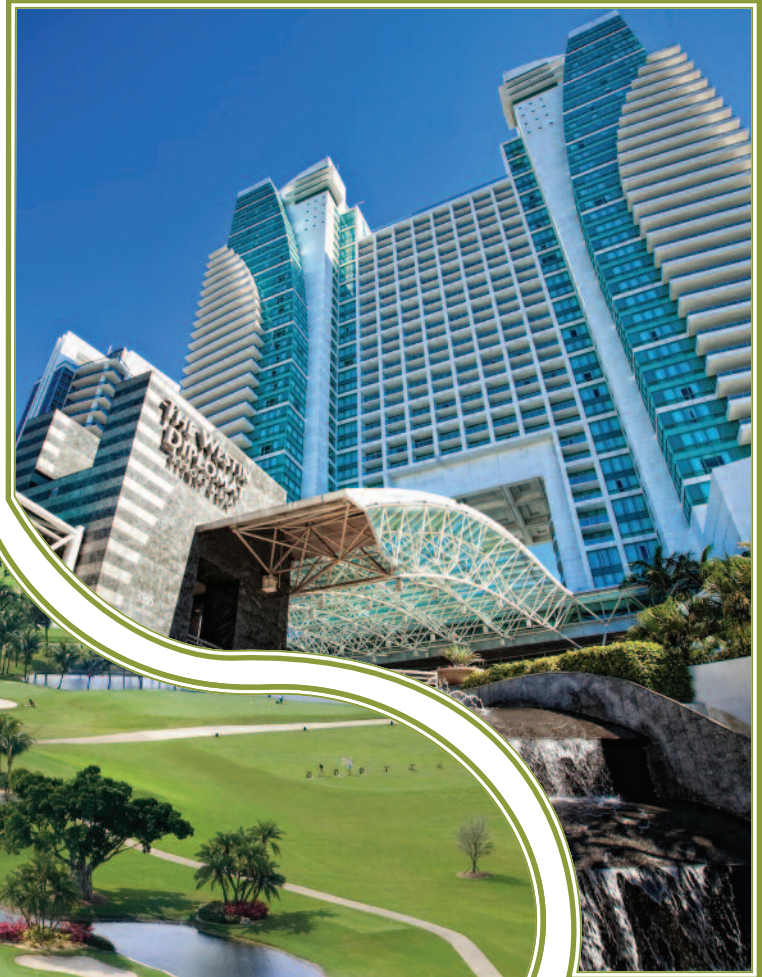


AUGUST 5-8TH, 2012

2012 UTILITY WORKING CONFERENCE & VENDOR TECHNOLOGY EXPO

OFFICIAL PROGRAM

NUCLEAR! 
STILL THE ONE
THE RIGHT BUSINESS •
THE RIGHT RESULTS •
THE RIGHT WAY FORWARD •



WESTIN DIPLOMAT RESORT & SPA • HOLLYWOOD, FLORIDA

The organizations listed below have made an outstanding contribution to the success of the

2012 Utility Working Conference

and to the enjoyment of the attendees and their guests through their generous sponsorship

Sunday, August 5, 2012

System One

Sponsor of the "Grab and Go Breakfast"

Invensys Operations Management

Sponsor of the Golf Tournament Awards Luncheon

Entergy Nuclear

EPM, Inc.

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(Hosted Wine, Beer & Soft Drinks)

Lockheed Martin

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Mitsubishi Heavy Industries, Ltd.

Sponsor of the Sunday Opening Reception

(Blended Bars)

Monday, August 6, 2012

Westinghouse Electric Company

Co-Sponsor of the Walk-Around Luncheon

in the Vendor Technology Expo

Tennessee Valley Authority

Sponsor of the Monday Mid-Morning Refreshment Break

in the Vendor Technology Expo

Entergy Nuclear

Co-Sponsor of the Afternoon Refreshment Break

in the Vendor Technology Expo

Tuesday, August 7, 2012

Sargent & Lundy

Sponsor of the Sunrise Breakfast

Northrop Grumman Corporation

Co-Sponsor of the Afternoon Refreshment Break

in the Vendor Technology Expo

Enercon

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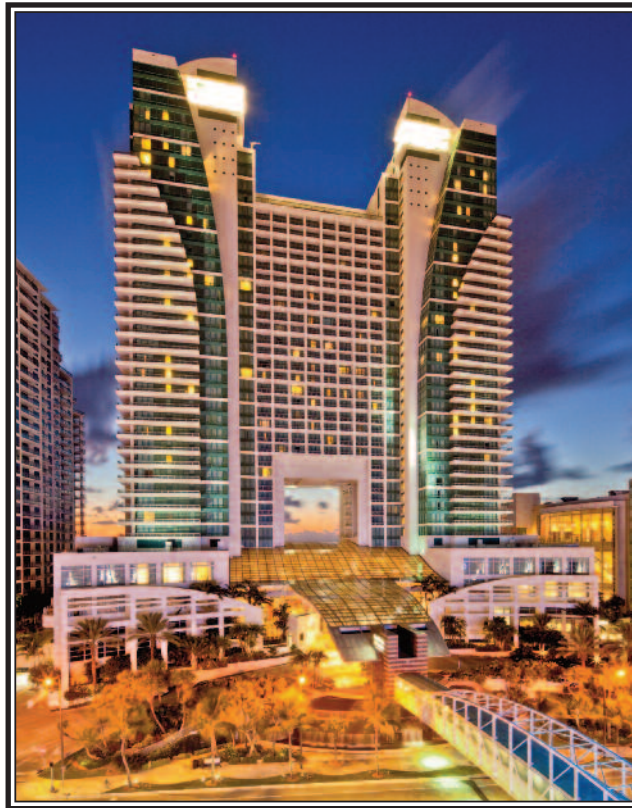
NGNP Industry Alliance

Co-Sponsors of the Reception in the Vendor Technology Expo

(Hosted Beer, Wine & Soft Drinks)

THANK YOU TO OUR SPONSORS!

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2012 Utility Working Conference and Vendor Technology Expo



The Westin Diplomat Resort and Spa • Hollywood, FL
August 5 - 8, 2012

Program Committee

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Tennessee Valley Authority

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Southern California Edison

GOLF CHAIR

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Retired, Enercon Services, Inc.

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PERFORMANCE IMPROVEMENT	David Gudger, Exelon-Byron Station George Hutcherson, INPO	Jodi Furr, TVA Bill Corcoran, NSRC
EQUIPMENT INNOVATION & SUPPLY	Greg Keller, AZZ N L I J. L. (Larry) Davenport, TVA	Eric Hale, B&W Marc Tannenbaum, EPRI
REGULATORY RELATIONS/OVERSIGHT	Gordon Arent, TVA Eric Leeds, U.S. NRC	Pete Gaillard, TVA Trent Wertz, U.S. NRC
RISK MANAGEMENT	Ching Guey, TVA	Dennis Henneke, GE/Hitachi Gregory Krueger, Exelon Nuclear Anil Julka, Next Era Energy Bijan Najafi, SAIC
WORK/PROJECT MANAGEMENT	Preston Pratt, TVA	Jon Anderson, Anderson, Chavet & Anderson Bill Flanagan, Black Diamond Services Jordan Gillis, Scott Madden Ian Falk, Scott Madden

Condensed Conference Schedule

SUNDAY, AUGUST 5, 2012

8:00 a.m.	Golf Tournament “Grab and Go Breakfast”– Sponsored by System One 2012 UWC Golf Tournament Awards Luncheon– Sponsored by Invensys Operations Management
3:00 p.m. – 7:00 p.m.	Meeting Registration
6:00 p.m. – 8:30 p.m.	Opening Reception in the Vendor Technology Expo <i>Beer/Wine/Soft Drinks– Co-Sponsored by Entergy Nuclear and EPM, Inc.</i> <i>Hot Appetizers– Sponsored by Rolls-Royce</i> <i>Cold Appetizers– Sponsored by Lockheed Martin</i> <i>Blended Bars– Sponsored by Mitsubishi Heavy Industries, Ltd.</i>

MONDAY, AUGUST 6, 2012

7:00 a.m. – 4:30 p.m.	Meeting Registration
7:30 a.m. – 8:30 a.m.	Continental Breakfast in the Vendor Technology Expo
8:30 a.m. – 10:00 a.m.	Opening Plenary: “Nuclear - Still the One! The Right Business. The Right Results. The Right Way Forward.” <i>Keynote Speakers:</i> Tom Kilgore (<i>Chief Executive Officer, Tennessee Valley Authority</i>) Josh Bleill (<i>Indianapolis Colts Speaker</i>)
10:00 a.m. – 10:30 a.m.	Refreshment Break in the Vendor Technology Expo <i>Sponsored by Tennessee Valley Authority</i>
10:30 a.m. – 12:00 p.m.	Breakout Sessions
12:00 p.m. – 1:30 p.m.	Walk-Around Luncheon in the Vendor Technology Expo <i>Sponsored by Westinghouse Electric Company</i>
1:30 p.m. – 3:00 p.m.	Breakout Sessions
3:00 p.m. – 3:30 p.m.	Afternoon Refreshment Break in the Vendor Technology Expo <i>Co-Sponsored by Entergy Nuclear</i>
3:30 p.m. – 5:00 p.m.	Breakout Sessions

TUESDAY, AUGUST 7, 2012

7:00 a.m. – 8:30 a.m.	Sunrise Breakfast <i>Sponsored by Sargent & Lundy</i>
7:00 a.m. – 4:30 p.m.	Meeting Registration
8:30 a.m. – 10:00 a.m.	Public Session: “Nuclear - Still the One? The Right Business? The Right Results? The Right Way Forward?”

Keynote Speakers:
Michael Corradini (*President, ANS*)
James Asselstine (*Barclays Capital*)
Bill Freebairn (*Platts*)
Derrick Freeman (*NEI*)

10:00 a.m. – 10:30 a.m.	Refreshment Break in the Vendor Technology Expo
10:30 a.m. – 12:00 p.m.	Breakout Sessions
12:00 p.m. – 1:30 p.m.	Walk-Around Luncheon in the Vendor Technology Expo
1:30 p.m. – 3:00 p.m.	Breakout Sessions
3:00 p.m. – 3:30 p.m.	Afternoon Refreshment Break in the Vendor Technology Expo <i>Co-Sponsored by Northrop Grumman Corporation</i>
3:30 p.m. – 5:00 p.m.	Breakout Sessions
5:00 p.m. – 7:00 p.m.	Reception in the Vendor Technology Expo <i>Beer/Wine/Soft Drinks– Co-Sponsored by Enercon IBM NGNP Industry Alliance</i>
7:30 p.m. – 10:30 p.m.	EXCEL Services Corporation Evening Event

WEDNESDAY, AUGUST 8, 2012

7:00 a.m. – 4:30 p.m.	Meeting Registration
8:30 a.m. – 10:00 a.m.	Industry Awards Presentation • L.E. (T-Bow) Thibault (<i>TVA, Technical Program Chair</i>) • Stephanie Banker (<i>Training Manager, Callaway Nuclear Station, Ameren</i>) Executive Panel Discussion “Nuclear! Still the One! The Right Business? The Right Results? The Right Way Forward?” <i>Panel Chair:</i> Mike Skaggs (<i>TVA, General Chair, 2012 UWC</i>) <i>Panel:</i> • Preston Swafford (<i>CNO, TVA</i>) • Maria Korsnick (<i>CNO, Constellation Energy</i>) • Bill Webster (<i>SrVP, Industry Evaluations, INPO</i>) • Commissioner Kristine L. Svinicki (<i>U.S. NRC</i>)
10:30 a.m. – 12:00 p.m.	Breakout Sessions
12:00 p.m. – 1:30 p.m.	Conference Luncheon

THURSDAY, AUGUST 9, 2012

8:00 a.m. – 4:00 p.m.	Professional Development Workshop: “Root Cause Analysis for Safety Culture and Human Performance Improvement”
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Conference Information



The Westin Diplomat Resort and Spa **Accommodations/Hotel Information**

The Westin Diplomat Resort and Spa will be the location for the 2012 Utility Working Conference, where all meeting activities and technical sessions will take place.

Conference Registration

Registration is required for all attendees and presenters. Badges and tickets are required for admission to all events. The Conference Registration fee includes one ticket to each of the following events: Sunday Welcome Reception; Monday, Tuesday and Wednesday Luncheons; and access to the presentations through the Online Knowledge Center.

NOTE: Additional tickets can be purchased in advance or on-site at the ANS Registration Desk for the Sunday Welcome Reception and the Monday, Tuesday and Wednesday Luncheons.

Registration Hours:

The Conference Registration Desk will be located in the **Great Hall Foyer** of the Westin Diplomat Resort and Spa. You may register, purchase tickets for events or pick up your registration packet during the following hours:

Sunday, August 5, 2012 • 3:00 p.m. – 7:00 p.m.
Monday, August 6, 2012 • 7:00 a.m. – 4:30 p.m.
Tuesday, August 7, 2012 • 7:00 a.m. – 4:30 p.m.
Wednesday, August 8, 2012 • 7:00 a.m. – 4:30 p.m.
Thursday, August 9, 2012 • 7:00 a.m. – 10:00 a.m.

Cancellations:

Registrations canceled prior to July 12, 2012, will be refunded minus a \$75 processing fee. Cancellations received after July 12, 2012, will NOT be refunded. However, you may send a substitute.

Best Practices Poster Exhibit

The Best Practices Poster Exhibit showcases individual practices and projects submitted and displayed by many US Nuclear Power Stations and Nuclear Fleet Organizations. An hour spent at the exhibit is like dozens of informal benchmarks all in one place.

Detailed Conference Schedule: Monday

MONDAY MORNING PUBLIC SESSION

MONDAY, AUGUST 6, 2012 8:30 A.M. - 10:00 A.M.

Opening Plenary:

“Nuclear - Still the One! The Right Business. The Right Results. The Right Way Forward.”

Regency Ballroom 1 & 2

Keynote Speakers:

- Tom Kilgore (*Chief Executive Officer, Tennessee Valley Authority*)
New Nuclear, A Regional Perspective
- Josh Bleill (*Indianapolis Colts Speaker*)
New Nuclear - One Step at a Time

MONDAY MORNING TECHNICAL SESSIONS

MONDAY, AUGUST 6, 2012 10:30 A.M. - 12:00 P.M.

Engineering Track

Strategies for Addressing Gas Intrusion in Emergency Cooling Core Cooling Systems

Session Organizers: Dan Strong (Duke Energy), Dave Schowalter, PhD (Alden)

Diplomat Ballroom 1

On January 11, 2008, the US NRC issued Generic Letter (GL) 2008-01, raising concerns about gas intrusion and the possible impact on pump performance during emergency scenarios. The plants were asked to submit information to demonstrate that the systems in question were in compliance with applicable regulatory requirements, and that measures were in place for maintaining compliance. As a result, the Nuclear Energy Institute (NEI) worked with industry and academia to develop datasets and guidelines for understanding gas sources and gas transport phenomena, ultimately developing NEI 09-10, “Guidelines for Effective Prevention and Management of System Gas Accumulation.” This session will cover experimental and computational methods used to quantify gas transport and gas sources in emergency cooling systems in order to meet regulatory concerns.

Speakers:

- Matthew Swartz (*Westinghouse*)
Experimental Basis for Gas Transport in Pump Suction Piping
- Jaehyok Lim, PhD (*Fauske Associates, LLC*)
Computational Investigation of Effects of Piping Configuration and Water Supply Pressure on Air Intrusion
- David Schowalter, PhD (*Principal Engineer & Director of Business Development, Alden*)
Physical Modeling to Address Plant Specific Source and Transport Issues

Executive Track

Current State of the Industry

Session Organizers: Don Eggett, Richard Cole

Diplomat Ballroom 2

The Monday morning Executive session will focus on the current state of the industry from the regulatory performance and sponsored industry technology perspectives. The NRC Executive Director for Operations will provide a perspective on current industry performance and areas for focus on improvements. An executive from the Nuclear Energy Institute will provide current focus areas for technology improvement and a status of industry-sponsored priority initiatives.

Speakers:

- R. William Borchardt (*Executive Director for Operations, NRC*)
Regulatory Perspectives
- Alex Marion (*Vice President, Special Projects, NEI*)
Operational Safety and Continuous Improvement

Knowledge Management / Workforce Issues

Community of Practice - Still the One and Time for Knowledge Management

Session Organizer: David Heler (Palo Verde HR Program Manager, Arizona Public Service)

Atlantic Ballroom 2

The nuclear industry is in the process of replacement and transformation of its workforce. Palo Verde will be presenting the process they have undertaken to meet this challenge. Through the organizational design process, knowledge management, along with workforce planning, plays a critical role in defining the workforce of the future. The presenters will provide an executive-level perspective on how this approach is affecting their journey.

Speakers:

- Maria Lical (*Vice President, Palo Verde Operations Support*) and Tony Marco (*Director, Palo Verde Human Resources*)
Knowledge Management Impact on Organizational Design Process – Preparing for the future workforce (70 minutes)

STARS has formed a Knowledge Management Community of Practices to help its members share strategies, processes and results on this very important subject. Representatives from Training Organizations, Engineering Departments and Human Resources have come together to create this Community of Practice. The presenter will share the results of this initiative to date, as well as discuss the need for a national CoP forum.

Speaker:

- David Heler (*Palo Verde HR Program Manager, Arizona Public Service*)
KM Community of Practice – STARS (Strategic Teaming and Resources Sharing) Knowledge Management Initiative (20 minutes)

Detailed Conference Schedule: Monday

Maintenance

Supplemental Personnel Training and Qualification through EPRI Standard Task Evaluation (STE)

Session Organizers: Barry Tidwell, John Klein

Diplomat Ballroom 3

EPRI STE qualification of supplemental personnel. Effective standardized qualification of supplemental personnel to reduce outage in-processing costs.

Speakers:

- Don Cullers (*EPRI STE project lead, EPRI*) and Bo Clark (*Senior Manager, EPRI*)
Introduction to EPRI STE: Development of standard task evaluations and the scope of available tasks
- Archie Proffit (*Fleet Maintenance Program Manager, First Energy*)
Utilization of STEs at First Energy-victories and pitfalls

New Reactor

Fukushima Response – Tier 1 Recommendations

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent, Andrea Sterdis

Regency Ballroom 3

(This is a combined Track session of New Reactor and Regulatory Relations & Oversight)

Operations / Operations Training

INPO National Academy for Nuclear Training – Updates and Perspective

Session Organizers: Dan Snook, Greg Kilpatrick

Diplomat Ballroom 4

What's new at INPO in Operations Training? The latest information and perspective on topics and pertinent issues facing Operations Training. There will current issues as well as information on the ACADs in use by the industry. Includes an interactive question and answer session.

