

March 25, 2021

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Southern Nuclear Operating Company
Joseph M. Farley Nuclear Plant - Units 1 and 2
Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2

License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls

Ladies and Gentlemen:

Pursuant to the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Southern Nuclear Operating Company (SNC) hereby requests an amendment to the Technical Specifications (TS) for Joseph M. Farley Nuclear Plant (FNP), Units 1 and 2, Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2, and Vogtle Electric Generating Plant (VEGP), Units 1 and 2. The proposed amendment would revise TS 5.0, "Administrative Controls," specifically, TS 5.7, "High Radiation Area," to align with the Standard Technical Specifications in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4.0, and NUREG-1433, "Standard Technical Specifications General Electric BWR/4 Plants," Revision 4.0, as applicable.

The proposed amendment will provide additional flexibility for control of access to high radiation areas, will provide commonality across the SNC fleet for administration of access to high radiation areas, and will align with the Standard Technical Specifications.

SNC requests approval of the proposed license amendment within one year of the date of this submittal. SNC will implement the approved amendment within 60 days of issuance.

The enclosure to this letter provides a description of the proposed changes, the supporting technical and regulatory analysis, and the no significant hazards determination. Attachments 1a, 1b and 1c provide the existing TS pages for FNP, HNP and VEGP marked up to show the proposed changes. Attachments 2a, 2b and 2c provide revised (clean) TS pages for FNP, HNP and VEGP.

This letter contains no regulatory commitments.

In accordance with 10 CFR 50.91, SNC is notifying the State of Alabama and the State of Georgia of this license amendment request by transmitting a copy of this letter and enclosures to the designated State Officials.

If you have any questions, please contact Jamie Coleman at 205.992.6611.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 25th day of March 2021.

Respectfully submitted,



Cheryl A. Gayheart
Regulatory Affairs Director
Southern Nuclear Operating Company

CAG/tle

Enclosure: Basis for Proposed Changes

Attachments: 1a. FNP Proposed Technical Specification Changes (Mark-Up)
1b. HNP Proposed Technical Specification Changes (Mark-Up)
1c. VEGP Proposed Technical Specification Changes (Mark-Up)
2a. FNP Revised Technical Specification Pages
2b. HNP Revised Technical Specification Pages
2c. VEGP Revised Technical Specification Pages

cc: NRC Regional Administrator, Region II
NRC Project Manager – Farley, Hatch, Vogtle 1 & 2
NRC Senior Resident Inspector – Farley, Hatch, Vogtle 1 & 2
Director, Alabama Office of Radiation Control
Director, Environmental Protection Division – State of Georgia
SNC Document Control RType: CGA02.001

**Southern Nuclear Operating Company
Joseph M. Farley Nuclear Plant - Units 1 and 2
Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2**

**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Enclosure

Basis for Proposed Changes

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1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Southern Nuclear Operating Company (SNC) requests amendment to the Technical Specifications (TS) for the renewed facility operating licenses for Joseph M. Farley Nuclear Plant Units 1 and 2 (FNP), Edwin I. Hatch Nuclear Plant Units 1 and 2 (HNP) and Vogtle Electric Generating Plant Units 1 and 2 (VEGP) to adopt the Standard Technical Specifications (STS) related to control of access to high radiation areas. The proposed amendment will provide additional flexibility for control of access to high radiation areas, will provide commonality across the SNC fleet for administration of access to high radiation areas, and will align with the Standard Technical Specifications.

This license amendment request (LAR) proposes adopting TS 5.7, "High Radiation Area," as presented in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4.0 [Reference 6.1], applicable to FNP and VEGP, and NUREG-1433, "Standard Technical Specifications General Electric BWR/4 Plants," Revision 4.0 [Reference 6.2], applicable to HNP.

2.0 DETAILED DESCRIPTION

2.1 Overview

TS 5.7, "High Radiation Area," is an Administrative Controls specification. It prescribes requirements for controlling entry into and work in a high radiation area to meet the requirements in 10 CFR 20.1601, "Control of access to high radiation areas."

