

### **Utility Working Conference 2020**

August 11, 2020 | Program



Transformational Change

2020

# Organizational Participants

A Special Thank You to Our Organizational Participants



































## **Program Committee**

**General Chair:** Dan Churchman (Southern Nuclear)

**Technical Program Chair:** Vince Gilbert (Model Performance, LLC)

**Assistant Technical Program Chair:**Jon Anderson (ACA Proactive)

Business/Economic Performance Track Leaders: Tim Schlimpert (MCR Performance Solutions)

Maria Hernandez (Duke Energy)

**Decommissioning Track Leader:**Jim Byrne (Byrne & Assoc., LLC)

**Executive/Leadership Track Leaders:**Bob Coward (MPR)

Ken Thomas

**Engineering and Equipment Reliability Track Leaders:** Ray Herb (Southern Nuclear)

Pareez Golub (Sargent and Lundy) Ted Quinn (Technology Resources)

Nuclear Supply Chain Track Leaders: William Fry (Duke Energy)

Jim Ripple (Southern Nuclear)

Maintenance and Work Management Track Leaders: Bryant Hearne (INPO)

Pete Arthur (INPO)

John McDonald (ACA Proactive)

Operations/Ops Training Track Leaders: Bruce Hennigan (Exelon Corporation)

Dan Randolph (Exelon Corporation)

Jason Lanier (Duke Energy)

**Performance Improvement Track Leaders:** Fred Lake (WD Associates)

Kevin Rackley (TVA)

**Regulatory Relations Track Leaders:** Garry Young (Entergy)

Luis Betancourt (US NRC)

Risk Management Track Leaders: Gene Kelly (Exelon Corporation)

Tim Crook (MCR Performance Solutions)

**Technology and Innovation Track Leaders:**John Downing (John Downing Consulting LLC)

Adam Dow (Southern California Edison)

Lead Knowledge Manager: Sarah Lynn (Luminant)

**Knowledge Managers:** Saieed Ahmed (Exelon Corporation)

Lee Causey (Duke Energy) Robby Christian (INL) Maxwell Daniels (IAEA)

Shahrukh Khan (Georgetown University)

Matthew Mairinger (Ontario Power Congration)

Matthew Mairinger (Ontario Power Generation)

Matthew Parsons (PSU) Sudipta Saha (U of S. Carolina) Greg Swain (Duke Energy)

Amber Von Ruden (Exelon Corporation)

# **Opening Plenary**

# **Driving Transformational Change**Plenary Session | 9:00–11:30AM EDT

#### MODERATOR



Bob Coward MPR Associates Principal Officer

#### **SPEAKERS**

Plenary,

Special

**Events** 

Sessions

and



Christopher T. Hanson Nuclear Regulatory Commission Commissioner



Jeff Place Institute of Nuclear Power Operations Executive Vice President of Industry Strategy



Tim O'Connor Xcel Energy Chief Generation Officer and Executive Vice President



Maria Lacal
Arizona Public Service
Company Executive Vice
President and Chief Nuclear
Officer Palo Verde
Generating Station



Scot Greenlee Exelon Senior Vice President, Engineering and Technical Support

### **Educational Sessions**

#### 12:00-1:30PM EDT

#### A Not So Random Walk Down Nuclear Industry Operating Cost Data

Panel | Sponsored by Business/Economic Performance | Session Organizer: Maria Hernandez

#### **Innovative and Historical Approaches to Decommissioning**

Panel | Sponsored by Decommissioning | Session Organizers: Lynne Goodman, Joe Carignan

#### Digital Implementation (Part 1): Evolving Digital Modification Strategies for Significant Cost and Risk Reduction

Panel | Sponsored by Engineering and Equipment Reliability | Session Chair: Pareez Golub

#### **XCEL Energy /DOE/INL Transformational Project**

Panel | Sponsored by Executive/Leadership | Session Organizer: Ken Thomas

#### **Automated Work Scheduling**

Panel | Sponsored by Maintenance and Work Management | Session Chair: Jon Anderson

#### **Inventory Management Workshop**

Sponsored by Nuclear Supply Chain | Session Organizers: Roger Smith, Jim Ripple

#### **Equipment Operator and Initial License Operator Training Program Redesign Workshop**

Sponsored by Operations/Ops Training | Session Organizer: Bruce Hennigan

#### **Performance Data Analytics and Visualization**

Panel | Sponsored by Performance Improvement | Session Organizers: Fred Lake, Kevin Rackley

#### Subsequent License Renewal (SLR): Is 80 the New 60?

Sponsored by Regulatory Relations | Session Organizer: Greg Robison

#### **Incorporating FLEX into PRA Models**

Panel | Sponsored by Risk Management | Session Organizer: Gene Kelly

#### The Democratization of AI - Using AI/ML to Assess Risk, Perform Inspections and Make Decisions

Panel | Sponsored by Technology and Innovation | Session Organizer: Adam Dow

### **Educational Sessions**

#### 2:00-3:30PM EDT

#### **SOUL Knowledge Management Platform and Palo Verde TeMPO Project**

Panel | Sponsored by Business/Economic Performance | Session Organizer: David Heler