Speaker:

- Mike Llewellyn (*Accreditation Team Manager, INPO*)
INPO National Academy for Nuclear Training – Updates and Perspective

Performance Improvement Track

Welcome to Performance Improvement 2012: Integral to Why It Is Right for Our Business

Rooms 212 & 213

Track Leadership Team:

Co-leaders: George Hutcherson (*INPO*), Dave Gudger (*Exelon*)
Co-organizers: Dr. Bill Corcoran (*NSRC Corporation*), Jodi Furr (*TVA*)
Session Organizers: Dr. Bill Corcoran (*NSRC Corporation*), Jodi Furr (*TVA*)

Bill Corcoran and the other members of the track leadership team will review the year's PI lessons to be learned in perspective with the 2012 PI Track content.

Speakers:

- Dr. Bill Corcoran (*President, Nuclear Safety Review Concepts Corporation*)
Welcome to PI 2012, Performance Improvement: Integral to Why It Is Right for Our Business
- Jodi Lynn Furr (*Fleet CAP Manager, TVA*)
CAP is the Right Way Forward to Improve Performance

Regulatory Relations & Oversight Track

Fukushima Response – Tier 1 Recommendations

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent, Andrea Sterdis

Regency Ballroom 3

(This is a combined Track session of Regulatory Relations & Oversight and New Reactor)

After the Fukushima disaster, the NRC convened a Near-Term Task Force to evaluate the events surrounding the disaster to review NRC processes and regulations and make recommendations to strengthen NRC policy. This session will explore the Tier 1 recommendations, the actions taken to date, and what is being planned. These recommendations are focused on enhancing defense in depth at nuclear power plants through increased capabilities to minimize the potential for core damage following a beyond design basis external event. This helps assure that nuclear will continue to provide the right results and remain the right way forward.

Speakers:

- Dan Dorman (*Deputy Director for Engineering and Corporate Support, NRR, USNRC*)
- Alex Harkness (*Fellow Engineer, Westinghouse*)
- Vijay Nilekani (*Principal Engineer, Fukushima Regulatory Response Team*)

Detailed Conference Schedule: Monday

Equipment Innovation and Supply

The Increasing Challenges of Maintaining & Obtaining Old Equipment

Session Organizer: Greg Keller (AZZ | N L I)

Diplomat Ballroom 5

Technology increases are accelerating and each advancement moves manufacturers farther away from being willing or able to provide older technologies. Replacement equipment and repair parts are more difficult to source and technicians familiar with the equipment are retiring. Sites adopt different solutions at different rates. Is there a better way for the industry to handle these challenges?

Speakers:

- Steve Addis (*Manager of Nuclear Supply Operations, Exelon*)
- Jerry Schlessel (*Construction Manager, TVA*)

Work / Project Management

Working Together: Building and Managing Project Team Relationships

Session Organizers: Preston Pratt, Bill Flanagan, Jon Anderson

Atlantic Ballroom 1

Did you ever wonder why some projects are easier to manage and more successful than others? More often than not, the key distinction has more to do with the “How” rather than the “What” of successful project management. When asked about the biggest headaches in project management, a common thread among most project managers is not the objectives and scope of a project, but building and managing the team of people necessary for a successful and effective outcome. This session is designed to help project managers be better team builders and set the stage for the rest of the Work/Project Management track of the conference. The session will be led by a recognized organization development specialist and assisted by a project management professional. Combined, they have over fifty years’ experience in the industry and their respective disciplines. In this session you will:

- learn and apply methods for building, leading and managing effective teams incorporating the Team Effectiveness and RACI models;
- identify and learn about tools available for understanding and managing work behavioral style differences and team dynamics; and
- apply program content for improved project teamwork within your organization.

Speaker:

- Michael Madras (*Owner and Managing Principal, Madras & Co.*)
Team Building - How to Get the Most from Teams Who Have Different Goals

MONDAY AFTERNOON TECHNICAL SESSIONS

MONDAY, AUGUST 6, 2012 1:30 P.M. - 3:00 P.M.

Engineering Track

Technology for ER

Session Organizer: Dan Strong

Diplomat Ballroom 1

This session explores two applications of technology in improving Equipment Reliability. It’s not good enough to work harder. To make step changes in performance, we need to use all the technology available. New technology brings new opportunities if we can apply it effectively. Open your mind; see where you can apply this to your plant.

Speakers:

- Amadeus Burger (*President, CSA, Inc.*)
Case Study in Leveraging 3D Technology for Equipment Reliability
- Robert Keener (*Manager of Projects, TVA*)
- Chris Crosby (*Business Development Executive, OSISoft*)
Turning Insight into Action

Executive Track

Workforce Demographics

Session Organizers: Richard Cole, Don Eggett, Greg Boerschig

Diplomat Ballroom 2

The nuclear industry has a highly experienced workforce, with as a possibility of 50 percent retirements over the next 10 years. With the expanding of the upgrading of the current fleet, new construction, and completion of previously deferred units, it is important that we maintain a strong focus on a highly trained workforce. This session will provide information on industry efforts to attain the workers that will take our industry into the future.

Speakers:

- Catherine Stancombe (*Managing Director, Human Resources, Duke Energy*)
- Dee Torres (*Manager, Operations and Programs Technology Talent Acquisition, Exelon*)
Strategies for Attracting, Developing, and Retaining our Nuclear Talent

Detailed Conference Schedule: Monday

Knowledge Management / Workforce Issues

Texas Innovation - Still the one - KT&R –Texas Style

Session Organizer: Vince Gilbert (EXCEL Services Corp)

Regency Ballroom 1

Recognizing an adverse trend in KT&R sustaining methods, Both South Texas and Comanche Peak launched “boot-strap” KT&R programs in 2010. Since that time, some impressive results have been achieved including some industry-wide recognition of program effectiveness as well as further interest in expanding the approach across the STARS Alliance.

Speakers:

- James Mertink (*South Texas Project*), (*invited*)
There is No One-Size-Fits-All Solution to KT&R
- Jim Gallman (*Comanche Peak*), (*invited*)
Analyzing Risk of Staffing Losses vs. Analyzing Loss of Critical Knowledge

Long-Term Operations

Potential Showstoppers for Life Beyond 60 and What We Must Do Now to Avoid Them

Session Organizer: Don Williams

Atlantic Ballroom 2

While there is general consensus that commercial nuclear power plants (NPPs) can be operated safely and economically beyond 60 years, the potential exists for one or more “showstoppers,” for example, a materiel-related concern, to appear during extended service periods for the current NPP fleet. Consequently, significant investments are being made in the public and private sectors to better understand the safety, operational and economic implications of NPP operations beyond 60 years to identify and prevent the appearance of an issue or concern that could rise to the level of showstopper.

This technical session will focus on the issues that could emerge as showstoppers and the work in progress or planned to ensure those issues are thoroughly vetted and defined before the industry decision-makers pass judgment on pursuing “life beyond 60” or retirement/replacement for their NPP units.

Speakers:

- Jeremy Busby (*Senior R&D Staff and LWRs Materials Aging and Degradation R&D Pathway Lead, Oak Ridge National Laboratory*)
Age-Related Mechanisms R&D Being Pursued Under DOE’s Light Water Reactor Sustainability (LWRs) Program
- Tom Esselman (*Principal, Lucius Pitkin, Inc.*)
An Integrated Perspective on Life-limiting Issues
- Andy Kadak (*Director, Nuclear Services, Exponent Engineering and Scientific Consulting*)
Life-limiting Issues Identified in Recent Public/Private Sector Dialogue
- Garry Young (*Director, Nuclear Business Development, Entergy Nuclear*)
A Nuclear Utility’s Views on Potential Life-limiting Issues and Challenges to Long-Term Operation

Maintenance

Reduction of Leaks and Their Impacts to Plant Reliability

Session Organizers: Jim Heishman, Rich Carpenter

Diplomat Ballroom 3

Leak reduction strategies for diesel generators with a brief focus on leak types and strategies for prevention. Bolted flange connections and strategies for prevention. Includes a high-powered, fast-moving training session focused on recent operating experience, hands-on gasket samples and detailed photos. Training addresses best practices, typical human performance pitfalls, and material applicability.

Speakers:

- Greg Schulte (*Exelon*)
Fluid Leak Management Users Group (FLMUG). Leak Reduction Using Proven Methods and New Technology
- Jim Heishman (*EPRI Project Manager, EPRI*)
Leak Reduction on Emergency Diesel Generators to Improve Reliability
- Ken Hart (*Regional Representative, AP Services*)
Leak Cause Determination

New Reactor

Reactor Project Planning--From Project Inception to Operation"

Session Organizers: Kyle Turner, Andrea Sterdis

Regency Ballroom 2

Lessons learned, tips, and hints about planning, licensing, and implementing a new reactor project from those who have lived the process.

Speakers:

- Kyle Turner (*Principal McCallum-Turner, Inc.*)
Planning and Management for Merchant and Venture Capital Projects?
- Eddie Grant (*Vice President, New Nuclear Projects, EXCEL Services*) and Peter Smith (*DTE Energy Director, Nuclear Development-Licensing and Engineering*)
ESP vs. COLA
- Ray Hruby (*General Manager Watts Bar Unit 2 Technical Services, TVA*)
Keeping Nuclear in the Mix

Operations / Operations Training

Lessons Learned from the New CPEs Conducted this Year

Session Organizers: Dan Snook, Greg Kilpatrick

Diplomat Ballroom 4

The first stations to conduct CPEs will discuss their lessons learned. Panel Question and Answer Session

Detailed Conference Schedule: Monday

Speakers:

- Gregg Ludlam (*Corporate Training Manager, Exelon*)
- Bruce Hennigan (*Operations Training Manager, Exelon, Peach Bottom Nuclear Station*), (*invited*)
- Todd Vander Warf (*Program Manager, Operations Training, TVA*), (*invited*)
- Jeff Smith (*Operations Training Manager, Exelon, La Salle County Station*), (*invited*)
- Jeff Williams (*Shift Operations Supervisor, Exelon, LaSalle County Station*), (*invited*)

Performance Improvement

Process and Self-Assessment—Right Ways to Go

Session Organizers: Martin Marquardt (*President, Tosan, Inc.*), Joe Carignan (*TVA*)

Rooms 212 & 213

TVA's Joe Carignan will lead us through the latest self-assessment thinking. Then Tosan, with a client co-speaker, will facilitate a discussion comparing and contrasting the role of process and the workforce in seemingly different industries. This expanded perspective will help attendees to understand how crucial process can be in driving safety, performance, and sustained achievement in nuclear plants.

This discussion will present a case study in how a national utility is increasing the impact of their process improvement efforts by addressing the core behaviors of those who need to make it succeed. Tosan's co-presenter Brose will also share its operating experience in producing high-quality products, shaping its culture and its performance improvement system.

Facilitators and attendees will discuss the following critical factors in managing high-performing, low-tolerance processes:

- Strategic Alignment
- Process Orientation vs. Functional Orientation
- Sustaining performance rather than intermittent success
- Process as a factor in company culture

Experience in nuclear generation plant performance, as well as T&D and manufacturing will work to help ANS participants see the strategic value of the workforce making process effective.

Speakers:

- Joe Carignan (*Performance Analysis and Assessment, TVA*)
- Martin Marquardt (*President, Tosan, Inc.*)
- Thomas Kowal (*Plant Manager, Brose Jefferson*)

Regulatory Relations & Oversight Track

GSI-191, Sumps and Strainers

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

GSI-191, Assessment of Debris Accumulation on Pressurized Water Reactor Sump Performance, has been a long-standing issue for both the NRC and industry. This session will address risk-informed approaches and the NRC's status on proposed recommendations. Issues and concerns regarding approaches and issues identified during the integrated review process may also be discussed.

Speakers:

- Bill Ruland (*Director, Division of Safety Systems, NRR, USNRC*)
- Rick C. Grantom (*Manager, Risk Projects, South Texas Project*)
- John Butler (*Senior Director, Engineering and Operations Support, NEI*)

Risk Management

NFPA 805 and Fire PRA

Session Organizer: Dennis Henneke

Atlantic Ballroom 3

NFPA 805 has provided an impetus and practical application of fire PRA model. Each licensee has unique challenges due to different plant configurations and modeling needs. Insights and lessons learned from ongoing and completed NFPA 805 and fire PRA are presented in this session.

Speakers:

- Ching Guey (*PRA Senior Manager, TVA*)
Fire PRA/NFPA-805 Lessons Learned
- Dennis Henneke (*PRA Principal Lead, GE-Hitachi*)
Fire PRA Methods Development and Research Status
- Vinny Rubano (*Program Manager NFPA 805, NextEra*)
Fire PRA/NFPA 805 Lessons Learned
- Jim Chapman (*Director Safety and Risk, Scientech, Curtiss Wright Flow Control*)
Fire PRA Lessons Learned
- Donnie Harrison (*PRA Branch Chief, NRC*)
NFPA-805 Lessons Learned

Equipment Innovation and Supply

Adoption of New Technologies by Operating Units

Session Organizer: Greg Keller (*AZZ | NLI*)

Diplomat Ballroom 5

New construction, obsolescence solutions, and general industry have led to the development of new technologies, but operating units are often hesitant to adopt new technologies. This session will explore some of the reasons for this and how to improve this situation.

Detailed Conference Schedule: Monday

Speakers:

- Craig Irish (*V.P., Sales & Marketing, AZZ | N L I*)
- Shawn Hughes (*COO, QTRCO*)
- Greg Merrifield (*Global Nuclear Sales Director - TopWorx, Emerson*)
- William Henwood (*VP Nuclear, ValvTechnologies*)

Work / Project Management

How To Get Work Done

Session Organizers: Jon Anderson, Preston Pratt

Atlantic Ballroom 1

This interactive discussion is all about how to take an overloaded organization and find the ability to focus on what is important and how to ensure the important work gets done. This session will include a “Spaghetti on the Plate” analogy of how to manage our work and ensure the most important work gets done and how to manage the work (spaghetti) that falls off the plate.

Speakers:

- Jon Anderson (*President, Anderson, Chavet & Anderson Inc.*) and/or Steve Grier (*Director of Projects, Anderson, Chavet & Anderson Inc.*)
Too Much Work, Too Little Time? This One is for You

MONDAY AFTERNOON TECHNICAL SESSIONS MONDAY, AUGUST 6, 2012 3:30 P.M. - 5:00 P.M.

Engineering Track

ER Hot Topics

Session Organizer: Dan Strong

Diplomat Ballroom 1

The first part of this session explores way to prepare our maintenance forces to be successful and event free and new ways to use automation in Component Monitoring. Human performance errors in Maintenance are a significant concern as identified in INPO Event Report 2011-02 where 37% of the equipment-related scrams in 2009 and 2010 were Maintenance related. 80% of these maintenance-induced scrams were associated with mechanical maintenance. This interactive discussion will focus on how Engineering can contribute to reducing the number of times work is required on plant equipment and reducing the potential for human performance errors. The second part of the session will expand our thoughts in new ways to use automation in Component Monitoring.

Speakers:

- Jon Anderson (*President, Anderson, Chavet & Anderson Inc.*) and/or Steve Grier (*Director of Projects, Anderson, Chavet & Anderson Inc.*)
Reducing Maintenance Errors
- Bill Woynshner (*Vice President, WSC International, LLC*)
Enhancing/Automating System & Component Performance Monitoring with OLM and APR

Executive Track

Industry Expansion

Session Organizers: Richard Cole, Don Eggett, Greg Boerschig

Diplomat Ballroom 2

Several utilities are expanding their nuclear fleets. This executive session will focus on providing utility executive’s perspective on why this has become their business model, and the status of their projects. Ample time will be provided for attendees to ask questions and gain insight into the near future of the nuclear industry.

Speakers:

- Bradley Adams (*Vice President of Operations Support, Southern Company*)
Operational Readiness for Vogtle 3 & 4
- Alan Torres (*General Manager for Nuclear Construction, SCANA*)
SCANA’s Commitment to Nuclear

Knowledge Management / Workforce Issues

Top Ten Ways to Promote (and “Kill”) Knowledge Transfer and Retention (KT&R)

Session Organizer: Vince Gilbert (*EXCEL Services Corp*)

Regency Ballroom 1

The nuclear industry has been discussing KT&R for at least a decade, with little demonstrable success. This session will engage participants in brainstorming simple, effective ways to foster KT&R “on the fly,” as well as ways that organizations may inadvertently stifle KT&R. To foster creativity, the session will be set up to display electronic messages from participants in real time. The session will result in two “top ten” lists (ways to promote and kill) that will be distributed to participants.

Session attendees will gain practical ideas to promote KT&R and hear lessons from others on what to avoid. With your creative input, we may even advance the state-of-the-art in KT&R!

Speakers:

- Al Haeger (*Director – Office of Licensing and Compliance, Certrec Corporation*) and Laurie Lahti (*Project Manager – Certrec Corporation*)
Top Ten Ways to Promote (and Kill) Knowledge Transfer and Retention
- Joseph Schippert (*Product Leader – IBM MAXIMO*)
Some Lessons Learned From Our Customers

Maintenance

RFID the Path Forward?

Session Organizer: Rich Carpenter

Diplomat Ballroom 3

A Story of Vision - This fast-paced demonstration of how concept can go from idea to infrastructure. With so much flexibility that it lends itself to becoming the solution for many problems. “The idea that just keeps solving.”

Detailed Conference Schedule: Monday

Speakers:

- Rick Raber (*CNO, Northern Apex*)
RFID Solutions in Real Time
- Rich Carpenter (*FME Coordinator; Track Organizer, PPL Susquehanna*)
From Concept to Implementation to Infrastructure
- Bart Hickman (*Regional Representative, Alphasource*)
RFID Technology and Flexibility

Operations / Operations Training

How to Prepare for an INPO CPE from an Operations and Training Perspective

Session Organizers: Dan Snook, Greg Kilpatrick

Diplomat Ballroom 4

This session will explore the methods used in the industry to prepare for the new Crew Performance Evaluation. This includes a panel question and answer session.

