#### TABLE 1-2

#### OPERATIONAL MODES

MODE	MODE SWITCH POSITION <sup>III</sup>	AVERAGE REACTOR COOLANT TEMPERATURE
1. POWER OPERATION	Run	Any temperature
2. STARTUP	Startup/Hot Standby	Any temperature
3. HOT SHUTDOWN	Shutdown <sup>(a, e)</sup>	> 212°F
4. COLD SHUTDOWN	Shutdown <sup>(a,b,e)</sup>	≤ 212°F
5. REFUELING <sup>(e)</sup>	Shutdown or Refuel <sup>(a,d)</sup>	≤ 140°F

#### TABLE NOTATIONS

- (a) The reactor mode switch may be placed in the Run, Startup/Hot Standby, or Refuel position to test the switch interlock functions provided the control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.
- (b) The reactor mode switch may be placed in the Refuel position while a single control rod drive is being removed from the reactor pressure vessel per Specification 3.10.1.
- (c) Fuel in the reactor vessel with one or more vessel head closure bolts less than fully tensioned or with the head removed.
- (d) See Special Test Exceptions 3.12.A and 3.12.B.

E

- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being recoupled or withdrawn provided the one-rod-out interlock is OPERABLE.
- (f) When there is no fuel in the reactor vessel, the reactor is considered not to be in any OPERATIONAL MODE. The reactor mode switch may then be in any position or may be inoperable.

DRESDEN - UNITS 2 & 3

PDR

1-9

Amendment Nos. 150-8

## **REFUELING OPERATIONS**

## 3.10 - LIMITING CONDITIONS FOR OPERATION

A. Reactor Mode Switch

The reactor mode switch shall be OPERABLE and locked in the Shutdown or Refuel position. When the reactor mode switch is locked in the Refuel position:

- A control rod shall not be withdrawn unless the Refuel position one-rod-out interlock is OPERABLE.
- CORE ALTERATION(s) shall not be performed using equipment associated with a Refuel position interlock unless at least the following associated Refuel position interlocks are OPERABLE for such equipment.
  - a. All rods in.
  - b. Refuel platform position.
  - c. Refuel platform hoists fuel-loaded.
  - d. Fuel grapple position.

APPLICABILITY:

OPERATIONAL MODE 5(+1(+) MODE (3) 3<sup>(a)</sup> ACTION:

 With the reactor mode switch not locked in the Shutdown or Refuel position as specified, suspend CORE ALTERATION(s) and lock the reactor mode switch in the Shutdown or Refuel position.

### 4.10 - SURVEILLANCE REQUIREMENTS

- A. Reactor Mode Switch
  - The reactor mode switch shall be verified to be locked in the Shutdown or Refuel position as specified:
    - a. Within 2 hours prior to:
      - Beginning CORE ALTERATION(s), and
      - Resuming CORE ALTERATION(s) when the reactor mode switch has been unlocked.
    - b. At least once per 12 hours.
  - Each of the required reactor mode switch Refuel position interlocks? shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST within 24 hours prior to the start of and at least once per 7 days during control rod withdrawal or CORE ALTERATION(s), as applicable.
  - Each of the required reactor mode switch Refuel position interlocks<sup>IF</sup> that is affected shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST prior to resuming control rod withdrawal or

the reactor mode switch is in the Ref a When



See Special Test Exceptions 3.12.A and 3.12.B

The reactor shall be maintained in OPERATIONAL MODE 5 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.

The reactor mode switch may be placed in the Run or Startup/Hot Standby position to test the switch interlock functions provided that all control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.

DRESDEN - UNITS 2 & 3

3/4.10-1

Amendment Nos.

# TABLE 1-2

## **OPERATIONAL MODES**

MODE	MODE SWITCH POSITION"	AVERAGE REACTOR COOLANT TEMPERATURE
1. POWER OPERATION	Run	Any temperature
2. STARTUP	Startup/Hot Standby	Any temperature
3. HOT SHUTDOWN	Shutdown <sup>(a, a)</sup>	> 212°F
4. COLD SHUTDOWN	Shutdown <sup>(a, b, e)</sup>	≤ 212°F
5. REFUELING <sup>(e)</sup>	Shutdown or Refuel <sup>(a,d)</sup>	≤ 140°F

### TABLE NOTATIONS

- (a) The reactor mode switch may be placed in the Run, Startup/Hot Standby, or Refuel position to test the switch interlock functions provided the control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.
- (b) The reactor mode switch may be placed in the Refuel position while a single control rod drive is being removed from the reactor pressure vessel per Specification 3.10.1.
- (c) Fuel in the reactor vessel with one or more vessel head closure bolts less than fully tensioned or with the head removed.
- (d) See Special Test Exceptions 3.12.A and 3.12.B.
- (e) The reactor mode switch may be placed in the Refuel position while a single control rod is being fectopped or withdrawn provided the one-rod-out interlock is OPERABLE.
- (f) When there is no fuel in the reactor vessel, the reactor is considered not to be in any OPERATIONAL MODE. The reactor mode switch may then be in any position or may be inoperable.

