15.4 Reactivity and Power Distribution Anomalies

The information in this section of the reference ABWR DCD, including all subsections, tables, and figures, is incorporated by reference with the following departures and supplements.

STD DEP Admin

15.4.2.1 Features of the ABWR Automatic Thermal Limit Monitoring System (ATLM)

STD DEP Admin

In the ABWR, the Automatic Thermal Limit Monitoring (ATLM) System performs the rod block monitoring function. The ATLM System is a dual channel subsystem of the Rod Control and Information System (RCIS). In each ATLM channel there are two independent thermal limit monitoring devices. One device monitors the MCPR limit and protects the operating limit of the MCPR, and the other device monitors the APLHGR limit and protects the operating limit of the APLHGR. The rod block algorithm and setpoint of the ATLM System are based on actual online core thermal limit information. If any one of the two limits is reached, either due to control rod withdrawal or recirculation flow increase, control rod withdrawal permissive is removed. Detailed description of the ATLM System is presented in ~~Reference 15.4-1 and~~ Chapter 7.

15.4.5 Recirculation Flow Control Failure with Increasing Flow

15.4.5.2.1.3 Identification of Operator Actions

STD DEP Admin

Reactor pressure is controlled as required, depending on whether scram occurs and, if scram occurs, whether a restart or cooldown is planned. In general, following a scram, the corrective action is to hold reactor pressure and condenser vacuum for restart after the malfunction has been repaired. The following is the sequence of operator actions expected during the course of the event, assuming restart. The operator should:

(3) Switch the reactor mode switch to the ~~STARTUP~~ SHUTDOWN *position*

15.4.11 COL License Information

15.4.11.1 Mislocated Fuel Bundle Accident

The following site-specific supplement addresses COL License Information Item 15.5.

No departures are being taken from the fuel design licensing basis that is described in the reference ABWR DCD, including the core loading map used for response analysis in Figure 4.3-1 and the basic control strategy in Table 4A-1. Consequently, the analysis results of the fuel bundle mislocated event are based on NRC approved methods and are provided in subsection 15.4.7.3 of the DCD.

15.4.11.2 Misoriented Fuel Bundle Accident

The following site-specific supplement addresses COL License Information Item 15.6.

No departures are being taken from the fuel design licensing basis that is described in the reference ABWR DCD, including the core loading map used for response analysis in Figure 4.3-1 and the basic control strategy in Table 4A-1. Consequently, the analysis results of the fuel bundle misoriented event are based on NRC appoved methods and are provided in subsection 15.4.8.3 of the DCD.