelly (*Exelon*), John Lubinski (*NRC*) **Room:** Cumberland B

Join us in learning about the exciting changes taking place in the industry and regulatory infrastructures related to digital I&C! In October 2016, the Commission approved the NRC Digital I&C "Integrated Action Plan" (IAP) with the objective of modernizing the digital I&C regulatory infrastructure. Industry and NRC identified key topics that have the greatest near-term impact in addressing regulatory challenges and improving timeliness / efficiency of digital modifications. Join key industry and NRC stakeholders to discuss progress on these important initiatives. This panel will discuss how the NRC and industry efforts will allow the utilities to take advantage of this technology for long-term, safe and efficient operation.

#### EXECUTIVE/LEADERSHIP See Supply Chain

#### MAINTENANCE/WORK MANAGEMENT

INPO Review of 2016 & 2017 Trends in Work Management and Maintenance

Session Organizers: Pete Arthur (INPO), Bryant Hearne (INPO) Participants: Pete Arthur (INPO), Bryant Hearne (INPO) Room: Amelia Ballroom 1

This session starts with a presentation by INPO on the current trends in performance. The session then opens to a discussion of what is working and not working by plant personnel in the areas discussed by INPO. Participants will leave this session with a good understanding of industry performance in general. They will also gain specific information and contact personal for what is and is not working in the areas discussed by INPO.

### **OPERATIONS/OPS TRAINING**

**Crew Performance Evaluation** 

Session Organizer and Moderator: Bruce Hennigan (Exelon) Participants: Sara Lange (Ameren), George Pickar (Southern Nuclear), Matt Henson (Southern Nuclear) Room: Cumberland C

As the CPE process continues to develop, Operations managers must continue to efficiently and effectively implement strategies for success. This discussion will center around changes to the process and the best strategies for making crews successful.

#### PERFORMANCE IMPROVEMENT Finding Value in PI Processes in the New Business Landscape Session Organizer: Reiko Perleberg (Southern Nuclear) Participant: Danny Bost (Southern Nuclear)

**Room:** Ossabaw B

What does the Performance Improvement process look like in the new business landscape? Hear it directly from Danny Bost the CNO from Southern Nuclear and the industry executive sponsor for the NEI Corrective Action Program Efficiency initiative on what is and is not working in the areas of Performance Improvement.

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 1: 10:30 AM-12:00 PM

**REGULATORY RELATIONS** 

See Engineering&Equipment Reliability

#### **RISK MANAGEMENT**

Challenges in Implementing Risk Insights Across the Fleet Session Organizer: Anil Julka (NextEra) Participants: Anil Julka (NextEra), Joseph Giitter (NRC), Fernando Ferrante (EPRI), Victoria Anderson (NEI) Room: Talbot B

The U.S. industry has been actively employing risk-informed thinking for over 20 year. Recently with the emphasis of delivering the nuclear promise (DNP), it has become important to improve knowledge of risk informed applications. Too often all the groups are not familiar with the risk informed framework making it difficult to implement across the fleet. With varying degree of knowledge form site to site, it is often challenging for governing and oversight organizations to implement. Achieving the benefits of risk-informed approaches requires an understanding of the strengths and weaknesses of the deterministic and probabilistic approaches and openness to the technical value brought by the different perspectives. The benefits of implementing risk insights needs to be over communicated and made part of the strategic initiatives for the fleet with implementing body at each site.

#### SUPPLY CHAIN/EXECUTIVE/LEADERSHIP

"Billions and Billions, and Nothing to Wear" - Leveraging Risk Based Decision Making for Effective Inventory Management

Session Organizer: Greg Keller (*Rolls-Royce*) Participants: Jim Ripple (Southern Nuclear), David Garcia (*AMMI Nuclear*), Ryan Gilchrist (*STARS*), Marc Tannenbaum (*EPRI*), Marlin Merritt (*Duke*) Room: Cumberland A

Inventory levels are considered to be 'excessively' high throughout the industry. With each outage or capital project, procured materials, parts and components are scoped, designed and ordered but not always with the full input from the organization which can result in delays to schedule, increased costs, re-order or dispositioning to inventory. The more significant impacts could be challenges to safety or plant operation if the errors go undetected. In the fast-paced work environment of the plant activities, legacy and unused items can make it to inventory and, over time be a key contributor to unnecessarily high volumes of inventories. This session will present an executive level overview of inventory management from the perspective of leadership engagement, risk based decision making and methods, and strategies for full supply chain governance models. When combined, the strengthened management of the supply chain can drive improved inventory management, higher equipment reliability and reduction of impacts to plant operation.

#### **TECHNOLOGY & INNOVATION**

#### Seamless Digital Environment for Hallbert Nuclear Power Plants

Session Organizers: Bruce Hallbert (*INL*), Ken Thomas (*INL*) Participants: Ken Thomas (*INL*), Shawn St. Germain (*INL*), Ann Orr (*APS*) Room: Amelia Ballroom 4

Through the U.S. Department of Energy's research programs, Idaho National Laboratory is developing advanced digital technologies to enable the long-term operation of light water reactor fleet. A common theme in recent developments is the incorporation of analytics to provide real-time actionable intelligence in critical plant functions. Three such technologies are presented in this session.

#### WORK MANAGEMENT See Maintenance

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 2: 1:30-3:00 PM

#### **BUSINESS/ECONOMIC PERFORMANCE**

Nuclear Financial Post-Mortem - Lessons Learned and Strategies Going Forward

Session Organizers: Tim Schlimpert (*MCR Performance Solutions*), Maria Hernandez (*Duke Energy*) Participants: Dennis Koehl (*STPNOC*), Mike Twomey (*Entergy*), Tim Schlimpert (*MCR Performance Solutions*) Room: Talbot A

This session will focus on diagnosing the financial and business root causes of recent plant closures as well as current pertinent business-related plant issues outside the current DNP efficiency bulletin paradigm. Presentations will focus on the hard decisions which need to be made in order to hit station financial goals focusing on cost/risk tradeoffs, project portfolio optimization as well as shifting and percolating financial culture through an organization.

#### ENGINEERING&EQUIPMENT RELIABILITY

#### Advanced Non-LWR Reactor Design

Session Organizer: Nicholas V. Smith (Southern Company Services) Participants: Jeff Latkowski (TerraPower), Eben Mulder (X-energy), Jacob DeWitte (Oklo) Room: Cumberland B

Multiple non-LWR designs are being developed towards commercialization in the US right now. This session will feature presentations from startup companies in the non-LWR advanced reactor space. These presenters will discuss their reactor designs, development strategies, and regulatory challenges going forward. Designs covered in this session will include TerraPower's Molten Chloride Fast Reactor, X-energy's Xe-100, and Oklo's micro-modular reactor. Expect to learn more about how these emerging technologies are shaping the future of nuclear energy.

#### **EXECUTIVE/LEADERSHIP**

#### **Technology-Enabled Business Improvement**

Session Organizers: Bruce Hallbert (INL), Ken Thomas (INL) Participants: Andreas Bye (OECD Halden Reactor Project), Lorenzo Slay (Arizona Public Service), Bruce Hallbert (INL) Room: Conference Room 2/3

Nuclear plants today are excessively burdened with implementing the substantial process and human performance requirements that have built up over time in pursuit of nuclear safety and production goals. At the same time, competitive forces have driven many industries to transform their business models with advanced digital technologies to increase production, improve quality, and reduce cost. Greater efficiency improvements are possible when technologies are applied systematically to broad business functions, rather than as point solutions to current performance problems. See two examples of how innovative organizations are transforming their business models with advanced digital technologies; followed by a presentation on technology development efforts by the Department of Energy's Light Water Reactor Sustainability Program to assist U.S. nuclear plant operators in achieving substantial business improvement.

#### MAINTENANCE/WORK MANAGEMENT

Direction of Delivering the Nuclear Promise Work Management Planning and Execution Team

Session Organizers: Pete Arthur (INPO), Bryant Hearne (INPO) Participants: Tony Mueller (*First Energy Nuclear*) Room: Amelia Ballroom 1

This will be a very informative session that will help participants understand the big picture of what is coming from the Nuclear Promise. A similar session conducted last year was well received by participants. Some said it was the first time they had heard of what other Promise bulletins are doing. This discussion will point to other sessions in our tracks. This discussion will also discuss what we are "getting for our buck" with the Promise.

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 2: 1:30-3:00 PM

# Breakout Sessions: Monday August 7

#### OPERATIONS/OPS TRAINING Pre-Approval Criteria for Work Execution

Session Organizer and Moderator: John Reimer (Exelon Nuclear Duty Officer) Participants: Dave Throne (Exelon), Howard Fitzwater (Southern Nuclear) Room: Cumberland C

Efficiency Bulletin 16-31 describes efficiency opportunities to be found by "...Removing unnecessary approvals and delays [to]...allow workers to get to...perform more work." We will exchange ideas and best practices for implementing a graded approach to work release easing the burden on both Operations and Maintenance while avoiding adverse consequences.

#### PERFORMANCE IMPROVEMENT Why Efficient Human Performance Saves Money

Session Organizer: Brandon Marlow (Southern Nuclear) Participants: John Schaeffer (Williams Power), Chris Smith (Duke), Sean Franklin (Duke), Brandon Marlow (Southern Nuclear)

Room: Ossabaw B

Learn how to implement the HU Investigation Checklist and discuss how it improves station efficiency by standardizing, simplifying and coupling multiple other processes into one simple form. Engage in a discussion panel focusing on First Line Supervisor (FLS) success related to the recent NEI Efficiency Bulletins (EBs).

## REGULATORY RELATIONS

Industry Regulatory Leaders Q&A

Session Organizer: Michael Meier (Southern Nuclear) Participants: Keith Jury (Exelon), Mike Johnson (NRC) Room: Amelia Ballroom 2/3

This is your opportunity to engage in a Q & A session with a panel of forward thinking industry and NRC leaders. It's a great opportunity to ask questions on issues covered in this conference or any topic you choose. The panel has executive expertise with a host of regulatory topics – from Part 52 licensing to backfit to decommissioning. Dialog is expected on the impacts of Delivering the Nuclear Promise and insights on the climate in Washington. This will be the most open-ended and likely the most interesting session at the conference, so please come and join us.

#### RISK MANAGEMENT/OPERATIONS/OPS TRAINING FLEX in Plant Operations

Session Organizer: William Webster (Dominion) Participants: Gary Dudek (Southern Nuclear), Randy Bunt (Southern Nuclear) Michael Powell (APS) Room: Talbot B

The nuclear industry developed mitigating strategies and procured portable equipment in support of regulations and orders following the beyond design basis earthquake and subsequent tsunami that led to the Fukushima accident in March 2011. These strategies and equipment provide an additional layer of defensein-depth with additional flexibility and diversity to permanently installed plant equipment. Under the NRC order EA-12-049, plants have implemented a series of FLEX strategies specifically designed to mitigate an extended loss of power event at the site. This equipment can also be used to develop additional strategies to reduce plant risk and improve operational flexibility. This session will share how sites have implemented additional mitigation strategies using FLEX equipment and other portable equipment. These strategies have been used to support regulatory requirements, TS AOTs, and have been credited in PRA models to demonstrate reduced risk from the additional defense in depth.

#### **MONDAY AUGUST 7** EDUCATIONAL SESSIONS 2: 1:30-3:00 PM

#### **SUPPLY CHAIN** Supply Chain Online and Outage Excellence, Accountability and Communication Session Organizer: Bill Frye (Duke) Participants: Burt Broughton (Duke) Room: Cumberland A

Having the correct part at the right time for the correct application is key to schedule adherence, outage performance and equipment reliability. How is this consistently accomplished at a high level? It takes communication, coordination and collaboration in several different areas. Supply Chain is at the center of this process because the work cannot be done without the necessary materials. Supply Chain must have a welldeveloped, robust program in which the Team is engaged, aligned and motivated (INPO 15-005 LE 4 and LE 5) to ensure nuclear stations are successful at maintaining safe, reliable and high performing plants. Several elements make this happen, but developing a strong relationship and coordination with other work groups is one of the keys to this success. Transferring ownership to the "doers" goes a long way in developing sustained results. Duke Energy's Catawba Nuclear Station will present their best practices that resulted in a strength from INPO.

