ORNL - Restart of the High Flux Isotope Reactor 2-07 (Contractor ORR)

ENGINEERING

OBJECTIVE ES-1: The engineering program has been appropriately modified to reflect the CS modification and its reactor interface, sufficient numbers of qualified engineering staff and management are provided, and adequate facilities and equipment are available to ensure services are adequate to conduct and support reactor operations with the hydrogen-moderated CS. Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management control of safety. (CR–1, CR–2, CR–6)

Criteria

- The engineering organization and associated programs are established and functioning to support the RRD operations organization. Functions, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented.

- The engineering organization is adequately staffed with qualified personnel.

Approach

Record Review: Review selected documentation (e.g., administrative procedures, organization charts, position descriptions and internal memoranda) that establish the roles, responsibilities, interfaces, and staffing levels of the engineering support organization.

Interviews: Interview selected engineering personnel to evaluate their understanding of their responsibilities to the RRD operations organization.

Shift Performance: None.

OBJECTIVE ES-2: Engineering staff and management exhibit awareness of applicable requirements pertaining to CS operation, hazards, and reactor operations with the hydrogen-moderated CS. Through their actions, they have demonstrated a high-priority commitment to comply with these requirements. The level of knowledge of engineering managers and staff relating to CS operations, hazards, and reactor interface is adequate. (CR – 1, CR – 4)

Criteria

Engineering support personnel demonstrate a working knowledge of reactor operations with the hydrogen-moderated CS, associated systems and components related to safety, and applicable safety management program requirements. These personnel also give adequate attention to health, safety, and environmental protection issues.

Approach

Record Review: None.

Interviews: Interview cognizant engineers responsible for safety systems to assess their understanding of how their actions relate to the safety basis for reactor operations with the hydrogen-moderated CS. Determine if their level of knowledge is adequate to properly assist the operations organization in maintaining safe operations. Determine if they have adequate knowledge of health, safety, and environmental issues.

Shift Performance: Observe drills, routine evolutions, and normal operations to assess the ability of engineering personnel to support safe, compliant operation and maintenance of systems and components under their cognizance.