Speakers:

- Gregg Ludlam (*Corporate Training Manager, Exelon*)
- Bruce Hennigan (*Operations Training Manager, Exelon, Peach Bottom Nuclear Station*), (*invited*)
- Todd Vander Warf (*Program Manager, Operations Training, TVA*), (*invited*)
- Jeff Smith (*Operations Training Manager, Exelon, La Salle County Station*), (*invited*)
- Jeff Williams (*Shift Operations Supervisor, Exelon, LaSalle County Station*), (*invited*)

Performance Improvement

Return on Investment for Performance Improvement

Session Organizers: Juan F. Villarreal (*Babcock and Wilcox*), Mike Kurzeja (*Exelon Generation*)

Rooms 212 & 213

The industry has made considerable investments in personnel, systems, and leadership engagement for managing performance improvement. Are these investments really paying off, are we receiving the expected return from these efforts. This session will describe the INPO initiative, objectives and action plan for improving ROI on Performance Improvement as well as two related programs at Exelon Generation on improving the effectiveness of the observation process and a new methodology for applying data analysis & forecasting for early detection of negative performance trends.

Speakers:

- Jim McCarthy (*Manager, Performance Improvement and Learning, INPO*)
Improving the ROI of Performance Improvement
- Al Ponessa (*Performance Improvement Manager, Exelon Generation*)
The Exelon Observation System (EOS)
- Mike Kurzeja (*Performance Improvement Analyst, Exelon Generation*)
Using Data Analysis and Forecasting to Detect Negative Trends and Prevent Significant Performance Declines

Risk Management

External Hazards Risk Management

Session Organizer: Anil Julka

Atlantic Ballroom 3

In order to support risk-informed regulatory activities, most plants need to add external hazards in their current PRA models. Recent examples of such effort and challenges associated with such effort will be discussed.

Speakers:

- Biff Bradley (*Director, NEI*)
Challenges of Risk Assessment and Management of External Hazards
- Ted Kulczycky (*Staff Engineer, Next Era Energy*)
Tornado/High Wind Risk Evaluation
- Paul Amico (*Consulting Scientist, SAIC*)
Integrated All-Hazards Risk Management in a Post-Fukushima World
- Greg Krueger (*Director, Risk Management: Exelon*)
External Events Risk Assessment
- Stuart Lewis (*Senior Program Manager, EPRI*)
R&D Needs and status in Risk assessment and Management of External Hazards
- Philip Watts (*President, Applied Fluids Engineering*)
Tsunami Hazards – Applying Careful PHTA in a Once and For All Manner

Equipment Innovation and Supply

Equipment Challenges Imposed by Fukushima Lessons Learned

Session Organizer: J. L. (Larry) Davenport (*Program Manager, Supply Chain - Nuclear Construction, TVA*)

Diplomat Ballroom 5

As of March 9th, 2012, the NRC has issued the first new rules in response to the Fukushima disaster. Released in three (3) separate tiers ranging from “start without unnecessary delay” to “actions that require further study,” the regulator has cited end of calendar 2016 to implement and complete requirements of all three new orders. This session will focus on the known immediate, short-term equipment demands and how the utility licensees and the suppliers can team to affect timely design, build, and delivery strategies to meet the regulator’s timetable.

Speakers:

- Mark Zeiger (*VP, Supply Chain, Bechtel*)
- Heiner Dornburg (*Product Manager, Global Sales and Marketing, I&C and Electrical Systems, AREVA*)
- Colin Elcoate (*SPX / ClydeUnion*)
- Larry Weckbaugh (*Executive Director – Supply Chain, Constellation Energy Nuclear Group (CENG)*)

Detailed Conference Schedule: Monday/Tuesday

Work / Project Management

Continuous Improvement through the T-Week Process

Session Organizers: Ian Falk, Jordan Gillis

Atlantic Ballroom 1

This interactive discussion will build on the previous sessions related to team building and managing too much work and too little time to focus on how to use the T-Week process to drive continuous improvement across the organization. This is a unique approach to performance improvement because it utilizes existing processes and tools to make significant improvements in performance. This discussion will draw an analogy between the 90-day refueling outages of 20 years ago with the T-Week process to explore what is doable if we put our minds to it. This discussion will set the challenge for significant improvements in T-Week processes.

Speakers:

- Adam Scales (*Work Control Manager, Watts Bar Unit 1*)
- Preston Pratt (*Work Control Manager, Sequoyah*)

TUESDAY MORNING PUBLIC SESSION

TUESDAY, AUGUST 7, 2012 8:30 A.M. - 10:00 A.M.

Public Session

“Nuclear - Still the One? The Right Business? The Right Results? The Right Way Forward?”

Regency Ballroom 1 & 2

Keynote Speakers:

- Michael Corradini (*President, ANS*)
ANS - Nuclear Education and Outreach as the Path Forward
- James Asselstine (*Barclays Capital*)
The Future of Nuclear Power: A Financial Community Perspective
- Bill Freebairn (*Platts*)
The Public’s Perspective on Nuclear Power
- Derrick Freeman (*NEI*)
The Perspective from Inside the Beltway

TUESDAY MORNING TECHNICAL SESSIONS

TUESDAY, AUGUST 7, 2012 10:30 A.M. - 12:00 P.M.

Engineering Track

Post-Fukushima Regulatory Status and Outlook - New Challenges and Solutions for Engineering Organizations

Session Organizer: Heiner Dornburg (*AREVA*)

Diplomat Ballroom 1

This session lays a solid foundation for the four post-Fukushima breakout meetings of the Engineering track by providing an overview of available – and still coming – ‘post-Fukushima’ regulatory requirements.

A quick way to make sure you’re up to date.

This session also features an overview of plant improvement actions taken outside of the U.S., encouraging lessons learned exchange in the international nuclear community.

Speakers:

- Vijay Nilekani (*Principal Engr. Fukushima Regulatory Response Team, NEI*)
Don’t Forget Tiers 2 and 3. Fukushima Regulatory Activities for Tier 1 Recommendations and an Outlook of Things to Come
- Wolfgang Michel (*Director Electrical Systems, AREVA GmbH (Germany)*)
International Post-Fukushima Solutions with Relevance to New US Regulatory Requirements

Executive Track

U.S. Nuclear Strategy and its Future

Session Organizers: Richard Cole, Don Eggett, Gregory Boerschig

Diplomat Ballroom 2

The Center for Strategic and International Studies (CSIS) in cooperation with leaders in the public and private sectors has developed a U.S. strategy for keeping the U.S. relevant on a global scale in the area of nuclear electrical generation. The Tuesday morning executive session provides a forum for industry leaders to become familiar with the proposed strategy and to discuss the pros and cons of the strategy.

Speaker:

- Bill McCollum (*Chief Operating Officer, TVA (retired)*)
A Proposed National Nuclear Strategy from the Center for Strategic and International Studies (CSIS)

Long-Term Operations

Life Cycle Asset Management Decisions and Optimization: A Tutorial

Session Organizer: Ted Quinn

Atlantic Ballroom 2

High performance of nuclear plants is imperative, even as we experience aging of equipment, lean budgets, and short outages. New tools and methods for Integrated Life Cycle Management (ILCM) of critical systems, structures, and components will be necessary.

Detailed Conference Schedule: Tuesday

The EPRI ILCM project is under way with a living process and tools for decisions on refurbishment, replacement, and modernization of critical assets. The project includes failure models, an assessment process, probabilistic remaining-life modeling, optimization tools, and pilot studies to demonstrate the effectiveness and practicality of the process. It is based on the vision of a core group of utilities who have participated throughout the project.

Through examples and case study results, this session previews the process and products to be available for utility use.

Speakers:

- Arden Aldridge (*License Renewal Project Manager, South Texas Nuclear Operating Company*)
EPRI Data, Models and Optimization Tools for Life Cycle Management
- Paul Bruck (*Lucius Pitkin*)
Estimating End of Life for Critical Power Plant Equipment
- Jerome Lonchamp (*EDF*)
An Optimization Approach for Life Cycle Management Applied to Large Power Transformers

Maintenance

Practical Implementation of Cyber Security Controls in Maintenance

Session Organizers: Linda Snyder, Eric Woloszyn

Diplomat Ballroom 3

This session will provide a practical demonstration of cyber security controls.

Speakers:

- Bill Grosse (*Cyber Security Engineer, NEI*)
Introduction to Cyber Security and How It Will Apply to Maintenance
- Mike Zavislak (*Cyber Security Engineer, TVA*)
Cyber Security Technology in Maintenance. How to Protect Plants from Cyber Viruses while Getting the Work Done.
- Eric Woloszyn (*Cyber Security Engineer, Exelon*)
Cyber Security Technology in Maintenance. Impacts of Initial Implementation in Exelon.

New Reactor

SMR Deployment Strategies and Regulatory Interfaces

Session Organizers: Dave Matthews, Andrea Sterdis

Atlantic Ballroom 3

Speakers:

- Greg Halnon (*Director, Regulatory Affairs, FirstEnergy Nuclear Operating Company*)
SMRs: Breaking the Log Jam
- Scott Bond (*Ameren, (invited)*)
Licensing—Transitioning to an SMR COLA

- Dave Matthews (*U.S. NRC*)
NRC Regulatory Moves to Support SMRs
- Peter Hastings (*Director of Regulatory Affairs, Generation mPower*)
mPower Design-Specific Review Standards
- Ian Jung (*Branch Chief, Instrumentation and Controls, Division of Engineering, Office of New Reactors, U.S. NRC*)
Advanced Reactor Licensing Review for Instrumentation and Controls: Taking on a New Approach for Safety and Efficiency through Applying Lessons Learned

Operations / Operations Training

Palisades Operator at the Controls (ATC) Leaves the Control Room Without Proper Relief – A Case Study

Session Organizer: Mike Spellman

Diplomat Ballroom 4

A Palisades site manager with an extensive operations background will lead an interactive discussion that includes factual description of the event, causes of the event, lessons learned, regulatory interfaces and impacts, actions taken, and suggestions to prevent this from happening at your station.

Speaker:

- Charles Arnone (*Nuclear Safety Assurance Director, Entergy Nuclear, Palisades Nuclear Plant, Case Study Facilitator*)

Performance Improvement

The Right Way Forward with Excellence Models

Session Organizers: Dr. Michael D. Quinn (*Workplace Cornerstone Group*), Vince Gilbert (*EXCEL Services Corp*)

Rooms 212 & 213

(This is a combined Track session of Performance Improvement and Knowledge Management / Workforce Issues.)

An excellence model rolls out detailed expectations for a culture of performance discipline that can be understood at all levels and used to identify performance gaps. Performance problems can come from having the wrong model or from not living to it. It is important to find out which and fix it.

Change in an organization's culture is frequently sought by executives, but rarely delivered. This presentation details the beginning of a culture change journey that started with an area for improvement (AFI) encompassing "workers not adhering to standards" and "supervisors not reinforcing standards," and resulting in observable behavior and attitude change in both supervisors and front-line workers. This case study will cover the background leading up to the AFI, data collection and analysis, gaining leadership buy-in, implementation plans, required resources, and observable results.

Detailed Conference Schedule: Tuesday

Speakers:

- Jim Hill (*Chief Judge, Performance Excellence Network*)
Process-Based Performance Excellence Model
- Gary Waldrep (*Senior Representative*) and Ken Koves (*Sr. Program Manager, INPO*)
Beginning Culture Change through Leadership Engagement, Successful Organizational Culture Change: It's not for the Faint of Heart
- Thomas Gysel (*Business and TQM Director KKL Leibstadt NPP, (Switzerland)*)
Performance Excellence by Application of the European Foundation for Quality Management Model

Regulatory Relations & Oversight Track

Fukushima Response – Tier 2 and 3 Recommendations

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

After the Fukushima disaster, the NRC convened a Near-Term Task Force to evaluate the events surrounding the disaster to review NRC processes and regulations and make recommendations to strengthen NRC policy. As a follow on to the Tier 1 session, this session will explore the Tier 2 and 3 recommendations of the NRC's Near-Term Task Force, to include actions under way, plans, and possible problems. These recommendations are focused on enhancing defense in depth at nuclear power plants through increased capabilities to minimize the potential for core damage following a beyond design basis external event. This helps assure that nuclear will continue to provide the right results and remain the right way forward.

Speakers:

- Dan Dorman (*Deputy Director for Engineering and Corporate Support NRR, USNRC*)
- Alex Harkness (*Fellow Engineer, Westinghouse*)

Equipment Innovation and Supply

Encouraging Engineering, Procurement and Constructor Firms to Balance EPC with Long-Term O&M Requirements for the Licensee

Session Organizer: J. L. (Larry) Davenport (*Program Manager, Supply Chain - Nuclear Construction, TVA*)

Diplomat Ballroom 5

Recent past projects for unit completion and new construction have focused on design and construction to meet aggressive schedules as utilities seek replacement base load power to offset retired fossil assets. Little attention has been directed to long-term maintenance and repair costs in the initial design phase of these projects. This panel will address the balance that needs to be struck between "first cost" and "long-term reliability/cost effectiveness."

Speakers:

- Jerry Schlessel (*Construction Manager, TVA Bellefonte Nuclear Plant*)
- Bill Heinmiller (*Project Engineer, Bechtel / TVA Watts Bar Unit 2*)
- Jon Chesser (*VP, Construction Solutions, Atlas RFID Solutions*)
- Sean McDermott (*Manager, Logistics Operations, Westinghouse AP1000 program*)
- Ed Wolbert (*President, Transco Products Inc.*)

Work / Project Management

New Build Project Management Leading Practices

Session Organizers: Jordan Gillis, Ian Falk

Atlantic Ballroom 1

This session will start a new thread on project management for the exciting new plants at Southern Nuclear (Vogtle) and plant restart at TVA (Bellefonte). This session will focus on the lessons from completing large projects that will help us with smaller projects and day-to-day performance improvements.

Speakers:

- Jim Chardos (*Senior Manager, Bellefonte Projects, TVA*)
Lessons from a Plant Restart
- Mark Rauckhorst (*VP, Vogtle 3&4 Construction, Southern Nuclear*)
New Build on an AP1000

TUESDAY AFTERNOON TECHNICAL SESSIONS

TUESDAY, AUGUST 7, 2012 1:30 P.M. - 3:00 P.M.

Engineering Track

The Right Results in Implementing New Post-Fukushima Solutions

Session Organizers: Heiner Dornburg (*AREVA*), Roy Brosi (*First Energy*)

Diplomat Ballroom 1

Benefit from concise overviews of engineering aspects related to implementing upgrade measures for "Tier 1" items: Spent Fuel Pool Instrumentation and Hardened Vents. This session will provide a unique chance to gather know-how regarding engineering lessons learned and available hardware solutions.

Speakers:

- Neil Wilkie (*Government and OEM Business Manager, VEGA Americas, Inc.*)
Lessons Learned for Implementing Simple and Reliable Water Level Measurement
- Greg Krueger (*Director – Risk Management; Chairman BWROG Containment Strategies, Exelon*)
Hardened Venting Solutions: Design Criteria for BWRs and Containment Protection Alternatives

Detailed Conference Schedule: Tuesday

Executive Track

The 2012 UWC and The Way Forward for the 2013 UWC

Session Organizer: Greg Boerschig

Diplomat Ballroom 2

This session is co-hosted by the 2012 General Chair and the 2013 General Chair. Current and future track leaders should attend to discuss what went well during the 2012 UWC such that the 2013 UWC can build on the success of the 2012 UWC.

Long-Term Operations

Strategies for Using Advanced I&C and Information Technology to Modernize Plant Processes for LTO

Session Organizer: Ken Thomas

Atlantic Ballroom 2

Work is progressing under DOE's Light Water Reactor Sustainability (LWRS) Program and EPRI's Long-Term Operations (LTO) Program to:

1. Reduce the technical, financial, and regulatory risk of upgrading the aging I&C systems to support extended plant life beyond 60 years, thereby ensuring that legacy analog I&C systems are not life-limiting issues for the LWR fleet.
2. Provide the technological foundation for a new nuclear plant operating model that improves plant performance and addresses the challenges of the future business environment.

This session will highlight work to modernize I&C systems and control rooms, as well as to apply digital technology to improve human performance and efficiency for nuclear plant workers and work processes. Integrating plant systems, plant processes, and plant workers through a seamless digital environment is THE RIGHT WAY FORWARD to enable long-term operation of the current nuclear fleet, ensuring nuclear is STILL THE ONE!

Speakers:

- Ken Thomas (*Senior Consultant, Idaho National Laboratory*)
Advanced Digital Technology for Nuclear Power Plants
- Greg Robison (*Manager, Nuclear Strategy and Issues, Duke Energy*)
Technology for Nuclear Plant Human Performance Improvement
- Keith Moser (*Director of Innovation, Exelon Nuclear*)
Improving Work Processes for Nuclear Plants

Maintenance

Organizations Working Together to Improve the T-Week Work Control Process

Session Organizers: Dan Strong, John Klein, Jon Anderson

Atlantic Ballroom 1

(This is a combined Track session of Maintenance and Work / Project Management.)

Operations / Operations Training

Operations and Training Staffing Challenges Part 1

Session Organizers: Mike Spellman, Vince Gilbert

Diplomat Ballroom 4

(This is a joint session between Operations / Operations Training and Knowledge Management / Workforce Issues Tracks.)

All nuclear plants are faced with the challenge of maintaining adequate staffing of qualified training personnel to support the maintenance of qualified licensed operators at all of our nuclear reactors. This session will present the aggregate results of a nation wide survey about operator training staffing issues. The first part of the session will focus on the current state of the challenge and will present industry cases of plants addressing the challenge. Part 2 will focus on solutions including best practices in place now and possible alternatives. These sessions will be co-sponsored by the KM-WF Issues Track.

Speakers:

- Robert Brown (*Training Director, Vogtle 1&2, Southern Company*)
Staffing Challenges to Support Growing Number of Licensed Operators
- Wendall Prevatt (*Operations Manager, Watts Bar Unit 1*)
Lessons Learned from Watts Bar Expansion
- James Mertink (*Manager, Training and Knowledge Transfer, South Texas Project*)
Successful Use of Staffing Models
- Robert Boesch (*Training Manager, Hope Creek Nuclear Generating Station, PSEG*)
Management Support Driving Success

Performance Improvement

Improving Performance Through Safety Culture Within an Engaged, Thinking Organization

Session Organizer: Tom Houghton

Rooms 212 & 213

Update from last year's session focusing on implementation of INPO SOER 10-2 "Engaged, Thinking Organization" processes and the new common language of nuclear safety culture.

