

Revised Technical Specifications Bases Insert

Grand Gulf Nuclear Station

(Replacement page for letter dated April 18, 1996
Attachment 3 page 9)

INSERT B 3.10-27A

SR 3.10.6.3 and SR 3.10.6.4

SR 3.10.6.3 and SR 3.10.6.4 provide alternate methods of meeting the requirements of LCO 3.10.6.c when loading fuel assemblies (loading includes incore fuel shuffle since the fuel assembly being moved must be loaded into the new position). Each of these surveillances are to ensure the periodic verification of the administrative controls established by this Special Operations LCO to preclude the possibility of an inadvertent criticality.

SR 3.10.6.3 requires the compliance to an approved spiral reload sequence whenever control rod(s) are withdrawn or removed in accordance with this LCO and the possibility exists that fuel assemblies could be loaded in to a core cell with withdrawn or removed control rod(s). SR 3.10.6.3 requires that when loading fuel into the core with multiple control rods withdrawn, special spiral reload sequences are used to ensure that reactivity additions are minimized. Spiral reloading encompasses reloading a cell (four fuel locations immediately adjacent to a control rod) on the edge of a continuous fueled region (the cell can be loaded in any sequence). This SR is not required to be met when SR 3.10.6.4 is satisfied for LCO 3.10.6.c.2 requirements.

SR 3.10.6.4 provides an alternate method to assure that an unacceptable reactivity addition does not occur during fuel loading when control rod(s) are withdrawn or removed in accordance with this LCO. As a backup to refueling procedures this surveillance verifies the LCO 3.10.6.c.2 requirement that a positive means of assuring fuel assemblies cannot be loaded into a core cell with a withdrawn or removed control rod is in effect. The positive means entails a physical barrier such that even if refueling procedures were violated and an attempt was made to load a fuel assembly into a core cell with a withdrawn or removed control rod the action would be prevented (e.g., multiple control rod blade guides are placed in the core cell or a mechanical blocking device is placed in a core cell such that all four fuel assembly locations are blocked from fuel insertion). This requirement provides sufficient additional restrictions considering the plant condition because with no fuel assemblies in the core cell, the associated control rod has no reactivity control function and any fuel loading error other than loading the fuel assembly into a core cell with a withdrawn or removed control rod is bounded by the analyzed fuel assembly mispositioning events. This SR is not required to be met when SR 3.10.6.3 is satisfied for LCO 3.10.6.c.1 requirements.

The 24 hour Frequency of these surveillance is acceptable, given the administrative controls on fuel assembly and control rod removal, and takes into account other indications of control rod status available in the control room.

Revised Technical Specifications Bases Insert

River Bend Station

(Replacement page for letter dated April 18, 1996
Attachment 4 page 9)

INSERT B 3.10-28A

SR 3.10.6.3 and SR 3.10.6.4

SR 3.10.6.3 and SR 3.10.6.4 provide alternate methods of meeting the requirements of LCO 3.10.6.c when loading fuel assemblies (loading includes incore fuel shuffle since the fuel assembly being moved must be loaded into the new position). Each of these surveillances are to ensure the periodic verification of the administrative controls established by this Special Operations LCO to preclude the possibility of an inadvertent criticality.

SR 3.10.6.3 requires the compliance to an approved spiral reload sequence whenever control rod(s) are withdrawn or removed in accordance with this LCO and the possibility exists that fuel assemblies could be loaded in to a core cell with withdrawn or removed control rod(s). SR 3.10.6.3 requires that when loading fuel into the core with multiple control rods withdrawn, special spiral reload sequences are used to ensure that reactivity additions are minimized. Spiral reloading encompasses reloading a cell (four fuel locations immediately adjacent to a control rod) on the edge of a continuous fueled region (the cell can be loaded in any sequence). This SR is not required to be met when SR 3.10.6.4 is satisfied for LCO 3.10.6.c.2 requirements.

SR 3.10.6.4 provides an alternate method to assure that an unacceptable reactivity addition does not occur during fuel loading when control rod(s) are withdrawn or removed in accordance with this LCO. As a backup to refueling procedures this surveillance verifies the LCO 3.10.6.c.2 requirement that a positive means of assuring fuel assemblies cannot be loaded into a core cell with a withdrawn or removed control rod is in effect. The positive means entails a physical barrier such that even if refueling procedures were violated and an attempt was made to load a fuel assembly into a core cell with a withdrawn or removed control rod the action would be prevented (e.g., multiple control rod blade guides are placed in the core cell or a mechanical blocking device is placed in a core cell such that all four fuel assembly locations are blocked from fuel insertion). This requirement provides sufficient additional restrictions considering the plant condition because with no fuel assemblies in the core cell, the associated control rod has no reactivity control function and any fuel loading error other than loading the fuel assembly into a core cell with a withdrawn or removed control rod is bounded by the analyzed fuel assembly mispositioning events. This SR is not required to be met when SR 3.10.6.3 is satisfied for LCO 3.10.6.c.1 requirements.

The 24 hour Frequency of these surveillance is acceptable, given the administrative controls on fuel assembly and control rod removal, and takes into account other indications of control rod status available in the control room.