#### QUAD CITIES - UNITS 1 & 2

1-9

Amendment Nos.

## **REFUELING OPERATIONS**

## 3.10 - LIMITING CONDITIONS FOR OPERATION

A. Reactor Mode Switch

The reactor mode switch shall be OPERABLE and locked in the Shutdown or Refuel position. When the reactor mode switch is locked in the Refuel position:

1. A control rod shall not be withdrawn unless the Refuel position one-rod-out interlock is OPERABLE.

- 2. CORE ALTERATION(s) shall not be performed using equipment associated with a Refuel position interlock unless at least the following associated Refuel position interlocks are OPERABLE for such equipment.
  - All rods in. а.
  - Refuel platform position. b.
  - Refuel platform hoists fuel-loaded. с.
  - Fuel grapple position. d.

APPLICABILITY:

OPERATIONAL MODE 5 3(a) y (a) an 5 (b)LE MODE(S) ACTION

1. With the reactor mode switch not locked in the Shutdown or Refuel position as specified, suspend CORE ALTERATION(s) and lock the reactor mode switch in the Shutdown or Refuel position.

# 4.10 - SURVEILLANCE REQUIREMENTS

A. Reactor Mode Switch

1. The reactor mode switch shall be verified to be locked in the Shutdown or Refuel position as specified:

- Within 2 hours prior to: а.
  - 1. Beginning CORE
    - ALTERATION(s), and
  - **Resuming CORE** ALTERATION(s) when the reactor mode switch has been unlocked.
- At least once per 12 hours. Ь.
- 2. Each of the required reactor mode switch Refuel position interlocks<sup>(c)</sup> shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST within 24 hours prior to the start of and at least once per 7 days during control rod withdrawal or CORE ALTERATION(s), as applicable.
- 3: Each of the required reactor mode switch Refuel position interlocks<sup>(c)</sup> that is affected shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST prior to resuming control rod withdrawal or

mode switch is in the Refuel position



See Special Test Exceptions 3.12.A and 3.12.B

α

The reactor shall be maintained in OPERATIONAL MODE 5 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.

The reactor mode switch may be placed in the Run or Startup/Hot Standby position to test the switch interlock functions provided that all control rods are verified to remain fully inserted by a second licensed operator or other technically qualified individual.

QUAD CITIES - UNITS 1 & 2

3/4.10-1

Amendment Nos.

# ATTACHMENT C

# Significant Hazards Consideration

The Commission has provided standards for determining whether a no significant hazards consideration exists as stated in 10CFR50.92(c). A proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

ComEd proposes to amend Appendix A, Technical Specifications 3/4.10.A, "Reactor Mode Switch," and Table 1-2 of Facility Operating Licenses DPR-19, DPR-25, DPR-29 and DPR-30. The amendment request changes current requirements for the reactor mode switch position during OPERATIONAL MODES 3 and 4 to permit movement of a single control rod for post-maintenance and surveillance testing on control rod drives.

ComEd 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 Dresden Units 2 and 3 or Quad Cities Units 1 and 2 in accordance with the proposed amendment will not:

# 1) Involve a significant increase in the probability or consequences of an accident previously evaluated because of the following:

This revision would allow a single control rod to be withdrawn under control of the reactor mode switch position one-rod-out interlock in OPERATIONAL MODES 3 or 4. This interlock is explicitly assumed in the safety analysis for control rod removal error during refueling. A prompt reactivity excursion could potentially result in fuel failure. The one-rodout interlock, together with the requirements for adequate SHUTDOWN MARGIN (SDM), provides protection against prompt reactivity excursions by preventing withdrawal of more than one control rod and ensuring the core remains subcritical with any one control rod withdrawn. The addition of surveillance requirements for the one-rod-out interlock will assure the interlock is OPERABLE prior to withdrawal of a control rod in OPERATIONAL MODES 3 and 4. Although this change will increase the frequency of single control rod withdrawals in OPERATIONAL MODES 3 and 4, the probability of previously analyzed accidents, including control rod withdrawal error, is not affected because the same actions are required, although they are now conducted in different OPERATIONAL MODES.