Speakers:

- Ben Whitmer (*Nuclear Safety Culture Coordinator, South Texas Nuclear Operating Company*)
Gain Greater Alignment by Advocating Engaged, Thinking Organization Principles in NSC Attribute Discussions
- Rey Gonzalez (*Director of Nuclear Services, Practicing Perfection Institute*), Shane Lies (*Plant Manager, DC Cook*), and Brad Williamson (*HU Manager, DC Cook*)
Engaging the Workforce for Positive Results
- Tom Houghton (*Director, Strategic Solutions, Certrec Corporation*)
Common Language of Nuclear Safety Culture

Detailed Conference Schedule: Tuesday

Regulatory Relations & Oversight Track

Merging of the Safety and Security Reactor Oversight Programs – What Are the Implications?

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

Recently the NRC reintegrated the safety Reactor Oversight Process (ROP) with the security ROP. This session will explore the reasons behind the reintegration, issues that have come up since the reintegration, and potential problems in the future.

Speakers:

- John Lubinski (*Deputy Director, Division of Inspection and Regional Support, NRR, USNRC*)
- Patricia Holahan (*Director, Division of Security Operations, NSIR, USNRC*)
- Pat Asendorf (*Security Regulation Oversight, TVA (on loan to NEI)*)

Risk Management

Impact of Fukushima on Risk Management

Session Organizer: Bijan Najafi

Atlantic Ballroom 3

The Fukushima event has provided an opportunity to rethink risk assessment and management. Effort from various segments of the nuclear safety community has provided important lessons learned. Various perspectives from different PRA practitioners are presented in this session.

Speakers:

- Amir Afzali (*Director, Risk-informed Engineering Southern Company*)
- Donnie Harrison (*PRA Branch Chief, NRC*)
Status of NRC Actions in Response to Fukushima
- Gary Pavis (*Constellation Energy Nuclear Group*)
- Rick C. Grantom (*Manager, Risk Management Projects, South Texas Project*)
A Proposed Approach for Evaluating the Risk-impact of Implementing FLEX
- Scott Bauer (*Nuclear Energy Institute*)
Mitigating Strategies for an Extended Loss of AC Power (FLEX)

Equipment Innovation and Supply

What's Holding Up the Parts and Equipment I Need? Challenges Associated with Procurement for Commercial Nuclear Plant Replacement Items and New Ones on the Horizon.

Session Organizer: Marc Tannenbaum

Diplomat Ballroom 5

Successful equipment procurement has long been challenging. Availability is increasingly impacted by obsolescence and supplier attrition. Quality suffers with global expansion of the supply chain as suppliers consolidate, product lines are sold, and as original design and manufacturing details and manufacturing expertise are lost. Rulemaking in commercial grade dedication, counterfeit and fraudulent item mitigation, and cyber security present new challenges to licensees and suppliers.

Speakers:

- Kerri Kavanagh (*Chief- Quality Assurance Branch (acting) NRC*)
Regulatory Update: Raising the Bar on the NRC Vendor Inspection Program
- Marc Tannenbaum (*Senior Project Manager, Electric Power Research Institute*)
How difficult can "shopping" be? Current challenges involved in getting the items we need
- Dan Maret (*President, Sequoia Consulting Group, Incorporated*)
Where are My 800,000 Tons of Safety Related Concrete? - Supply Chain Challenges on New Plant Construction Projects

Work / Project Management

Organizations Working Together to Improve the T-Week Work Control Process

Session Organizers: Dan Strong, John Klein, Jon Anderson

Atlantic Ballroom 1

(This is a combined Track session of Maintenance and Work / Project Management.)

This interactive discussion will build on the lessons from Session 1 in the Work / Project Management track on team building. This session will include role play to allow participants to represent the key organizations in the T-Week work process. Success in the process improvements will be measured in reductions in the time and cost required to conduct the process and improvements in the amount of work performed. Participants will develop a "poster map" of lessons they learned and how they can be implemented at their plants.

Speakers:

- Dan Strong (*Equipment Reliability Lead Engineer, Duke Energy*)
- John Klein (*Maintenance Support Functional Area Manager, TVA*)
- Jon Anderson (*President, Anderson, Chavet & Anderson Inc.*) and/or Steve Grier (*Director of Projects, Anderson, Chavet & Anderson Inc.*)

Detailed Conference Schedule: Tuesday

TUESDAY AFTERNOON TECHNICAL SESSIONS

TUESDAY, AUGUST 7, 2012 3:30 P.M. - 5:00 P.M.

Engineering Track

Seismic, Flooding, and Other External Hazards: Ways to Mastering the Challenges

Session Organizer: Jeremy Picard (AREVA)

Diplomat Ballroom 1

Seismic and flooding hazard re-evaluation and walkdowns are currently the top 'post-Fukushima' topics for many utilities. Especially, preparation needs to be optimized to keep spending reasonable and to ensure that the right results will be obtained. The two speakers, known experts in their fields, will share insights from previous and current work and their suggestions for the right way forward.

Speakers:

- Gene Hughes (Director, ETRANCO Inc.)
Rigor and Realism in Seismic PRA, Managing Cost
- Dr. Daniel Gessler, PE, DWRE (Vice President, Alden)
Flooding Design Basis Reevaluation and Walkdowns - Challenges and Solutions

Knowledge Management / Workforce Issues

The Right Way Forward: Application of Knowledge Management to Solve Important Issues

Session Organizers: Vince Gilbert (CKO, EXCEL Services Corp), Zoltan Pasztory (Acting Section Head, IAEA NKM Section)

Diplomat Ballroom 2

This session will focus on international efforts to apply knowledge management principles to begin to solve nuclear organizational issues worldwide. IAEA subject matter experts from the Americas, Asia, and Europe will provide descriptions. Areas for discussion include implementation of comprehensive NKM frameworks, application of KM to safety culture, knowledge preservation of major nuclear accidents, and risk management of knowledge loss.

Speakers:

- Vince Gilbert (Excel)
Coordinated Research Project in Process-oriented Knowledge Management
- Zoltan Pasztory (IAEA)
"IAEA NKM Projects in 2012"
 - NKM in Integrated Management Systems
 - Mapping Competencies
 - NKM and Safety Culture

Long-Term Operations

Aging Degradation: Aging Management Programs (AMP) to Ensure Long-Term Operation

Session Organizer: Rich Tilley (EPRI)

Atlantic Ballroom 2

A key requirement to achieving safe and reliable performance during periods of extended operation will be the utility execution of comprehensive aging management programs (AMPs). AMPs must fully cover known degradation mechanisms to assure timely response and correction and must incorporate elements that address the potential for new or variable modes of degradation with full consideration of potential operation beyond 60 years. This technical session will explore both the bases for developing such comprehensive AMPs and the bases for their successful implementation at an operating plant.

Speakers:

- Amy Hull (Sr. Materials Engineer, NRC)
Lessons Learned from AMP Effectiveness Audits at Ginna and NMP-1
- Rich Tilley (Sr. Project Manager, LTO Program, Electric Power Research Institute)
Proactive Identification of AMP Enhancements for Subsequent License Renewal
- Mike Fallin (Principal Engineer, Asset Management, Constellation Energy Nuclear Group)
AMPs are Living Programs that Will Evolve to Address Emergent Aging Concerns

Maintenance

Rightsizing the Preventive Maintenance Program by Working as One Team

Session Organizers: Dan Strong, John Klein, Jon Anderson

Atlantic Ballroom 1

(This is a combined Track session of Maintenance and Work / Project Management.)

Operations / Operations Training

Industry Operations and Training: Prevent Events

Session Organizer: Mike Williams

Diplomat Ballroom 4

A panel of experienced personnel in the Operations and Training areas discuss lessons learned, a case study, and other techniques used to "Prevent Events." This session will include a panel discussion and other interactive techniques.

Speakers:

- Mike Williams (TVA)
- Scott Plymale (FENOC)

Detailed Conference Schedule: Tuesday

Performance Improvement

The Human in Performance Improvement: A New Perspective on Improving Performance

Session Organizers: Brad Williamson, Dick Swanson

Rooms 212 & 213

The industry has made great progress in addressing performance issues over the history of nuclear operations in the United States, but it now appears as if improvement efforts have plateaued. Why is it that after 40 years of evolution in Performance Improvement, we now find ourselves addressing the same failures over and over again?

Why are corrective action programs not effectively addressing repetitive organizational & programmatic issues? Why are root cause evaluations, apparent cause evaluations, and other performance improvement tools not identifying the causes of failure? Why do backlogs continue to accumulate and grow in complexity? Why do root causes continue to end with “human error?”

Drawing on personal experience, the panel will offer its perspectives of what is holding us back and what to do about it, based on a contemporary understanding of what it means to be human in the safe operation of complex systems.

Speakers:

- Shane Lies (*Plant Manager, DC Cook, AEP*)
Fixing Machines, Leading People: Improving Human Performance
- Greg Halnon (*Director of Regulatory Affairs, FirstEnergy*)
Process Paralyzed
- Brad Williamson (*Human Performance Manager, DC Cook, AEP*)
The Performance Improvement Paradox: Improving Performance When the Human Isn't Broken!
- Dick Swanson (*President, Performance Management Initiatives*)
New Design/New Construction: Same Old Learning Curve

Regulatory Relations & Oversight Track

Flooding of Nuclear Power Plant Sites Following Upstream Dam Failure (GI-204)

Session Organizers: Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

GI-204, Flooding of Nuclear Power Plant Sites Following Upstream Dam Failure, addresses flooding impacts at operating reactors due to potential dam failures. It was determined that further evaluation of external flooding of nuclear power plants due to an upstream dam failure was warranted. The upstream dam issue came to the NRC's attention long before the current interest in natural disasters raised by the Japan earthquake/tsunami and reactor accident. New sources of information on this issue have accumulated over the past few years. This session will identify the primary issues and challenges associated with complying with the issues and requests identified in GI-204.

Speakers:

- Dan Dorman (*Deputy Director for Engineering and Corporate Support, NRR, USNRC*)
- Joseph Ehasz (*Program Manager, Water Resources, URS, Civil Construction & Mining*)
- Carrie Stokes (*VP, Water Resources, Barge Waggoner Sumner & Cannon, Inc.*)

Risk Management

Initiatives in Risk Management and Conformance with Reg. Guide 1.200

Session Organizer: Ray Fine

Atlantic Ballroom 3

Since the publication of Reg. Guide 1.200 Rev 2, many licensees are developing PRA models beyond internal events. Efforts by the licenses in the development of risk assessment and management of external hazards are discussed in this session.

Speakers:

- Steve Eide (*Senior Principle Scientist, Scientech, Curtiss Wright Flow Control*)
Using PRA and Stress Test Insights from Hazards Analyses to Manage Risk and Improve Plant Safety
- Ray Fine (*Supervisor Analytical Methods, FENOC*)
FENOC PRA Capital Project Plan
- Jeff Stone (*PRA Lead, Constellation*)
- Stuart Lewis (*Senior Program Manager, EPRI*)
- Rick C. Grantom (*Manager, Risk Management Projects, South Texas Project*)

Equipment Innovation and Supply

Sourcing Issues Facing New Nuclear Construction

Session Organizers: Eric Hale

Diplomat Ballroom 5

One of the critical factors to the success of the nuclear renaissance is the ability of the supply chain to meet the demand for new construction. The nuclear supply chain landscape is substantially different from when the existing fleet was deployed. Some of the original equipment manufacturers no longer have the qualifications or ability provide nuclear-grade components. There are new global players, who have continued to support the development of new nuclear plant construction outside the U.S. and can support the new generation of domestic reactors. There is also a host of new technologies that have evolved beyond those that are deployed in the existing fleet. This session will address some of the unique challenges that face NSSS OEMs, utilities, and suppliers supporting the latest generation of reactors in the North American fleet and around the world.

Speakers:

- Juan Molina (*Vice President & Chief Procurement Officer, Global Supply Chain Management, Westinghouse Electric Company*)
Invigorating the US Nuclear Infrastructure
- Gary Wolski (*Vice President, Nuclear Group, Curtiss-Wright Flow Control*)
Evolution of Supplier Relations for New Build
- Laura Dudes (*Director, Division of Construction Inspection and Operational Programs, Office of New Reactors, U.S. NRC*)
Enhancing the Integrity of the Supply Chain
- Albert F. Coccagna (*mPower Manufacturing Manager, The Babcock & Wilcox Company*)
Nuclear Energy Supply Strategy for SMR Deployment

Detailed Conference Schedule: Tuesday/Wednesday

Work / Project Management

Rightsizing the Preventive Maintenance Program by Working as One Team

Session Organizers: Dan Strong, John Klein, Jon Anderson

Atlantic Ballroom 1

(This is a combined Track session of Maintenance and Work / Project Management.)

This interactive discussion will allow participants to “play the roles” in the plant that normally interact to define the strategies to be used to ensure plant equipment meets required levels of performance. Participants will be challenged with both online and outage situations where the adequacy of the PM Program will be questioned. Participants will be required to make the real-life decisions around the need for work identified in INPO AP-913, Equipment Reliability Process Description, and AP-928, Work Management Process Description. This discussion will use lessons from previous sessions to build the bridges between organizations to allow the development of common goals and actions to improve plant performance, not necessarily the performance of independent organizations.

Speakers:

- Dan Strong (*Equipment Reliability Lead Engineer, Duke Energy*)
- John Klein (*Maintenance Support Functional Area Manager, TVA*)
- Jon Anderson (*President Anderson, Chavet & Anderson Inc.*) and/or Steve Grier (*Director of Projects, Anderson, Chavet & Anderson Inc.*)

TUESDAY, AUGUST 7, 2012 • 7:30 P.M. - 10:30 P.M.

"Trek through the Stars"

EXCEL Services Corporation Evening Event

Great Halls 5 & 6

WEDNESDAY MORNING PUBLIC SESSION

WEDNESDAY, AUGUST 8, 2012 8:30 A.M. - 10:00 A.M.

Industry Awards Presentation

Regency Ballroom 1 & 2

Moderators:

- L. E. (T-Bow) Thibault (*TVA, Technical Program Chair*)
- Mike Skaggs (*TVA, General Chair*)
- Stephanie Banker (*Training Manager, Callaway Nuclear Station, Ameren*)

UWC Award Presentations:

ANS OPD 2012 Utility Achievement Award

North Anna Power Station Dominion Virginia Power

For sustained outstanding performance with a continued focus on safety, protecting the health and safety of the public, plant health assessments, communications with the public, and regulatory interaction with regard to the response to and the return to service following the 2011 Mineral, Virginia, Earthquake.

ANS OPD 2012 Utility Leadership Award

Keith Moser (*Exelon Corporation*)

In recognition of exemplary performance throughout his career in the nuclear industry for his achievements in the area of innovations and nuclear power plant improvement. Keith's innovations represent significant savings of radiation exposure and cost as well as significant plant performance improvement for U.S. and international nuclear power plants.

Executive Panel Discussion

Nuclear! Still the One! The Right Business? The Right Results? The Right Way Forward?

Panel Chair: Mike Skaggs (*TVA, General Chair, 2012 UWC*)

Diplomat Ballroom 2

Panelists:

- Preston Swafford (*CNO, TVA*)
- Maria Korsnick (*CNO, Constellation Energy*)
- Bill Webster (*SrVP, Industry Evaluations, INPO*)
- Commissioner Kristine L. Svinicki (*U.S. NRC*)

WEDNESDAY MORNING TECHNICAL SESSIONS

WEDNESDAY, AUGUST 8, 2012 10:30 A.M. - 12:00 P.M.

Engineering Track

Panel Discussion with Introductory Presentation: Challenges and Solutions for Engineering Organizations in the Post-Fukushima Era

Session Organizer: Heiner Dornburg (*AREVA*)

Diplomat Ballroom 1

Rounding off the series of “Post-Fukushima” Engineering-related breakout sessions, the introductory speaker will present the results of a survey among U.S. Nuclear Utilities regarding how Fukushima affected the U.S. engineering organizations, with a more in-depth look at 2-3 specific utilities' approaches.

With that groundwork laid, the panelists will discuss YOUR questions. Highlights and any topics that could not be fully covered during the previous breakout sessions will also be brought up again, providing a good summary of this series.

Detailed Conference Schedule: Wednesday

Panelists:

- George Attarian (*Duke Energy*)
- David Gambrell (*Southern Nuclear*)
- Roy Brosi (*First Energy*)
- Gary Pavis (*Constellation Energy*)
- TBD (*AREVA Inc.*)

Speaker:

Introductory Presentation

- David Gambrell (*Director, Severe Accident Mitigation, Southern Nuclear Operating Co.*)
Aligning Engineering Organizations for the Successful Handling of Post-Fukushima Work

Executive Track

U.S. Nuclear Strategy for Subsequent License Renewal Beyond 60 Years – Technical, Policy, and Licensing Perspectives

Session Organizers: Don Eggett, Dick Cole, Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

(This is a joint session with Executive, Long-Term Operations, and Regulatory Relations & Oversight Tracks)

The utility industry, through the Long-Term Operations Program at EPRI and collaboration with DOE and NRC research, has been investigating technical issues related to potentially operating plants beyond 60 years. More recently, the industry is considering the needs, through NEI, for such a license submittal; and NEI has engaged NRC to address their expectations for subsequent license renewal.

This session explores the status of technical, policy, and regulatory issues for subsequent license renewal. Speakers are industry and NRC leaders on these topics. This session is especially timely – aging management, asset management, and capital project decisions are being made today that will impact the long-term operations of these critical generating assets.

Speakers:

- Mike Gallagher (*VP, License Renewal and Asset Management, Exelon*)
Making the Technical Case for High Performance, Long-Term Plant Operation
- Melanie Galloway (*Deputy Director, Division of License Renewal, NRR, USNRC*)
- Doug Walters (*Vice President, Nuclear Operations and Regulatory Affairs, NEI*)
Subsequent License Renewal - A Holistic View

Long-Term Operations

U.S. Nuclear Strategy for Subsequent License Renewal Beyond 60 Years – Technical, Policy, and Licensing Perspectives

Session Organizers: Don Eggett, Dick Cole, Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

(This is a joint session with Executive, Long-Term Operations, and Regulatory Relations & Oversight Tracks)

Maintenance

Maintenance Fundamentals and Conduct of Maintenance

Session Organizer: Patrick Boyle

Diplomat Ballroom 3

Presentation and working meeting to address the decline in maintenance fundamentals and the conduct of maintenance.

