Fire Protection Loanee Opening

INPO has an opening for a loanee in Fire Protection. Experience in fire protection engineering and NFPA 805 implementation is preferred. If you have a qualified candidate, contact Vickie Armour at 770-644-8895.

Upcoming Industry Meetings

Online registration for upcoming industry meetings is available through the calendar on the INPO Member Website. Please register for the following meetings at INPO:

- Emergency Response Advisory Committee, Nov. 6
- EP Working Meeting, Nov. 7-8

Engineering & Configuration Management

Terry Schuster, 770-644-8957

Updates from the Design Engineering Manager Meeting

INPO hosted the Engineering Design Managers Meeting on July 25-26 as a forum for design engineering managers and corporate functional area managers to gain insights on industry trends and issues and to share recent operating experiences.

Topics for the meeting included the INPO engineering and configuration management focus areas — fuel reliability and engineering consequential error reduction — along with industry trends and common areas for improvement, Delivering the Nuclear Promise, implementation of the industry standard design process, cybersecurity and digital modifications. Industry presenters discussed oversight of vendor engineering services, engineering performance improvement and design basis knowledge for engineers.

A segment titled "Speed OE" was used to discuss technical challenges and to identify industry peers and contacts for help in resolving the issues. For additional information, contact Thomas Roddey at 770-644-8176 or Gary Garrett at 770-644-8217.

Equipment Reliability

George Manaskie, 770-644-8968

A Success Story from Brunswick Nuclear Plant

In an effort to recognize good examples in the industry, we will periodically provide an example of positive equipment reliability.

For many years, Duke Energy's Brunswick Nuclear Plant experienced MSIV LLRT failures in both units. Leakage results were often unmeasurable (would not pressurize due to gross leakage).

Brunswick has Y-Pattern globe valves that were originally supplied with three internal body guides, 120 degrees apart. The root cause of the leak rate test performance was eventually determined to be inadequate disc guidance based on valve orientation. The valve OEM concurred that welding additional guide pads just above the in-body seat would provide the necessary disc guidance to ensure adequate disc-to-seat contact.

Brunswick contracted a machining company to design and build a machine to weld the additional body guide pads robotically. The machine is also capable of valve bore laser mapping/data acquisition, packet milling, seat machining and valve bore weld buildup to achieve nominal design bore dimensions, all with one initial setup of the machine. This resulted in dose and outage resource savings.

The valve guide pad modifications were completed on the last of sixteen of Brunswick's MSIVs in 2010, and there has not been an LLRT failure of an MSIV due to seat leakage since.

For more information, contact Rhoel Tierra, Sam Swain or Frank Jefferson at Duke Energy.

Equipment Reliability Area Monitoring Insights Criteria

Every six weeks, the Equipment Reliability (ER) department single point of contact (DSPOC) for each site reviews several inputs to provide Area Monitoring Insights (AMIs) to the performance leader. These inputs include the following:

- safety system performance
- monitor and control reactivity
- fission product barriers
- equipment causing plant transients or not functioning during power transients
- operator workarounds
- capacity losses