#### **TECHNOLOGY & INNOVATION**

#### **Big Data / Artificial Intelligence for Nuclear**

Session Organizer: Vincent Williams (GE-Hitachi)

Participants: Joan Knight (Exelon), Eric Mino (GE), Nagi Gebraeel (Decision IQ), Theresa Sutter (Curtis-Wright) Room: Amelia Ballroom 4

There is an enormous amount of data that is being generated at our nuclear facilities that could be harnessed for performance insights, improve performance, cost reductions, safety improvement, and many other benefits. In this session, we will look at some of the solutions already in place as well as capabilities in this area.

#### WORK MANAGEMENT See Maintenance

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Breakout Sessions: Monday August 7



**B 610** 

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 3: 3:30-5:00 PM

#### BUSINESS/ECONOMIC PERFORMANCE See Maintenance

Breakout Sessions: Monday August 7

#### ENGINEERING&EQUIPMENT RELIABILITY/RISK MANAGEMENT Realizing the Promise of 50.69 Risk Informed Component Categorization Session Organizer: Shannon Rafferty-Czincila (Exelon) Participants: Ted Quinn (Technology Resources), Adam Coker (Southern Nuclear), Heather Szews (Duke), Maricarmen Trexler and Pat O'Rourke (Exelon), Bryan Thiele (APS) Room: Cumberland B

This session will focus on the key aspects of a 50.69 Risk-Informed Engineering Programs effort, required to fulfill DNP Efficiency Bulletin: 17–09 "Implementation of 10 CFR 50.69: Categorization and Alternative Treatment." This focus will include exploring ideas on establishing a 50.69 project plan, the appropriate multi-disciplinary categorization team structure, implementing procedures, Panel (IDP) training, and how to engage all stakeholders including design engineering and procurement. The session will highlight recent experience with performing categorization, actual results (including the various "drivers" that influence RISC-1 versus 3), system selection criteria, process efficiencies and lessons learned from recent projects. Presentations will touch upon the equally important topics of which engineering programs to target (for optimal savings), what the specific alternative treatment options look like for each program (e.g. IST, ISI, EQ, procurement, design control, etc.) and how to prioritize which systems/programs provide the best plant-specific cost savings. Last, the importance of a strong change management plan for the entire Station will be addressed.

#### EXECUTIVE/LEADERSHIP

#### Westinghouse – State of the Business

Session Organizer: Sean Clark (Atkins Global) Participants: David Howell (Westinghouse) Room: Conference Room 2/3

This will be a session that provides an update on the business at Westinghouse following the bankruptcy.

#### MAINTENANCE/WORK MANAGEMENT/BUSINESS/ECONOMIC PERFORMANCE Measuring Cost Savings from Work Management / Maintenance Efficiency Bulletins

Session Organizers: Jon Anderson (ACA), Pete Arthur (INPO) Participants: John McDonald (Southern Nuclear), Adam Dow (MCR Performance Solutions) Room: Amelia Ballroom 1

This workshop will include proactive game changers from Business, Maintenance and Work Management. These experts will be discussing the Nuclear Promise changes being made to reduce the cost and increase the effectiveness of Work Management and Maintenance. They will be identifying concrete actions that have been taken to significantly improve the value of these initiatives. This will be a conversation changing event where we measure the before and after costs associated with these topics. The topics they will be discussing include:

- EB 16-15a: Work Screening Process
- EB 16-15b: Utilizing Minor Maintenance
- EB 16-15c: FIN Team Efficiency

### **OPERATIONS/OPS TRAINING**

#### Training to Improve Operator Performance

Session Organizer and Moderator: RJ Frederes (Exelon)

Participants: George Pickar, Stephen Harris, Wes Lyon *(Southern Nuclear)*, Bruce Hennigan *(Exelon)*, James Bubba Edwards *(WCNOC)* 

Room: Cumberland C

Is "training for performance improvement" a platitude or the core of how we train? This panel discussion will provide real insights into what it means to train for performance improvement.

#### MONDAY AUGUST 7 EDUCATIONAL SESSIONS 3: 3:30-5:00 PM

#### PERFORMANCE IMPROVEMENT

#### The 'How to' on Improving Organizational Effectiveness and Leadership Behaviors

Session Organizer: Marcia Lesniak (Exelon) Participants: Joellen Muntz (Exelon), Gary Waldrep (INPO) Room: Ossabaw B

Ever wonder what your organization is missing that is keeping your organization from the next level of performance? Well here is your opportunity to hear what sets other organizations apart. You will hear from INPO and the industry on what are some simple tactics to improve organizational effectiveness, align leadership behaviors, and some performance monitoring tools to drive performance.

#### **REGULATORY RELATIONS**

#### Advanced non-LWR Licensing Challenges - Transitioning Barriers to Bridges

Session Organizer: Amir Afzali (Southern Nuclear)

**Participants:** George Apostolakis (*former NRC Commissioner*), Jim Kinsey (*INL*), John Monninger (*NRC*) **Room:** Amelia Ballroom 2/3

Nuclear energy is the dominant energy option for generating environmentally responsible energy while serving national security interests. Advanced non-LWR technologies expand the use of this unique source of energy by providing additional flexibility, such as replacing diesel generators in remote locations, and providing an alternative to fossil for process heat generation and seawater desalination. Yet deployment of these technologies has remained a major challenge in the US. Securing the required capital is necessary for deployment, but securing capital is challenged by uncertainties in licensing. The nation needs this barrier to innovation removed. This requires a licensing framework that strengthens the regulator, and provides improved certainty for reactor developers / investors. The distinguished panelists will provide their perspectives on removing licensing barriers to deployment of advanced non-LWRs in the US.

#### RISK MANAGEMENT See ENGINEERING&EQUIPMENT RELIABILITY

#### SUPPLY CHAIN Counterfeit, Fraudulent and Suspect Items (CFSI) Session Organizer: Jim Ripple (SNC) Participants: Roger Moerman (Atkins Global), Marc Tannenbaum (EPRI) Room: Cumberland A

Counterfeit, Fraudulent and Suspect Items (CFSI) is a continuing issue within the nuclear industry supply chain. The CFSI potential cost impacts on the operation of the stations is tremendous if the prevention of CFSI is not addressed in the supply chain processes. The session provides the recommended organizational involvement to strengthen the supply chain processes for the prevention of CFSI. Learn from an SME involved in CFSI issue for over 20 years, insight from past instances within the nuclear industry worldwide that highlight the immediate impacts to Licenses' of CFSI discovery; costs when nuclear facilities are shut down; costs to correct conditions affected by the CFSI discovery; costs to determine extent of condition prior to restart of facilities. The ripple effect and potential costs for other Licenses' when during an investigation (initial CFSI discovery) identify sources of the CFSI materials/components that maybe utilized by many of the other nuclear facilities. The prevention of CFSI entering the supply chain, methods to enhance the supply chain processes, flow down of enhanced CFSI processes, modifying contract terms and conditions identification of those involved, are intended as Cost Avoidance.

#### **TECHNOLOGY & INNOVATION**

#### **Digital / Wired Worker**

Session Organizer: Chris Comfort (Southern Nuclear) Participants: Evans Manolis (Help Lightning), Ryan O'Hagan (AMS), Chris Moustakas (Devon Way) Room: Amelia Ballroom 4

It is crazy, that in today's age, plant personnel are carrying paper and antiquated tools into the plant. With today's tools and technology our workers should be empowered to utilize these resources to improve performance, increase safety, and reduce our overall costs. In this session, we will look at some technologies that have already started this shift as well as a look into the future of what is possible.

WORK MANAGEMENT See Maintenance

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 4: 10:30 AM-12:00 PM

#### **BUSINESS/ECONOMIC PERFORMANCE**

#### The System Engineering Role in Business and Plant Processes

Session Organizer: Adam Dow (MCR Performance Solutions) Participants: Molly Strasser (Xcel Energy), Trevor Krawcyk (Exelon), Emily DeBrock (Exelon) Room: Talbot A

Recent Delivering The Nuclear Promise (DNP) efficiency bulletins have focused on optimizing system and program health reporting requirements. This is achieved via process streamlining and/or reducing the number of program/system health reports through the elimination of low-value system and administrative burdens and replacing them with a graded approach leveraging Key Performance Indicators (KPIs) or other valid forms of communication. The desired end state is an efficient and cost-effective means of translating plant condition through an appropriate mode, coalescing data into projects within the plants portfolio and planning horizon. At the forefront of this DNP initiative are the system engineers, the custodians of plant system assets. Presentations and discussions will focus on the role of (and burden on) the system engineers, driving complete discovery of the known or knowable issues and rigorous, risk-informed evaluation of discovered information within the context of system/program reporting, plant health committee interfaces (PHC), and life cycle management processes.

#### ENGINEERING&EQUIPMENT RELIABILITY DNP Status and Overview

Session Organizer: Brad Adams (Southern Nuclear)

**Participants:** Amir Shahkarami (CASe Group), Sudesh Gambhir (INPO), John Grabnar (First Energy), Gene Kelly (Exelon)

Room: Cumberland B

Brad Adams will host a session on the current state of the DNP initiatives, what is upcoming what has completed. How is the program evolving and adapting? Where are the successes and what can we expect in 2018. This panel will cover the DNP major topical areas and we will be here to answer your questions.

#### EXECUTIVE/LEADERSHIP

#### The Pursuit of "Excessilence" - Can We Go Back to "Good Enough?"

Session Organizer: Jim Little (Executive Consultant Nuclear Energy Programs) Participants: Jim Little (Executive Consultant Nuclear Energy Programs), Jeff Merrifield (Pillsbury Winthrop Shaw Pittman LLP), Gary Leidich (Western Electricity Coordinating Council), Ernie Kapapolous (Robinson Nuclear Plant)

Room: Conference Room 2/3

The U.S. the nuclear industry is facing a new and significant set of challenges to its very existence and future including aging fleets, equipment obsolescence, fragmented supply chains, and ever increasing retirements of knowledge workers and an accompanying set of increasing regulations and requirements. The resulting increase in operational cost combined with of low demand growth, significant increases in competing sources of supply with historically low natural gas prices, and the rapid deployment of renewable technologies bolstered by regulatory policies with significant subsidies and tax credits will, if left alone, see nuclear generation significantly decline as investors will seek more profitable opportunities elsewhere.

The panel of key engineering, operations and regulatory executives and managers will explore further opportunities for significant cost reductions achieved through the critical and thorough re-examination of the requirements, and responses to those requirements that the industry has imposed upon itself over the past decades in the pursuit of excellence and continuous improvement. As the industry has already been successful in advancing risk informed regulation to explore whether proposed regulations actually produce a needed safety benefit, it seems logical to examine the industry's own self-imposed practices, using risk-informed techniques, to see indeed if they are producing the desired financial benefits as well. This topic is not without some controversy and hesitation and begs the question," Has the industry lost sight of "good enough" results and gone too far in the pursuit of excellence to end up in an era of "excessilence"?

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 4: 10:30 AM-12:00 PM

#### MAINTENANCE/WORK MANAGEMENT

Proposed Simplified Work Management Process (Revision to INPO AP-928. The target for issuance of AP-928 rev 5 is 9/4/17)

**Session Organizers:** Pete Arthur (*INPO*), John McDonald (*Southern Nuclear Company*) **Participants:** Pete Arthur (*INPO*), John McDonald (*Southern Nuclear Company*) **Room:** Amelia Ballroom 1

This session will introduce the proposed simplified work management process. The simplified work management process is intended to expedite the work flow for new incoming work and significantly reduce the "hands on" or "touching" of repetitive or reoccurring type work. Repetitive or reoccurring work will introduce the concept of more automation and less human interface in order to reduce the "touching" or "hands on" of these type tasks.

