

## KNOWLEDGE MANAGEMENT AND THE NUCLEAR RENAISSANCE

G. Marcus  
United States of America

*E-mail address of main author: GHMarcus@aol.com*

As the nuclear industry prepares itself for a new and potentially large growth spurt in the near future, people are suddenly becoming acutely aware of the demands such growth will place on the existing infrastructure. We will need more large-component manufacturing capacity. We will need more uranium. But most of all, we will need more people—skilled craftspeople, highly-trained operators, nuclear-trained engineers, and experienced regulators. This need is developing just as the cohort that designed, built and operated the existing facilities is reaching retirement age. Thus, the usual internal corporate means of knowledge transfer—informal mentoring and on-the-job training, are being strained. In the short term, there is concern that organizations are trying to meet their staffing needs by “raiding” each other for experienced personnel. If even a fraction of the current predicted growth in nuclear capacity is realized, this will not be a viable solution.

A number of initiatives are beginning to emerge to deal with the need to transfer skills and knowledge, both within organizations and across them. Most of these can be classified broadly as “knowledge management” initiatives. These include:

- Improvements in the way internal records are documented are maintained, indexed and made available.
- Structured programs to capture and transmit undocumented (“tacit”) knowledge.
- Programs to share knowledge and lessons learned, both across the industry and across nations.
- Internal and external training programs.

This paper will review some of the major directions, initiatives, possibilities and limitations in these areas.