Speakers:

- Dan Glassic or Bob Peters (*Assistant Maintenance Department Manager, INPO*)
Declining Industry Trends in Fundamentals and the Impacts on Maintenance

New Reactor

Post-COL Configuration Management--Coordination of Oversight, License Maintenance, and ITAAC Closure

Session Organizers: Laura Dudes (*NRC*), David Matthews (*NRC*), Russell Bell (*NEI*), Chuck Pierce (*Southern Co.*)

Atlantic Ballroom 3

The NRC has now issued four Combined Licenses (COLs). This session will cover the recent evolution from the challenges attendant to project licensing to those prompted by coordination among the oversight, license amendment, and ITAAC closure processes. The objective is to share lessons learned through the initial months of construction oversight and inspection, the receipt and review of the first COL license amendments, and the processing of the first ITAAC Closure Notifications.

Speakers:

- David Matthews (*Director, Division of New Reactor Licensing, U.S. NRC*)
- Laura Dudes (*Director, Division of Construction Inspection and Operational Programs, U.S. NRC*)
- Clint Medlock (*Southern Nuclear Operating Company*)
- Amy Monroe (*South Carolina Electric & Gas Company*)
- Joel Munday (*Director, Division of Construction Projects, Region II, U.S. NRC*)
- Earl Libby (*Project Manager, Office of New Reactors, U.S. NRC*)

Operations / Operations Training

Operations and Training Staffing Challenges Part 2

Session Organizers: Mike Spellman, Vince Gilbert

Diplomat Ballroom 4

(This is a joint session between Knowledge Management / Workforce Issues and Operations / Operations Training Tracks.)

Detailed Conference Schedule: Wednesday

All nuclear plants are faced with the challenge of maintaining adequate staffing of qualified training personnel to support the maintenance of qualified licensed operators at all of our nuclear reactors. This session will present the aggregate results of a nationwide survey about operator training staffing issues. The first part of the session will focus on the current state of the challenge and will present industry cases of plants addressing the challenge. Part 2 will focus on solutions including best practices in place now and possible alternatives. These sessions will be co-sponsored by the KM-WF Issues Track.

Speakers:

- John Wheeler (*Training Manager, Entergy Nuclear*), (*invited*)
Specific Application of the Tank Model to Operations Training
- Phil Polefrone (*SVP, Workforce Solutions, GSE*)
Simulations and Historical Perspective
- Derek Millar (*Regional Director, Ian Martin*)
Recruiter Perspectives

Performance Improvement

The Right Business Approach - Managing Root Cause Teams Supported by HPRCT

Session Organizers: Steve Davis, Jack Martin

Rooms 212 & 213

Root cause teams are a valuable company investment. The resource commitment has to be managed with a leadership perspective to balance efficiencies while providing effective results. Managing the root cause team is key to successful and necessary corrective action to prevent future events.

Team members need to know that their bosses are vitally interested in getting the investigation done right. The bosses need to get specific, timely, accurate, and reliable (STAR) information on how their loaned members are performing to senior management expectations.

Speakers:

- Dave Gudger (*Exelon*)
Ensuring Root Cause Team Results from a Leadership Perspective
- Bill Corcoran (*NSRC Corporation*)
Being a Root Cause Team Leader is not for Sissies

Regulatory Relations & Oversight Track

U.S. Nuclear Strategy for Subsequent License Renewal Beyond 60 Years – Technical, Policy, and Licensing Perspectives

Session Organizers: Don Eggett, Dick Cole, Trent Wertz, Pete Gaillard, Gordon Arent

Regency Ballroom 3

(This is a joint session with Executive, Long-Term Operations, and Regulatory Relations & Oversight Tracks)

Equipment Innovation and Supply

Insights on New Procurement Requirements and Guidance

Session Organizers: Marc Tannenbaum

Diplomat Ballroom 5

Procurement requirements are changing. Brief summaries of issues certain to affect procurement practices and availability will provide insights, followed by a panel discussion. The NRC is updating 10CFR21. EPRI is publishing guidance on accepting design and analysis computer programs using dedication methodology and revising the original commercial-grade item dedication guideline. NEI, EPRI, and others are working on cyber security requirements. NEI is working on the acceptance of international accreditation for calibration and test lab service providers. Each of these issues will likely prompt changes in supplier and utility procurement and sourcing practices.

Speakers:

- Kerri Kavanagh (*Chief- Quality Assurance Branch, NRC*)
10CFR21 Rulemaking
- Marc Tannenbaum (*Senior Project Manager, Electric Power Research Institute*)
Dedication of Computer Programs
- Ashley Stout (*Director of Quality Management and Operations Systems, Teledyne Brown Engineering*)
Challenges Meeting New Requirements - A Supplier's Perspective
- Mark Harvey / Marc Tannenbaum (*tentative*) (*Director, Quality and Performance Improvement, Unistar Nuclear Energy*)

Work / Project Management

How to Improve Planning of Work Orders

Session Organizers: Jon Anderson, Preston Pratt

Atlantic Ballroom 1

This interactive discussion will focus on the Steven Covey spheres of influence and spheres of concern to identify those elements that affect the planner's ability to plan an excellent work order that can be successfully implemented in the field. This session will build on previous sessions that demonstrated how to build teams to accomplish work and improve performance. This session will also focus on tools available to help planners to be more successful inside their sphere of control. The need for this session is highlighted in INPO Event Report 2011-02, 2009 and 2010 Scram Analysis that identified maintenance contributing 37% to equipment retaliated scrams. The recommendations for improving planning in this Event Report will be explored and applied in this discussion.

Speakers:

- Jon Anderson (*President, Anderson, Chavet and Anderson*) and/or Steve Grier (*Director of Projects, Anderson, Chavet & Anderson Inc.*)

Professional Development Workshop

ANS Professional Development Workshop- Root Cause Analysis for Safety Culture and Human Performance Improvement

Thursday, August 9, 2012

8:00 a.m.-4:00 p.m.

Workshop Organizer and Chief Instructor:

Dr. Bill Corcoran, President, Nuclear Safety Review
Concepts, Windsor, CT 860-285-8779
firebird.one@alum.mit.edu

Materials provided: 1) Hard copy of PowerPoint™ Slide Show for note taking, 2) PowerPoint file (PPT) of slideshow for use in cascade training in attendees' organizations, 3) Portable document format (Adobe PDF) file of *The Phoenix Handbook*, the ultimate investigation manual for finding profit improvement in adverse experience (a \$150.00 value), 4) Microsoft Word (DOC) file of Root Cause Analysis Report template for use at attendees' organizations.

Workshop attendance is limited to the first thirty (30) paid applicants to provide for collegial discussion and individual attention.

Who Should Attend:

This workshop is for professionals whose current or near-term future duties involve:

- sponsoring or conducting root cause analyses of adverse events or their precursors
- training event investigation teams
- assessing the effectiveness of event investigations
- managing the outcomes of event investigations
- managing or assessing corrective action programs
- defending the regulatory aspects of event investigations
- Safety Conscious Work Environment
- Employee Concerns Program

Who Should not Attend:

This workshop is **not** for people who want to continue thinking that:

- Event investigation is a well-defined science about which nothing new can be learned.
- There is a single right way to do root cause analysis.
- For every consequential event there is one single root cause.
- My organization could not have a serious event any time soon
- Event consequences are not controlled by business decisions.
- Event investigation should be done mainly to satisfy outside agencies.

What Will Happen:

During this workshop we will journey with the instructor through a safety culture and human performance-oriented approach to event investigation organizational learning.

We will take away immediately usable tools that have been applied successfully in the contexts of nuclear power generation, fossil power generation, electric transmission and distribution, natural gas distribution, site remediation, and manufacturing.

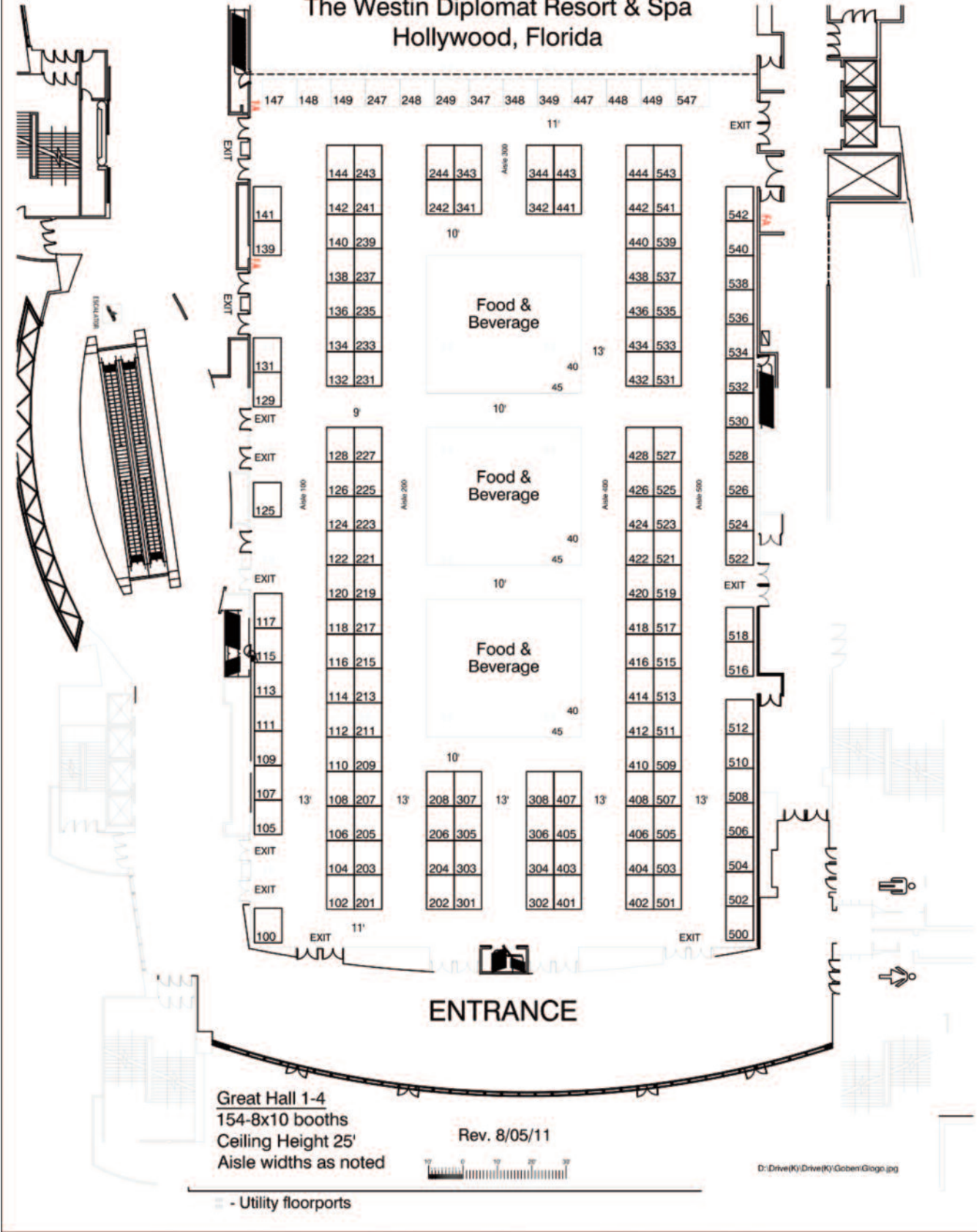
We will participate in hands-on individual and group work in the actual application of bottom-line customer focused techniques that take full advantage of investigators' abilities to do out-of-the-box thinking.

This workshop will furnish the attendees with a spectrum of immediately applicable action items that will be in full compliance with most existing corrective action programs. Participant-instructor interaction will emphasize the modeling and emulation of proven investigator and management behaviors.

Workshop topics will include:

- Safety Culture in Root Cause Analysis
- Using Event Investigation as a Window into the Culture
- Standard Approaches to RCA
- Lessons to be Learned from Recent Consequential Events
- Business Incentives for Cost-effective Investigations
- Advance Preparation for Effective Investigation
- Avoiding Fatal Investigation Errors
- Effective Event Investigation Team Formation, Development, and Leadership
- Human Performance Improvement
- Investigative Ethics
- Asking the Right Questions
- What to do Before Management Becomes Enlightened
- Extent of Conditions and Causes
- Evaluating Event Investigation Effectiveness
- State-of-the-Art Investigative Tools.

Utility Working Conference • August 5 - 8, 2012
 The Westin Diplomat Resort & Spa
 Hollywood, Florida



Great Hall 1-4
 154-8x10 booths
 Ceiling Height 25'
 Aisle widths as noted

Rev. 8/05/11



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- Utility floorports

Technical Exhibitors

*We would like to extend a special thanks to the following organizations
who have made an outstanding contribution to the success of the*

2012 UTILITY WORKING CONFERENCE AND VENDOR TECHNOLOGY EXPO

Aerofin

Lynchburg, Virginia (Booth 249)

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, pumps, and parts. Aerofin holds ASME Certificates of Authorization for ASME N, NPT, NS, S, U and PP, and we are NUPIC audited.

Ahlberg Cameras

Wilmington, NC (Booth 100)

Ahlberg Cameras designs, manufactures and delivers Cameras, TV and light systems with the latest technology in customized solutions to over 35% of the nuclear power plants worldwide.

- Nuclear Power Plants (NPP) in commission and decommission
- Nuclear fuel manufactures
- Nuclear waste storage and reprocessing facilities and plants
- Non Destructive Testing (NDT)-companies for nuclear inspection

We work in close relation with our customers in continuous development and qualification of new products in real nuclear environments. By recruiting personnel from the nuclear industry and concentrating 100% in the nuclear field only, Ahlberg Cameras is unique in designing visual inspection systems to all current reactor types. The company's website address is www.nuclear-cameras.com.

Alaron Nuclear Services

Wampum, PA (Booth 547)

Alaron's services include licensed facility access, a hot machine shop, large component processing and metals recycling, volume reduction and disposal, motor test and rebuild, pump rebuild and balance, fabrication and repair, Service Level I and other specialty coatings, decontamination for free release, waste segregation and processing services, and special projects.

Albér

Pompano Beach, FL (Booth 304)

Albér provides solutions for stationary battery testing. This includes capacity test systems, load banks, single cell testers, battery multimeters and permanently installed battery monitoring and diagnostic systems. Nuclear, power utilities and data centers have relied on Albér to ensure the integrity of their power systems since 1972. NERC PRC-005 compliant.

Alden

Holden, MA (Booth 118)

Acclaimed fluid flow engineering and consulting company in business for over 100 years, providing the following services to the nuclear power industry: flow meter calibration, flow testing of valves, strainers, and other flow control devices, physical and computational modeling, and Clean Water Act Section 316 a/b environmental compliance assistance.

Alphasource, Inc.

Philadelphia, PA (Booth 342 & 441)

Alphasource is a 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. Our award-winning Toolsaver RFID SmartCart and expandable platform of RFID Operational Efficiency Solutions is providing the benefits of superior asset tracking, reporting accuracy and loss minimization to many satisfied customers, all while using less manpower. We also offer our award-winning FME/FOD Turnkey Program, Tarps and Protective Covers, Safety and Decon. Supplies, Spill Control Products and Nuclear Grade Wiping Cloths and Coveralls Program. Our products are field-proven, backed by three generations of practical experience, and our quick turnaround capabilities ensure your compliance needs and deadlines are met.

Altran

Cranbury, NJ (Booth 125)

Altran is an engineering firm founded in 1986 to provide high quality engineering to the Power Industry. Altran provides services in Civil/Structural, Mechanical, Electrical and I&C engineering, Material Science, Failure Analysis, Aging Management Trainings, FAC, Buried Piping and AOV/MOV Programs. Altran currently employs 260 highly qualified professionals in 7 offices across the country and 17,000 people worldwide.

AMEC

Tucker, GA (Booth 113)

AMEC is a focused supplier of consultancy, engineering and project management services to its customers in the world's clean energy, nuclear, oil and gas, minerals and metals, environment and infrastructure markets. With annual revenues of some \$5.2 billion, AMEC designs, delivers and maintains strategic and complex assets and employs over 27,000 people in around 40 countries worldwide. AMEC's US Nuclear Service is ready to serve clients with more than 2,500 nuclear engineers and specialist in North American and Europe. amec.com/nuclear

American Crane & Equipment Corporation **Douglassville, PA (Booth 406)**

American Crane & Equipment Corporation (ACECO) is a leading provider of cranes, hoists and specialized lift systems for the commercial nuclear industry. American Crane has all the in-house capabilities to provide the cranes, custom components, and materials needed for new plant construction. American Crane has significant experience supplying safety-related single failure-proof replacement cranes and trolleys for dry spent fuel storage operations, as well as other critical lift cranes. American Crane has performed upgrades of a variety of nuclear plant cranes, including reactor building and turbine cranes. American Crane has a full-time service group to perform maintenance of plant cranes.

Anderson, Chavet & Anderson, Inc. **Goodyear, AZ (Booth 207)**

ACA is expert in solving complex problems that are barriers to improvements in equipment reliability and plant performance. Transforming your organization into a top performer can be challenging but ACA's expertise and proven solutions can ease this transition. Our industry leading consultants and innovative approaches to resolving the most challenging reliability issues will help you implement and sustain your transformation to reliability distinction.

Aquilex WSI **Norcross, GA (Booth 403)**

Nuclear Services that reduce Dose, Duration and Dollars

Aquilex WSI Nuclear Services is the field services leader in advanced, engineered welding solutions. We provide valve, welding and machining expertise; computer mapping; an integrated repair plan; all delivered by a highly-trained and specialized workforce. Our strong focus on technology innovation and automation leads to faster, safer, and better results for our customers.

AREVA **Lynchburg, VA (Booth 203 & 205)**

AREVA supplies solutions for power generation with less carbon. Its expertise and unwavering insistence on safety, security, transparency and ethics are setting the standard, and its responsible development is anchored in a process of continuous improvement.

Ranked first in the global nuclear power industry, AREVA's unique integrated offering to utilities covers every stage of the fuel cycle, nuclear reactor design and construction, and related services. The group is also expanding in renewable energies - wind, solar, bioenergies, hydrogen and storage - to be one of the top three in this sector worldwide.

With these two major offers, AREVA's 48,000 employees are helping to supply ever safer, cleaner and more economical energy to the greatest number of people.

www.aveva.com

AREVA DZ **Philadelphia, PA (Booth 206)**

AREVA DZ (ADZ) is a joint venture (JV) that combines the world-class capabilities of AREVA and Day & Zimmermann to offer comprehensive engineering, procurement and construction services to the U.S. nuclear utilities sector. AREVA and Day & Zimmermann have a longstanding, successful history working together on complex nuclear plant projects that drive efficiencies and increase accountability and predictability while reducing costs. This innovative JV provides the framework for both companies to further their commitment to providing integrated, end-to-end solutions to the nuclear industry.