This LAR requests adopting TS 5.7, "High Radiation Area," as presented in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4.0 [Reference 6.1], and NUREG-1433, "Standard Technical Specifications General Electric BWR/4 Plants," Revision 4.0 [Reference 6.2]. The STS provide specific high radiation area administrative controls in lieu of the controls required by 10 CFR 20.1601(a) and 20.1601(b), as allowed by 10 CFR 20.1601(c). STS 5.7 in NUREG-1431 and NUREG-1433 contain common language and common requirements for administrative control of access to high radiation areas.

The significant differences between the current TS at each station and the STS presented in NUREG-1431 and NUREG-1433 are discussed in Section 3.0, Technical Evaluation.

2.2 Current Technical Specification Requirements

TS 5.7, "High Radiation Area," for FNP, HNP and VEGP is an Administrative Controls specification that prescribes requirements for controlling access to high radiation areas to meet the requirements in 10 CFR 20.1601, "Control of access to high radiation areas," subparts 20.1601(a) and (b).

FNP

FNP TS 5.7.1 describes current requirements for controlling access to high radiation areas greater than 100 mrem/hour (mr/hr) but less than 1000 mr/hr.

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Basis for Proposed Changes

FNP TS 5.7.2 and TS 5.7.3 describe additional requirements for controlling access to high radiation areas greater than 1000 mr/hr.

HNP

HNP TS 5.7.1 describes current requirements for controlling access to high radiation areas greater than 100 mr/hr but less than 1000 mr/hr.

HNP TS 5.7.2 describes additional requirements for controlling access to high radiation areas greater than or equal to 1000 mr/hr but less than 500 rads/hr.

VEGP

VEGP TS 5.7.1 describes current requirements for controlling access to high radiation areas greater than 100 mr/hr but less than 1000 mr/hr.

VEGP TS 5.7.2 and TS 5.7.3 describe additional requirements for controlling access to high radiation areas greater than, or greater than or equal to, 1000 mr/hr.

2.3 Reason for the Proposed Change

The proposed amendment will provide additional flexibility for control of access to high radiation areas, will provide commonality across the SNC fleet for administration of access to high radiation areas, and will align with the Standard Technical Specifications.

Adopting STS 5.7 will provide additional flexibility by allowance of remote monitoring technologies, will allow an additional specific exemption from Radiation Work Permit requirements for qualified Radiation Protection individuals, and will provide additional detail that will result in clarification of requirements.

STS 5.7 in NUREG-1431 and NUREG-1433 contain common language and common requirements for administrative control of access to high radiation areas, therefore, the proposed change will result in common language for TS 5.7 across the SNC fleet.

2.4 Description of the Proposed Change

This LAR requests adopting STS 5.7, "High Radiation Area," as presented in NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4.0 [Reference 6.1], applicable to FNP and VEGP, and NUREG-1433, "Standard Technical Specifications General Electric BWR/4 Plants," Revision 4.0 [Reference 6.2], applicable to HNP.

No deviations from the STS are requested.

3.0 TECHNICAL EVALUATION

High radiation areas in nuclear power plants, where personnel have the potential to receive doses greater than the regulatory limits in a relatively short period of time, require administrative controls to protect station workers by controlling access to such areas. 10 CFR 20.1601, "Control of access to high radiation areas," provides the applicable regulatory requirements for controlling access to high radiation areas. Station technical specifications document the administrative control requirements specified by 10 CFR 20.1601, or as approved by the Commission in accordance with 10 CFR 20.1601(c), whereby licensees may apply to the Commission for approval of alternative methods for controlling access to high radiation areas.

The STS 5.7, as presented in NUREG-1431 [Reference 6.1] and NUREG-1433 [Reference 6.2], meet the requirements for controls specified in 10 CFR 20.1601(a) and (b).

The current TS 5.7 for FNP, HNP and VEGP will be replaced with STS 5.7 as presented in NUREG-1431, applicable to FNP and VEGP, and NUREG-1433, applicable to HNP. STS 5.7 in NUREG-1431 and NUREG-1433 contain common language and common requirements for administrative control of access to high radiation areas. This change will result in common requirements across the SNC fleet.

In many cases, the difference between the requirements stated in FNP, HNP and VEGP TS 5.7 and the requirements stated in STS 5.7 is not discernible or is a negligible difference. The most notable differences are presented and addressed in Table 3-1. There are no notable differences identified that would prohibit adopting STS 5.7 for FNP, HNP and VEGP.

