



#### Description of Event

On 6/8/79 at approximately 0530, power escalation was underway following feed pump maintenance. At this time an upper detector flux deviation alarm was received. Analysis of the detector currents indicated the presence of a quadrant power tilt ratio of 1.0292 in the upper core and 1.0285 in the lower core. This was in excess of T.S. 3.2.4 limit which restricts the quadrant power tilt ratio to  $\leq 1.02$ .

#### Probable Consequences of Occurrence

The limit of 1.02 provides DNB and linear heat generation rate protection for X-Y plane power tilts. Technical Specification 3.2.4 provides a period of two hours of operation between 1.02 and 1.09 to allow for identification and correction of a dropped or misaligned rod before a power reduction is necessary to reinstate the margin of uncertainty for FQ. The unit was already at reduced power and no control rod misalignment could be determined during this two hour period. At this time there appear to be no generic implications. As a result, the public health and safety were not affected by this event. A safety evaluation for plant operation with several dropped rodlets was performed. The evaluation indicated that operation with several dropped rodlets did not invalidate the appropriate accident analysis limits.

#### Cause of Occurrence

There was no indication of control rod misalignment and no immediate cause for the quadrant power tilt could be found. A similar event occurred on 5/30/79 and was reported in LER 79-076/03L-0. An evaluation of incore flux map data and PDQ design simulations suggests that the power tilt could be caused by several dropped RCCA rodlets.

#### Immediate Corrective Action

After the presence of the tilt was noted, the actions given by T.S. 3.2.4 were followed. The tilt was monitored using the excore detector system. The tilt was reduced below the 1.02 limit after approximately 3 hours. Subsequent calculations of quadrant tilt indicated the tilt remained less than 1.02. Incore flux map surveillance has been increased to biweekly intervals (dependent on stable core conditions).

#### Scheduled Corrective Action

The tilt ratio has been closely monitored by both incore and excore detector systems as well as the incore thermocouple system.

#### Actions Taken to Prevent Recurrence

The tilt ratio is being monitored and operations which could result in an increase in the tilt ratio are being carefully observed. Further evaluation of this matter is being pursued with Westinghouse.