AT&F Nuclear **Cleveland, OH (Booth 215)**

AT&F has earned a reputation for high quality and excellent service through years of commitment, dedication to quality and continued pursuit of excellence. Providing reliable steel solutions since 1940, our unique combination of equipment capabilities, professional staff and quality systems that make us your best choice for nuclear components and materials. Quality systems include: ASME NQA-1, N, NPT, NS, N3, U, U2 & S, NA, NIAC audited. Materials fabricated and supplied include: carbon, stainless, alloy, armor, titanium, zirconium and other advanced materials. From replacement nuclear parts to finished fabrications for new builds, we have the equipment, capacity and capabilities to meet your needs. You can count on us whether for single parts or complex build-to-print nuclear fabrications.

ATC-Nuclear **Oak Ridge, TN (Booth 102)**

ATC-Nuclear links the past, present, and future through a variety of innovative services. To support the past, we offer warehouse and sourcing services. Our warehouse holds over \$70 million in surplus, unused parts and components. ATC-Nuclear's sourcing team are experts at finding obsolete parts in inventory at other utilities or via their extensive network of other sources. To support the present, we offer a full line of commercial grade dedication, qualification and repair/refurbishment services. And to support the future, ATC has formed strategic alliance partnerships, is performing reverse engineering of circuit boards and power supplies as well as engineering and qualifying replacement components for your maintenance and operational needs.

Automated Engineering Services Corp. **Naperville, IL (Booth 426)**

Automated Engineering Services Corp. (AES Corp.) is a fast growing full service Architect Engineering (A-E) company serving the US and International Nuclear Power Industry. These "Services" encompass plant capital and O & M projects with full Service (A-E) design and design/build capabilities and an experienced staff covering all engineering disciplines, licensing / regulatory compliance, operations, outage support, and decommissioning services. We have actively been involved in a variety of major plant engineering modifications including the 10 CFR 73.55 security modifications; Extended Power Uprate modifications;

Technical Exhibitors

Engineer/ Procure/ Construct (EPC) projects; Steam Generator replacements; Dry Cask Storage/ISFSI; Dose Reduction Initiatives; and Decommissioning projects. We have extensive experience in security modifications/upgrades including cyber security, digital upgrades, spurious actuations, ECCS strainer module modifications, dose reduction initiatives such as permanent lead shielding design and permanent platforms/scaffolding, and PWR and BWR Containment analysis. AES Corp., founded in 1990, is an employee-owned engineering company with over 150 professional staff members located in the Naperville, IL corporate office and branch offices in Plymouth, MN, Manitowoc, WI, and Swedesboro, NJ. We have a full 10 CFR 50 App B, ASME NQA-1, ANSI N45.2 QA program audited by NUPIC for safety related work. The company's web site address is www.aesengineering.com

AZZ | NLI,

Fort Worth, TX (Booth 436, 438 & 440)

NLI is a supplier of equipment, service, and engineering support to the nuclear industry. Headquartered in Ft. Worth, TX, with sales offices throughout North America, NLI offers products and services that minimize the engineering impact to nuclear plants. With a 200,000 sq.ft. manufacturing facility and roughly 35 vendor alliances, NLI provides a wide array of electrical, I&C, and mechanical products under its 10CFR50 Appendix B QA Program and ASME III N-Stamp.

The Babcock & Wilcox Company

Charlotte, NC (Booth 132 & 134)

B&W is a leader in clean energy technology and services, primarily for the nuclear, fossil and renewable power markets, as well as a premier advanced technology and mission critical defense contractor. Through our operating groups, we offer nuclear products and services - including B&W mPower™ small modular reactor technology - for utility customers worldwide.

Barnhart

Memphis, TN (Booth 416)

Over the last three decades, Barnhart and Hake have built impressive nuclear project résumés. 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.

Bechtel Power Corporation

Frederick, MD (Booth 208)

Since its founding in 1898, Bechtel has worked on more than 22,000 projects in 140 countries on all seven continents. Today, our 53,000 employees team with customers, partners and suppliers on diverse projects in nearly 50 countries. We stand apart for our ability to get the job done right—no matter how big, how complex, or how remote. www.bechtel.com

Bentley Systems

Exton, PA (Booth 126)

Bentley is the global leader dedicated to providing comprehensive software solutions for sustaining infrastructure. Bentley's AssetWise is an information modeling platform for delivering asset lifecycle information management (ALIM). AssetWise for Nuclear is a set of nuclear-specific interoperable applications and online services based on industry best practices that provide universal information accessibility to support nuclear business processes - including performance improvement, requirements management, corrective action, cyber security, and knowledge management - improving safety and compliance, operational efficiency, and delivering faster ROI. Visit www.Bentley.com/AssetWise-Nuclear.

BHI Energy

Plymouth, MA (Booth 109)

BHI Energy, comprised of companies Bartlett Nuclear, SUN Technical Services, Power Equipment Maintenance, AMES and WeldTech Services, is a leading provider of radiation protection, professional & technical staff augmentation and specialty maintenance & modification services to nuclear power facilities. With over 30 years of experience BHI Energy offers managed staffing solutions through a qualified, mobile workforce to satisfy our clients' changing needs. Additionally, we offer equipment and technologies including Excel modular scaffolding, scaffold management programs, automated monitoring systems, portable ventilation systems and contamination control materials.

Black & Veatch

Overland Park, KS (Booth 131)

Black & Veatch (www.bv.com) is a global leader in the consulting, engineering, construction and operation of what the world needs now and in the future in the crucial areas of energy, water and telecommunications and in providing up-to-the-minute services in the fast changing nuclear, federal and environmental markets.

BloXR

Salt Lake City, UT (Booth 513)

BloXR introduces the latest invention in radiation attenuation technology. You can get lead equivalent performance without the use of lead and with less weight. General and customized use product applications tailored specifically to the nuclear power industry are currently in development. Meet us in the exhibitor hall and let us discuss your specific needs.

The Brock Group

Beaumont, TX (Booth 432)

Since 1947, The Brock Group has offered clients a small company interaction with the resources available from one of the largest specialty craft providers in the United States. Continuing the tradition of integrity and performance excellence, Brock's 16,000 employees offer industry the complete single source benefit of doing business with a financially strong and resource abundant contractor. With operational centers strategically located throughout the United States and Canada, Brock offers

scaffolding, specialized shoring, coatings, insulation and associated services to a diverse industry that includes Nuclear, Petrochemical, Refining, Power Generation, Offshore, Logistics, Pipelines & Transmission, and Pulp & Paper. Brock's organization structure and internal cooperative culture provide expert leadership for nationally commended, award winning safety and management processes. Brock provides performance in services which sequentially supports and strengthens our customers' strategic competitive advantage and bottom line profitability.

Burns & McDonnell **Kansas City, MO (Booth 405)**

Founded in 1898, Burns & McDonnell is a 100 percent employee-owned, full-service engineering, architecture, construction, environmental and consulting solutions firm.

Burns & McDonnell ranks in the upper 5 percent of Engineering News-Record's Top 500 Design Firms and is among the leaders in many service categories. With the multidisciplinary expertise of more than 3,100 professionals in more than 20 offices, Burns & McDonnell plans, designs, permits, constructs and manages facilities worldwide with one mission in mind — to make our clients successful.

Candu Energy Inc. **Mississauga, Ontario, Canada (Booth 509)**

Candu Energy Inc. (Candu) is a leading full-service nuclear technology company providing nuclear power reactors, products and services to customers worldwide. Candu is the designer of CANDU® reactors. Candu provides CANDU and LWR engineering services, plant life management programs, specialized tools and products enhancing plant safety, reliability and performance.

Certrec **Fort Worth, TX (Booth 221)**

Founded in 1988, CERTREC is a regulatory and compliance solutions provider that helps utilities manage the regulatory process to their advantage. With more than 250 cumulative years of regulatory and industry experience, Certrec's licensing and compliance, performance improvement, and technical services solutions help nuclear professionals better manage the risks of the regulatory and compliance process.

CiDRA Power Generation **Wallingford, CT (Booth 543)**

CiDRA's SONARtrac® flow technology is a clamp-on, non-ultrasonic, flow meter for power generation. CiDRA offers high value Nuclear applications in: Safety Related Service Water, ECCS min-flow loop testing, IST support, secondary flow verifications, in-situ pump testing, and excels where complex piping arrangements preclude other non-intrusive technologies.

Coreworx, Inc. **Kitchener, Ontario, Canada (Booth 128)**

Coreworx delivers integrated project information and cost control solutions for new construction, power uprate, refurbishment, outages, and knowledge capture for the nuclear industry. Coreworx offers the only commercially available ITAAC solution addressing the complex work processes and regulatory compliance requirements for Part 52 Plants. Coreworx is proud to be a partner of the EXCEL Services Corporation to offer a unique combination of nuclear project execution solutions.

CRANE Nuclear, Inc. **Kennesaw, GA (Booth 138)**

CRANE Nuclear designs and manufactures a variety of valves, valve parts, and valve testing equipment for domestic and international nuclear power plants. Our trusted brands (Powerhouse(tm), Viper (tm), and Votes(r) Infinity) and reliable services provide complete valve solutions that help ensure nuclear plant safety through the reliable performance of motor-operated valves, air-operated valves, and check valves.

www.cranenuclear.com

CSA, Inc. **Atlanta, GA (Booth 527)**

CSA Laser Scanning Technology – PanoMap® CSA's PanoMap® is database-driven laser scanning technology representing as-built 3D laser scan models. PanoMap® offers powerful features which allow viewing and measuring, modeling, interference checking (directly against scan data), equipment removal simulation, pre-job briefings, and integration with radiation monitoring equipment. PanoMap® enables planning, scheduling, reviewing, identification, explanation, and resolution for projects.

Existing facility databases can be integrated with and accessed through PanoMap®. CSA's Laser Scan Technology is fully integrated to/from all major 3D CAD systems. Typical projects include replacement of FWH, RC pumps, chillers, MSR, transformers, valves, breakers, as well as support of engineering modifications and changes. The PanoMap® walkdown application is available on a tablet/smartphone.

Curtiss-Wright Flow Control Company, Nuclear Group **Brea, CA (Booth 410, 412 & 414)**

Curtiss-Wright Flow Control Company's nuclear power focused business units (EMD, EST Group, Enertech, Nova, QualTech NP, Scientech, Target Rock), have been supporting the safe operation and improved performance of the worldwide commercial nuclear power industry for over 50 years.

Technical Exhibitors

Day & Zimmermann **Norfolk, VA (Booth 204)**

With a rich history of over 110 years, Day & Zimmermann remains the leading provider of maintenance, modifications, and major projects to the nation's nuclear power generation fleet. Additional value added specialty services include integrated valve services, HP/RP technical support, full compliment condenser support, turbine maintenance / retrofit, fabrication / machining, and non-manual staffing services.

Diakont **San Diego, CA (Booth 140)**

Diakont is a full cycle engineering, manufacturing, and service company, providing high-tech solutions that enhance the safety and economy of the nuclear power and pipeline industries.

Doosan HF Controls **Carrollton, TX (Booth 449)**

Doosan HF Controls supplies nuclear-grade safety and non-safety digital instrumentation and control system solutions to both nuclear and non-nuclear customers world-wide. Our safety platform has received approval from the US NRC, Korean KINS, and TUV-Rheinland and used extensively in major international I&C programs.

DRS Consolidated Controls **Danbury, CT (Booth 231)**

DRS Consolidated Controls, Inc. (DRS-CCI) has been a premier supplier of Class 1E and non-1E Instrumentation and Control (I&C) systems to the nuclear industry for more than fifty years.

DRS-CCI designs, qualifies, and manufactures both safety critical and non-safety I&C systems for commercial nuclear power plants and the U.S. Navy. Our reactor and plant control systems have been installed worldwide in more than thirty commercial nuclear power plants and in every Navy nuclear vessel since the USS Nautilus. Our commitment to long term product support includes installation, training, start-up, field service, spare components and assemblies, and commercial grade dedication programs. DRS-CCI is an ISO-9001 certified facility and has continuously maintained a 10 CFR Part 50 Appendix B Nuclear Quality Assurance program since 1974. Learn more at www.drs-cci.com.

Edgen Murray **Charlotte, NC (Booth 139)**

Edgen Murray is accredited as an ASME Material Organization (QSC-614) and compliant with 10 CFR 50 App. B, 10 CFR Part 21 and provisions of NQA-1. Its Nuclear Quality Program has passed an NIAC-member audit and NUPIC checklist audit performed by a major U.S. utility. Edgen Murray's nuclear operations center in Charlotte, North Carolina, combines a broad product range of both safety and non-safety related materials with a global stocking platform that offers quick scalability.

ENERCON **Kennesaw, GA (Booth 115)**

ENERCON is a diversified energy consulting company offering engineering, licensing, environmental and management services with 21 offices nationwide and internationally. Services provided include comprehensive design, engineering, procurement and construction management related to nuclear plant retrofits, plant life extension, power uprates, and operations support. ENERCON is currently focused on developing new nuclear plant applications and operating nuclear plant solutions for industry challenges such as PWR sump strainer clogging, extended power uprate, spent fuel storage and transport, improved plant security, EPA 316(b) and post-Fukushima response.

EnergX, LLC **Oak Ridge, TN (Booth 506)**

EnergX (www.energxl.com) has been a premier provider of management and technical consulting services; waste management and environmental remediation services; and training services to the nuclear industry since 1997. EnergX's consultants bring hundreds of years of collective leadership experience in commercial nuclear power safety, nuclear materials processing, radioactive waste management, nuclear facility operations, and energy technology assessment to solve your most pressing challenges.

EnergySolutions **Salt Lake City, UT (Booth 307)**

EnergySolutions is an international company headquartered in Salt Lake City. As a worldwide leader in the safe recycling, processing and disposal of nuclear material, we provide innovations and technologies to the U.S. Department of Energy, commercial utilities, medical and research facilities. In the United Kingdom, we operate and provide nuclear decommissioning services for 22 nuclear power plants. We remain committed to the future of responsible energy in the United States and to our role in helping our country achieve energy security, reduce carbon emissions and protect the environment through clean, safe and affordable energy sources.

EPM, Inc. **Framingham, MA (Booth 147 & 148)**

Engineering Planning and Management, Inc. (EPM) provides engineering, software, and probabilistic risk assessment (PRA) consulting services to utilities in North America, Europe and Asia. For over 30 years EPM has been working with utilities to achieve compliance with complex regulatory requirements. EPM continues to provide expert fire protection and systems engineering guidance as NRC regulations change and evolve, particularly in the new performance-based, risk-informed regulatory environment of

10CFR50.48(c) and NFPA 805. EPM is an industry leader in Post-Fire Safe Shutdown, Fire Modeling, PRA, and Thermal-Hydraulic Systems Analysis. EPM is also the leading provider of innovative software that optimizes engineering and business processes to achieve regulatory compliance cost-effectively with emphasis on long-term configuration management. EPM's Genesis Solution Suite®, which is 10CFR50Appendix B compliant, includes EDISON (Cable Management System) and SAFE (Post-Fire Safe Shutdown Analysis). EDISON is the only current cable management system developed specifically for new plant designs and construction projects. SAFE automates the engineering programs for 10CFR50 Appendix R, NFPA 805, FPRA, and NPO. As a single repository of information, SAFE simplifies long-term configuration management and control of these programs. EPM's team of engineering, PRA, and information technology personnel have developed innovative methods to achieve practical, comprehensive, and cost-effective solutions using a combination of creative strategies, time-tested engineering methods, and an experienced staff.

ERIN Engineering and Research, Inc.
Walnut Creek, CA (Booth 111)

ERIN Engineering and Research, Inc., an SKF Group Company, is the premier nuclear safety and reliability consulting firm in the world and the leading provider of PRA consulting services to the nuclear power industry. ERIN's services and software have long supported the safety, reliability and cost-effectiveness of nuclear power.

EXCEL Services Corporation
Rockville, MD (Booth 223, 225 & 227)

EXCEL Services Corporation specializes in providing operations, Engineering, safety and regulatory services for energy and environmental projects world-wide. These specialized services include: License Renewal, Power Uprate, 24 Month Fuel Cycle Conversions, Licensing and Operations Support, Improved Technical Specifications Conversions, Quality Assurance Solutions, Training, Spent Fuel Storage Licensing, New Plant Site Permitting (ESP), and Combined License (COL) Support. EXCEL has worked with almost every nuclear power plant and many other nuclear facilities in the U.S., and has worked with many international nuclear facilities and organizations for more than 26 years.

Exponent
Menlo Park, CA (Booth 526)

Exponent offers unparalleled multi-disciplinary expertise and rapid response capabilities to assist clients assess complex engineering and scientific problems. We provide our clients with a team of engineering, construction, environmental, risk, and health specialists that is unique in the industry. We offer proven experience on projects of national and international significance.

Fairbanks Morse Engine
Beloit, WI (Booth 528)

Fairbanks Morse Engine is the leading supplier of emergency diesel generators to the nuclear industry, with over 100 EDGs currently providing critical backup power in the U.S. We also provide factory direct service, OEM parts and customized engineering to ensure the long life of your Fairbanks Morse engine.

Flowserve Flow Solutions Group (FSG)
Vernon, CA (Booth 422 & 424)

Flowserve Corporation, the world's premier provider of industrial flow management services, produces engineered pumps, precision mechanical seals, valves and actuators. We are an industry leader, providing pumps, pump upgrades, pump repairs, on-site technical services, turnkey services, engineering support and mechanical seals. With heritage names such as Byron Jackson and Pacific, we are the driving force in the nuclear industry. The Flowserve global footprint provides support to the existing nuclear power plants of today and will be there to support the plants of tomorrow. For more information, please contact Jim Cook at 1-845-548-9275.

G.D. Barri & Associates, Inc.
Peoria, AZ (Booth 108)

G.D. Barri & Associates, Inc. is a 100% Woman Owned Business Enterprise providing engineering, management and technical support including environmental operations, and maintenance work primarily in the areas of assessment, analysis, design, systems, baseline engineering, training, procedure development, quality assurance and quality control.

GE Energy, Measurement & Control
Longmont, CO (Booth 349)

GE Energy has over 40 years of BWR - PWR experiences and activity working with customers on interim analog system support and long term digital conversions. Digital conversion includes turbine, generator, and plant controls upgrades, while addressing critical digital asset compliance aspects, mechanical interfaces, and service installation methods.