#### **OPERATIONS/OPS TRAINING**

Event Review Process

Session Organizer and Moderator: James Bubba Edwards (WCNOC) Participants: Ron Gibbs (STPNOC), Sara Lange (Ameren), Bruce Hennigan (Exelon) Room: Cumberland C

A working discussion on post-event reviews including self-critiques to identify crew performance or process gaps.

#### PERFORMANCE IMPROVEMENT

#### Industry Benchmarking – Open Q&A with the Industry's PI Leaders

Session Organizer: Reiko Perleberg (Southern Nuclear) Participants: Kevin Rackley (TVA) Room: Ossabaw B

An open forum to ask all the questions of the PI leaders in the industry to get a pulse on what, where, and when, and how your peers are headed. It is a great opportunity to see and hear what everyone is doing around the industry. You will not want to miss it!

#### PERFORMANCE IMPROVEMENT

Using HU Tools? Prove it! Session Organizer: Brandon Marlow (Southern Nuclear) Participants: Larry Bird (Bruce), Mike Minty (Bruce)

Room: Ossabaw A

The team is working in the vault. You have confidence they understand the job and have all the physical tools necessary to finish the task, but you are not as confident concerning the "how" work will be performed. Come see how dynamic learning activities (DLA) to demonstrate their ability to apply HU Tools in a challenging setting.

#### **REGULATORY RELATIONS/RISK MANAGEMENT**

**Restoring Regulatory Confidence in Risk-Informed: What Happened?** 

Session Organizers: Roy Linthicum (*Exelon*), Ken McElroy (*Southern Nuclear*) Participants: Victoria Anderson (*NEI*), Joe Giitter (*NRC*), Rick Grantom (*CRG LLC*) Room: Amelia Ballroom 2/3

The U.S. industry has been actively employing risk-informed thinking for over 20 year and until recently, has made significant strides in risk-informing regulatory applications. Over the last several years, this momentum has stalled, in large part, due to a loss of confidence by the NRC in the industry's' tools and decision making process. This session will explore the potential reasons for this loss of confidence and explore ways to restore it.

#### **RISK MANAGEMENT** See Regulatory Relations

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 4: 10:30 AM-12:00 PM

#### SUPPLY CHAIN/TECHNOLOGY & INNOVATION

Warehouse of the Future Session Organizer: Bill Frye (Duke) Participants: Jim Ripple (Southern Nuclear) Room: Cumberland A

Implementing RFID technology has decreased in cost and applications previously prohibitive of this technology are now feasible. In addition, advances in IT have similarly progressed along with the computerization of work management processes such that a tipping point has thus been reached that will allow the application of these technologies to further automate the warehousing function. This presentation will discuss how the use of RFID technology will allow the closing of traditionally manned issue counters and toolrooms and allow for unmanned and essentially virtual warehouses at jobsite or Maintenance locations. Headcount reductions in Supply Chain, minimization of tool room losses, and efficiencies in Maintenance labor utilization are significant (over \$1 million per year per site possible) with payback easily within 12-18 months.

Breakout Sessions: Tuesday August 8

**TECHNOLOGY & INNOVATION** See Supply Chain

WORK MANAGEMENT See Maintenance

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#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 5: 1:30-3:00 PM

BUSINESS/ECONOMIC PERFORMANCE

See Maintenance

#### ENGINEERING&EQUIPMENT RELIABILITY Standard Design Process Update

Session Organizer: Rick McAdams (*Southern Nuclear*) Participants: John Connelly (*Exelon*), Sudesh Gambhir (*INPO*), Ashley Taylor (*TVA*), Brian Griner (*Southern Nuclear*), EOC perspective - TBD Room: Cumberland B

At the beginning of the year over 30 units have adopted the Standard Design Process (SDP) and by the end of July all domestic units will be operating with this new process. This session will provide a high level overview of the SDP, lessons learned from the roll out both from the utility and EOC perspectives, and performance and efficiency gains.

The session will also provide an overview of two new initiatives that will build on the SDP process and infrastructure. This includes integrating digital strategies into the SDP, and industry standardized processes and infrastructure for item equivalencies and parts obsolescence.

#### EXECUTIVE/LEADERSHIP Preserving Nuclear Competitiveness Amid Technological Disruption Session Organizer: Clinton Carter (Luminant) Participants: TBD

Room: Conference Room 2/3

Market forces and technological disruption are challenging the ongoing competitiveness of the nuclear power industry. The Fourth Industrial Revolution, using the capabilities of advanced technologies, holds the promise of enabling the kind of nuclear power transformation needed to ensure its availability as a key provider of energy for the foreseeable future. This session provides an overview of the drivers behind this technological revolution, what it means for the future and how, through collaboration, the nuclear power industry can continue to deliver its inherent benefits for all mankind

#### MAINTENANCE/WORK MANAGEMENT/BUSINESS/ECONOMIC PERFORMANCE Prerequisites for Cost Reductions

Session Organizers: Jon Anderson (Anderson, Chavet & Anderson), Adam Dow (MCR), Jordan Gillis (ScottMadden) Participants: TBD

Room: Amelia Ballroom 1

The cost of operations at a nuclear plant can be reduced by 20 to 30% by "simply" reducing the number of full time employees, supplemental employees, and amount of overtime. However, safe and efficient implementation requires that several necessary "prerequisites" are met before these reductions can be made in a way that realizes actual improvement. This workshop will include some of the most forward thinking Business, Work Management and Maintenance personnel who are analyzing the Efficiency Bulletins and developing a strategic approach to not only implement the bulletins, but also ensure these prerequisites are met. Engaged participants in this workshop will leave with a greater understanding of what needs to happen to be ready to make changes and sustain safe operations with only 70% to 80% of their current staff.

### **OPERATIONS/OPS TRAINING**

#### Shift Manager Leadership

Session Organizer and Moderator: Bruce Hennigan (*Exelon*) Participants: George Pickar (*Southern Nuclear*), Stephen Harris (*Southern Nuclear*) Room: Cumberland C

The Shift Manager's role as leader of the site for one shift at a time is unique and can be daunting. Shift Manager development must also be unique and should be designed to meet the needs of the individual shift managers as well as the site.

#### PERFORMANCE IMPROVEMENT Proficiency & Trajectory– Taking this Initiative from Theory to Practical Application Session Organizer: Brandon Marlow (Southern Nuclear)

**Participants:** Kim Maza (*INPO*), Chantelle Hurst (*Duke*), Lori Armstrong (*Dominion*) **Room:** Ossabaw B

You will hear from INPO and Industry leaders about the meaning behind the term "proficiency", why it is an initiative we cannot afford to live without, and how you can help create a culture that values Proficiency at your station. In this interactive session, you will hear innovative ways to introduce Proficiency and brainstorm new ideas to help continue to shape and define this initiative for the industry.

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 5: 1:30-3:00 PM

#### **REGULATORY RELATIONS**

#### License Amendment Process and Process Improvements

Session Organizer: Jamie Coleman (Southern Nuclear) Participants: Jim Barstow (Exelon), Eric Benner (NRC), Lance Sterling (STP) Room: Amelia Ballroom 2/3

Changes to streamline the License Amendment Request (LAR) process are ongoing per the DNP Efficiency Bulletin 17-08. These changes will increase efficiencies in LAR submittals and NRC reviews. NEI 06-02, License Amendment Request Guidelines, has been revised to incorporate an industry-standard LAR process. Effort to gain efficiencies with industry-coordinated/consolidated TSTF Traveler submittals is also being pursued. Maximum benefit can be gained by working together to submit travelers, ensuring that participation in generic Owner's Group projects is more cost efficient. This session will also discuss recent NRC process changes to include updates to LIC-101 and LIC-109, and a recent DORL letter.

#### **RISK MANAGEMENT**

Applications of Seismic PRA Session Organizer: Vish Patel (Southern Nuclear) Participants: C. J. Fong (NRC), Partha Chandran (Southern Nuclear), Wally Djordjevic (Jensen Hughes) Room: Talbot B

Several US utilities have developed Seismic Probabilistic Risk Analysis (SPRA) models. While there may have been several drivers for developing SPRA models, one of the major drivers was NRC Fukushima orders. The US utilities have either submitted risk insights from the SPRA models to meet the NRC Fukushima order or are in the process of submitting this information. Other utilities may be contemplating to develop SPRA models to support various Risk-Informed applications but might be discouraged due to high development cost. The purpose of this session is three-fold - explore ways to develop seismic PRA models more economically without significantly compromising risk insights ("Seismic Smart"), explore various applications of SPRA models, and hear NRC's perspective.

#### **SUPPLY CHAIN**

#### **Unintended Consequences of Well Meaning Initiatives**

Session Organizer: Greg Keller (*Rolls-Royce*) Participants: Frank Helin (*Energy Steel*), Bradley Detamore (*GE Hitachi*), Tad Gray (*Curtiss-Wright*)

Room: Cumberland A

The DNP initiatives are well meaning and expected to bring large savings to the nuclear industry. However, some of the initiatives may also have unintended consequences outside of the utilities themselves. Such consequences could include driving suppliers from an already diminished supply base either away from the product lines currently supported or dropping their QA qualifications. This could cause utilities to expend significant design and procurement costs in replacement products, extend shutdown periods, and exacerbate obsolescence issues. This is a panel discussion.

#### **TECHNOLOGY & INNOVATION**

#### Robotics, Unmanned Aerial Vehicles (UAVs) and Remote Systems

Session Organizer: Chris Comfort (Southern Nuclear)

**Participants:** Chris Comfort *(Southern Nuclear)*, Aleksandar Vukojevic *(Duke)*, David Cislo *(AREVA)* **Room:** Amelia Ballroom 4

The use of automated tools such as robots and unmanned aerial vehicles (UAVs) are starting to play important roles in many industries. Within Nuclear these technologies are starting to become more prevalent and provide many benefits such as reducing dose, improving safety, and reducing costs. This session looks at some of the ways that technologies like this have recently been used as well as a vision of what may be to come.

#### WORK MANAGEMENT See Maintenance

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 6: 3:30-5:00 PM

#### BUSINESS/ECONOMIC PERFORMANCE See Engineering&Equipment Reliability

#### ENGINEERING&EQUIPMENT RELIABILITY/WORK MANAGEMENT/MAINTENANCE/ BUSINESS/ECONOMIC PERFORMANCE

Value Based Maintenance (VBM), What it is and What do we Need to do to Prepare for it? Session Organizers: Jon Anderson (ACA), Adam Dow (MCR)

**Participants:** Jeff Greene (*EPRI*), Rich Weisband (*Exelon*), Timothy Schlimpert (*MCR*), Jon Anderson (*ACA*) **Room:** Amelia Ballroom 1

There are three Engineering Efficiency Bulletins that have the potential to have a significant impact on Engineering, Operations, Work Management, Maintenance and Supply Chain. This workshop will start with Engineering describing the changes that will come from EB-16-25-Critical-Component-Reduction, EB 17-03a Value-Based Maintenance, and EB 17-03b Embracing Cultural Shifts for Value-Based Maintenance. Industry leaders from Engineering, Business, Maintenance and Work Management will then lead the discussion of concrete actions that should be taken to prepare for these changes and how to measure the cost savings from these changes.

#### MAINTENANCE

See Engineering&Equipment Reliability

#### PERFORMANCE IMPROVEMENT

Practical Implementation Resulting in Big Savings from the CAP Efficiency Bulletins Session Organizer: Ludwig Thibault (*Thibault Consulting*)

**Participants:** John Grabnar *(FENOC)*, Jim Schleser *(Dominion)* **Room:** Ossabaw B

Performance Improvement is under the spot light in the industry on how they gained huge savings while maintaining effective Corrective Action Programs. Learn from the industry leaders on what it takes to effectively implement CAP-001 and CAP-002 regarding the dos and don'ts to get the results you expect.

