ANS Issues a Response to an Inquiry on ANS-3.1-1993 (withdrawn), Selection, Qualification, and Training of Personnel for Nuclear Power Plants (Nuclear News, October 2024)

The ANS Standards Committee received an inquiry on ANS-3.1-1993 (withdrawn). The inquiry and response are provided below. Some editorial changes have been made for clarity.

Inquiry:

Korea Hydro & Nuclear Power is seeking clarification to determine if quality assurance or quality control work meets the requirements of "nuclear power plant experience" as described in ANS-3.1-1993 (withdrawn). Additionally, the inquiry also requests clarification to determine if the "operating organization" also described in this standard includes the quality assurance team.

Response:

ANS-3.1-1993 (withdrawn), Sec. 2, "Definitions," defines "nuclear power plant experience" as follows:

"Applicable work performed in a nuclear-fueled electric power production plant during preoperational, startup testing, or operational activities. Observation of others performing work is not experience."

Additionally, the definition of "operating organization" is "The organization concerned with daily operation, maintenance, and related technical services. This organization may include personnel located off-site who provide operational support."

- Sec. 3.1, "Operating Organization," states: "This standard is not intended to prescribe a required organization nor does it apply to design engineering groups. The owner organization may organize the functional levels as it deems necessary, but the operating organization shall address all functional responsibilities set forth in this standard."
- Sec.4.3, "Middle Manager Level," states: "The functional level of middle manager provides intermediate management level(s) between the first line supervisor level and the manager level. There may be more than one level in the Middle Manager Level. Middle Managers are typically responsible for development and administration of programs and policies in their specific areas such as chemistry, radiation protection, instrumentation and control, electrical maintenance, mechanical maintenance, quality assurance, and operations."
- Sec. 4.3.7 describes the Quality Assurance Middle Manager functional level.
- Sec. 4.4, "First Line Supervisor Level," states: "The functional level of first line supervisor is the first line of management and describes those individuals who direct the actions of operators, technicians, or maintenance personnel and who are responsible for the quantity and quality of work done. Their duties include ensuring that work is performed in compliance with procedures, policies and industrial safety practices."
- Sec. 4.4.13 describes the Quality Assurance or Quality Control First Line Supervisor functional level.
- Sec. 4.5, "Operators, Technicians, and Maintenance Personnel," states: "Activities performed by this group include manipulation of plant controls, monitoring of plant performance through various instrumentation, radiation surveys, chemistry sampling and analysis, equipment calibration and repair, and instructing people in these activities.

Personnel in this category are experienced and are generally classified as journeymen or work group leaders."

Sec. 4.5.5 describes the role of Quality Control. Sec. 4.5.6 describes the role of Quality Assurance.

When considering the inquiry seeking clarification to determine if specific quality assurance or quality controls work can be considered nuclear power plant experience as defined in ANS-3.1-1993 (withdrawn), Sec. 2, the following questions should be considered.

- 1. Was the work performed within the functional responsibilities described in Secs, 4.3.7, 4.4.13, 4.5.5, or 4.5.6 of this standard?
- 2. Was the quality assurance or quality control work performed in a nuclear-fueled electric power production plant during preoperational, startup testing, or operational activities? Note that per the Sec. 2 definition of "nuclear power plant experience," observation of others performing the quality assurance or quality control work is not experience.

If the answers to these two questions are yes, it is reasonable to conclude that the work is considered nuclear power plant experience for the purpose of meeting the nuclear power plant experience requirements for the functional responsibility level(s) (i.e., Secs. 4.3.7, 4.4.13, 4.5.5, and 4.5.6) within which the experience was gained.

Regarding the question of whether an operating organization, as defined in Sec. 2 of ANS-3.1-1993 (withdrawn), includes the quality assurance team, Sec. 3.1 states, in part, "This standard is not intended to prescribe a required organization . . ." However, Sec. 3.1 also states, "Section 4, Qualification, describes the qualification requirements for a typical operating organization." As noted in response to question 1, Sec. 4 includes requirements for three levels of quality assurance/control functional responsibilities.