#### Status of Decommissioning Projects in Progress and Completed to Date

Panel | Sponsored by Decommissioning | Session Organizer: Gerry VanNoordennen

### Digital Implementation (Part 2): Evolving Digital Modification Strategies for Significant Cost and Risk Reduction

Panel | Sponsored by Engineering and Equipment Reliability | Session Chair: Ray Herb

#### **Exelon/DOE/INL Transformational Project**

Panel | Sponsored by Executive/Leadership | Session Organizer: Craig Primer

#### **Optimized Procurement Descriptions Workshop**

Sponsored by Nuclear Supply Chain | Session Organizer: Bill Fry

#### "Artificial Intelligence" Improving Corrective Action Program, Work Order Generation and Screening

Panel | Sponsored by Performance Improvement | Cosponsored by Maintenance and Work Management | Session Organizers: Fred Lake, Jon Anderson, Kevin Rackley

#### **NRC Transformation**

Panel | Sponsored by Regulatory Relations | Cosponsored by Risk Management | Session Organizer: Ken Lowery

### Insights into DOE Research, Human Factor Engineering Strategy for Phased Main Control Room Modernization and Cutting Edge Technology

Panel | Sponsored by Technology and Innovation | Cosponsored by Operations/Ops Training | Session Organizer: Ken Thomas

### **Educational Sessions**

#### 4:00-5:30PM EDT

#### **Capital Investment Analyses from Fukushima to Today**

Panel | Sponsored by Business/Economic Performance | Session Organizers: Jon Anderson, Tim Schlimpert

#### **Nuclear Industry Security Transformation to Reduce Costs**

Panel | Sponsored by Decommissioning | Cosponsored by Risk Management, Technology and Innovation | Session Chair: Mark Campagna

#### **Expanding the Use of Monitoring and Diagnostics Centers to Integrate with Work Management**

Panel | Sponsored by Engineering and Equipment Reliability | Cosponsored by Executive/Leadership, Maintenance and Work Management | Session Organizers: Jon Anderson, Ray Herb, Pareez E. Golub

#### **Diversity in Nuclear Supply Chain Workshop**

Panel | Sponsored by Nuclear Supply Chain | Session Organizer: Bill Fry

#### **Use of e-Learning Workshop**

Sponsored by Operations/Ops Training | Session Organizer: Bruce Hennigan

#### **Contemporary INPO Performance Improvement Efforts**

Panel | Sponsored by Performance Improvement | Session Organizers: Fred Lake, Kevin Rackley

### Advanced Reactors: Innovation in Nuclear Technology Needs Agile, Efficient and Predictable Regulatory Framework

Panel | Sponsored by Regulatory Relations | Session Organizers: Amir Afzali, Brandon Chisholm

### **General Information**

#### **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.

#### **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 complete Respectful Behavior Policy can be found at ans.org/about/rbp.

### **General Information**

#### ANS CODE OF ETHICS

#### **Preamble**

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.

#### **Fundamental Principle**

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.

ANS members shall subscribe to the following practices of professional conduct:

#### **Principles of Professional Conduct**

- 1. We hold paramount the safety, health, and welfare of the public and fellow workers, work to protect the environment, and strive to comply with the principles of sustainable development in the performance of our professional duties.
- 2. We will formally advise our employers, clients, or any appropriate authority and, if warranted, consider further disclosure, if and when we perceive that pursuit of our professional duties might have adverse consequences for the present or future public and fellow worker health and safety or the environment.
- 3. We act in accordance with all applicable laws and these Practices, lend support to others who strive to do likewise, and report violations to appropriate authorities.
- 4. We perform only those services that we are qualified by training or experience to perform, and provide full disclosure of our qualifications.
- 5. We present all data and claims, with their bases, truthfully, and are honest and truthful in all aspects of our professional activities. We issue public statements and make presentations on professional matters in an objective and truthful manner.
- 6. We continue our professional development and maintain an ethical commitment throughout our careers, encourage similar actions by our colleagues, and provide opportunities for the professional and ethical training of those persons under our supervision.
- 7. We act in a professional and ethical manner towards each employer or client and act as faithful agents or trustees, disclosing nothing of a proprietary nature concerning the business affairs or technical processes of any present or former client or employer without specific consent, unless necessary to abide by other provisions of this Code or applicable laws.
- 8. We disclose to affected parties, known or potential conflicts of interest or other circumstances, which might influence, or appear to influence, our judgment or impair the fairness or quality of our performance.
- 9. We treat all persons fairly.
- 10. We build our professional reputation on the merit of our services, do not compete unfairly with others, and avoid injuring others, their property, reputation, or employment.
- 11. We reject bribery and coercion in all their forms.
- 12. We accept responsibility for our actions; are open to and acknowledge criticism of our work; offer honest criticism of the work of others; properly credit the contributions of others; and do not accept credit for work not our own.