## REGULATORY RELATIONS

Select Owner's Group Topics

Session Organizer: Jack Stringfellow (Southern Nuclear) Participants: Heather Malikowski (Exelon), Susan Sallade (Exelon) Room: Amelia Ballroom 2/3

The PWR Owners' Group Chair will provide an overview of the PWROG and the BWROG missions and how they operate with emphasis on the value to the industry. The Chair of the PWROG Materials Committee will discuss various materials related issues and the Chair of the PWROG Procedures Committee will discuss collaboration with INPO related to planned INPO review visits regarding Abnormal Operating Procedures (AOPs). The PWROG and BWROG plan to develop a standards document for AOPs like that which exists for Emergency Operating Procedures to provide a consistent industry standard and assist our members in preparing for the review visits.

#### TUESDAY AUGUST 8 EDUCATIONAL SESSIONS 6: 3:30-5:00 PM

#### **RISK MANAGEMENT**

#### Characterization of Risk and Safety Benefits of Advanced

**Technology Fuel** 

Session Organizer: Owen Scott (Southern Nuclear) Participants: John Williams (Southern Nuclear), Stephen Hess (Jensen Hughes), Ray Schneider (Westinghouse) Francis Bolger (GEH) Room: Talbot B

The nuclear Industry is currently looking at various designs of new Advanced Technology Fuel (ATF) to reduce risk and improve safety of nuclear power plants. Before committing substantial resources for development and fabrication of new ATF, questions that need to be answered are how much safer will a plant be with ATF and can the benefits justify the costs? This session will discuss how PRA models can be used to quantify reduction in risk and provide insights into which characteristics of the various designs would yield the most benefits for a particular plant. A process to develop a new PRA model with success criteria based on an ATF design, which would provide a look at the risk profile and contributors to plant risk with the new fuel, and how this new PRA model could be used to evaluate the incremental cost savings from Risk Informed applications using the new ATF-based PRA model compared to the cost savings using the current PRA Model, will also be discussed.

#### SUPPLY CHAIN

#### **Contracting Best Practices**

Session Organizer: Jim Ripple (Southern Nuclear) Participants: Brandon Zimmerman, Eric Peterson (Southern Nuclear), Markley Ward (AMS-Par) Room: Cumberland A

How many times do parties write contracts where the true intent is not captured, or the parties walk away with contract gaps or two very different understandings? This breakout session will focus on some Contracting Best Practices and a "Repeat Offenders" list of clauses that result in real-time disputes and retrospective audit findings. The session will provide valuable insights for novice contract drafters and seasoned CPOs alike.

#### **TECHNOLOGY & INNOVATION**

#### **New Technology**

**Session Organizer:** Chris Comfort *(Southern Nuclear)* **Participants:** Hank Kaczowka *(NuVision)*, Lisa Ralph *(GE)*, Gregg Ott *(AREVA NP)* **Room:** Amelia Ballroom 4

What is over the horizon when it comes to technology? This session is focusing on technology that has not or is just coming available to the nuclear industry. The technology presented will provide new solutions and help us, as an industry, think about what do we focus on next.

WORK MANAGEMENT See Engineering&Equipment Reliability

#### WEDNESDAY AUGUST 9 EDUCATIONAL SESSIONS 7: 10:30 AM-12:00 PM

**BUSINESS/ECONOMIC PERFORMANCE** 

See Regulatory Relations

#### ENGINEERING&EQUIPMENT RELIABILITY

# Utility Response to an NRC concern related to the Use of Silicone Foam (Dow Corning 6548) as an Electrical Conduit Internal Seal

Session Organizer: J. Kent Johnson (Southern Nuclear)

**Participants:** J. Kent Johnson *(Southern Nuclear)*, John Antignano *(Nuvia-USA)*, EPRI Representative (TBD) **Room:** Cumberland B

This session will provide the background and initial response to an NRC concern related to the use of silicone foam (Dow Corning 6548) as an electrical conduit internal seal. Silicone foam can shrink after several days of cure time and lead to the leakage of water past an electrical conduit internal seal. The session will share information regarding the utility's strategy to be prepared for a NUREG that is expected to be issued in the future. Portions of the session will be presented by a Seal Material Subject Matter Expert who will provide information related to seal test results and introduce concepts to resolve the issue. An overview of the sources of external flooding events will also be included.

#### MAINTENANCE/WORK MANAGEMENT

#### **Open Discussion & Future DNP Activities for Work Management and Maintenance**

**Session Organizer:** Pete Arthur (*INPO*), Bryant Hearne (*INPO*) **Participants:** Pete Arthur (*INPO*), Bryant Hearne (*INPO*) **Room:** Amelia Ballroom 1

This session will include an open discussion of challenges that stations are facing. Pete Arthur and Bryant Hearne will kick off the discussion and turn it over to participants to bring up for discussion of the challenges that they are facing. Discussion by other participants will help to provide solutions that work for them.

#### **OPERATIONS/OPS TRAINING**

New Build Initial License Training Session Organizer and Moderator: Gary Dudek (Southern Nuclear) Participants: John Austin (Southern Nuclear), John Rasmussen (Southern Nuclear) Room: Cumberland C

As an industry, we have not conducted cold-license classes for a very long time. Two U.S. sites are implementing that process now and bring incredible learnings for all of us through this panel discussion.

#### PERFORMANCE IMPROVEMENT

What Success Looks Like...

Session Organizers: Reiko Perleberg (Southern Nuclear), Ludwig Thibault (Thibault Consulting) Participants: Darin Myers (Southern Nuclear), Peg Lucky (Entergy) Room: Ossabaw B

Do you know the difference between fixing an organizational problem and repairing a problem? Our speakers do, and you need to take advantage of their successes, noble failures, and continuing successes. If you are serious about recovering your organization's performance, you will want to attend this session that will get into the organizational drivers to turn your organization around.

#### WEDNESDAY AUGUST 9 EDUCATIONAL SESSIONS 7: 10:30 AM-12:00 PM

#### **REGULATORY RELATIONS/BUSINESS/ECONOMIC PERFORMANCE**

Second License Renewal: Delivering the Nuclear Promise from 60 to 80 Years

Session Organizer: Andrew Taylor (*Sargent & Lundy*) Participants: Albert Piha (*Exelon*), Craig Heah (*Dominion*), Steve Bloom (*NRC*) Room: Amelia Ballroom 2/3

Operation of a facility for 80 years is a key element for realizing its full value. By the end of 2018, thirtyfour units will have passed the 40-year mark for plant operation. Thus, one-third of the U.S. nuclear power industry will soon be eligible to apply for a second license renewal. This session brings together NRC, plant operators, and an A/E firm with issues and solutions regarding Second License Renewal (SLR), including:

- New NRC & industry guidance
- Research in aging of materials
- Lessons learned
- SLRA procedures and training

#### RISK MANAGEMENT What's Next in Probabilistic Risk Assessment (PRA)? Session Organizer: Stuart Lewis (Jensen Hughes)

**Participants:** Joe Giitter (*NRC*), Kelli Voelsing (*EPRI*) **Room:** Talbot B

Breakout Sessions: Wednesday August 9

PRA has become an important tool in managing day-to-day risks in the operation of nuclear power plants and in addressing a wide variety of safety issues. As we continue to implement a range of available risk applications, it is not too early to start considering what new challenges for PRA lie just over the horizon. The next big thing for PRA may be an important new risk-informed application that builds on the experience of the past two decades. Drawing on insights from the vast array of existing PRAs and risk applications may well offer an opportunity to risk-inform the models themselves, making it possible to develop, maintain, and apply risk technology more efficiently. Furthermore, the increasing use of risk information makes it essential that important insights and a proper understanding of the role of uncertainties be extracted and presented in a manner that can be acted on effectively by decision-makers. This session will explore these potential developments and the challenges to be met in pursuing them.

#### **SUPPLY CHAIN**

#### Contract Forensics/Supplemental Supplier Contracts (In-processing)

Session Organizer: Jim Ripple (Southern Nuclear) Participants: Brandon Zimmerman (Southern Nuclear) Room: Cumberland A

Contract Forensics (Efficiency Bulletin 16-19) is a DNP initiative which is focused on the prevention, identification and post-identification best practices regarding the prevention of financial misbilling that may not be contractually permitted. The first part of this session focuses on the industry's struggle regarding contract administration, as well as best practices regarding the use of in-house and third party auditors and what to do with the auditor's report. The second portion of this session will address Supplemental Supplier Contracts (Efficiency Bulletin 16-26d) which provides the contract changes needed to implement the In-processing DNP initiative. This session will also include a discussion of implementation challenges experienced to date and a roadmap for the future.

#### TECHNOLOGY & INNOVATION Centralized Monitoring

Session Organizer: Chris Kerr (*EPRI*) Participants: Michael Taylor (*EPRI*), Howard Nudi (*Duke Energy*) Room: Amelia Ballroom 4

Recently the industry has seen a shift towards centralized monitoring for nuclear assets. In this session, the focus is on the implementation of centralized monitoring for nuclear assets and how the data is being used for improved performance.

WORK MANAGEMENT See Maintenance

# **Exhibitors List**

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L3 MAPPSBooth 509
Lean PowerBooth 610
Lockheed MartinBooth 405
LPI, Inc
Luminant Generation Company, Power Optimization
Center (POC)
Mesa Associates IncBooth 600
Mitsubishi Electric Power Products, Inc Booth 512
Mitsubishi Nuclear Energy Systems, Inc Booth 302
National Inspection and ConsultantsBooth 108
National Technical Systems (NTS) Booth 215
New York Blower Company   SSM IndustriesBooth 212
Northrop GrummanBooth 309
NextAxiom Technology, IncBooth 106
Nuclear NewsBooth 514
Nuclear Plant JournalBooth 411
Nutherm International, IncBooth 114
OTEK CorporationBooth 209
PleaseTech LtdBooth 303
Power Services GroupBooth 101
Prometheus Group
Quest IntegrityBooth 306
ReNuke Services, IncBooth 03
Revenew International
Rolls-RoyceBooth 11
RSCC Wire & Cable, LLCBooth 207
S&ME, IncBooth 406
SANDVIKBooth 503
Saulsbury Industries
Schneider-ElectricBooth 08
Structural Group
Structural Integrity Associates, Inc Booth 310
Sulzer Pumps (US) Inc
SWIBooth 612
System OneBooth 305
TECNATOM, S. ABooth 104
Teledyne Brown EngineeringBooth 206
Toshiba America Energy SystemsBooth 404
Transco Products Inc
UniTech Services GroupBooth 10
United Controls InternationalBooth 205
ValvTechnologiesBooth 202
Wachs ServicesBooth 414
Williams Industrial Services Group, LLCBooth 12
Wiss, Janney, Elstner Associates, Inc Booth 607
Zachry GroupBooth 201



Omni Island Plantation Resort Amelia Island, Florida

# **EXPO HOURS:**

Sunday, August 6	6:00-8:00 pm
Monday, August 7	7:30 am-4:30 pm
Tuesday, August 8	7:30 am-7:30 pm
Wednesday, August 9	7:30-9:00 am



#### AECOM

#### Fort Mill, SC

(Booth 301)

AECOM is a full-service contractor to the nuclear power industry, encompassing discrete or bundled services of program management, planning, licensing, QA/ QC, engineering, procurement, construction, commissioning, maintenance, outage management, and decommissioning. We have more than 60 continuous years of nuclear facility experience, supporting owners, NSSS suppliers, and developers of enrichment facilities.

#### Aerofin

Lynchburg, VA

#### (Booth 210)

Aerofin is a leading manufacturer of Safety Related and Non-Safety Related heat transfer equipment including extended surface cooling & heating coils, shell & tube heat exchangers, vessels, and parts. Aerofin holds ASME Certificates of Authorization for ASME N, NPT, NS, S, U and PP, and we are NUPIC audited.

#### Aggreko

#### Houston, TX

(Booth 506)

Aggreko is the world leader in temporary power, temperature control and oil-free air solutions. With more than 50 years' experience, we've helped businesses around the world improve productivity, manage power demands and plan for emergencies.