GE Hitachi Nuclear Energy
Wilmington, NC (Booth 418 & 420)

Based in Wilmington, N.C., GEH is a world-leading provider of advanced reactors and nuclear services. Established in June 2007, GEH is a global nuclear alliance created by GE and Hitachi to serve the global nuclear industry. The nuclear alliance executes a single, strategic vision to create a broader portfolio of solutions, expanding its capabilities for new reactor and service opportunities. The alliance offers customers around the world the technological leadership required to effectively enhance reactor performance, power output and safety.

Technical Exhibitors

Graybar **St. Louis, MO (Booth 404)**

Graybar Electric Company, Inc., a Fortune 500 corporation with more than 240 North American distribution facilities, is a leader in the distribution of high quality electrical, networking, and security products, and specializes in related supply chain management and logistics services.

As an Energy Star Partner and a member of the U.S. Green Building Council, Graybar is committed to delivering energy-savings products and “green” knowhow to its customers. From lighting to sensors and metering to controls and drives, Graybar can provide products, systems, and advice that deliver measurable savings of time and money.

Graycor Industrial Constructors Inc. **Oakbrook Terrace, IL (Booth 348)**

Family-owned since 1921, Graycor has earned its reputation as a premier general contractor in the power industry. Graycor’s capabilities include all areas of power plant construction and maintenance, employing approximately 3 million craft-hours annually. Our nuclear focus is on industry initiatives including aging concrete, buried pipe, power uprates and post-Fukushima.

The Heritage Foundation **Washington, DC (Booth 511)**

The Heritage Foundation is the nation's most broadly supported public policy research institute, with nearly 700,000 individual, foundation, and corporate donors. Founded in 1973, it develops public policy solutions that advance free enterprise, limited government, individual freedom, traditional values, and a strong national defense.

Howden North America, Inc. **New Philadelphia, OH (Booth 105)**

Howden North America Inc. (HNA)(fka Howden Buffalo Inc.) is the leading supplier of safety and non-safety related fans and blowers for the nuclear industry, as well as equipment and services for other applications. HNA maintains formal quality systems that conform to 10 CFR 50 Appendix B, ASME NQA-1, ASME AG-1, and ISO 9001-2008. Our products are also environmentally and seismically qualified for both mild and harsh environment applications.

In addition, if replacement motors are required for either of these fan designs, Howden North America Inc. can supply safety or non-safety related motors either refurbished to original specifications or as replacements with Reliance/Baldor Electric motors. Howden North America, Reliance/Baldor Electric and Westinghouse Electric have also formed an alliance to support the repair or rebuild of contaminated nuclear fan/motors.

Howden 360 is our commitment guarantee to provide superior customer service throughout the life cycle of your equipment, plant and career. With capabilities to engineer or provide products and aftermarket services in virtually every situation, Howden 360 continues to provide customers with innovative solutions that no other company can offer.

Howden North America Inc. is the official provider of service and supply for thousands of nuclear fans, fluid drives, compressors, and other products in service throughout the world from equipment originally manufactured by Buffalo Forge, Joy Fans, Westinghouse, American Standard, Howden, and Novenco.

HukariAscendent, Inc. **Wheat Ridge, CO (Booth 124)**

HukariAscendent is a Service Disabled Vietnam Veteran-Owned small business providing engineering and technical services for the government and commercial nuclear industry, specializing in Nuclear Safety, Licensing, and Engineering. The HukariAscendent network provides access to over 11,000 engineers and professionals with nuclear related experience, making us a recognized leader in this industry.

Hurst Technologies Corp. **Angleton, TX (Booth 448)**

Hurst Technologies Corp. is an engineering services firm specializing in instrumentation, control, automation, asset and knowledge management, and digital systems.

IBM Corporation **Armonk, NY (Booth 136)**

At IBM, we strive to lead in innovation with the most advanced information technologies. We translate these technologies into business value for our customers. IBM is focused on nuclear power and using IBM Maximo Asset Management and other IBM applications to meet the needs of both operating and new build plants.

Idaho National Laboratory **Idaho Falls, ID (Booth 302)**

Idaho National Laboratory is the U.S. Department of Energy’s leading center of nuclear energy research and development where more than 4,100 researchers and support staff work with national and international governments, universities and industry partners to deliver energy and national security solutions and expand the frontiers of science and technology.

Industrial Testing Laboratory Services **Pittsburgh, PA (Booth 444)**

ITLS is headquartered in Pittsburgh, PA and offers over 53 years of expert nuclear industry experience.

ITLS services meet NCA 3800, NQA-1, 10CFR50 Appendix B and ISO-17025. Areas of specialty include Nondestructive Examination, Mechanical Testing, Metallurgical Testing, Chemical Analysis, Failure Analysis, Training, Auditing and QA/QC Outage services.

INSURICA Insurance Management Network **Arlington, TX (Booth 508)**

INSURICA is one of the largest privately owned insurance brokers in the nation. We have developed a program specific to the Nuclear Industry. It includes products liability and all related property and casualty coverage lines. This program is tailored to meet the needs of small to midsize suppliers and manufacturers.

Invensys Operations Management **Plano, TX (Booth 114 & 116)**

Invensys Operations Management is an alliance of Invensys brands including Avantis, Foxboro, Wonderware, Skelta, Eurotherm, IMServ, InFusion, SimSci-Esscor and Triconex, all with a strong nuclear presence.

Leveraging the power of one organization, Invensys consistently collaborates in development, integrated design, and execution of Safety and Non-safety related solutions proven to maximize the availability and utilization of nuclear plant assets. Invensys will be displaying ground breaking Team Training technology, the latest 2012 NRC approved SER for the TRICON V10, Cyber Security solutions, and the latest advancements in Turbine Control, Feedwater Digital Upgrades. Invensys continues to raise the bar with evolving products and unmatched reliability in the nuclear industry.

Joseph Oat Corporation **Camden, NJ (Booth 530)**

Joseph Oat is a well renowned integrated OEM designer and fabricator of ASME Section VIII & Section III / safety-related products for the Nuclear Power Industry. We have supplied critical heat exchangers and pressure vessels, spent fuel/rad-waste canisters, and NQA-1 components to nuclear customers worldwide. Our QA system has been audited by NUPIC and complies with NQA-1 & 10 CFR 50 Appendix B. We have continuously held an 'N' Stamp certification since 1966 and maintain an excellent reputation in the industry. We Make Metal Work ©.

Kiewit Power Nuclear Co. **Lenexa, KS (Booth 213)**

Kiewit Power Nuclear Co. (KPN) is responsible for all nuclear construction work under the Kiewit umbrella. KPN has a strong core nuclear team with a utility NUPIC Audited NQA-1 program, NANTEL modeled training, and expertise to support nuclear construction and plant modifications/maintenance. Kiewit takes tremendous pride in safety and the quality of work executed.

Kinectrics **Toronto, Ontario, Canada (Booth 241 & 243)**

Kinectrics offers specialized testing facilities and advanced expertise in life cycle management for nuclear, including equipment and components, genuine replacement parts, inspection and maintenance systems and environmental technologies. Our US facility provides qualified local support for EQ, CGD and other technical services for new build and the existing operating fleet.

KnightHawk Engineering **Houston, TX (Booth 407)**

Specialists in Design, Failure Analysis and Troubleshooting of Static and Rotating Equipment. We are a Technology based Specialty-Engineering company offering Consulting, Field Services, Analysis and Testing. We have Nuclear Qualified, Registered Professional Engineering Staff. We have extensive experience in troubleshooting and solving problems in Nuclear power facilities.

KSB, Inc. **Richmond, VA (Booth 402)**

KSB is a Global Supplier of Engineered Critical Service Pumps for the Power Industry: Boiler Feed, Condensate, Coolant Water, Charging, Reactor Coolant and other safety and non-safety related pumps. With 130 years centrifugal pump experience and 29 factories in 19 countries, KSB can fulfill your pump technology needs around the globe.

L-3 MAPPS **Montreal, Quebec, Canada (Booth 202 & 301)**

When you're looking for increased reliability in your power plant's performance, you can count on L-3 MAPPS' simulation experience to get you there. Our dedication to true-to-life power plant simulators ensures that your personnel have the knowledge required to safely and efficiently operate your power plant. Providing more than just training devices, our simulator solutions - powered by L-3 MAPPS' unparalleled Orchid™ suite of simulation products - will elevate your engineering team to new heights in addressing plant design issues, procedural deficiencies and reliability improvements.

Lanj Tools, LLC **Medford, OR (Booth 504)**

Lanj Tools, LLC of Medford, Oregon has invented, engineered, manufactured, and is holding Patents and Patent Pending on some of the most innovative industrial hand tools to come to market in years. The Lanj Socket Insert is a precise tool that is revolutionizing the impact socket market. With a few impact sockets acting as "host drivers" and a complement of Lanj Socket Inserts, hundreds of pounds of weight are saved from the mechanics toolbox. Change in drive format has little effect upon the Socket Insert, the same insert fits 3/4", 1", 1-1/2", 2-1/2", spline, etc. drive sockets. Tough, durable, made of heat treated special alloys, Lanj Inserts have been outlasting impact sockets in field usage. Lanj Inserts work extremely well with open and closed end wrenches too. Lanj Inserts will save you weight, space and money. Manufactured in the USA with American made materials. Sizes from 2" id to over 12" id. SAE, Metric or combination on the same insert, custom sizes manufactured too.

Lockheed Martin **Grand Prairie, TX (Booth 503)**

Lockheed Martin Nuclear Systems & Solutions provides total systems solutions and services for civil nuclear power applications. Lockheed Martin is a lead systems integrator and provider of discrete and digital safety-critical instrumentation and control (I&C) systems for civil and DoD customers for over 50 years.

Technical Exhibitors

Merrick & Company **Aurora, CO (Booth 517)**

Merrick & Company provides design and design-build services for nuclear facilities, systems, and equipment for specialized processing, handling, treatment, production, manufacturing, power production and research. Merrick offers multi-discipline services for designing or designing and building facilities and systems for commercial nuclear power stations, including specialized shielding systems and Balance of Plant.

Mesa Associates, Inc. **Knoxville, TN (Booth 531)**

Mesa is a full service engineering, procurement and construction management (EPCM) firm experienced in Nuclear Power generation projects. Mesa specializes in plant modifications and upgrades and fast tracked Design build Projects. Mesa staff is highly qualified and experienced in developing Engineering/Design modification documentation, 10 CFR 50.59 evaluations, review and updating of the FSAR. Our approved/proven Appendix B Quality Assurance and Equipment Qualification/Dedication programs are instrumental to our project delivery success. In addition, Mesa brings a disciplined Project Management approach to each of our projects, e.g., WBS, project schedule, cost controls, and scheduled project reviews.

Mesa's core competencies include: I&C (analog to digital upgrades), component change replacement including commercial grade dedication, e.g., Chillers, diesel generators, feed water heaters, DCS upgrades, transformers, and spent fuel storage systems. Mesa understands how to evaluate the existing system/component to provide an economical - seamless plant modification.

Metrohm USA **Riverview, FL (Booth 536)**

See why Metrohm USA is the market leader and go-to source for your analytical chemistry lab instruments. Featuring a complete line of Swiss-made titrators and titration automation, ion chromatography systems, pH/ion meters, colorimeters, electrodes, voltammetric analyzers, oxidative stability instrumentation and more. All carry 3 year warranties, and our IC MSM suppressor features an unprecedented 10-year warranty! But don't stop there: we back our systems with expert application support and services - we're there when you need us. Don't just take our word for it, stop by and talk with us!

Mitsubishi Heavy Industries, Ltd./Mitsubishi Nuclear Energy Systems, Inc. **Arlington, VA (Booth 303 & 305)**

Mitsubishi Heavy Industries, Ltd. (MHI) has been engaged in the nuclear energy business for over 4 decades and has built 24 pressurized water reactor (PWR) electrical plants in Japan. In addition, 3 plants are in the licensing phase. MHI is now introducing its US-APWR to the U.S. market, which is the largest nuclear energy plant in the world.

MHI established Mitsubishi Nuclear Energy Systems, Inc. (MNES) as a wholly owned U.S. subsidiary in 2006, based in Arlington, Virginia. Mitsubishi is a fully-integrated nuclear power plant supplier, capable of providing engineering, design, manufacturing, construction, ongoing maintenance and nuclear fuel to its utility customers.

Northrop Grumman Corporation **Sykesville, MD (Booth 211)**

Northrop Grumman provides innovative I&C solutions for both commercial and U.S. Navy customers. We focus on safety and critical applications involving Nuclear Reactor Control, Electronic Power Conversion and Machinery Control Systems. Our heritage in design, manufacture and support of nuclear I&C systems dates back to the birth of the industry. You can rely on our engineering and production capabilities to develop affordable solutions for your specific requirements.

Nuclear News **LaGrange Park, IL (Booth 401)**

Nuclear News is the flagship monthly membership publication of the American Nuclear Society. Since the magazine accepted its first advertisement in 1960, Nuclear News has been an integral part of the business development plans of more than 1000 companies that market their nuclear-related products, services, and capabilities to this essential segment of the power industry. News reports cover plant operations, maintenance, security, international developments, waste management, fuel, industry, and education, training and workforce issues.

Nuclear Plant Journal **Downers Grove, IL (Booth 120)**

Nuclear Plant Journal, now in its 30th year, provides technical information exchange among managers and engineers in nuclear power industry worldwide. Circulation is 12,000 (BPA audited). The Journal is published six times per year. The Products & Services Directory is published yearly in December. www.nuclearplantjournal.com

Nuclear Safety Associates **Johnson City, TN (Booth 117)**

Nuclear Safety Associates (NSA) is a premier provider of technical, engineering, and design services, primarily serving the nuclear industry, and specializing in safety and licensing, operations, design, and safeguards & security. We have expertise in all phases of the nuclear lifecycle, from conceptual design through facility and process operations to D&D, and our clients include utilities, commercial fuel fabrication plants, and reactor vendors. What sets us apart is that we have highly experienced, nationally recognized subject matter experts who have successfully applied years of lessons learned to solve client challenges, and that allows us to help mitigate risks and reduce costs often associated with complex nuclear operations.

NWI Consulting **Knoxville, TN (Booth 428)**

NWI Consulting, LLC is a professional consulting firm specializing in power generation performance improvement services, specialized learning interventions, computer-based training, organizational development, accreditation renewal/recovery, and professional staff augmentation. NWI has a broad portfolio of U.S. and international clients in the electric generation industry and is headquartered in Knoxville, TN.

NWI's power plant services includes supporting such areas as Operations, Training, Outage Management, Nuclear Oversight, Performance Improvement, Engineering, Maintenance, Radiation Protection,

Chemistry and Emergency Preparedness. NWI has assisted clients in other more specialized efforts including Leadership/ Management Development, Executive Coaching, Conflict Resolution, Multi-Discipline Assessments (including Organizational Effectiveness and Safety Culture), Root Cause Analyses, NRC 95-002 & 3 Preparations and specialized Safety Analyses (50.59).

Performance Contracting Inc.

Lenexa, KS (Booth 104)

www.pciesg.com

Performance Contracting Inc. (PCI) has been an expert in the nuclear industry and is the largest insulation contractor in the U.S. Complete testing support for GSI-191 issue with the only NRC-accepted large flume test protocol that allows debris to settle. KAEFER PCI Reflective Metal Insulation (RMI) – Available with ACT Silflex® radiation shielding capabilities without LEAD.

Precision Surveillance Corporation (PSC)

East Chicago, IN (Booth 233)

Precision Surveillance Corporation is a Utility Services and Engineering company that has been in business since 1986. Since our company's inception we have worked in the Nuclear Power Industry providing Construction-related, Engineering, Quality Control and Quality Assurance services to numerous Utilities throughout North America.

In the past five years we have been expanding our services to additional industry sectors beyond the post tensioning tendon surveillance realm. This expansion includes engineering, structural, mechanical piping, rigging and heavy transport services. PSC is also expanding our engineering capabilities to handle turnkey special projects, beyond the typical scope of maintenance groups.

As a supplier of construction-related, engineering and QA/QC services, our capabilities extend to capital projects, repairs and upgrades, operations and maintenance support, and plant outages and services. Our quality assurance program complies with the requirements of 10CFR50 Appendix B, 10CRF21, and ANSI N45.2.

Project Assistance Corporation (PAC)

Walnut Creek, CA (Booth 442)

PAC has over 36 years of experience providing technical support services to the Nuclear Power Industry. The scope of services include developing NQA-1 programs, Vendor Audits, Surveillance, Inspections, Structural Detailing, QA manual reviews, procedure writing, Lead Auditor Training, Source and Receipt Inspection, Procurement Engineering and Commercial Grade Dedication training/program development.

Radiy Research & Production Corporation

Kirovograd, Ukraine (Booth 235)

Established in 1954, Radiy designs, develops, manufactures and installs digital instrumentation and control (I&C) systems for safety and process control of nuclear facilities and industries with high level of safety requirements. For over 15 years Radiy has been using its safety designs to offer advanced technical solutions to meet the challenges of aging NPPs and New Build projects.

RCS Nuclear

Charlotte, NC (Booth 347)

Delivering top talent & staffing solutions since 1994, RCS Nuclear is a premier supplier of nuclear industry professionals. Located in Charlotte, NC and Aiken, SC, RCS specializes in direct hire, contract staffing and payroll services. RCS was recognized as "The #1 Fastest Growing New Small Business in America" by Entrepreneur magazine. Please visit www.rcsnuclear.com.

ReNuke Services

Oak Ridge, TN (Booth 209)

ReNuke was designed and built specifically to bring innovative human capital consulting and staffing programs to the resurgent commercial nuclear power market. The name itself is emblematic of our commitment to nuclear energy. In a period where personnel needs are growing and the workforce is shrinking, a fresh approach to staffing nuclear positions is being demanded by both candidates and customers - and ReNuke is responding. The company provides four basic services: Defined-scope project execution, traditional staff augmentation, fee-based permanent placement, and strategic human capital consulting. ReNuke's service offerings are supported by a full-time leadership staff with over 300 years of collective nuclear industry experience. We are technically qualified in project management, project controls, contract administration, engineering, operations, outage management, procurement, health physics, decommissioning, transportation, and quality assurance.

Rolls-Royce

Huntsville, AL (Booth 242 & 341)

Rolls-Royce offers a broad range of civil nuclear expertise, including work related to licensing and safety reviews, engineering design, supply chain management, manufacturing, installation and commissioning of nuclear island systems and equipment, as well as operational management and through life support. The company's involvement in the nuclear industry spans over half a century in the design and supply of equipment for both civil and military reactors.

