

## **EPRI Project: "Tritium Management by Design"**

Caryl Ingram  
Duke Energy

Paul D. Saunders  
Suncoast Solutions, Inc.

### **ABSTRACT**

In 2003, EPRI and a team of industry experts from the liquid radioactive waste processing, liquid and solid effluents, and chemistry disciplines developed a document that provides guidance and considerations for use when developing a sensible long-term liquid processing effluents strategy.

Part of that process identified the importance of balancing a site's liquid, solid, and gaseous effluents. Developing a solid, defensible tritium management strategy that balances production, inventory control, and subsequent exposure continues to present challenges to the industry. Several stations have adopted unique tritium production control, operational, and liquid processing strategies for managing the impact of tritium on plant programs.

In response to this challenge, EPRI was tasked by utilities with developing an interactive analytical tool to input actual or hypothetical plant data to evaluate actual or proposed program changes. The tool will be used to track and trend data, and provide a graphical output display showing production, inventory, and release paths with real time or projected values for tritium concentrations. This paper will summarize this project's current status and schedule.