

REACTIVITY CONTROL SYSTEM

3/4.1.3 CONTROL RODS

CONTROL ROD OPERABILITY

LIMITING CONDITION FOR OPERATION

Unit 1 Page

NO CHANGES ON THIS PAGE

3.1.3.1 All control rods shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one control rod inoperable due to being immovable, as a result of excessive friction or mechanical interference, or known to be untrippable:
 1. Within one hour:
 - a) Verify that the inoperable control rod, if withdrawn, is separated from all other inoperable control rods by at least two control cells in all directions.
 - b) Disarm the associated directional control valves** either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 - c) Comply with Surveillance Requirement 4.1.1.c.
 2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
 3. Restore the inoperable control rod to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. With one or more control rods trippable but inoperable for causes other than addressed in ACTION a, above:
 1. If the inoperable control rod(s) is withdrawn:
 - a) Immediately verify:
 - 1) That the inoperable withdrawn control rod(s) is separated from all other inoperable control rod(s) by at least two control cells in all directions, and
 - 2) The insertion capability of the inoperable withdrawn control rod(s) by inserting the control rod(s) at least one notch by drive water pressure within the normal operating range*.
 - b) Otherwise, insert the inoperable withdrawn control rod(s) and disarm the associated directional control valves** either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves

*The inoperable control rod may then be withdrawn to a position no further withdrawn than its position when found to be inoperable.

*May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

2. If the inoperable control rod(s) is inserted:
 - a) Within one hour disarm the associated directional control valves** either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 - b) Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
3. *THE PROVISIONS OF SPECIFICATION 3.0.4 ARE NOT APPLICABLE*
 - c. With more than 8 control rods inoperable, be in at least HOT SHUTDOWN within 12 hours.

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The scram discharge volume drain and vent valves shall be demonstrated OPERABLE by:

- a. At least once per 31 days verifying each valve to be open*, and
- b. At least once per 92 days cycling each valve through at least one complete cycle of full travel.

4.1.3.1.2 When above the low power setpoint of the RWM and RSCS, all withdrawn control rods not required to have their directional control valves disarmed electrically or hydraulically shall be demonstrated OPERABLE by moving each control rod at least one notch:

- a. At least once per 7 days, and
- b. At least once per 24 hours when any control rod is immovable as a result of excessive friction or mechanical interference.

4.1.3.1.3 All control rods shall be demonstrated OPERABLE by performance of Surveillance Requirements 4.1.3.2, 4.1.3.4, 4.1.3.5, 4.1.3.6 and 4.1.3.7.

*These valves may be closed intermittently for testing under administrative control.

**May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

REACTIVITY CONTROL SYSTEM

CONTROL ROD DRIVE COUPLING

LIMITING CONDITION FOR OPERATION

UNIT 1 PAGE
CHANGE AS SHOWN

3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 5*.

ACTION:

- a. In OPERATIONAL CONDITION 1 and 2 with one control rod not coupled to its associated drive mechanism:
 1. Within 2 hours, either:
 - a) If permitted by the RWM and RSCS, insert the control rod drive mechanism to accomplish recoupling and verify recoupling by withdrawing the control rod, and:
 - 1) Observing any indicated response of the nuclear instrumentation, and
 - 2) Demonstrating that the control rod will not go to the overtravel position.
 - b) If recoupling is not accomplished on the first attempt or, if not permitted by the RWM or RSCS then until permitted by the RWM and RSCS, declare the control rod inoperable and insert the control rod and disarm the associated directional control valves** either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 5* with a withdrawn control rod not coupled to its associated drive mechanism, within 2 hours, either:
 1. Insert the control rod to accomplish recoupling and verify recoupling by withdrawing the control rod and demonstrating that the control rod will not go to the overtravel position, or
 2. If recoupling is not accomplished, insert the control rod and disarm the associated directional control valves** either:
 - a) Electrically, or
 - b) Hydraulically by closing the drive water and exhaust water isolation valves.

→ C. THE PROVISIONS OF SPECIFICATION 3.0.4 ARE NOT APPLICABLE

*At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

**May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.1.3.6 A control rod shall be demonstrated to be coupled to its drive mechanism by observing any indicated response of the nuclear instrumentation while withdrawing the control rod to the fully withdrawn position and then verifying that the control rod drive does not go to the overtravel position:

- a. Prior to reactor criticality after completing CORE ALTERATIONS that could have affected the control rod drive coupling integrity,
- b. Anytime the control rod is withdrawn to the "Full out" position in subsequent operation, and
- c. Following maintenance on or modification to the control rod or control rod drive system which could have affected the control rod drive coupling integrity.

REACTIVITY CONTROL SYSTEM

3/4.1.3 CONTROL RODS

CONTROL ROD OPERABILITY

LIMITING CONDITION FOR OPERATION

3.1.3.1 All control rods shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION:

- a. With one control rod inoperable due to being immovable, as a result of excessive friction or mechanical interference, or known to be untrippable:
 1. Within 1 hour:
 - a) Verify that the inoperable control rod, if withdrawn, is separated from all other inoperable control rods by at least two control cells in all directions.
 - b) Disarm the associated directional control valves* either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 - c) Comply with Surveillance Requirement 4.1.1.c.
 2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
 3. Restore the inoperable control rod to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. With one or more control rods trippable but inoperable for causes other than addressed in ACTION a, above:
 1. If the inoperable control rod(s) is withdrawn:
 - a) Immediately verify:
 - 1) That the inoperable withdrawn control rod(s) is separated from all other inoperable withdrawn control rod(s) by at least two control cells in all directions, and
 - 2) The insertion capability of the inoperable withdrawn control rod(s) by inserting the control rod(s) at least one notch by drive water pressure within the normal operating range**.
 - b) Otherwise, insert the inoperable withdrawn control rod(s) and disarm the associated directional control valves* either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves

*May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

**The inoperable control rod may then be withdrawn to a position no further withdrawn than its position when found to be inoperable.

