

RS-20-025

February 24, 2020

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555Dresden Nuclear Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-19 and DPR-25  
NRC Docket Nos. 50-237 and 50-249James A. FitzPatrick Nuclear Power Plant  
Renewed Facility Operating License No. DPR-59  
NRC Docket No. 50-333

Subject: Supplement to Exelon Fleet License Amendment Request - Common Language for Technical Specification High Radiation Area Administrative Controls

Reference: 1. Exelon Letter RS-19-039 to U.S Nuclear Regulatory Commission, "Exelon Fleet License Amendment Request - Common Language for Technical Specification High Radiation Area Administrative Controls," dated June 26, 2019 (ADAMS Accession No. ML19178A304)

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), proposed a change to the Technical Specifications (TS), Appendix A of Renewed Facility Operating Licenses for Braidwood, Byron, Calvert Cliffs, Dresden, James A. FitzPatrick, LaSalle County, Limerick, Nine Mile Point, Peach Bottom Atomic Power, Quad Cities, R.E. Ginna and Three Mile Island nuclear stations, and Facility Operating License for Clinton Power Station, to request common language for the Technical Specification High Radiation Area Administrative Controls (Reference 1).

Recently, during preparation and review of clean TS pages to be submitted to NRC, it was discovered that the TS marked-up pages for Dresden and James A. FitzPatrick nuclear stations had been inadvertently omitted from Reference 1. The oversight had occurred during the final assembly of the License Amendment Request (LAR) package before electronically submitting to the NRC.

The marked-up TS pages for Dresden and James A. FitzPatrick nuclear stations are included in Attachment 1.

EGC has reviewed the information supporting a finding of no significant hazards consideration, and the environmental consideration, that were previously provided to the NRC in Attachment 1 of the Reference 1 letter. EGC has concluded that the information provided in this response does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92. In addition, EGC has concluded that the information in this supplemental letter does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

The proposed changes had been previously reviewed by each station's Plant Operations Review Committee in accordance with the requirements of the EGC Quality Assurance Program.

This amendment request contains no regulatory commitments.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the states of Illinois and New York of this request for changes to the Technical Specifications by transmitting a copy of this letter and its attachment to the designated State officials.

If you have any questions or require additional information, please contact Mr. Frank J. Mascitelli at (610) 765-5512.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 24<sup>th</sup> day of February 2020.

Respectfully,



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David P. Helker  
Sr. Manager, Licensing & Regulatory Affairs  
Exelon Generation Company, LLC

Attachment: 1. Proposed Technical Specifications Markup Pages (Dresden and FitzPatrick Stations)

cc: Regional Administrator - NRC Region I  
Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - Dresden Nuclear Power Station  
NRC Senior Resident Inspector - James A. FitzPatrick Nuclear Power Plant  
NRC Project Manager, NRR - Dresden Nuclear Power Station  
NRC Project Manager, NRR - James A. FitzPatrick Nuclear Power Plant  
Illinois Emergency Management Agency - Division of Nuclear Safety  
A. L. Peterson, NYSERDA

**Attachment 1**

**Proposed Technical Specifications Markup Pages (Dresden and FitzPatrick  
Stations)**

**Exelon Fleet License Amendment Request - Common Language for Technical  
Specification High Radiation Area Administrative Controls**

Dresden, Units 2 & 3  
James A. FitzPatrick

TS Pages 5.7-1, 2  
TS Pages 5.7-1, 2, 3, 4



5.0 ADMINISTRATIVE CONTROLS

Insert 1

5.7 High Radiation Area

~~5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is  $> 100$  mrem/hr at 30 cm (12 in.), shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP) (or equivalent document). Individuals qualified in radiation protection procedures (e.g., radiation protection technicians) or personnel escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.~~

~~Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:~~

- ~~a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.~~
- ~~b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.~~
- ~~c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the RWP (or equivalent document).~~

~~5.7.2 In addition to the requirements of Specification 5.7.1, areas accessible to personnel with radiation levels  $> 1000$  mrem/hr at 30 cm (12 in.) from the radiation source or from any surface which the radiation penetrates shall require the following:~~

- ~~a. Doors shall be locked to prevent unauthorized entry and shall not prevent individuals from leaving the area. In place of locking the door, direct or electronic surveillance~~

(continued)

~~5.7 High Radiation Area~~

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~~5.7.2 (continued)~~

~~that is capable of preventing unauthorized entry may be used. The keys shall be maintained under the administrative control of the shift manager on duty or radiation protection supervision.~~

- ~~b. Personnel access and exposure control requirements of activities being performed within these areas shall be specified by an approved RWP (or equivalent document).~~
- ~~c. Each person entering the area shall be provided with an alarming radiation monitoring device that continuously integrates the radiation dose rate (such as an electronic dosimeter). Surveillance and radiation monitoring by a radiation protection technician may be substituted for an alarming dosimeter.~~

~~5.7.3 For individual high radiation areas with radiation levels of  $> 1000$  mrem/hr at 30 cm (12 in.), accessible to personnel, that are located within large areas where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.~~

