

### 3.1 REACTIVITY CONTROL SYSTEMS

#### 3.1.8 Rod Position Indication

LCO 3.1.8                      The Analog Rod Position Indication (ARPI) System and the Demand Position Indication System shall be OPERABLE.

APPLICABILITY:        MODES 1 and 2.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each inoperable rod position indicator per group and each demand position indicator per bank.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>-----NOTE----- Rod position monitoring by Required Actions A.2.1 and A.2.2 may only be applied to one inoperable ARPI and shall only be allowed: (1) until the end of the current cycle, or (2) until an entry into MODE 5 of sufficient duration, whichever occurs first, when the repair of the inoperable ARPI can safely be performed. Required Actions A.2.1, A.2.2 and A.2.3 shall not be allowed after the plant has been in MODE 5 or other plant condition, for a sufficient period of time, in which the repair of the inoperable ARPI could have safely been performed.</p>	<p>A.1      Verify the position of the rods with inoperable position indicators by using movable incore detectors.</p> <p><u>OR</u></p> <p>A.2.1    Verify the position of the rod with the inoperable position indicator by using movable incore detectors.</p>	<p>Once per 8 hours</p>
<p>A.    One ARPI per group inoperable for one or more groups.</p>	<p><u>AND</u></p>	<p>8 hours</p> <p><u>AND</u></p> <p>Once every 31 days thereafter</p> <p><u>AND</u></p> <p>8 hours, if rod control system parameters indicate unintended movement</p> <p>(continued)</p>

**ACTIONS**

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2.2 Review the parameters of the rod control system for indications of unintended rod movement for the rod with an inoperable position indicator.	16 hours
	<u>AND</u>	<u>AND</u> Once per 8 hours thereafter
	A.2.3 Verify the position of the rod with an inoperable position indicator by using movable incore detectors.	8 hours, if the rod with an inoperable position indicator is moved greater than 12 steps.
	<u>OR</u>	<u>AND</u> Prior to increasing THERMAL POWER above 50% RTP and within 8 hours of reaching 100% RTP
	A.3 Reduce THERMAL POWER to less than or equal to 50% RTP.	8 hours
B. One or more rods with inoperable position indicators have been moved in excess of 24 steps in one direction since the last determination of the rod's position.	B.1 Verify the position of the rods with inoperable position indicators by using movable incore detectors.	4 hours
	<u>OR</u> B.2 Reduce THERMAL POWER to less than or equal to 50% RTP.	8 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One demand position indicator per bank inoperable for one or more banks.	C.1.1 Verify by administrative means all ARPIs for the affected banks are OPERABLE.	Once per 8 hours
	<u>AND</u>	
	C.1.2 Verify the most withdrawn rod and the least withdrawn rod of the affected banks are less than or equal to 12 steps apart.	Once per 8 hours
	<u>OR</u>	
	C.2 Reduce THERMAL POWER to less than or equal to 50% RTP.	8 hours
D. Required Action and associated Completion Time not met.	D.1 Be in MODE 3.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.1.8.1 Verify each ARPI agrees within 12 steps of the group demand position for the full indicated range of rod travel.	18 months