NITSL Newsletter

Our goal is to keep members informed and involved. Please check out the "NITSL Snippets" section at the bottom of the newsletter for links to additional information. Feel free to provide feedback or comments at any time.

Chairman's Update

Again, I would like to **THANK** all of you that were able support and participate in this year's 2018 NITSL conference. NextEra Energy did an amazing job hosting, the vendor representation was greatly appreciated, and our Standing Committee's went above and beyond providing high value presentations.

I am looking forward to seeing everyone next year in Birmingham, Alabama where Southern Company will be hosting the 2019 NITSL conference. It is hard to believe they are already hard at work planning next year's conference. The NITSL EC along with the Southern Company Planning committee will be walking down the hotel and conference facilities the first week of October.

My post 2018 NITSL conference challenge to all of you is to help increase engagement in the regular standing committee meetings. It would be great if each one of you could get one new person you know or work with to start attending a standing committee meeting. The NITSL website member section has been updated to show the times, dial-in information, and the standing committee Chairs and Vice-Chairs. The infusion of new people will help stimulate new ideas that will ultimately benefit our industry as a whole.

Our Next Conference Host

The 2019 conference will be hosted by Southern Company. Southern Nuclear, headquartered in Birmingham, Ala., is a leader among the nation's nuclear energy facility operators and an innovator in advanced nuclear technologies.

The company operates a total of six units for Alabama Power and Georgia Power at the Joseph M. Farley Nuclear Plant near Dothan, Ala.; the Edwin I. Hatch Nuclear Plant near Baxley, Ga., and the Alvin W. Vogtle Electric Generating Plant near Waynesboro, Ga. Southern Nuclear is the licensee of two new nuclear units currently under construction at Plant Vogtle, which are among the first nuclear units being constructed in the United States in more than 30 years.

For more than 40 years, Southern Nuclear has operated its three nuclear energy facilities at the highest levels of reliability, with a current average three-year fleet capacity factor of 93.7 percent, exceeding the U.S. average of 92 percent for the years 2014-2016.

Southern Nuclear has received numerous accolades in 2016 for leadership in the advancement of nuclear energy including the Special Achievement Award by the United States Nuclear Infrastructure Council and the Presidential Citation by the American Nuclear Society. Southern Nuclear also received two of the Nuclear Energy Institute's Top Innovative Practice awards and a special recognition for achieving excellence in research and performance. Plant Hatch received the ANS Operations & Power Division's Utility Achievement Award for plant improvements that resulted in record-setting refueling outage duration.

Our 2019 Conference Location

The 45th Annual NITSL conference will take place from July 15, 2019 – July 18, 2018 at the Sheraton Hotel in Birmingham, Alabama.

Birmingham also known as the "Magic City" is a beautiful and diverse city. It's steeped in tradition and has become one of the South's leading industrial, medical and technology centers.


Meet the new Executive Committee Members

Chairman – Bill Wood, IT Manager at Exelon

Bill is primarily responsible for IT Cyber Security Programs / Projects for the fleet. Bill has over 19 years of experience in Nuclear IT and has been responsible for Plant Process Systems, Business IT Systems, and Cyber Security.

Vice-Chairman – Pat Swinson, IT Manager at Southern Nuclear Plant Hatch

Pat Swinson has 30 years of IT experience supporting Southern Nuclear needs at generating sites, in fleet applications, and in new nuclear. She is responsible for leading the site IT group in supporting all aspects of Hatch's IT needs, including application and network support as well as communication systems support.
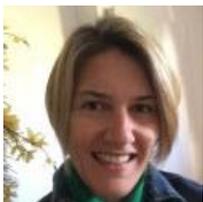
Secretary – Kelly Polizzi, IT Supervisor at Talen Energy

Kelly is responsible for procuring, implementing and maintaining non-process computer related applications as well as oversight and coordination of printers, phones, workstations and network infrastructure at the Susquehanna Steam Electric Station (SSES). She has been with Talen Energy for 4 years.

Financial Officer – Michael Melaragni, General Manager IT Applications at Arizona Public Service (APS)

Michael is a Strategic IT Executive with over 18 years of utility industry experience with a proven record of success ensuring the resiliency of critical business operations in reducing operational expenses and driving organizational change.