REACTIVITY CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

2. If the inoperable control rod(s) is inserted:
 - a) Within 1 hour disarm the associated directional control valves* either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 - b) Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
3. The provisions of Specification 3.0.4 are not applicable.
- c. With more than 8 control rods inoperable, be in at least HOT SHUTDOWN within 12 hours.

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The scram discharge volume drain and vent valves shall be demonstrated OPERABLE by:

- a. At least once per 31 days verifying each valve to be open**, and
- b. At least once per 92 days cycling each valve through at least one complete cycle of full travel.

4.1.3.1.2 When above the low power setpoint of the RWM and RSCS, all withdrawn control rods not required to have their directional control valves disarmed electrically or hydraulically shall be demonstrated OPERABLE by moving each control rod at least one notch:

- a. At least once per 7 days, and
- b. At least once per 24 hours when any control rod is immovable as a result of excessive friction or mechanical interference.

4.1.3.1.3 All control rods shall be demonstrated OPERABLE by performance of Surveillance Requirements 4.1.3.2, 4.1.3.4, 4.1.3.5, 4.1.3.6, and 4.1.3.7.

*May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

**These valves may be closed intermittently for testing under administrative control.

REACTIVITY CONTROL SYSTEM

CONTROL ROD DRIVE COUPLING

LIMITING CONDITION FOR OPERATION

3.1.3.6 All control rods shall be coupled to their drive mechanisms.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 5*.

ACTION:

- a. In OPERATIONAL CONDITIONS 1 and 2 with one control rod not coupled to its associated drive mechanism:
 1. Within 2 hours, either:
 - a) If permitted by the RWM and RSCS, insert the control rod drive mechanism to accomplish recoupling and verify recoupling by withdrawing the control rod, and:
 - 1) Observing any indicated response of the nuclear instrumentation, and
 - 2) Demonstrating that the control rod will not go to the overtravel position.
 - b) If recoupling is not accomplished on the first attempt or, if not permitted by the RWM or RSCS then until permitted by the RWM and RSCS, declare the control rod inoperable and insert the control rod and disarm the associated directional control valves** either:
 - 1) Electrically, or
 - 2) Hydraulically by closing the drive water and exhaust water isolation valves.
 2. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 5* with a withdrawn control rod not coupled to its associated drive mechanism, within 2 hours, either:
 1. Insert the control rod to accomplish recoupling and verify recoupling by withdrawing the control rod and demonstrating that the control rod will not go to the overtravel position, or
 2. If recoupling is not accomplished, insert the control rod and disarm the associated directional control valves** either:
 - a) Electrically, or
 - b) Hydraulically by closing the drive water and exhaust water isolation valves.
- c. The provisions of Specification 3.0.4 are not applicable.

*At least each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

**May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

REACTIVITY CONTROL SYSTEM

SURVEILLANCE REQUIREMENTS

4.1.3.6 A control rod shall be demonstrated to be coupled to its drive mechanism by observing any indicated response of the nuclear instrumentation while withdrawing the control rod to the fully withdrawn position and then verifying that the control rod drive does not go to the overtravel position:

- a. Prior to reactor criticality after completing CORE ALTERATIONS that could have affected the control rod drive coupling integrity,
- b. Anytime the control rod is withdrawn to the "Full out" position in subsequent operation, and
- c. Following maintenance on or modification to the control rod or control rod drive system which could have affected the control rod drive coupling integrity.

ATTACHMENT B

SIGNIFICANT HAZARDS CONSIDERATION

Commonwealth Edison has evaluated the proposed Technical Specification amendment and determined that it does not represent a significant hazards consideration. Based on the criteria for defining a significant hazards consideration established in 10 CFR 50.92, operation of LaSalle County Station Unit 1 in accordance with the proposed amendment will not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated because the control rod which may be uncoupled during mode changes will be fully inserted into the core and disarmed to prevent withdrawal. In this condition the control rod cannot drop and therefore the probability is not increased. This change has been reviewed and approved by the NRC as part of the Unit 2 Technical Specifications as issued.
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated because the change to the Technical Specification is only to allow mode changes with the control rod fully inserted in accordance with action a. of Specification 3.1.3.6 and in accordance with 3.1.3.1.
- 3) Involve a significant reduction in the margin of safety because the control rod will be in its most conservative position. The margin of safety was evaluated as part of the licensing process for LaSalle Unit 2 and found to be acceptable.

Based on the preceding discussion, it is concluded that the proposed change clearly falls within all acceptable criteria with respect to the system or component, the consequences of previously evaluated accidents will not be increased and the margin of safety will not be decreased. Therefore, based on the guidance provided in the Federal Register and the criteria established in 10 CFR 50.92(e), the proposed change does not constitute a significant hazards consideration.