We also provide technical services in the UK and US civil nuclear markets, as well as safety critical instrumentation and control systems in Europe, the US and many other international markets, including all 58 operating nuclear facilities in France.

S&ME, Inc.

Raleigh, NC (Booth 122)

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 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 26 offices in the Southeast and Midwest, our goal is to provide the engineering and scientific services our clients require to achieve success.

Technical Exhibitors

SCHOTT Electronic Packaging

Southbridge, MA (Booth 144)

SCHOTT Electronic Packaging produces Electrical Penetration Assemblies (EPA's) for nuclear power plants and submarines. SCHOTT Electronic Packaging is a leading manufacturer of high-quality hermetic housings and components for the reliable, long-term protection of sensitive electronics. Core technologies include glass-to-metal and ceramic-to-metal sealing, thermal sensing components and cutting-edge specialty glass competencies.

The Shaw Group

Baton Rouge, LA (Booth 110 & 112)

The Shaw Group is a diverse, leading global organization with 27,000 employees and fiscal year 2011 revenues of \$5.9 billion. Our ability to provide vertically integrated solutions to our clients in a variety of industries makes us stand out among our peers.

SPX ClydeUnion Pumps

Battle Creek, MI (Booth 217 & 219)

ClydeUnion Pumps, an SPX Brand, is a world leading specialist in pumping solutions and provides expertise across many industries. In December 2011, ClydeUnion Pumps became part of the Fortune 500 multi-industry manufacturing leader, SPX Corporation, who provides highly-specialized, engineered products and technologies for a vast range of markets. ClydeUnion Pumps understands the specialized needs of the nuclear power market and draws on over 50 years nuclear pump experience to provide coded, safety related and balance of plant pumps for all reactor types. Our ability to design a reliable solution for the specific needs of the overall nuclear plant allied to our comprehensive service provision means ClydeUnion Pumps has nuclear pump installations in over 65% of operational nuclear power plants worldwide. We can provide Class I, II and III pumps with most of our Class I pumps having been developed for small modular reactors. Our three nuclear coded facilities have extensive experience in designing, supplying and project managing pump packages on all reactor types to the highest levels of quality. Our aftermarket business is supported by service centres in over 40 countries resulting in a truly global service across the full life cycle of any nuclear power plant.

STRUCTURAL

Hanover, MD (Booth 525)

STRUCTURAL collaborates with nuclear clients to improve infrastructure by combining our award-winning specialty construction, repair and maintenance services with our proprietary technologies to provide innovative solutions for demanding engineering and construction challenges.

Structural Integrity Associates

Huntersville, NC (Booth 443)

Structural Integrity Associates, Inc. is an internationally recognized engineering leader in the prevention and control of structural and mechanical failures. We've provided world-class support and engineering services to domestic and international nuclear utilities for nearly 30 years. Call 1-877-4SI-POWER to learn more about our nuclear plant services and solutions.

Sulzer Pumps (US) Inc.

Brookshire, TX (Booth 237)

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.

System One

Pittsburgh, PA (Booth 107)

For nearly 30 years, System One has delivered a full suite of staff augmentation, managed staffing and quality solutions to power producers, service providers and OEMs in the nuclear energy sector. We support the full production lifecycle, from licensing and construction to operations and maintenance. View our capabilities at www.systemoneservices.com.

Teledyne Brown Engineering, Inc.

Huntsville, AL (Booth 510)

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.

TopWorx/Emerson

Louisville, KY (Booth 534)

TopWorx Nuclear Qualified Proximity/Limit Position Sensor

- 100 year qualified life Containment LOCA/Harsh Non-LOCA/Mild
- Highest environmental qualifications in the industry 10g RIM/250Mrad/500F
- AP1000 Qualified
- No maintenance required
- Easily retrofits old lever arm type limit switches
- Discreet, 4-20, bus networks and wireless available for BOP

Tosan Inc.

Denver, CO (Booth 512)

TOSAN is an Organizational Effectiveness Consulting Practice with deep experience and success in the Energy Industry as well as other highly complex, safety oriented operations.

We help organizations and individuals perform better and achieve more by increasing their capacity - to implement change, generate and transfer knowledge, and support strategic initiatives at the front-line through organization-wide alignment.

Toshiba America Nuclear Energy Corporation

Charlotte, NC (Booth 505 & 507)

Toshiba America Nuclear Energy Corporation - a Charlotte-based subsidiary of Toshiba - serves North American customers with:

- Engineering, procurement, construction and licensing support for Toshiba Advanced Boiling Water Reactors (ABWR).
- Operations and maintenance services & technology for existing BWR NPP's (with Westinghouse).
- Equipment supply & construction support for Westinghouse AP1000 reactor construction.

Transco Products Inc.

Chicago, IL (Booth 248)

Building on more than 50 years of nuclear experience, Transco provides nuclear plants with turnkey solutions and custom-tailored products including thermal insulation, ECCS sump strainers and passive fire protection. With products and services in use at over 150 nuclear power plants worldwide, Transco is at the forefront of safety and innovation.

Twin City Fan & Blower

Minneapolis, MN (Booth 502)

Twin City Fan & Blower (TCF) is an industry leading designer and manufacturer of the highest quality fans throughout the world. We have a full line of centrifugal and axial fans for both safety and non-safety related applications in the nuclear industry. Our quality systems conform to 10 CFR 50 Appendix B, ASME NQA-1, ASME RG-1 and ISO 9001-2008 with U. S. based manufacturing in South Dakota. TCF, Aerovent and Clarage are all brands under our parent company, Twin City Fan Companies, Ltd.

TW Metals - Nuclear Materials Solutions

Leetsdale, PA (Booth 239)

TW Metals – Nuclear Materials Solutions is the ASME Certified source for all classes, forms and grades of fabrication material; plate, bar, forgings, tubing, fittings, pipe, consumables and fasteners including Special Chemistry Products. Proven experience supporting the domestic and global commercial markets - Utilities, OEM's, DOE and DOD, TW Metal's Nuclear QA programs are in accordance with; 10CFR21, 10CFR50 b, 10CFR71 h, 10CFR72 g, NQA-1, NCA 3800 and ASME Sect. III.

UniTech Services Group

Springfield, MA (Booth 129)

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 of their workers with minimal generation of radioactive waste.

URS

Princeton, NJ (Booth 501)

URS provides integrated engineering, procurement, construction, and maintenance services to the commercial nuclear industry and similar services in support of managing/operating government nuclear facilities. The Steam Generating Team (SGT), our joint venture with AREVA, is a leading supplier of engineering and construction support services for large nuclear component replacements.

ValvTechnologies

Houston, TX (Booth 434)

ValvTechnologies, best known for our four year, zero leakage guarantee, has been solving power application issues for 25 years, by offering better built, cobalt free, metal seated isolation & control valves. We pride ourselves on our client-partner relationships and have made it our mission to offer best in class service and support. ASME N and NPT Authorized with a 10CFR50 Appendix B program for safety related equipment - we are committed to offering the very best valve solutions to the nuclear industry.

Ventyx Inc.

Atlanta, GA (Booth 532)

Ventyx, an ABB company, is the leading enterprise software and service partner for the world's essential industries. The world relies on you to make the most of the resources that matter. We know your challenges and understand where your markets are headed. That's why you can count on us to deliver solutions that help you minimize risk, maximize profits, and strategize for the future.

Waste Control Specialists

Dallas, TX (Booth 542)

Low Level Radioactive Waste (LLRW) disposal is entering a new era in the United States. The state-of-art Texas Compact Waste Facility (CWF) is now open in Andrews, Texas, providing a safe, secure, permanent solution to your class A, B & C disposal needs. Owned by the state of Texas, and operated by Waste Control Specialists, the CWF is available to generators of commercial LLRW. For more information please visit our website at wcstexas.com.

WeldTech Services

Lawrenceville, GA (Booth 344)

The Gold Standard

WeldTech Services Corp. is the new nuclear industry leader in specialty mechanical projects and maintenance. Founded in 2005 with the primary focus on serving the customer, WeldTech is the customer-oriented alternative to the traditional specialty mechanical contractors.

WeldTech is led by career nuclear professionals and supported by a network of highly skilled, nuclear craft and supervision to perform critical projects safely, with the highest quality, on time and budget, ultimately reducing outage/project risk for the nuclear industry.

Technical Exhibitors

Western Services Corporation **Frederick, MD (Booth 244 & 343)**

WSC, headquartered in Frederick, Maryland, is a global simulation and services company. It was founded in 1995, and has been growing steadily based on the quality and efficiency of its products, and its flexible team-oriented approach for serving its customers.

WSC's primary focus is the development and deployment of advanced 3KEYSOFTWARE® Simulation Technology, which consists of the 3KEYMASTER™ simulation platform and a suite of unified graphical modeling tools that includes 3KEYRELAP5-RT™, which is an adaptation of Idaho National Laboratory (INL) thermal-hydraulics and neutronic models running within the 3KEYMASTER Environment. Even though operator training simulators, both new simulators and the modernization or refurbishment of existing simulators for all type of power and process plants are WSC's main focus, WSC has achieved significant growth in Simulation Assisted Engineering (SAE) based on the strength of its "engineering-grade" simulation technology. Leading companies have been the external driver for SAE, and are embedding WSC's technology in their engineering processes to address the challenges of improving quality up-front, and reducing complex engineering development and commissioning cycles. To support the increasing deployment of e-learning, WSC has developed 3KEYSTUDENT™, which makes state-of-the-art simulator training available to a student's PC anywhere in the world via the Internet. WSC recently added the ability to embed Severe Accident Analysis modeling in 3KEYMASTER by coupling MELCOR, a product of Sandia National Laboratories, or EPRI's MAAP5, with 3KEYRELAP5-RT.

WSC is committed to continually improving the capabilities of its technology and widening the applicability of its simulation technology to complex systems. To further this goal, WSC has a vigorous market-focused R&D program and a strong commitment to customer service. WSC is ready to serve you globally for your complete simulation needs.

Westinghouse Electric Company **Cranberry Township, PA (Booth 306 & 308)**

Westinghouse Electric Company is the only company with a single focus on nuclear power, providing a wide range of nuclear plant products and services to utilities throughout the world. Our more than 14,000 employees worldwide provide fuel, spent fuel management, service and maintenance, instrumentation and control, and advanced nuclear plant designs. With the world's largest base of installed plants, no company has more nuclear experience.

The Westwind Group, Inc. **Wilmington, NC (Booth 500)**

The Westwind Group, Inc. is a multifaceted consulting firm specializing in selection, training and performance support solutions, information and learning content management solutions, leadership development, and management support. Our mission is to equip our clients with solutions that measurably contribute to productivity in the workplace.

Williams Industrial Services Group, LLC **Tucker, GA (Booth 201)**

Williams Industrial Services Group, LLC (Williams) is a family of companies providing a comprehensive range of industrial maintenance, modification and construction services to Power Generation, Pulp and Paper, Chemical, Refining, Manufacturing and other industrial markets.

Williams, founded in 1958, has been safely upgrading, uprating, maintaining, modifying, and improving the material condition of commercial nuclear power plants in the United States since 1970. We offer a complete range of services including general maintenance/ modification and specialty services such as coatings application, insulation, asbestos and lead abatement, roofing, valve maintenance and repair, staff augmentation, and other key services. Williams has completed many major projects such as Extended Power Uprate (EPU) projects and 10 CFR 73.55 security upgrades under all types of contracting models, including target price and firm fixed price. We pride ourselves on having one of the best safety performance records in the industry.

In summary, Williams helps nuclear power plant owners enhance the value of their generating assets by facilitating safe and efficient extended operations.

Wolverine Fire Protection Co. **Mount Morris, MI (Booth 142)**

Since 1958, Wolverine Fire Protection Co. has been committed to the preservation of life and property through the design, installation, maintenance, and service of fire protection sprinkler and alarm systems.

WorleyParsons Group, Inc. **Reading, PA (Booth 447)**

WorleyParsons has been a provider of professional technical, construction and project management services to the nuclear industry for over 50 years. Whether enhancing your nuclear operations with radiological design basis, safety analysis, and emergency management support, or supporting your new plant feasibility, development, design, construction or commissioning, WorleyParsons keeps your nuclear plants in compliance, online and operating at peak performance. We have the demonstrated industry commitment and capability to deliver outstanding support service from new plant development to deactivation and decommissioning, with the global presence and local project capabilities to assist customers in all phases of an asset's lifecycle.

Zachry Nuclear Engineering, Inc. **Stonington, CT (Booth 408)**

Zachry Nuclear Engineering, Inc. and our Numerical Applications Division is a full service engineering firm that provides Engineering, Analysis, Design, and Project Management services to the Nuclear Power Industry. Zachry Nuclear Engineering offers the services of experienced mechanical, electrical, controls, civil and structural engineering professionals and designers who are skilled in power plant systems, engineering analysis, including GOTHIC(tm), RADTRAD-NAI(tm), and CentralStor(tm), as well as modification package development. Zachry Nuclear Engineering has offices in Stonington, Connecticut; Chicago, Illinois; Charlotte, North Carolina; Cary, North Carolina; and Richland, Washington. For more information please visit www.zhi.com and www.numerical.com for information on GOTHIC, RADTRAD-NAI, CentralStor.

2012 UWC Golf Tournament: Sunday, August 5, 2012

GENERAL INFORMATION

The ANS Utility Working Conference (UWC) Golf Tournament will be held at The Diplomat Golf Resort. The UWC Golf Tournament is open to all conference attendees: you must be registered for the conference. Players from sponsoring organizations of the golf tournament are also expected to register and pay the appropriate fees to participate in the tournament. The tournament will begin at 8:00 a.m. on Sunday, August 5, 2012.

TRANSPORTATION

The Diplomat Golf Resort is located approximately 8 blocks from the Westin Diplomat Resort and Spa. For those of you who do not have a vehicle, ANS has arranged for a shuttle service to the Diplomat Golf Resort from the Westin Diplomat Resort and Spa. Shuttle service will begin at 7:00 a.m. and continue until approximately 7:45 a.m. The shuttle will also return golfers to the Westin Diplomat Resort and Spa following the UWC Golf Tournament Awards Luncheon.

Please keep in mind that the UWC Golf Tournament will begin promptly at 8:00 a.m. so please make sure that you arrive at the Diplomat Golf Resort on time.

FORMAT

The format of the tournament will be Captains Choice or Super Ball. With this format, each player will hit his or her drive. You select the best shot and everyone plays their next shot from that location. You continue this until the ball is holed out. We will make every attempt to have the teams paired to keep the scores as close as possible. If you have someone that you wish to play with, please include the name of that golfer on your return email to Sid Sarver.

CANCELLATIONS

If you are unable to participate in the golf tournament after you have registered, please contact Sid Sarver at tsarver@ec.rr.com and the ANS Registrar at registrar@ans.org, immediately. Refunds will be issued until the registration deadline of Friday, July 12, 2012. After that date, you may send a substitute. Absolutely no refunds will be issued after July 12, 2012.

2012 Utility Working Conference Golf Tournament Sponsors

American Crane & Equipment Corporation

Anderson, Chavet and Anderson (ACA)

Aquilex WSI
2 Foursomes of Golf

AREVA

AREVA DZ

The Babcock & Wilcox Company

Bechtel Power Corporation
2 Foursomes of Golf

Black & Veatch

Curtiss-Wright Flow Control Nuclear Group
(Anatec-LMT, Enertech, EST Group, NETCO, Nova, QualTech NP, Scientech)

Day & Zimmermann
2 Foursomes of Golf

Graybar

2 Foursomes of Golf

Invensys Operations Management

Sponsor of the Golf Tournament Awards Luncheon

Nuclear Safety Associates

2 Foursomes of Golf

NWI Consulting

ScottMadden, Inc.

2 Foursomes of Golf

System One

2 Foursomes of Golf

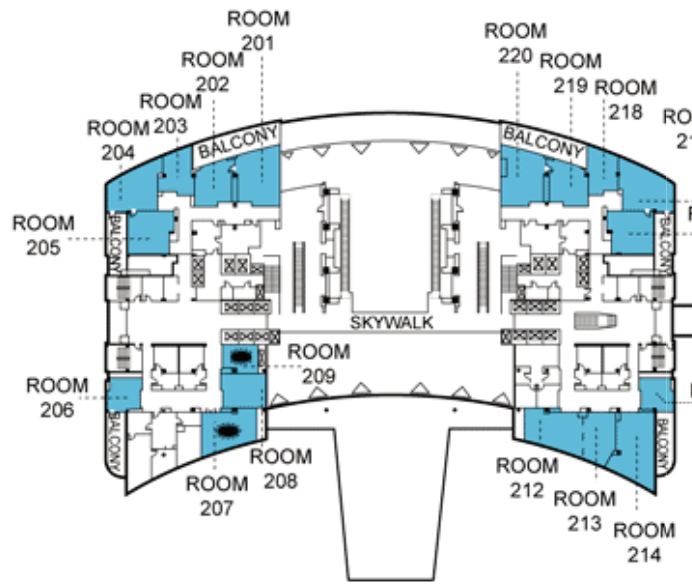
and Sponsor of the "Grab and Go" Breakfast

Westinghouse/PCI Energy Services

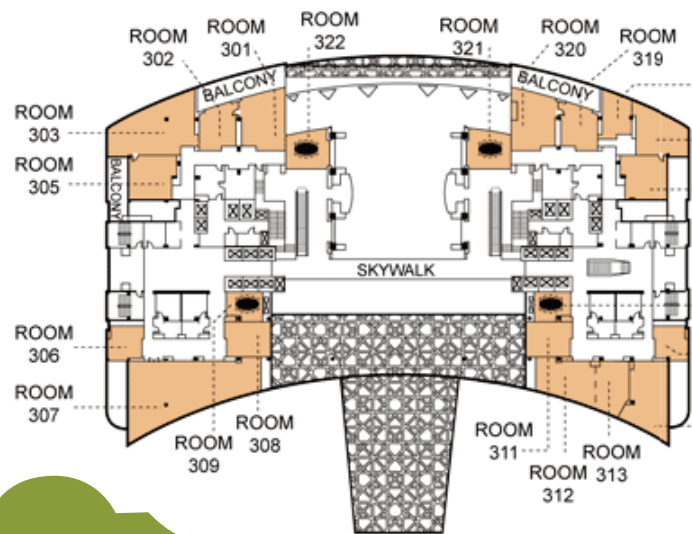
2 Foursomes of Golf

Zachry Nuclear Engineering, Inc.

3 Foursomes of Golf



SECOND FLOOR



GREAT HALL LEVEL