**TABLE 3-1
 NOTABLE DIFFERENCES BETWEEN TS 5.7 AND STS 5.7**

Applicable Site(s)	Notable Difference⁽¹⁾	Discussion
FNP U1 FNP U2 HNP U1 HNP U2 VEGP U1 VEGP U2	STS 5.7.1.a, applicable to dose rates not exceeding 1000 mr/hr, acknowledges that high radiation area barricades may be opened as necessary to permit entry or exit of personnel or equipment.	The current TS 5.7.1 for FNP, HNP and VEGP states the requirement for barricades but does not address opening of barricades. No changes are expected due to this difference. High radiation area barricades will continue to be established and controlled by TS requirements and station procedures.

Enclosure to NL-21-0065
 Basis for Proposed Changes

Applicable Site(s)	Notable Difference ⁽¹⁾	Discussion
FNP U1 FNP U2 HNP U1 HNP U2 VEGP U1 VEGP U2	STS 5.7.1, applicable to dose rates not exceeding 1000 mr/hr, allows use of a radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by Radiation Protection (RP) personnel (STS 5.7.1.d.3) and allows surveillance of individuals using a closed circuit TV and with a means to communicate with individuals in the area covered by such surveillance (STS 5.7.1.d.4).	The STS make allowances for technologies that perform remote monitoring of individuals working in high radiation areas. These allowances currently are not specified in TS 5.7.1 for FNP, HNP and VEGP. This change offers additional flexibility to safely monitor individuals working in high radiation areas.
HNP U1 HNP U2	STS 5.7.2.a.2, applicable to dose rates > 1000 mr/hr but < 500 rads/hr, is a new specification for HNP. STS 5.7.2.a states that each entryway to an area is provided with a locked or continuously guarded door or gate and STS 5.7.2.a.2 specifies that such doors or gates shall remain locked except during periods of personnel or equipment entry and exit.	HNP TS 5.7.2 currently requires locked or continuously guarded doors to prevent unauthorized entry and addresses control of keys for such doors. The revised specification will clarify when such doors and gates are to remain locked.
FNP U1 FNP U2 HNP U1 HNP U2 VEGP U1 VEGP U2	STS 5.7.2.c, applicable to dose rates > 1000 mr/hr but < 500 rads/hr, allows individuals qualified in RP procedures to be exempted from the requirement for a RWP or equivalent while performing radiation surveys provided they are following RP procedures for entry/exit and work in the subject areas.	This exemption for qualified individuals currently exists at FNP, HNP and VEGP for dose rates not exceeding 1000 mr/hr (TS 5.7.1). This change would allow a similar exemption in areas with dose rates > 1000 mr/hr but < 500 rads/hr.
FNP U1 FNP U2 HNP U1 HNP U2 VEGP U1 VEGP U2	STS 5.7.2.d.2, applicable to dose rates > 1000 mr/hr but < 500 rads/hr, allows use of a device that continuously transmits the dose rate and cumulative dose to a remote receiver that is monitored by RP personnel when a means to communicate also exists.	This is a new specification for FNP, HNP and VEGP that acknowledges acceptable use of remote monitoring technology. TS 5.7.2 for FNP and VEGP currently allows use of remote continuous surveillance (such as by use of closed-circuit TV cameras) in lieu of stay times specified in a RWP.

Applicable Site(s)	Notable Difference ⁽¹⁾	Discussion
HNP U1 HNP U2	STS 5.7.2.d.3, applicable to dose rates > 1000 mr/hr but < 500 rads/hr, is a new specification for HNP. STS 5.7.2.d.3 allows surveillance by means of a closed-circuit TV with a means to communicate with and control every individual in the area.	HNP TS 5.7 currently does not specify allowable use of remote monitoring of personnel in high radiation areas. The STS offers additional flexibility by allowing remote monitoring technologies to safely monitor individuals working in high radiation areas.
HNP U1 HNP U2	STS 5.7.2.f, applicable to dose rates > 1000 mr/hr but < 500 rads/hr, addresses access control for high radiation areas located in large areas where no enclosure exists for purposes of locking and where no enclosure can be reasonably constructed.	This is a new specification for HNP. This specification will provide a requirement for HNP that currently exists at FNP and VEGP and will provide consistency throughout the SNC fleet.