#### Alphasource, Inc.

#### Philadelphia, PA

(Booths 502 & 504)

Alphasource is the leading custom manufacturer and distributor of quality FME/ FOD maintenance and drop-prevention supplies, specialized RFID solutions and innovative safety supplies for the Nuclear Industry.

Benefit from our award-winning FME/FOD Turnkey Program, RFID-Barcode Operational Efficiency Solutions, Tarps/Protective Covers, MRO, Safety, Wiping Cloths, and Decon. Supplies Programs.

Count on us for field-proven products and services backed by three generations of practical experience with quick turnaround capabilities that ensure your deadlines and compliance needs are satisfied.

#### Altran US Corp.

Bordentown, NJ

#### (Booth 204)

Altran was founded in 1986 and delivers high quality, cost conscious solutions to the nuclear power industry. We provide analytical services across all disciplines with specialties in digital instrumentation and controls, engineering programs, and material science. Altran employs over 300 highly qualified professionals with strategic office locations across North America.

#### Amec Foster Wheeler

Naperville, IL

#### (Booth 13)

For more than 60 years, Amec Foster Wheeler has occupied a significant position in the commercial nuclear market in the US, the UK and Canada. We have more than 3,000 specialists dedicated to the nuclear power industry, providing services from site hazard assessment to operating nuclear power plants technical support and project management to site remediation.

#### **Applied Technical Service**

#### Greenville, SC

(Booth 614)

ATS is a materials testing and Non-destructive Testing firm with extensive testing services and inspection capabilities. Since our founding in 1967, we have grown to perform all phases of field and lab non-destructive testing, which also include Rope Access Inspection, Tank Inspection, Weld Inspection (CWI and Visual), API Inspection, 510, 570, and 653. ATS has 30 office located in the US. ATS is NIAC and NUPIC qualified.

#### AREVA Inc.

#### Lynchburg, VA

AREVA Inc. combines U.S. and Canadian leadership to supply high added-value products and services to support the operation of the commercial nuclear fleet. AREVA is recognized by utilities around the world for its expertise, its skills in cutting-edge technologies, and its dedication to the highest level of safety.

#### Atkins

Charlotte, NC

(Booths 413 & 415)

Atkins' energy business provides expert consultancy, engineering and design, and project management services to the nuclear, oil and gas, renewables, and conventional power sectors worldwide from our hubs in North America, the United Kingdom, Middle East and Asia Pacific. We merge original thinking with our 60 years' experience in energy, helping to transform the potential of existing infrastructure as well as new resources and technology, to improve lives through safer, cleaner and smarter energy.

#### The Austin Company

Cleveland, OH

Fort Worth, TX

The Austin Company, founded in Cleveland, Ohio, in 1878, provides planning, architectural design, engineering, design-build, EPC, construction management, and construction solutions for nuclear support facilities throughout North America. We deliver "Results, not Excuses®".

#### AZZ Nuclear (formerly AZZ NLI)

(Booth 315)

(Booth 505)

AZZ Nuclear is a global supplier of equipment, service, and engineering to the nuclear power industry. AZZ Nuclear offers a wide array of electrical, mechanical, I&C, and HVAC products and services under its 10CFR50 Appendix B QA Program and ASME III N-Stamp.

#### AZZ Specialty Welding (formerly AZZ WSI) Norcross, GA

(Booth 313)

AZZ Specialty Welding is a global leader in designing and implementing specialty welding solutions with more than 35 years of experience and expertise in solving critical energy industry issues that are safety, schedule and quality critical – including maintenance, repair, replacement, and Stress Corrosion Cracking (SCC) solutions/services for the nuclear power industry.

#### Barnhart

Memphis, TN

(Booth 103)

(Booth 515)

(Booth 601)

Over the last three decades, Barnhart has built an impressive nuclear project résumé. Our team of nuclear experts includes personnel with backgrounds from both the construction and operations side of the nuclear industry. Barnhart's experience has brought the kind of innovative design and execution that makes money in reducing Critical Path during outages and improving ALARA in handling components in containment.

### BHI Energy

Weymouth, MA

BHI Energy is a leading provider of specialty maintenance, radiation protection and professional staffing solutions to the nuclear power industry. With more than 35 years of experience, BHI's proven approach combines strong leadership with a highly skilled technical and craft workforce to deliver these services individually, or bundled as an integrated, turnkey offering to our customers.

#### Black & Veatch Overland Park, KS

Black & Veatch is an employee-owned company with more than 100 offices worldwide. Our work results in long-lasting client relationships, reliable infrastructure improvements, and recognition from the industry as a global leader. Since 1915, we have provided comprehensive services to our clients across the globe. Learn more at by.com.

(Booth 401)

#### Black Diamond Services, Inc.

Grayslake, IL

(Booth 214)

Black Diamond Services (BDS) is one of the leading providers of project management and technical services for complex capital and O&M improvement projects for the nuclear industry. BDS has specialized resources that have been in key leadership positions on Decommissioning Projects, Large Component Replacement Projects, Major Plant Modifications for Operating Plants. BDS is a privately owned Women Business Enterprise (WBE) Company that is largely committed to work in the nuclear power industry. www.blackdiamondservices.com

#### Burns & McDonnell

Kansas City, MO

(Booth 407)

Burns & McDonnell comprises more than 5,700 engineers, architects, construction professionals, scientists, consultants and entrepreneurs. We strive to create amazing success for our clients and amazing careers for our employee-owners. We are steadfast in our mission to make our clients successful. For more information, visit burnsmcd.com.

#### **BWX** Technologies, Inc.

Lynchburg, VA

(Booth 308)

Headquartered in Lynchburg, Va., BWX Technologies, Inc. (BWXT) is a leading supplier of nuclear components and fuel to the U.S. government; provides technical, management and site services to support governments in the operation of complex facilities and environmental remediation activities; and supplies precision manufactured components and services for the commercial nuclear power industry. BWXT has approximately 5,600 employees and significant operations in Lynchburg, Va.; Erwin, Tenn.; Mount Vernon, Ind.; Euclid, Ohio; Barberton, Ohio; and Cambridge, Ontario.

#### **CableLAN Nuclear**

Norfolk, MA

www.cablelannuclear.com

CableLAN Nuclear is the leading supplier of fiber optic and communications cable, patch panels, cable assemblies, patch cords and related products for nuclear power plants worldwide. We instituted our own NQA-1 and Appendix B program in 2016, and can supply any of our products with certification under these programs. Our fiber optic cable partner, Prysmian/Draka, is the world's premier manufacturer of radiation

resistant optical fiber, with demonstrated performance for 60 years.

#### Camfil

Washington, NC

(Booth 615)

(Booth 216)

Camfil is a global leader in air filtration technology with over 50 years' experience designing, manufacturing and servicing sustainable highefficiency filters and custom containment systems. Markets include industrial, biosafety, pharmaceutical, nuclear, research, healthcare, military, and homeland security. Camfil is your single-source provider for complete clean air solutions. www.camfil.com

#### **Canadian Nuclear Laboratories**

#### Ontario, Canada

(Booth 511)

Canadian Nuclear Laboratories (CNL) is Canada's premier nuclear science and technology laboratory, dedicated to developing peaceful and innovative applications from nuclear technology through its expertise in physics, metallurgy, chemistry, biology, and engineering. We address global issues across the nuclear lifecycle and develop novel medical isotopes and devices.

#### Ceradyne, Inc., a 3M Company

St. Paul, MN (Booth 116)

Stable isotopes from Ceradyne, Inc., a 3M company have been helping the nuclear industry operate more efficiently and safely for nearly 30 years. From reactor criticality control to fuel and waste management, our neutron absorbing materials are helping to make nuclear power a safer and more affordable option for powering tomorrow's world. www.3m.com/boron

#### **Certrec Corporation**

Fort Worth, TX

Founded in 1988, CERTREC is a regulatory compliance process expert that helps utilities manage the regulatory process to their advantage. With more than 1,000 cumulative years of regulatory and industry experience with the Nuclear Regulatory Commission (NRC), the Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC), and other Regional Entities, Certrec's Office of Licensing and Compliance, Office of NERC Compliance, Office of Assessment and Recovery, and New Plant services are used by utilities across North America.

#### ChemStaff

Joliet, IL

(Booth 603)

(Booth 09)

ChemStaff is an engineering consulting company serving the global power industry with core expertise in Chemistry, Engineering, Environmental, & Health Physics Programs. We are headquartered in Joliet, Illinois, with 40+ consultants located throughout the US. Our team brings decades of experience working directly for leading US utilities and new power plant producers to solve problems and help optimize plant performance, reduce cost and operator burden, reduce radiation fields, and improve compliance. Contact ChemStaff at info@chemstaff.com

#### **Copperleaf Technologies**

Vancouver / BC / Canada

(Booth 117)

Copperleaf is a global provider of decision analytics to organizations facing the challenges of managing critical infrastructure. We leverage operational and financial data to empower organizations to manage risk, improve performance, and deliver the highest value to stakeholders.

#### **Curtiss-Wright Nuclear Division**

Brea, CA

(Booth 402)

Curtiss-Wright Nuclear provides a comprehensive range of products and services that sustain the safe, reliable, and cost-effective operation of nuclear power plants worldwide. We offer proactive solutions to critical plant obsolescence issues, and we provide innovative technologies in support of Plant Life Extension and Delivering the Nuclear Promise.

#### DataGlance

Fremont, CA

(Booth 608)

DataGlance, Inc. develops products and services for Enterprise Data Management that support electronic Work Package (eWP), data conversion, data migration, data archiving, Web services, and document generation.

Our unique experience and skill sets with nuclear work management processes and data management has positioned DataGlance as the leading commercial nuclear power eWP solution provider.

#### Day & Zimmermann

#### Lancaster, PA

#### (Booth 403)

Day & Zimmermann is the #1 ranked O&M contractor in the power industry. We are the leading provider of maintenance, modifications, and major projects to the nation's nuclear power generation fleet. Specialty services include condensers, valves, turbines, scaffolding, asbestos abatement & insulation, radiological protection, security screening, and professional & technical staffing.

#### **Doosan HF Controls Corp.** Carrollton, TX

(Booth 508)

Doosan HF Controls, headquartered in Carrollton Texas USA, is an I&C solutions provider that has supplied and serviced Instrumentation and Control (I&C) systems to American and International clients for over 50 years across the fossil and nuclear markets. Doosan HF Controls has become a major nuclear supplier as it expands its business portfolio. For more information: 1-866-501-9954 www.hfcontrols.com

#### DP Engineering Ltd. Co.

Fort Worth, TX

(Booth 14)

DP Engineering Ltd. Co. is a leading provider of engineering and consulting services to the power industry in the United States. DPE was established to provide value-added engineering services and contributing to the continued success of our clients. Our core engineering competencies include project studies, design modifications, engineering analysis.

#### DRS Consolidated Controls, Inc.

Danbury, CT

(Booth 501)

DRS Consolidated Controls, Inc. (DRS-CCI) has been a premier supplier of Class 1E and non-1E Instrumentation and Control (I&C) systems and sensors to the nuclear industry for more than sixty years. DRS-CCI designs, qualifies, and manufactures systems and sensors for both commercial nuclear power plants and the U.S. Navy.

#### Electrical Builders, Inc. (EBI) St. Cloud, MN

(Booth 606)

For 43 years, EBI has served over 70% of the U.S. nuclear fleet and earned the reputation as North America's "Bus Duct Experts". Your one stop solution for; supply, installation, design, fabrication, modification, inspections, repair and more. Their expertise spans all OEM designs, both current and obsolete. Visit www.electricalbuilders.com.

#### ENERCON

#### Kennesaw, GA

(Booth 307)

Enercon Services, Inc. (ENERCON) is an architectural engineering, environmental, technical and management services firm known for innovation, excellence, responsiveness and commitment. With 30 strategically located offices and over 1500 professionals, ENERCON provides a broad range of professional services to private, public, and government sector clients throughout the United States and internationally.

