# ORNL - Restart of the High Flux Isotope Reactor 2-07

## CONDUCT OF OPERATIONS (OP)

#### **OBJECTIVE OP-1:**

The formality and discipline of operations are adequate to conduct work safely, and programs are in place to maintain this formality and discipline (e.g., DOE Order 5480.19). (Core Requirement 13)

#### Criteria

- The formality and discipline of operations are adequate to conduct work safely, and programs are in place to maintain this formality and discipline.
- Implementation of ADM-0001, *HFIR Conduct of Operations*, is adequate for operations.
- Implementation of ADM-0601, *Cold Source Conduct of Operations*, is adequate for operations.

### Approach

Record Review: Review of ADM-0601 and ADM-0001 to confirm that those procedures fully capture the expectations for formality and discipline of operations. In addition, review operations logs.

#### Interviews:

Interview selected staff, including shift crews, involved in implementing ADM-0601 and ADM-0001.

#### Shift Performance:

Observe selected activities and/or simulations to assess the applicable elements of DOE Order 5480.19 as implemented through ADM-0601, *Cold Source Conduct of Operations*, and ADM-0001, *HFIR Conduct of Operations*. In particular, observe the communication and coordination (e.g., system and equipment status, work authorization) between CS operations staff and HFIR operations staff during those phases.

# **OBJECTIVE OP-2**:

The RRD has effectively implemented a program to assure sufficient reactor operator proficiency prior to resumption of operations. (Core Requirement 12)

#### Criteria

- Reactor operations personnel retain a practical and adequate understanding of the systems, operations, and the authorization basis.
- Reactor operations personnel give adequate attention to and retain an adequate knowledge of ES&H protection issues.
- Reactor operations personnel demonstrate a working knowledge of the facility systems and components, as needed to accomplish the actions required by the normal, abnormal, and emergency procedures under their cognizance.

# Approach

Record Review: Review selected training records (such as lesson plans, examination results, on the-job training, and postdrill critique reports) for operators and supervisors to assess the training program's effectiveness in establishing/maintaining an adequate level of knowledge.

# Interviews:

Interview reactor operators, supervisors, and shift technical advisors to ascertain the effectiveness of the RRD reactor operations proficiency plan by assessing their understanding of processes, procedures, and the authorization basis for reactor operations. Determine if they have adequate knowledge of ES&H issues. *Shift Performance*: Observe the performance of selected actual or simulated routine and abnormal operations to provide confidence that the proficiency of reactor operations management and operators has been maintained.