Communications – Noel Abascal, Senior Scrum Master at Florida Power & Light (FP&L)
Noel is a Senior Scrum Master with over 10 years of experience in project management. He has managed multiple projects across the Power Delivery and Nuclear business units. His most recent project was to deploy an Electronic Work Package (eWP) solution across the NextEra/FP&L Nuclear fleet.

Standing Committee Leads

Infrastructure & Applications: Jim Hill (Xcel) – Chair; Misty Goff(Exelon) – Co-chair

Software Quality Assurance: Amanda Engle (Exelon) – Chair; Meheeja Kotareddy(Duke) – Co-chair

Cyber Security: Dave Neff (Exelon) – Chair; Dave Fetil (Xcel) – Co-chair

Digital Controls: Mike Peutl (Exelon) – Chair; Sharon Gray (Southern) – Co-chair

Cyber Security Update

The NITSL Cyber Security Standing Committee (CSSC) selected 4 initiatives to work on throughout the year (shown below). Some of these initiatives are focused on providing utilities information prior to the full implementation dates coming up at the end of year. Initiative leaders are working on the development of scope for the initiatives, and laying out some milestones for the schedule. Since the NITSL conference, the CSSC has also conducted one Technical Call involving a live SIEM webinar based demonstration by Infrashield that presented techniques to filter Security Intrusion Event Monitor (SIEM) traffic and clearly identify actionable events. The demonstration incorporated real-world cyber incident data. The intent of the demonstration was to empower each participant to fight more effectively on the cyber battlefield by using SIEM to its fullest capability. The biweekly committee conference calls have included Leadership and Team Effectiveness Attributes from INPO 15-005 with specific ties to implementation of the Cyber Security Programs.

- *Continuance of the Benchmarking Initiative to identify Standard Cost Saving Practices*

   The intent of this initiative is to build upon the 2018 CSSC benchmarking effort that identified the top quartile licensees in terms of lowest on-going cyber program costs. The purpose of the initiative is shift the focus from compliance only to review more closely ongoing program costs to identify potential efficiency improvements and cost saving opportunities. Presently licensees are performing many regulatory required recurring activities using a combination of automated and manual methods. This initiative will identify manual efforts that could be automated to reduces costs and identify the current ongoing compliance activities that are providing a low safety/security benefit compared to the level of effort required to support those activities. This effort will identify automated solutions to could reduce labor needs and potential Cyber Security Plan changes that could be pursued to further reduce labor burden by reducing or eliminating low-value added compliance activities. Results and

recommendations will be shared at the 2019 NITSL conference.

- *Continuance of the Cyber Security Program Metrics initiative*

  The intent of this initiative is to build on the Standardized Metrics for the Cyber Security Program that were presented at the July 2018 NITSL Conference. The scope will include suggestions for standardized weighting of individual performance focus areas, standardized grading of overall performance, and standardized reporting structure. Part of the intent to standardize across the industry is so that the NRC can possibly utilize these reports during their next round of Cyber Security inspections to increase efficiency in their inspection process. Additional guidance for adding and removing focus areas based on changes in performance and program health will also be developed. To help with this initiative, CSSC members will be solicited to provide feedback to survey questions regarding use of performance metrics developed in early 2018, as well as, during technical calls for reviewing revised grading and weighting criteria in development.

- *Identification and Alignment on Additional Cyber Security Plan (CSP) Changes.*

  The intent of this initiative is to continue with the success of Addendum 1 and pursue additional specific changes to the NEI 08-09 Rev 6 Appendices A, D and E. The scope will look to narrow the scope of phase 2 changes already identified during the Addendum 1 effort. The initiative will use OE from full implementation inspections as well as existing NIST documents to help identify and justify reasoning of controls selected for use in the next addendum or revision of NEI 08-09. The initiative will include identification of specific changes and justifications to support NRC review and 10CFR50.54(p) evaluations. Surveys will be issued to the NITSL membership soliciting suggestions.