#### Energy Steel & Supply Company Lapeer, MI

(Booth 416)

Energy Steel is widely recognized for expertise in integrated solutions, custom fabrication of pressure vessels, mechanical components, heat exchangers, specialty piping, pumps, fabricated structural supports, and component refurbishment in obsolescence including replacement of OEM legacy parts & components. With over 35 years of dedicated service emphasizing safety and quality first, we maintain the highest certifications in the field.

#### EnergySolutions

#### Oak Ridge, TN

EnergySolutions is an international nuclear services company with operations and facilities in the United States, Canada, Asia and United Kingdom. Our more than 4,000 professionals provide integrated services and solutions to the nuclear industry. EnergySolutions is the global leader in the safe recycling, processing and disposal of nuclear material.

# **Engineered Solutions, Inc.** Athens, AL

Engineered Solutions, Inc. established in 1987, as a consortium of power industry professionals with considerable knowledge and experience in plant operations, design, implementation and testing.

Specializing in Electrical/I&C engineering/planning/construction/testing and managing projects as an EPC.

Our nuclear experience and team culture is known for implementing a wide-range of technical solutions.

#### EPM, Inc.

Framingham, MA

(Booth 412)

EPM is a multi-discipline engineering company that provides services in fire safety, PRA/PSA, Risk Informed Regulation, 10CFR50.69, RITS 4B, RITS 5B. Our safety related software solutions include cable and raceway and cable aging management system, post fire safe shutdown analysis and Environmental Qualification (EQ) modules. We have expertise in engineering programs such as Environmental Qualification (EQ), Safety Classification and categorization.

#### **EXCEL Services Corporation** Rockville, MD

(Booths 04, 05 & 06)

EXCEL Services Corporation (EXCEL) specializes in providing operations, engineering, safety, and regulatory services for energy and environmental projects worldwide. These specialized services include: License Renewal, Power Uprate, 24 Month Fuel Cycle Extensions, ITS Conversions/Upgrades, Training, Used Fuel Storage Licensing, New Nuclear Build Licensing, Critical Infrastructure Protection, and Executive Performance Solutions. In its 32-year history, EXCEL has worked with every nuclear utility in the U.S. and with numerous international facilities and organizations.

#### Flowserve Corporation Charlotte, NC

(Booths 408 & 410)

Flowserve has been a pioneer in pump and seal technology for the nuclear power industry. We have key equipment installed in all plants throughout the Americas as well as equipment outside this region. We offer a broad array of aftermarket equipment services, such as OEM parts, replacement units, installation, advanced diagnostics, upgrades, repair and retrofitting. We support both the existing nuclear fleet as well as new construction. With heritage names like Byron Jackson and Pacific, we are here to support you. Please contact Jim Cook for more information.

# Gateway for Accelerated Innovation in Nuclear (GAIN)Idaho Falls, ID(Booth 311)

DOE's Office of Nuclear Energy established the Gateway for Accelerated Innovation in Nuclear (GAIN), to make state-of-the-art research, development, and deployment infrastructure, regulatory expertise, and financial support available to the nuclear industry to optimize development of advanced nuclear energy technologies toward commercial readiness.

#### **GE Hitachi Nuclear Energy** Wilmington, NC

(Booth 07)

GE Hitachi Nuclear Energy (GEH) is a world-leading provider of advanced reactor technology, nuclear fuel and services. GEH is a global nuclear alliance created by GE and Hitachi to serve the global nuclear industry. The alliance offers customers around the world the technological leadership required to effectively enhance reactor performance, power output and safety.

(Booth 102)

(Booth 02)

#### **General Atomics**

#### San Diego, CA

(Booth 211)

General Atomics (GA) has been at the cutting edge of nuclear energy research and innovation since 1955. GA's revolutionary silicon-carbide composite cladding is the key to enabling an Accident Tolerant Fuel rod that will greatly enhance fuel rod safety and durability, and improve plant economics and performance in both current and advanced reactors.

### **GLSEQ. LLC**

#### Huntsville, AL

(Booth 208)

GLSEQ, LLC is featuring GLS Advanced I&C Hydrogen and Oxygen Monitors. GLS Severe Accident Instruments: IS-SAIL™ and Condition Monitoring Instruments: M-FI<sup>™</sup> require no electronics in containment and directly measure hydrogen, oxygen, temperature, and pressure. The benefits are streamlined SAMG scenarios and elimination of most equipment in combustible gas control systems.

#### Help Lightning Birmingham, AL

(Booth 609)

Help Lightning delivers patented, mobile merged reality virtual interactive presence. Digitally merge two real-time views, blending local and remote collaborative video streams to give or receive interactive help anywhere. Instantly. Service experts can visually collaborate and assist with issues as though they were working side-by-side with a colleague or customer.

#### Industrial Training International Woodland, WA

(Booth 105)

Industrial Training International is a global leader in training and technical services for users of load handling equipment, and the maker of the ITI Mobile Crane Simulator, the most widely-used VR training and assessment platform in the industry. In business since 1986, ITI provides hands-on instruction in over 75 countries and online at ITI.com

#### INL Light Water Reactor Sustainability Program Idaho Falls, ID (Booth 312)

The Light Water Reactor Sustainability (LWRS) Program is an R&D program sponsored by DOE with participation by NRC and the nuclear industry. LWRS leverages the extensive capabilities of DOE's national labs to provide the technical foundation for licensing and managing the long-term safe operation of existing nuclear power plants.

#### INTERCON ENTERPRISES INC.

Blaine, WA

#### (Booth 213)

Intercon Enterprises Inc will be showcasing their InterPurge line of pipe purging equipment as well as measuring equipment. With our system a welder with our system can reduce the rest oxygen level down to 50 ppm and is ready to weld in 2 minutes. Please visit our booth for information.

#### James C. White Company, Inc. Greenville, SC

#### (Booth 605)

The manufacturer of TUBETRACK® and CABLE-RACE®, Complete Support Systems for Tubes and Cables that connect instruments and controls, including Solid Stainless Steel Tube and Pipe Clamps. Offers custom machining and fabrication to customer specifications. Established in 1954, serving the nuclear industry since the 1970's under the company's nuclear QA Program (10CFR50 Appendix B, ANSI N45.2, ASME NQA-1, ASME III NCA-3800).

#### Jensen Hughes Baltimore, MD

(Booth 611)

JENSEN HUGHES is a comprehensive engineering firm dedicated to smart, practical solutions for the built environment. Strategically linking Engineering, Policy, and Research, our Power Services Group partners with utilities in creating optimal solutions for all disciplines, including civil-structural, mechanical, electrical, I&C, fire protection, thermal hydraulics, risk-informed engineering, and failure analysis.

#### Joseph Oat Corporation

#### Camden, NJ

Joseph Oat is a well renowned OEM designer and fabricator of Safety-Related products for the Nuclear Power Industry. We have supplied critical heat exchangers, coolers, pressure vessels, tanks, spent fuel canisters, and special NQA-1 component fabrications to nuclear utility customers worldwide. We have continuously held an 'N' Stamp certification since 1966 and maintain an excellent reputation in the industry. We Make Metal Work©.

#### **Kinectrics**

Ontario, Canada

(Booths 314 & 316)

(Booth 409)

Kinectrics' offers expert capabilities and advanced lab facilities for radioactive materials and analytical chemistry testing, materials characterization, nuclear waste management, fuel channels, refurbishment, and licensing support. We provide complete services for EQ and CGD, reverse engineering (new dedicated facility) inspection and maintenance systems, and leading-edge nuclear inspection tooling. www.kinectrics.com www.kinectrics.us

#### Konecranes Nuclear Equipment & Services New Berlin, WI

(Booth 507)

Konecranes can expertly provide all nuclear material handling equipment, services, and equipment modernizations worldwide with a capability of servicing and modernizing any manufacturers' equipment within nuclear power plants, nuclear waste storage, fuel processing, and test facilities including the most critical safety-related lifting equipment.

#### L3 MAPPS

Montreal, Quebec

(Booth 509)

Count on L3 MAPPS to effectively deliver a simulator solution that best suits your training or engineering needs. We offer simulators ranging from classroom trainers and system trainers to full scope operator training simulators including severe accident simulation-all designed and aimed at unlocking value for your organization. We even provide innovative learning technologies for efficient fundamentals and systems training.

#### Lean Power

Chicago, IL

(Booth 610)

Lean Power is a new way to prepare, perform, and optimize your field service operations. Increase uptime, decrease cost, and reduce risk by digitizing your paper-based process. Come see how to create new, scalable procedures quickly and easily, and execute those procedures in the field using a convenient mobile app.

#### Lockheed Martin

Archbald, PA

(Booth 405)

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 97,000 people worldwide. Lockheed Martin provides total systems solutions and services for civil nuclear power applications. Lockheed Martin has provided discrete and digital safety-critical instrumentation and control (I&C) systems for civil and DoD customers for over 60 years.

#### LPI. Inc.

New York, NY

(Booth 510)

www.lpiny.com

LPI, Inc. is an engineering consulting firm using advanced analytical techniques, tools, and instrumentation for fatigue, failure, & material analysis, Fitness-for-Service assessments, and nondestructive examination to assess and deliver to our clients the most accurate and economical solutions to both simple and complex engineering problems.

#### Luminant Generation Company, Power Optimization Center (POC) New York, NY (Booth 113)

The Power Optimization Center offers 24/7 real-time operational support, leveraging power generation experience, data analytics, and well-defined processes and procedures, providing actionable-intelligence to our customers, maximizing the efficiency and reliability of their assets.

#### Mesa Associates Inc.

Knoxville, TN

(Booth 600)

Mesa is a woman/minority-owned full service multi-discipline engineering, procurement, and construction management firm providing engineering services for the nuclear power generation utility industry. Mesa provides BOP multidiscipline engineering support specializing in plant modifications, upgrades, and fast-track projects. Mesa's staff is qualified and experienced in developing engineering/design modification documentation, 10 CFR 50.59 evaluations, and FSAR review/updates. Our approved/proven Appendix B QA and Equipment Qualification/ Dedication programs are instrumental to our project delivery success.

#### **Mitsubishi Electric Power Products, Inc.** Warrendale, PA

(Booth 512)

Mitsubishi Electric Corporation (MELCO) is a world leader in designing, manufacturing and implementing advanced nuclear power plant control solutions, with more than 30 years of experience and plant-wide digital control systems installed in over twenty operating nuclear power reactors worldwide.

#### Mitsubishi Nuclear Energy Systems, Inc. Charlotte. NC

(Booth 302)

Mitsubishi Nuclear Energy Systems, Inc. (www.mnes-us.com), the U.S. nuclear operations for Mitsubishi Heavy Industries, Ltd., offers advanced nuclear services, inspection technologies, and components. Mitsubishi is the world leader in nuclear Water Jet Peening solutions with 16 years of field proven experience through 47 international projects.

#### National Inspection and Consultants Fort Myers, FL

(Booth 108)

NIC can perform non destructive testing services on various segments of a nuclear plant.

NIC has established Quality Assurance Programs that meet the requirements of 10CFR50, Appendix B; NQA-1; 10CFR Part 21. NIC has been audited and approved by Nupic.

## National Technical Systems (NTS)

Huntsville, AL

(Booth 215)

NTS provides test, inspection and certification services to help clients build better, stronger, safer, more reliable products. Our engineers and technicians serve a wide range of industries such as aerospace, defense, telecom and energy. With a nationwide network of laboratories, we bring a unified solution to a global market.

### New York Blower Company | SSM Industries

Willowbrook, IL

(Booth 212)

The New York Blower Company and SSM Industries have teamed together to provide filtration decommissioning skids to the nuclear industry. New York Blower is an industry leader in manufacturing premiumquality, engineered fans and blowers to the industrial, OEM and nuclear marketplace. SSM Industries, Inc.(formally Schneider Sheetmetal), is the largest Safety Related HVAC Designer-Fabricator-Installer in the United States with over 40 years continuous Nuclear Experience.