The consequences of previously analyzed accidents in OPERATIONAL MODES 3 and 4 are not affected by this proposed change. The SDM requirements of TS 3.3.A assure the reactor is maintained subcritical when all control rods are fully inserted, without crediting the single control rod having the highest reactivity worth which is assumed to be fully withdrawn. The one-rod-out interlock of the reactor mode switch Refuel position permits only a single control rod to be withdrawn. The proposed change will not effect the potential for attaining criticality in OPERATIONAL MODES 3 and 4 or effect the initial conditions assumed in any design basis accident analysis. Based on this, the probability or consequences of any accident previously evaluated is not increased by the proposed changes.

# 2) Create the possibility of a new or different kind of accident from any accident previously evaluated because:

Single control rods can be withdrawn to permit control rod recoupling in OPERATIONAL MODES 3 and 4 under existing TS. The proposed change will merely expand this allowance to other control rod maintenance and testing activities performed in OPERATIONAL MODES 3 and 4. The revision to Specification 3/4.10 A provides additional assurance that the one-rod-out interlock is OPERABLE in OPERATIONAL MODES 3 and 4.

The additional control rod maintenance and testing activities which could be performed in OPERATIONAL MODES 3 and 4 are permitted by the existing TS in OPERATIONAL MODES 1, 2 and 5. Examples of activities which could be performed include venting of control rods following a reactor scram or control rod drive system outage, normal control rod insertion/withdrawal timing and adjustment, control rod scram time testing and control rod friction testing.

Based on this, the proposed changes do not create the possibility of a new or different kind of accident from those previously evaluated.

Specification 3/4.10.A is revised to ensure the one-rod-out interlock is OPERABLE, enhancing the assurance that the plant will prevent the withdrawal of more than one control rod in the manner currently assumed. Expanding the applicability of this existing requirement to OPERATIONAL MODES 3 and 4 similarly does not create the possibility of a new or different kind of accident from those previously evaluated.

# 3) Involve a significant reduction in the margin of safety because:

The TS currently permit single control rod withdrawal for the purpose of control rod recoupling when in OPERATIONAL MODES 3 or 4 if the one-rod-out interlock is OPERABLE. This change merely allows additional activities for which a single control rod may be withdrawn in OPERATIONAL MODES 3 or 4, with the same restriction that the one-rod-out interlock is OPERABLE.

While the TS currently allow limited control rod withdrawal in OPERATIONAL MODES 3 and 4 provided the one-rod-out interlock is OPERABLE, no explicit surveillance requirements for the one-rod-out interlock exist while in OPERATIONAL MODES 3 or 4. The proposed changes to the Applicability statement in TS 3/4.10.A will result in applicability of the Surveillance Requirements for the one-rod-out interlock whenever control rod withdrawal is performed in OPERATIONAL MODES 3 and 4. Together, the OPERABILITY requirements for the one-rod-out interlock and the SDM requirements of TS 3.3.A will continue to ensure that the reactor will be maintained subcritical during single control rod withdrawals. Therefore, this change will not involve a significant reduction in the margin of safety.

As described, the proposed amendment for Dresden and Quad Cities Stations will not reduce the availability of systems required to mitigate accident conditions. Neither are new or significantly different modes of operation proposed. Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

Guidance has been provided in "Final Procedures and Standards on No Significant Hazards Considerations," Final Rule, 51 FR 7744, for the application of standards to license change requests for determination of the existence of significant hazards considerations. This document provides examples of amendments which are and are not considered likely to involve significant hazards considerations.

This proposed amendment does not involve any irreversible changes, a significant relaxation of the criteria used to establish safety limits, a significant relaxation of the bases for the limiting safety system settings or a significant relaxation of the bases for the limiting conditions for operations. Therefore, based on the guidance provided in the Federal Register and the criteria established in 10 CFR 50.92(c), the proposed change does not constitute a significant hazards consideration.

# **Environmental Assessment**

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ComEd has evaluated the proposed amendment against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed changes meet the criteria for a categorical exclusion as provided under 10 CFR 51.22 (c)(9). This conclusion has been determined because the changes requested do not pose significant hazards consideration and do not involve a significant increase in the amounts, and no significant changes in the types, of any effluents that may be released off-site. Additionally, this request does not involve a significant increase in individual or cumulative occupational radiation exposure.