- *Standardized Licensee Ongoing Monitoring and Assessment Plan (Scope document for 24 month Self-Assessment*

  The intent of this initiative is to provide insight and interpretations for implementing the pending Ongoing Monitoring and Assessment Guidance Document Addendum 6. Additionally, this initiative will include scoping for the implementation of Programmatic ongoing monitoring requirements which may not be included in the Addendum 6 document. This initiative will also include as a subcomponent working with the Identification and Alignment on Additional Cyber Security Plan (CSP) Changes Initiative to ensure alignment for ongoing activities is reflected.

Digital Controls Update

 The NITSL Digital Controls committee is currently pursuing 8 initiatives for presentations at the NITSL conference next year. These initiatives revolve around data collection and analysis for predictive maintenance and remote monitoring as well as establishing life cycle maintenance strategies for the digital devices. Each initiative is expected to develop an initiative charter that establishes the details associated with the initiative such as a description, expected time involved in development and what the end result is expected to be.

- *Predictive Maintenance*

  The intent of this initiative is to review applications that perform predictive analytics on information provided to better target when maintenance needs to be performed. The theory is to reduce the burden of unnecessary preventative maintenance activities while still

maintaining excellent equipment reliability.

- *Wireless Sensors*

  Southern Company has implemented a wireless sensor strategy. The intent of this topic is to cover the initiative they undertook and elaborate on how they were able to be successful with their implementation.

- *In-House Development of Security System Code*

  This initiative reviews the development of Security System code to understand the drive behind why the software was developed in-house and what the cost-benefits were from the decision that was made.

- *Nuclear Digital System Lifecycle Concerns*

  With the aging of digital systems in the plants, a strategy needs to exist to ensure optimal equipment reliability. This initiative will review some of the theories behind life-cycle management of the digital systems.

- *Turbine Control Modernization*

  The intent of this initiative is to evaluate the Turbine Control technologies that have started to be implemented across the industry. A comparison and evaluation of different technologies, the benefits and the various experiences of the different items is expected to be portrayed.

- *Brunswick OE – Introduction of New Trip Condition*

  This initiative is focused on discussing the operating experience from Brunswick regarding the introduction of new trip conditions due to digital technology installations. This presentation is expected to help enhance the questioning attitude associated with the implementation of new technologies and understand what impacts may be introduced.

- *EPRI Guideline on Staffing*

  With the changes introduced to the nuclear industry due to the economy, staffing changes are being implemented to meet various goals. This initiative is intended to take a look at the EPRI guideline regarding staffing and how it would affect the nuclear sites.

- *Standardization of LEFM Across the Fleet*

  Standardizing technologies across various sites has many benefit, but completing the transition can have its own challenges. This initiative intends to share how one organization is completing the goal of standardizing the LEFMs across the fleet so that others may be able to apply the lessons learned.

Infrastructure & Applications Update

At its August meeting, I&A reviewed initiatives established at the July NITSL. The topics below are being developed, for Committee and General attendee presentation at the 2019 NITSL. These may be revised during the course of the next six Months (topics eliminated or added), based on their development and potential for emergent topic of interest.

In order to better communicate information objectives of each topic and provide information for potential broader participation, a Charter process was established…each topic will have one developed. About half of the topics have an initial charter established, and these can be revised as

the topic is further defined. Meeting content and initiative charters are at the NITSL I&A site. https://www.nitsl.org/NITSLCollaborationSite/Infrastructure%20and%20Application/SitePages/Home.aspx

- **Walter Church - Radio Frequency Identification**
  Southern Fleet effort, with Plant Hatch in lead. Please contact Walter if you have any RFID initiatives underway
- **Jim Hill -Delivering Nuclear Promise**
  Provide status and awareness for any Efficiency Bulletins that appear to require significant IT support. In such cases, collaboration on how to approach EB may be appropriate
- **Misty Goff - Data ingestion tool**
- **Kelly Polizzi - Vendor Management Integration**
- **Johanna Oxstrand - Smart Procedures**
  INL will be asking for industry participation in DIRECTOR initiative which will ultimately results in a published requirements document, tentatively in about one year.
- **Mike Melaragni - Data Analytics**
  Jerrold Vincent provided description; effort is to inform members of high value analytics use cases. If any members are working on analytics efforts, please contact Jerrold and provide information
- **Kelly Polizzi - Innovation Change Management**
- **Alex Ponder - Roadmap for Innovation**
  Intent is to produce a set of templates to be used in facilitating innovation. An "Innovation Templates" folder will be created for this
- **David Arndt - Collaboration with industry strategies**
- **Ray Marino - API- based software development**
- **Ray Marino - Low Code Development**
- **Angie Hensley - Practices for data sharing under 10CFR810**
  Members requested to provide input on problems/opportunities the presentation can address.