⁽¹⁾ Entire specification not provided; certain requirements are selected for discussion and are paraphrased for simplicity.

In summary, SNC proposes to adopt STS 5.7 in entirety for FNP, HNP and VEGP with no exceptions.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

SNC has reviewed the applicable regulatory requirements/criteria and has determined that exemptions or relief from regulatory requirements is not needed. The following regulations and regulatory requirements are applicable to this LAR.

10 CFR 50.36, "Technical Specifications"

10 CFR 50.36(c) specifies that Technical Specifications will include items in various categories, which include 10 CFR 50.36(c)(5), "Administrative Controls." Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. The changes proposed by this LAR conform with 10 CFR 50.36(c) requirements.

10 CFR 20, "Standards for Protection Against Radiation"

10 CFR 20.1101, "Radiation Protection Programs," requires licensees to develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of 10 CFR Part 20. The changes proposed by this LAR conform with 10 CFR 20.1101 requirements.

10 CFR 20.1601, "Control of access to high radiation areas," provides specific requirements to control access to high radiation areas. 10 CFR 20.1601(c) allows licensees to apply to the Commission for approval of alternate methods for controlling access to high radiation areas. The changes proposed by this LAR conform with 10 CFR 20.1601 requirements.

Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," Revision 1

Regulatory Guide (RG) 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," Revision 1 [Reference 6.3], describes methods that the Nuclear Regulatory Commission considers acceptable for complying with the regulations regarding radiation safety and protection, and for specifically complying with the requirements of 10 CFR 20.1101, "Radiation protection programs," 10 CFR 20.1601, "Control of access to high radiation areas," and 10 CFR 20.1602, "Control of access to very high radiation areas." The changes proposed by this LAR conform with RG 8.38, Revision 1, guidance for control of access to high radiation areas or alternate methods for access control as allowed by 10 CFR 20.1601(c) and as acknowledged in the Regulatory Guide.

4.2 Precedent

This LAR proposes to adopt the Standard Technical Specifications for control of access to high radiation areas as provided in NUREG-1431 [Reference 6.1] and NUREG-1433 [Reference 6.2]. The Abstracts in NUREG-1431 and NUREG-1433 state:

"Licensees are encouraged to upgrade their technical specifications consistent with those criteria and conforming, to the practical extent, to Revision 4 to the improved STS ... Licensees adopting portions of the improved STS to existing technical specifications should adopt all related requirements, as applicable, to achieve a high degree of standardization and consistency."

This LAR would adopt the currently available STS for control of access to high radiation areas, without exception, for FNP, HNP and VEGP.

4.3 No Significant Hazards Consideration Determination

SNC has evaluated whether a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The change to adopt STS 5.7 for control of access to high radiation areas has no effect on normal station operations and has no effect on any accident initiator or precursor. The change does not impact the function of any plant system, structure or component (SSC). As a result, the proposed change does not impact any accident previously evaluated, does not impact the probability of an accident previously evaluated, and does not change the consequences of an accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change to adopt STS 5.7 for control of access to high radiation areas does not impact the accident analysis. The change does not involve physical alterations to the plant or changes in the method of operation. No new or different type of equipment will be installed. The change does not introduce failure modes that could result in a new accident, and the change does not alter assumptions made in the safety analysis.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed change to adopt STS 5.7 for control of access to high radiation areas does not impact any occupational dose limits for workers or dose limits for individual members of the public. The proposed change does not affect margin of safety associated with confidence in the ability of the fission product barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the level of radiation dose to the public. The proposed change does not impact operation of the plant or its response to transients or accidents. No accident analyses are affected by the proposed change. There is no change in design basis or safety limits.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, SNC concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.4 Conclusions

In conclusion, based on the considerations above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change to adopt STS 5.7 for control of access to high radiation areas, (2) the changes will be made in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

This LAR proposes to adopt STS 5.7, "High Radiation Area," for control of access to high radiation areas at FNP, HNP and VEGP. SNC has determined that the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCES

- 6.1 NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 4.0.
- 6.2 NUREG-1433, "Standard Technical Specifications General Electric BWR/4 Plants," Revision 4.0.
- 6.3 Regulatory Guide (RG) 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," Revision 1.

