

## **CRISIS IN THE WORKPLACE: DECLINING ENROLLMENTS IN NUCLEAR ENGINEERING**

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### **ABSTRACT**

Nuclear engineering enrollments have declined substantially during the 1990s, with a 72% decline in undergraduate enrollment and a 46% decline in M.S. enrollment. However, recent experience over the past two years indicates a substantial increase in demand for nuclear engineers. In order to understand these trends and suggest measures to address them, there have been two workshops and a survey conducted during over the past 18 months. This presentation will summarize the results of these activities, which are briefly described below.

The Nuclear Engineering Department Heads Organization (NEDHO) organized a workshop at the 1998 Winter Meeting of the American Nuclear Society (ANS) in Washington, D.C. The purpose of the workshop, titled "Crisis in the Workplace: Manpower Supply and Demand in the Nuclear Industry: The Imbalance", was to address the growing imbalance between supply and demand in the nuclear workplace, an imbalance that could lead to a manpower crisis in the coming years if not addressed by academe, industry, and the government. This workshop identified a number of problems and potential solutions related to the nuclear manpower shortage, which will be briefly summarized in the presentation.

NEDHO (with the assistance and support of DOE) arranged for ASEE to conduct a survey on manpower supply and demand in the nuclear industry. The survey was sent to 32 nuclear engineering departments and 168 companies that fit the description of a firm that would hire nuclear engineers or were known to hire nuclear engineers. The survey was distributed in the month of February 1999 and responses were collected until September 30, 1999 at which point the survey was closed. The survey provides compelling evidence that the manpower gap is real and will become worse in coming years unless steps are taken to reverse the declining enrollments in nuclear engineering programs. The survey will be discussed in the presentation.

A second workshop entitled "Crisis in the Workplace II: Addressing the Growing Supply/Demand Gap in the Nuclear Industry," was held at the Winter 1999 ANS Meeting in Long Beach. A one day workshop with invited talks and panel discussion was conducted and a number of important conclusions and recommendations resulted from this workshop, which will be discussed in the presentation.