

## **ENC 2002 Conference Invited Paper**

### **NUCLEAR PLANT ASSET ENHANCEMENT – LESSONS FROM UTILITY / VENDOR PARTNERSHIPS**

**Mark T. Savoff  
President  
GE Nuclear Energy**

Although slowed as a result of the situation in California, the move to competitive markets globally continues, and with the improved economics of nuclear plant operation comes the opportunity to achieve additional shareholder value. Owners recognize the benefits of nuclear generation in their portfolio and have focused on capacity enhancement to maximize the value of their assets. Significant improvements in capacity factor have been achieved through shorter outages, and overall generation has been increased through large power uprates at several stations. These accomplishments have positioned the existing nuclear fleet to be on par with the lowest cost, non-hydro, forms of production, and have been achieved through the collaborative efforts of utilities and vendors.

This paper explores how the traditional focus of nuclear plant cost reduction through generation enhancement is reaching its limit and how new business models of utility and vendor collaboration will be required to continue the trend. Innovative outsourcing concepts and application of information technology in engineering and design enable utilities to take full advantage of the synergies available through consolidation and maximize shareholder value. Several current examples of collaborative efforts utilizing digitized tools will be discussed. The opportunity for additional operation and maintenance cost reductions is large and real, and required in order to maintain the competitive position of the industry. Achieving these benefits, however, will require a shift in the traditional utility paradigm and adoption of a new mindset that focuses on core competencies.