## REACTIVITY CONTROL SYSTEMS

## 3/4.1.3 MOVABLE CONTROL ASSEMBLIES

CEA POSITION

## LIMITING CONDITION FOR OPERATION

3.1.3.1 All full-length (shutdown and regulating) CEAs, and all part-length CEAs which are inserted in the core, shall be OPERABLE with each CEA of a given group positioned within 6.6 inches (indicated position) of all other CEAs in its group.

## APPLICABILITY: MODES $1^{*}$ and $2^{*}$.

## ACTION:

a. With on or more full-length CEAs incperable due to being immovable as a result of excessive friction or mechanical interference or known to be untrippable, determine that the SHUTOOWN MARGIN requirement of Specification 3.1.1. 12is satisfied within 1 nour and be in at least HOT STANDBY within 6 hours.
b. With more than one ful1-length or part-length CEA inoperable or misaligned from any other CEA in its group by more than 19 inches (indicated position), be in at least HOT STANDBY within 6 hours.
c. With one or more full-length or part-length CEAs misaligned from ariy other CEAs in its group by more than 6.6 inches, operation in MODES 1 and 2 may continue, provided that core power is reduced in accordance with Figure $3.1-2 A$ and that within 1 hour the misaligned CEA(s) is either:

1. Restored to OPERABLE status within its above specified alignment requirements, or
2. Declared inoperable and the SHUTDOWN MARGIN requirement of Specification 3.1.1.12is satisfied. After declaring the CEA(s) inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specifications 3.1.3.6 and 3.1.3.7 provided:
a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA(s) shall be aligned to within 6.6 inches of the inoperable CEA(s) while maintaining the allowable CEA sequence and insertion limits shown on Figures 3.1-3 and 3.1-4; the THERMAL POWER level shall be restricted pursuant to Specifications 3.1.3.6 and 3.1.3.7 during subsequent operation.

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## ACTION: (Continued)

b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 2 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within 6 hours.
d. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, but within its above specified alignment requirements, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6.
e. With one part-length CEA inoperable and inserted in the core, operation may continue provided the alignment of the inoperable part length CEA is maintained within 6.6 inches (indicated position) of all other part-length CEAs in its group and the CEA is maintained purslant to the requirements of Specification 3.1.3.7.

SURVEILLANCE REQUIREMENTS
4.1.3.1.1 The position of each full-1ength and part-length CEA shall be determined to be within 6.6 inches (indicated position) of all other CEAs in its group at least once per 12 hours except during time intervals when one CEAC is inoperable or when both CEACs are inoperable, then verify the individual CEA positions at least once per. 4 hours.
4.1.3.1.8 Each full-length CEA not fully inserted and each part-length CEA which is insertea in the core shall be determined to be OPERABLE by movement of at least 5 inches in any one direction at least once per 31 days.

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## 3/4.1.3 MOVABLE CONTROL ASSEMBLIES

## CEA POSITION

## LIMITING CONDITION FOR OPERATION

3.1.3.1 All full-1ength (shutdown and regulating) CEAs, and all part-length CEAs which are inserted in the core, shall be OPERABLE with each CEA of a given group positioned within 6.6 inches (indicated position) of all other CEAs in its group. In addition, the position of the part length CEAs Groups shall be limited to the insertion limits shown in Figure 3.1-2A.

APPLICABILITY: MODES $1^{*}$ and $2^{\star}$.

## ACTION:

a. With one or more full-length CEAs inoperable due to being immovable as a result of excessive friction or mechanical interference or known to be untrippable, determine that the SHUTDOWN MARGIN requirement of Specification 3.1.1.12is satisfied within 1 hour and be in at least HOT STANDBY within 6 hours.
b. With more than one full-length or part-length CEA inoperable or misaligned from any other CEA in its group by more than 19 inches (indicated position), be in at least HOT STANDBY within 6 hours.
c. With one or more full-length or part-length CEAs misaligned from any otner CEAs in its group by more than 6.6 inches, operation in MODES 1 and 2 may continue, provided that core power is reduced in accordance w th Figure 3.1-28 and that within 1 hour the misaligned CEA(s) is either:

1. Restored to OPERABLE status within its above specified alignment requirements, or
2. Declared inoperable and the SHUTDCWN MARGIN requirement of Specification 3.1.1. 12 is satisfied. After declaring the CEA(s) inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:
a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA(s) shall be aligned to within 6.6 inches of the inoperable CEA(s) while maintaining the allowable CEA sequence and insertion limits shown on Figures 3.1-2A, 3.1-3 and 3.1-4; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.
[^1]ACTION: (Continued)
b) The SHUTDOWN MARGIN requirement of Specification 3.1.1. 12 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within 6 hours.
d. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, but within its above specified alignment requirements, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6.
e. With one part-length CEA inoperable and inserted in the core, operation may continue provided the alignment of the inoperable part length CEA is maintained within 6.6 inches (indicated position) of all other part-length CEAs in its group.
f. With part length CEAs inserted beyond insertion limits, except for surveillance testing pursuant to Specification 4.1.3.1.2, within 2 hours either:

1. Restore the part length CEAs to within their limits, or
2. Reduce THERMAL POWER to ?ess than or equal to that fraction of RATED THERMAL POWER which is allowed by part length CEA group position using Figure 3.1-2A.

## SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The position of each full-length and part-length CEA shall be determined to be within 6.6 inches (indicated position) of all other CEAs in its group at least once per 12 hours except during time intervals when one CEAC is inoperable or when both CEACs are inoperable, then verify the individual CEA positions at least once per 4 hours.
4.1.3.1.2 Each full-length CEA not fully inserted and each part-length CEA which is inserted in the core snall be deterinined to be OPERABLE by movement of at least 5 inches in any one direction at least once per 31 days.

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## 3/4.1.3 MOVABLE CONTROL ASSEMBLIES

CEA POSITION

## LIMITING CONOITION FOR OPERATION


#### Abstract

3.1.3.1 All full-length (shutdown and regulating) CEAs, and all part-length CEAs which are inserted in the core, shall be OPERABLE with each CEA of a given group positioned within 6.6 inches (indicated position) of all other CEAs in its group. In addition, the position of the part length CEAs Groups shall be limited to the insertion limits shown in Figure 3.1-2A.


## APPLICABILITY: MODES $1^{*}$ and $2^{*}$.

## ACTION:

a. With one or more full-length CEAs inoperable due to being immovable as a result of excessive friction or mechanical interference or known to be untrippable, determine that the SHUTDOWN MARGIN requirement of Specification 3.1.1.12is satisfied within 1 hour and be in at least HOT SYAMDBY within 6 hours.
b. With more than one full-length or part-length CEA inoperable or misaligned from any other CEA in its group by more than 19 inches (indicated position), be in at least HOT STANDBY within 6 hours.
c. With one or more full-length or part-length CEAs misaligned from any other CEAs in its group by more than 6.6 inches, operation in MODES 1 and 2 may continue, provided that core power is reduced in accordance with Figure 3.1-2B and that within 1 hour the misaligned CEA(s) is either:

1. Restored to OPERABLE status within its above specified alignment requirements, or
2. Declared inoperable and the SHUTDOWN MARGIN requirement of Specification 3.1.1.72is satisfied. After declaring the CEA(s) inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:
a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA(s) shall be aligned to within 6.6 inches of the inoperable CEA(s) while maintaining the allowable CEA sequence and insertion limits shown on Figures 3.1-2A 3.1 .3 , and 3.1-4; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.
[^2]
## CONTROLLED BY USER

## LIMITING CONDITION FOR OPERATION (COntinued)

## ACTION: (Continued)

b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.122 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within 6 hours.
d. With ane full-length CEA inoperable due to causes other than addressed by ACTION a., above, but within its above specified alignment requirements, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6.
e. With one part-length CEA inoperable and inserted in the core, operation may continue pruvided the alignment of the inoperable part length CEA is maintained within 6.6 inches (indicated position) of all other part-length CEAs in its group.
f. With part length CEAs inserted beyond insertion limits, except for surveillance testing pursuant to Specification 4.1.3.1.2, within 2 hours either:

1. Restore the part length CEAs to within their limits, or
2. Reduce THERMAL POWER to less than or equal to that fraction of RATED THEfi'AL POWER which is allowed by part length CEA group position using Figure 3.1-2A.

## SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The position of each full-iength and pert-length CEA shall be determined to be within 6.5 inches (indicated position) of all other CEAs in its group at least once per 12 hours except during time intervals when one CEAC is inoperable or when both CEACs are inoperable, then verify the individual CEA positions at least once per 4 hours.
4.1.3.1.2 Each full-length CEA not fully inserted and each part-length CEA which is inserted in the core shall be datermined to be OPERABLE by movement of at least 5 inches in any one direction at least once per 31 days.


[^0]:    *See Special Test Exceptions 3.10.2 and 3.10.4.

[^1]:    *See Special Test Exceptions 3.10.2 and 3.10.4.

[^2]:    *See Special Test Exceptions 3.10 .2 and 3.10.4.

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