#### NextAxiom Technology, Inc.

#### San Francisco, CA

NextAxiom enables a new class of advanced nuclear solutions such as a fully integrated mobile work package, streamlined work management, simplified corrective action, real-time P6 scheduling, role-based mobile approvals, and more.

Nuclear Utilities worldwide use NextAxiom software to implement their seamless digital environment and deliver on the Nuclear Promise.

#### Northrop Grumman Woodland Hills, CA

(Booth 309)

(Booth 106)

Northrop Grumman is a leading global security company providing innovative systems, products and solutions in autonomous systems, cyber, C4ISR, strike, and logistics and modernization to customers worldwide. Please visit news.northropgrumman.com and follow us on Twitter, @NGCNews, for more information.

#### Nuclear News

LaGrange Park, IL

(Booth 514)

Nuclear News is the flagship trade publication hundreds of vendors rely on to deliver their marketing message to the 10,000 members of the American Nuclear Society. Advertise to help keep the worldwide nuclear industry informed about your products and services. Subscribe to stay informed about the latest developments throughout the nuclear field. Visit us at www.ans.org/NN.

#### Nuclear Plant Journal

Downers Grove, IL

(Booth 411)

Nuclear Plant Journal, a US publication now in its 35th year, provides technical information exchange among managers and engineers in nuclear power industry worldwide with over 12,000 readers. The Journal is published six-times per year and reaches every country in the world with a civilian nuclear energy program. The Journal is published in digital as well as printed version. The Products & Services Directory is published yearly in December. Online: nuclearplantjournal.com; facebook.com/nuclearplantjournal; youtube. com/user/nuclearplantjournal; twitter.com/npjtweet. Representatives: Newal Agnihotri and Michelle Gaylord.

#### Nutherm International, Inc. Mount Vernon, IL

(Booth 114)

Nutherm is an innovative company committed to delivering world class solutions to the commercial nuclear power industry and the Department of Energy that meet the demands of the 21st century while providing unprecedented levels of service. We utilize our technical expertise to exceed customer's expectations. We will provide risk management solutions that create financial returns for our customers and manufacturing partners.

#### **OTEK Corporation**

Tucson, AZ

(Booth 209)

Founded in 1974 by Dr. Otto P Fest, OTEK Corp. manufactures Process Measurement & Control Instruments from generic to Mil-Spec to Nuclear. The company holds several patents and many "Industry's First" products. OTEK"s Appendix B program will allow it to help the Nuclear Industry modernize their controls rooms.

#### PleaseTech Ltd. Malmesbury, UK

(Booth 303)

PleaseReview by PleaseTech, the document review, co-authoring and redaction specialists, transforms the process of producing quality, compliant documents.

It enables documents to be co-authored and reviewed by multiple participants simultaneously within a collaborative, controlled environment. PleaseReview also offers full management and control, comment and change reconciliation and comprehensive reporting.

#### **Power Services Group**

#### Anderson, SC

#### (Booth 101)

PSG provides customers a broad maintenance, repair and overhaul (MRO) solution for all rotating equipment and other critical plant maintenance services. More specifically, PSG's service offering includes field services, field machining, steam path repairs, valve repair and parts manufacturing, generator inspection and repair, balance of plant maintenance, and specialty code welding. Industries served include power generation (nuclear, fossil, hydro-electric, and wind), industrial, and petrochemical.

#### **Prometheus Group**

#### Raleigh, NC

#### (Booth 516)

Prometheus Group is a global provider of comprehensive and intuitive enterprise asset management software solutions that work within ERP systems and span the full work management lifecycle for both maintenance and operations. Our straightforward functionality, graphical visualization, and simple processes enable customers to increase productivity, reduce costs, and improve reporting. For more information, visit www.prometheusgroup.com.

### Quest Integrity

Sugar Land, TX

#### (Booth 306)

Quest Integrity uses industrialized remote visual inspection camera systems and laser scanning equipment to inspect and survey plant systems and components. This combination of unique technologies yields unparalleled surface data acquisition providing detailed images, precise measurements, cohesive point clouds and 3D documentation.

#### **ReNuke Services, Inc.** Oak Ridge, TN

(Booth 03)

ReNuke brings innovative project management and staffing programs to commercial and government nuclear power markets. ReNuke's service offerings are supported by leadership with over 300 years of collective nuclear industry experience.

We are technically qualified in project management, project controls, contract administration, engineering, licensing/regulatory affairs, operations, outage management, procurement, health physics, decommissioning, transportation, and quality assurance. ReNuke provides direct, turnkey project performance solutions for client's end of fuel cycle and radioactive waste management challenges.

#### **Revenew International** Houston, TX

#### (Booth 513)

Revenew's Cost Recovery audits and Cost Containment services deliver monetary recoveries and cost reduction benefits. Our programs comprise far more than just Accounts Payable recovery and contract compliance audits – we help to ensure compliance with commercial terms, recover lost monies and provide best practice recommendations for contractual and operational improvements.

#### Rolls-Royce Huntsville, AL

#### (Booth 11)

Rolls-Royce provides a broad range of commercial nuclear expertise with a focus on providing nuclear utilities with integrated, longterm support solutions and services. It's newly created Nuclear Services business provides a comprehensive suite of services and fleet solutions including remote tool design and delivery; engineering and obsolescence management services and software solutions, plant monitoring solutions; and an N-stamp custom design / build capability.

#### **RSCC Wire & Cable, LLC** East Granby, CT

(Booth 207)

RSCC Wire & Cable, LLC is the premier manufacturer of Nuclear Safety cables to the nuclear industry worldwide. We offer a full line of Low and Medium Voltage Cables, Communication Cables, Fire Rated Cables and a variety of Specialty Cables. Please visit our website. www.rsccnuclearcable.com

### S&ME, Inc.

#### Raleigh, NC

S&ME provides award-winning engineering and environmental services to the nuclear power industry. Since 1973, we have partnered with owners, operators and their consultants and contractors assisting them with permitting, construction and refurbishing nuclear power plants, fuel facilities, and other nuclear energy related programs. As an employee-owned firm operating from 36 offices across the U.S., our goal is to provide the engineering and scientific services our clients require to achieve success.

#### SANDVIK Sandviken, Sweden

(Booth 503)

(Booth 406)

Sandvik is a world-leading developer and manufacturer of products in advanced stainless steels and special alloys for demanding environments, as well as products and systems for industrial heating. For more than 50 years, Sandvik has delivered top-of-the-range products to nuclear power plants worldwide for both pressurized and boiling water reactors.

#### Saulsbury Industries

Dallas, TX

(Booth 604)

(Booth 08)

Saulsbury's first company, Saulsbury Electric, was founded in 1967 by C.R. "Dick" Saulsbury in Odessa, Texas. Later, Saulcon was created, and Saulsbury became the only organization in the Permian Basin capable of providing total construction services: general construction and instrumentation and engineering. Following the success of Saulsbury Electric and Saulcon, Saulsbury Engineering and Construction was founded in 1994, establishing Saulsbury as a multi-industry, full-service organization; eventually becoming the basis of Saulsbury Industries upon consolidation.

## Schneider-Electric

Lake Forest, CA

Schneider-Electric Nuclear provides a wide portfolio of recognized brands, to enable fully integrated Digital Upgrade I&C and Electrical Solutions to the Global Nuclear Industry that maximize availability and utilization of plant assets. Schneider–Electric's booth will display the approved 1E TRICON and the Foxboro I/A Digital Feed-water Upgrade technology along with information on other brands offered across the portfolio.

### Structural Group

Columbia, MD

(Booth 203)

Structural Group is firmly committed to its ongoing mission of making new and existing structures stronger and last longer. Through its companies, Structural Group delivers turnkey solutions that integrate technology, engineering, and construction.

#### **Structural Integrity Associates, Inc.** Huntersville, NC

(Booth 310)

Structural Integrity Associates, Inc. is an internationally recognized leader of engineering and inspection services for the prevention and control of structural and mechanical failures with more than 30 years of experience. We offer services from R&D to engineering, metallurgy, and nondestructive testing; from nuclear and fossil-fueled power plant support to oil and gas transmission pipeline applications; and renewable energy sources including hydro, geothermal and wind generation. Contact us today: 1-877-4SI-POWER, info@structint.com, www.structint.com.

#### Sulzer Pumps (US) Inc.

#### Chattanooga, TN

(Booth 304)

Sulzer Pumps is widely recognized for technical excellence in nearly all nuclear plant applications, providing primary and secondary pumping and sealing solutions, including our Balanced Stator seal for both PWR and BWR main coolant pumps. Nuclear service installations exceed over 80 sites in the US and 100 worldwide. We provide pump repair, replacement parts, and testing services for all OEM pumps compliant with ASME, PTC, HI and ISO.

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#### SWI

#### Ontario, Canada

#### (Booth 612)

SWI provides a turnkey work management software product CASSI<sup>™</sup> that enables continuous process improvements for Nuclear Online, and Outage preparation and execution activities. CASSI<sup>™</sup> is fully automated and integrates easily with common scheduling, financial, EAMS, and work control systems to generate performance reporting packages that are timely, accurate, and consistent. Our software streamlines the work management process by directing focus, accountability, and identifying areas of systemic risk in the management of costs, resources, materials, and equipment reliability.

### System One

#### Pittsburgh, PA

(Booth 305)

For more than 35 years, System One has delivered a full suite of staff augmentation, managed staffing, quality assurance, quality control, and NDE solutions to nuclear power producers, utilities, OEMs, EPCs, and service providers. We support the full production lifecycle, from licensing and construction to operations and maintenance. www.systemone.com

#### TECNATOM, S. A.

Madrid, Spain

(Booth 104)

TECNATOM is an engineering company owned by the Spanish utilities that provides products & services to the nuclear industry since 1957.

Its main technical capabilities are: Simulation & Control Rooms Supply and Modernization, NDT Inspection & Structural Integrity, Testing, Plant Operational Support, Training Centres, Development & Manufacture of NDT Equipment & Systems, Long Term Operation, New Comers, Safety Management and Emergency Response, carrying out projects in a wide range of technological areas for all type of reactors in more than 40 countries worldwide through their offices in France, Brazil, China, Emirates, Mexico and USA.

#### **Teledyne Brown Engineering**

Huntsville, AL

Charlotte, NC

(Booth 206)

Teledyne Brown Engineering, Inc. has supported the nuclear industry for over 45 years and is a recognized leader in providing innovative systems engineering, cutting edge technology, and advanced manufacturing solutions. Our strengths in both engineering and manufacturing distinguish us from our competitors and allow us to provide extensive, precise solutions.

#### **Toshiba America Energy Systems**

#### (Booth 404)

Toshiba America Energy Systems Corporation (TAES) provides turbine/generator services and equipment for the energy industry in the Americas, including Nuclear, Fossil and Hydroelectric power plants. The dedicated service ethic of our employees and our rigorous safety culture combine with world class technology from Toshiba to result in high-quality, reliable and cost-effective products and services to meet your current and future power generation needs.

#### Transco Products Inc. Chicago, IL

#### (Booth 01)

Transco Products Inc. has unsurpassed experience in supporting the power and process industries. Transco materials and systems are in service at every operating nuclear power station in the United States. Building on over seven decades of experience, we continue to turn ideas into quality engineered products by delivering comprehensive project management from design through installation.

#### UniTech Services Group Springfield, MA

(Booth 10)

UniTech Services Group, Inc. is the world's largest supplier of nuclear protective clothing and accessories. Our nuclear licensed decontamination facilities throughout the US and Europe provide the following services: radiological laundering of protective clothing, decontamination and testing of respirators, and the decontamination of tools & equipment (scaffolding, hand tools, portable HEPA vacuums, etc.). Our products and services are designed to provide our customers cost effective protection for their workers with minimal generation of radioactive waste.

#### **United Controls International**

#### Norcross, GA

For over 40 years, United Controls International has delivered "The Quality Behind the Power" to a global nuclear clientele. Some of our services include: commercial grade dedication, harsh environment qualification, testing services, engineering services, motor services, and panel and MCC design/fabrication/integration, all performed under our NQA-1, 10CFR50 Appendix B, and ISO 9001 quality program.