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## 5.0 ADMINISTRATIVE CONTROLS

### 5.7 High Radiation Area Insert 1

~~As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:~~

#### 5.7.1 ~~High Radiation Areas with dose rates not exceeding 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation:~~

- ~~a. Each entrance or access point to such an area shall be barricaded (e.g., roped off) and conspicuously posted as a high radiation area, or be continuously guarded to prevent unauthorized personnel entry. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.~~
- ~~b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.~~
- ~~c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided they are following plant radiation protection procedures for entry to, exit from, and work in such areas.~~
- ~~d. Each individual or group entering such an area shall possess:
  - ~~1. A radiation monitoring device that continuously displays radiation dose rates in the area; or~~
  - ~~2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with a pre-set alarm setpoint; or~~
  - ~~3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area; or~~~~

(continued)

## 5.7 High Radiation Area

### 5.7.1 ~~High Radiation Areas with dose rates not exceeding 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation: (continued)~~

~~4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,~~

~~(a) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or~~

~~(b) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.~~

~~e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre job briefing does not require documentation prior to initial entry.~~

### 5.7.2 ~~High Radiation Areas with dose rates greater than 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation, but less than 500 rads/hour at 1 meter from the radiation source or from any surface penetrated by the radiation:~~

~~a. Each entrance or access point to such an area shall be conspicuously posted as a high radiation area and shall be~~

~~(continued)~~



## 5.7 High Radiation Area

### 5.7.2 ~~High Radiation Areas with dose rates greater than 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation, but less than 500 rads/hour at 1 meter from the radiation source or from any surface penetrated by the radiation: (continued)~~

~~provided with a locked door or gate that prevents unauthorized entry, or be continuously guarded to prevent unauthorized personnel entry, and, in addition:~~

- ~~1. All such door and gate keys shall be maintained under the administrative control of the shift manager, radiation protection manager, or designee.~~
- ~~2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.~~
- ~~b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.~~
- ~~e. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided they are following plant radiation protection procedures for entry to, exit from, and work in such areas.~~
- ~~d. Each individual or group entering such an area shall possess:~~
  - ~~1. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with a pre-set alarm setpoint, or~~
  - ~~2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or~~

(continued)



## 5.7 High Radiation Area

### ~~5.7.2 High Radiation Areas with dose rates greater than 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation, but less than 500 rads/hour at 1 meter from the radiation source or from any surface penetrated by the radiation: (continued)~~

- ~~3. A self reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,~~
  - ~~(a) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or~~
  - ~~(b) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area, or,~~
- ~~4. In those cases where options 2 and 3, above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area may be used.~~
- ~~e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to entry.~~
- ~~f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonable be constructed around the individual area need not be controlled by a locked door or gate, nor conspicuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.~~

### Insert 1

Pursuant to 10 CFR Part 20, paragraph 20.1601(c), in lieu of the requirements of paragraph 20.1601(a) and 20.1601(b) of 10 CFR Part 20:

- 5.7.1 Access to each high radiation area, as defined in 10 CFR 20, in which an individual could receive a deep dose equivalent  $> 0.1$  rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation) shall be controlled as described below to prevent unauthorized entry.
- a. Each area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
  - b. Entrance shall be controlled by requiring issuance of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rate in the immediate work area(s) and other appropriate radiation protection equipment and measures.
  - c. Individuals qualified in radiation protection procedures or personnel continuously escorted by such individuals may, for the performance of their assigned duties in high radiation areas, be exempt from the preceding requirements for issuance of an RWP or equivalent provided they are otherwise following plant radiation protection procedures for entry into, exit from, and work in such high radiation areas.
  - d. Each individual or group of individuals permitted to enter such areas shall possess, or be accompanied by, one or more of the following:
    - 1. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
    - 2. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset setpoint is reached. Entry into high radiation areas with this monitoring device may be made after the dose rate in the area has been determined and personnel have been made knowledgeable of it.
    - 3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area.
    - 4. An individual qualified in radiation protection procedures equipped with a radiation dose rate monitoring device. This individual shall

be responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by radiation protection supervision.

5.7.2 In addition to the requirements of Specification 5.7.1, high radiation areas in which an individual could receive a deep dose equivalent  $> 1.0$  rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) shall be provided with a locked or continuously guarded door, or gate, or equivalent to prevent unauthorized entry.

- a. The keys to such locked doors or gates, or equivalent, shall be administratively controlled in accordance with a program approved by the radiation protection manager.
- b. Doors and gates, or equivalent, shall remain locked except during periods of access by personnel under an approved RWP, or equivalent, to ensure individuals are informed of the dose rate in the immediate work areas prior to entry.
- c. Individual high radiation areas in which an individual could receive a deep dose equivalent  $> 1.0$  rem in one hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), accessible to personnel, that are located within larger areas where no enclosure exists to enable locking, or that are not continuously guarded, and where no lockable enclosure can be reasonably constructed around the individual area require both of the following access controls:
  1. Each area shall be barricaded and conspicuously posted.
  2. A flashing light shall be activated as a warning device.