Software Quality Assurance Update

The NITSL SQA Committee is currently pursuing the following initiatives for the 2018-2019 NITSL year. These initiatives reflect what our members feel benefit the SQA committee and also explore SQAs role in the changing software environment. The SQA Committee continues to maintain a strong focus on knowledge sharing between utilities and other committees.

- *SQA Managing the Cloud*

  The intent of this initiative is to guide Utilities in understanding how SQA needs to adapt to support applications migrated/ing to Cloud environment.

- *Agile Methodologies*

  This initiative is focused on how to adapt current SQA process methodology to incorporate Agile/Scrum methodology. The SQA committee hopes to pursue a training opportunity for the 2019 NITSL Conference.

- *SQA Classifications & Delivering the Nuclear Promise*

  This initiative will examine what the current industry standard is around the products that are being classified. Why are we classifying more and can we "skinny" down to support

Delivering the Nuclear Promise?

- *SQA for Dummies*

  This initiative will provide information on why we have an SQA program and what the program accomplishes.

- *Review NRC Inspection Procedure*

  NRC Inspection Manual 35710 – Quality Assurance Inspection of Software used in Nuclear Applications was released in January 2018. This initiative will review the new procedure to determine what adjustments, if any, need to be added to NITSL guidance.

- *Cyber/Digital/I&A Collaboration*

  The SQA Committee continues their trend of having SQA personnel represented on the Cyber, Digital, and I&A committee calls. Members will be looking for collaboration opportunities with the other committees.

NRC Staff Agrees Small Modular Reactors Won't Need Large-Scale Emergency Zones

In a potential regulatory breakthrough that could accelerate future deployment of small modular and advanced reactors, Nuclear Regulatory Commission staff agreed with the Tennessee Valley Authority that scalable emergency planning zones (EPZs) for small modular reactors are feasible. The industry believes that this recognition of the enhanced safety features of small and advanced reactors could greatly simplify the licensing of these technologies and increase their cost competitiveness. Read more here.

Second Sanmen AP1000 connected to grid

Unit 2 of the Sanmen nuclear power plant in China's Zhejiang province has been connected to the electricity grid and has begun supplying power. In late-June, Sanmen 1 became the world's first AP1000 to achieve grid connection and power generation. Read more here.

Halloween Safety On and Off the Road

Kids love the magic of Halloween: Trick-or-treating, classroom parties and trips to a neighborhood haunted house. But for moms and dads, often there is a fine line between Halloween fun and safety concerns, especially when it comes to road and pedestrian safety.

In 2015, about 6,700 pedestrian deaths and 160,000 medically consulted injuries occurred among pedestrians in motor vehicle incidents, according to *Injury Facts 2017,* the statistical report on unintentional injuries created by the National Safety Council.

NSC research reveals about 17% of these deaths occurred when pedestrians improperly crossed roads or intersections. Lack of visibility because of low lighting or dark clothing accounted for about 15% of the deaths. Other circumstances varied by age: Darting or running into the road accounted for about 15% of deaths in kids ages 5 to 9 and 7% for those 10 to 15.

Children are more than twice as likely to be hit by a car and killed on Halloween than on any other day of the year, and October ranks No. 2 in motor vehicle deaths by month, with 3,550. August is first, with 3,642 deaths.

Click here for additional tips to ensure adults and children enjoy a safe holiday.

NITSL Snippets

- Need to know who to contact? Visit the NITSL website and a list of the current Executive Committee members and Standing Committee chairs/co-chairs.

- Click here for useful tips on improving your presentation skills.

- Autumn is here. Visit the National Safety Council for safety tips on various topics (e.g. flue prevention, drive safety, and more).

Visit us at www.nitsl.org. Comments, questions or story ideas are always welcome.