#### ValvTechnologies

Houston, TX

(Booth 202)

(Booth 205)

Founded in 1987 and based in Houston, Texas, ValvTechnologies is the leading manufacturer of zero-leakage, severe service isolation valve solutions. Best known for our four-year zero-leakage guarantee,ValvTechnologies has been solving problematic valve applications for almost 30 years. ASME N & NPT Authorized with a 10CFR50 Appendix B program for safety related equipment. For more information visit our website at www.valv.com.

#### Wachs Services

Belmont, NC (Booth 414) (704) 967-0187 www.WachsServices.com

Wachs Services has been delivering nuclear projects safely, on time and within budget for over 27 years. Through a single point of contact, our business lines offer Field Services, Shop Fabrication and Staffing Solutions for planned and unplanned nuclear outages, managed tasks, major component upgrades, replacements and repairs. Wachs has the unique ability to perform modular fabrication and field installation as a Prime Contractor.

#### Williams Industrial Services Group, LLC Tucker, GA

(Booth 12)

Williams Industrial Services Group, LLC (Williams), founded in 1958, provides a comprehensive range of maintenance, modification and construction services to the Nuclear & Fossil Power Generation sector, as well as multiple other markets. The service disciplines have ranged from mechanical, electrical and civil scopes in addition to specialty services such as coatings applications, lead and asbestos abatement, insulation, valve maintenance and repair, roofing systems, crane upgrades and enhancements and fire protection.

#### Wiss, Janney, Elstner Associates, Inc. Northbrook, IL

(Booth 607)

(Booth 201)

WJE specializes in the investigation, analysis, testing, and repair and rehabilitation design of structures. More than two-thirds of the nuclear power plants in the United States have used WJE's services to assess a variety of structural and materials conditions associated with initial construction, modifications, structural monitoring, and license renewal.

# Zachry Group

Stonington, CT

Zachry Group is a full service engineering firm that provides Engineering, Analysis, Design, and Project Management services to the Nuclear Power Industry. Zachry's 13 design centers offer the services of experienced mechanical, electrical, controls, civil/structural engineers and designers who are skilled in power plant systems, engineering analysis, including GOTHIC<sup>™</sup>, RELAP, RETRAN, RADTRAD-NAI<sup>™</sup>, and CentralStor<sup>™</sup>, as well as modification package development. For more information please visit www.ZachryGroup.com and www.numerical.com.

# AWARDING EXCELLENCE IN INNOVATION

When it comes to improving safety and efficiency, you are innovative and resourceful leaders in creating the high standards of the nuclear industry. Now all you need to do is tell us about it!

Since 1994, the Top Innovative Practice (TIP) Awards have rewarded the new and creative ideas and techniques developed by our industry's talented workforce. In seeking and sharing best practices, you help your company have a profound and direct impact on improving the safety and reliability of the nuclear energy industry.

Sponsored by the Nuclear Energy Institute in conjunction with nuclear steam supply system (NSSS) vendors AREVA, GE Hitachi Nuclear Energy, Westinghouse and Westinghouse Combustion Engineering, the TIP Awards are the nuclear industry's highest recognition of excellence.

ANNOUNCING THE **2017 TIP AWARDS** Entry dates: Nov. 7, 2016 – Feb. 3, 2017



# ELIGIBILITY

The TIP awards are open to individuals and teams from all NEI member utilities that have created and implemented transferable new practices—or improved processes and equipment—within the past three years. Entrants must be utility members of NEI. There are no limits to the number of entries that may be submitted. Industry suppliers interested in entering are encouraged to do so through their utility clients.

#### **2017 TIP ENTRY DEADLINE**

All TIP entries must be submitted electronically via the member section of NEI's website using the instructions below. Entries will be accepted beginning **Nov. 7, 2016, through Feb. 3, 2017.** 

# AWARD CRITERIA

To be considered for a TIP Award, the new process or practice can come from ANY area of utility operations including, but not limited to, improvements in plant operations, plant support, communications and outreach, or innovative business practices. The process or practice must have already been implemented and address one or more of the following criteria:

**INNOVATION:** The entry should illustrate how the improvement is unique. Explain how it offers a different approach to a new or existing challenge.

**SAFETY**: The entry should maintain or enhance nuclear safety, radiation protection safety and/or industrial safety, as applicable.

**COST SAVINGS IMPACT**: The entry should include quantitative or qualitative data or information that demonstrates significant, tangible cost savings achieved or costs avoided.

**PRODUCTIVITY/EFFICIENCY:** The entry should clearly define the measurable increases in employee/organization productivity that were gained. If applicable, state how the improvement was collaborative across the organization.

**TRANSFERABILITY**: The entry should state how this new process or practice is transferable across the industry or within a fleet or applicable to a generic plant design.

**COMMUNICATIONS:** The entry should include a description of effective and innovative approaches to internal communications, external stakeholder communications, or change management.

VISION & LEADERSHIP: The entry should describe exceptional leadership in change management demonstrating effective organizational motivation and support that achieved measurable results.

All TIP Award winners will be recognized at a special gathering during the Nuclear Energy Assembly—the annual meeting of the Nuclear Energy Institute—on May 22-24, 2017, at The Westin Kierland in Scottsdale, Arizona.

All entries will be posted on the NEI member website.

# AWARD CATEGORIES

All winners will be selected by the TIP Committee—an industry panel chaired by NEI—with representation from each NSSS vendor, the Institute of Nuclear Power Operations and the Electric Power Research Institute.

**NEI Awards** 



• AREVA (BW)

• GE Hitachi Nuclear Energy (GE)

 Westinghouse Design (W)
 Westinghouse Combustion Engineering Design (CE)

#### **Best of the Best**

NEI will choose an overall award winner from the NEI and NSSS vendor winners.

# ENTER ONLINE

Coming up with the innovation is the hard part. This is the easy part.

LOG IN to www.nei.org/TIPawards

**REVIEW** the entry instructions and award criteria.

**BROWSE** past TIP entries and winners from previous years.

VIEW previous nominations online to see how past entrants presented their projects.

SUBMIT all complete entries on NEI's website. No material submitted to NEI will be returned, nor will NEI be responsible for lost or damaged entries.

For questions about the entry process, please contact Suzanne Stuart at 202.739.8005 or sns@nei.org.

## STEP UP. STAND OUT. www.nei.org/TIPawards



# **2017** Top Innovative Practice A W A R D S

#### AWARD NAME: Best of Best

 TITLE: Utilization of FLEX Equipment to Support Technical Specification Change
 COMPANY: Duke Energy
 TEAM: Sarah McDaniel, John Caves, Rob Isbell, Tom Scattergood, Jason Lanier
 TIME: Monday, 1:30 pm
 ROOM: Ossabow A

#### AWARD NAME: AREVA Vendor Award

 TITLE: Waterford 3 Circulating Pump C Discharge Isolation Valve Repair
 COMPANY: Entergy Operations
 TEAM: Dave Frey, Doug Phillips, Nigel Elias, John Sheppard,

Corey Claybrook

#### AWARD NAME: GE Vendor Award

TITLE: TRACG-LOCA Methodology COMPANY: Exelon TEAM: Jim Tusar, David Knepper, Benjamin Lambert, John Massari, Travis Bement TIME: Monday, 2:15 pm ROOM: Ossabow A

#### AWARD NAME: Westinghouse Vendor Award

TITLE: Upflow Modification COMPANY: Dominion TEAM: Stewart Morris, Janelle Madison, Chris Allmond, Matthew Paden, Nick Rubis

#### AWARD NAME: Westinghouse Combustion Engineering Vendor Award

**TITLE**: Enhanced Steam Generator Tube Foreign Object Wear Detection Using the Bobbin Eddy Current Coil

**COMPANY:** Exelon and Arizona Public Service

**TEAM**: Harry Smith, Carl Friant, Douglas Hansen, William Cullen, Qui Lee

#### AWARD NAME: NEI TIP Award

**TITLE**: Value Based Maintenance **COMPANY**: Arizona Public Service **TEAM**: John Langskov, Glen Smith

#### AWARD NAME: NEI TIP Award

**TITLE:** Bruce Power and Nordion ensure global cobalt supply up to 2064

**COMPANY:** Bruce Power

**TEAM**: John Peevers, James Scongack, Jack Tasker, Phillippe Paquette, Alex Chong

#### AWARD NAME: NEI TIP Award

TITLE: Procurement Engineering Prioritization Reporting & Obsolescence Application COMPANY: Duke Energy TEAM: Wayne Unkefer, Jacob Denny, Mike Bruce

#### AWARD NAME: NEI TIP Award

TITLE: BWR Core Shroud UT Examinations for Off-Axis Flaws COMPANY: Duke Energy TEAM: Steve Williams, Mark Sloman, Brad Thigpen, John Becker

#### AWARD NAME: NEI TIP Award

TITLE: GNF2.02 Introduction COMPANY: Entergy Operations TEAM: David Smith, Jim Head, Scott Stanchfield, Gerry Latter, Patty McCumbeee

#### AWARD NAME: NEI TIP Award

**TITLE**: Advocating for NY and IL Policy Reforms to Support **COMPANY**: Exelon **TEAM**: David Tillman, Marshall Murphy, Amy Hopcian, Laura Micheli

#### AWARD NAME: NEI TIP Award

TITLE: Ultra-High Pressure Cavitation Peening for Alloy 600 PWR Reactor Head Primary Water Stress Corrosion Cracking Mitigation

**COMPANY**: Exelon

TEAM: Brad Lanka, Benjamin Youman, Edward Wrigley, Gary Hagermann, Jack Feimster

TIME: Tuesday, 1:30 pm

ROOM: Ossabow A

#### AWARD NAME: NEI TIP Award

TITLE: Blocking Device for HGA Model Relays COMPANY: NextEra Energy TEAM: Kevin Steimer, Ben Carolan, Collin Steimer, Maxwell McChesney

\*Presenters are in BOLD

Ossabow A is reserved for the PI Track Session on Tuesday 10:30 am. The remainder of the time Ossabow A will serve as a display area for all TIP Winner Information.



# 2017 Utility Working Conference and Vendor Technology Expo

Our most sincere thanks to the following contributors for their support of the 2017 UWC Golf Tournament



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# Golf Information

# 2017 UWC GOLF TOURNAMENT

Sunday, August 6th, 8:00 am

Oak Marsh Golf Course

#### Transportation:

The Oak Marsh Golf Course is conveniently located on the property of the Omni Amelia Island Plantation Resort. Transportation will be provided to/from the main hotel and the Oak Marsh Golf Course, starting at 6:30 am

#### Format:

The format of the tournament will be Captain's Choice or Super Ball. With this format each player will hit his/her drive. You select the best shot and everyone plays their next shot from that location. You continue this format until the ball is holed out.





The Oak Marsh Golf Course is one of the truly classic Pete Dye-designed golf courses in the world. The course, built in 1972 shortly after the completion of the Harbour Town Golf Links at Hilton Head Island, South Carolina, is noted for its tight fairways and small greens, meandering along serpentine salt marsh creeks and through the moss draped heritage oaks for which Amelia Island is famous.

At par 72, this 6,500-yard course has 14 holes with water hazards and numerous bulk-headed greens. A variety of bunkers are placed throughout the course to add to the challenge, and a natural approach has been maintained as well with the use of coquina shell cart paths, native plant life and preserved habitats for the local wildlife. Walking is allowed after 4:00 pm

Oak Marsh played host to the 1991 PGA Section Championship and 1992 Society of Seniors Championship. In addition, numerous resort tournaments are played here. Included in Golf Digest's prestigious list of the "Top 75 Resort Courses in the U.S", Oak Marsh also was selected by Travel & Leisure Golf as one of "Florida's 50 Finest Courses."







American Nuclear Society Utility Working Conference and Vendor Technology Expo



# UWC 2017

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August 6-9, 2017 Omni Amelia Island Plantation Amelia Island, FL



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