



Plants shown in map are highlighted in news stories in this section

TIP AWARDS

NEI honors Alliant, Southern for innovations

ALLIANT ENERGY AND Southern Nuclear Operating Company shared in receiving the Nuclear Energy Institute's Top Industry Practice (TIP) Award for developing new safety-focused inspection and testing programs for their Duane Arnold and Farley nuclear power plants, respectively.

Florida Power Corporation also was honored for developing the first electronically available final safety analysis report (FSAR) on CD-ROM for required submissions to the Nuclear Regulatory Commission.

The awards were announced on May 4 at NEI's Nuclear Energy Assembly, in Chicago.

The TIP award was established in 1994 to recognize nuclear energy industry employees for innovations that improve safety, economics, or plant performance in nine categories. Four vendor awards were presented representing ABB-Combustion Engineering, Framatome, GE Nuclear Energy, and Westinghouse. In addition, NEI also presented awards in five process categories: plant operations; equipment reliability; work management; administrative support and training; and materials, fuel, and support services.

Development of phased-array ultrasonic inspection technology intended to ensure the structural integrity and reliability of low-pressure turbines earned Alliant Energy's Duane Arnold, in Palo, Iowa, a share of the TIP Award grand prize, along with the vendor award from the plant designer GE Nuclear Energy and the NEI process award for equipment reliability.

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A turbine failure ultimately could result in a reactor shutdown and cost millions of dollars to repair, but Alliant Energy's new inspection technique reduces turbine inspection time by 50 percent.

Southern Nuclear shared the TIP Award grand prize—and also received the Westinghouse vendor award and NEI's process award for equipment reliability—for implementing an automated system that detects cracks in steam generator tubes at Farley, in Dothan, Ala. This computer-based system employs a precision robotic probe that allows data to be collected on-line for immediate availability. The automated system has enabled Farley to reduce inspection time, use fewer probes, and avoid duplicative retesting. It also has eliminated paperwork and potential clerical errors that might result during the inspection of more than 10 000 steam generator tubes.

Florida Power received Framatome's vendor award and NEI's work management and configuration control process award for development of an electronic final safety analysis report at its Crystal River-3 nuclear plant, in Red Level, Fla. The innovation earned the company the first exemption from federal regulations requiring hard-copy FSAR submissions to the NRC. The requirement for nuclear plants submitting FSARs on CD-ROM is re-

duced from 12 copies to two. So far, Florida Power has shared this electronic process with 15 other nuclear plants.

The fourth vendor award, from ABB-Combustion Engineering, went to Southern California Edison Company for creating a new probabilistic risk assessment model to verify an extension in the amount of time an emergency diesel generator is allowed to be out of service at its San Onofre nuclear plant in San Clemente, Calif. The model verified an increase in the shutdown time of San Onofre's diesel generator from 72 hours to 14 days and enabled more maintenance to be done while maintaining safety.

This assessment tool demonstrated that it is actually safer to do preventive maintenance on an emergency diesel generator while the plant is operating rather than shut down, said NEI. It enabled San Onofre to achieve shorter, simpler, and safer refueling outages, which saved the company about \$4 million, according to NEI.

The other winners in the TIP process award category were:

■ SCE, which, in addition, won the TIP plant operations process award for eliminating corrosion in the low-pressure turbine and steam generators at San Onofre. By replacing and modifying the main turbines and reducing the reactor operating temperature, SCE was able to



Farley: A TIP winner for its automated system for crack detection in SG tubes

reduce the corrosion rate and extend the life of both the turbines and steam generators, while maintaining the plant's full electrical output.

Extending the use of equipment alone could save hundreds of millions of dollars, NEI said. ■ Arizona Public Service Co. won the TIP ad-

ministrative support and training process award for the "Silent Defender" penetration-resistant security door at its Palo Verde nuclear plant in Wintersburg, Ariz. The remote-controlled, multibarrier steel door resulted in a substantial manpower reduction and a cost savings of about \$1.4 million per year.

■ The Tennessee Valley Authority won the TIP materials, fuel and support services process award for an innovative approach used to move fuel bundles at its Browns Ferry nuclear plant, in Decatur, Ala. TVA's development of a specialized fuel movement process in the reactor reduced the time needed to refuel the plant. Use of this refueling technique saved several hundred thousand dollars.

To date, the TIP Awards program has generated more than 300 entries from nuclear power plants throughout the United States, with almost 40 entries submitted in 2000. ■

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