

## Shift Turnover

The staff has several concerns with language in NEI 06-11, Rev. 2, draft C, regarding shift turnover.

### Definition of Shift Turnover

NEI 06-11, Rev 2, includes the following definition:

Shift turnover - those activities that are necessary to safely transfer information and responsibilities between two or more individuals between shifts. Shift turnover activities may include, but are not limited to, discussions of the status of plant equipment, arming and disarming of armed security officers, transit to and from turnover stations including compliance with radiological and personal safety requirements, and the status of ongoing activities such as extended tests of safety systems and components.

The staff notes that this definition differs from the description of shift turnover activities that may be excluded from the calculation of work hours in the rule. For reference, 10 CFR 26.205(b)(1) currently states:

...Shift turnover includes only those activities that are necessary to safely transfer information and responsibilities between two or more individuals between shifts. Shift turnover activities may include, but are not limited to, discussions of the status of plant equipment, and the status of ongoing activities, such as extended tests of safety systems and components. Licensees may not exclude work hours worked during turnovers between individuals within a shift period due to rotations or relief within a shift. Activities that licensees may not exclude from work hours calculations also include, but are not limited to, shift holdovers to cover for late arrivals of incoming shift members; early arrivals of individuals for meetings, training, or pre-shift briefings for special evolutions; and holdovers for interviews needed for event investigations.

In Appendix B to Regulatory Guide 5.73, the staff determined that it is acceptable to include “arming and disarming of armed security officers” as “activities that are necessary to safely transfer information and responsibilities between two or more individuals between shifts.” The staff did not agree that “donning and doffing protective clothing for radiation workers” falls within the scope of shift turnover activities.

NEI 06-11, Rev 2 extends the definition of shift turnover activities to include “transit to and from turnover stations” and “compliance with radiological and personal safety requirements.” The staff believes that the addition of these activities to the definition of shift turnover indicates that the current rule text and existing guidance have not adequately conveyed the staff’s intent. Therefore, the staff is proposing one change to § 26.205(b)(1), as follows:

“Shift turnover includes only those activities that are necessary to safely transfer responsibilities between two or more individuals working contiguous shifts.”

The staff has also developed new guidance for determining the activities the staff considers shift turnover.

### Guidance for Determining Shift Turnover Activities that May Be Excluded from Work Hours Calculations

Shift turnover activities that may be excluded from work hours calculations are only those activities

that meet all three of the following criteria:

1. The activity immediately preceded the beginning of the individual's shift or immediately followed the end of an individual's shift;
2. The activity was necessary to transfer safety and security responsibilities between two or more individuals on contiguous shifts; and
3. The activity could not have reasonably been performed during the shift because of NRC requirements or other safety/security considerations.

The first criterion addresses the timing of the turnover activity and limits the turnover exclusion to only those turnover activities that occur outside of an individual's shift. Only that portion of turnover that precedes the beginning of a shift or follows the end of a shift may be excluded as turnover. No portion of a turnover that occurs between individuals within a shift for rotations between watch stations, for example, or to temporarily relieve a watch-stander may be excluded from the calculation of work hours.

The second criterion addresses the type of activities that qualify as turnover and limits these activities to those that are necessary to transfer safety and security responsibilities between individuals working contiguous shifts. The exclusion is limited to activities that are necessary for an individual to assume or transfer these responsibilities. These activities may include, for example, security personnel arming/disarming and transiting to and from a post at the beginning or end of a shift or health physics personnel donning/doffing radiation protective gear and transiting to and from a job site where continuous monitoring is required. This criterion also limits this exclusion to turnover activities between contiguous shifts. The term, "contiguous," means that the shifts are immediately adjacent in time, with the next shift beginning immediately after the end of the preceding shift. Therefore, a shift meeting that is held before the beginning of a shift (which may satisfy Criterion 1) that includes discussion of a maintenance task that is being performed only on day shifts would not be considered shift turnover, as the meeting does not satisfy Criterion 2.

The third criterion addresses the basis for conducting the activity before or after, rather than during the shift. It limits the exclusion to activities that cannot reasonably be performed during the individuals' scheduled shifts for reasons of safety or security (e.g., because the job duties that are being turned over must be continuously performed and the individual assuming the responsibilities must have the information or equipment before assuming the duty). This includes job duties that must be performed without interruption because of NRC regulations (e.g., requirements for continuous staffing at certain security posts, maintaining minimum shift complement in the control room) or because of safety/security considerations to which the licensee has committed. Activities that can be performed during shifts without impacting safety or security should not be excluded as turnover.