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**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Attachment 1a

FNP Proposed Technical Specification Changes (Mark-Up)

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 but < 1000 mrem/hr, 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). Individuals qualified in radiation protection procedures (e.g., radiation protection personnel) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such 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 by the radiation protection supervision in the RWP.~~

5.7.2 ~~In addition to the requirements of Specification 5.7.1, areas accessible to personnel with radiation levels, as measured at 30 cm from the radiation source or from any surface that the radiation penetrates, such that a major portion of the body could receive in one hour a dose greater than 1000 mrem, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Foreman on duty or radiation protection supervision. Doors shall remain locked~~

(continued)

5.7 High Radiation Area

5.7.2 (continued)

~~except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.~~

5.7.3

~~For individual high radiation areas with radiation levels, as measured at 30 cm from the radiation source or from any surface that the radiation penetrates, such that a major portion of the body could receive in one hour a dose greater than 1000 mrem, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, 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.~~

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

INSERT 1 (continued):

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

INSERT 1 (continued):

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)

- d. Each individual group entering such an area shall possess:
 1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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.

INSERT 1 (continued):

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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

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Attachment 1b

HNP Proposed Technical Specification Changes (Mark-Up)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

INSERT 1

5.7.1 ~~Pursuant to 10 CFR 20, paragraph 20.1601, in lieu of the requirements of 10 CFR 20.1601a, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area. Entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates < 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such 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 by the facility radiation protection supervision in the RWP.~~

5.7.2 ~~In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, but less than 500 Rads in 1 hour measured at 1 meter from the radiation source or from any surface that the radiation penetrates, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervision on duty or radiation protection supervision.~~

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

INSERT 1

~~5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601, in lieu of the requirements of 10 CFR 20.1601a, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area. Entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates < 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such 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 by the facility radiation protection supervision in the RWP.~~

~~5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, but less than 500 Rads in 1 hour measured at 1 meter from the radiation source or from any surface that the radiation penetrates, shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervision on duty or radiation protection supervision.~~

INSERT 1 (FOR HNP UNITS 1 AND 2):

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

INSERT 1 (continued):

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

INSERT 1 (continued):

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)

- d. Each individual group entering such an area shall possess:
 1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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.

INSERT 1 (continued):

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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

**Southern Nuclear Operating Company
Joseph M. Farley Nuclear Plant - Units 1 and 2
Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2**

**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Attachment 1c

VEGP Proposed Technical Specification Changes (Mark-Up)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

INSERT 1

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 but < 1000 mrem/hr, 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). Individuals qualified in radiation protection procedures (e.g., radiation protection technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such 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 by radiation protection supervision in the RWP.~~

5.7.2

~~In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of Operations or radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for~~

(continued)

5.7 High Radiation Area

5.7.2 (continued)

~~individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV camerae) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.~~

5.7.3

~~For individual high radiation areas within radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, 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.~~

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

INSERT 1 (continued):

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

INSERT 1 (continued):

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)

- d. Each individual group entering such an area shall possess:
 - 1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 - 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 - 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.
- 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.

INSERT 1 (continued):

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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

**Southern Nuclear Operating Company
Joseph M. Farley Nuclear Plant - Units 1 and 2
Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2**

**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Attachment 2a

FNP Revised Technical Specification Pages

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

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)

- d. Each individual group entering such an area shall possess:
1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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 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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

**Southern Nuclear Operating Company
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Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2**

**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Attachment 2b

HNP Revised Technical Specification Pages

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

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)

- d. Each individual group entering such an area shall possess:
1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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 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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

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)

- d. Each individual group entering such an area shall possess:
1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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 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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

**Southern Nuclear Operating Company
Joseph M. Farley Nuclear Plant - Units 1 and 2
Edwin I. Hatch Nuclear Plant - Units 1 and 2
Vogtle Electric Generating Plant - Units 1 and 2**

**License Amendment Request to Revise
Technical Specification 5.7, "High Radiation Area," Administrative Controls**

Attachment 2c

VEGP Revised Technical Specification Pages

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

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 entryway to such an 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. Access to, and activities in, each such area shall be controlled by means of 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 that they are otherwise 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 an appropriate 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
 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) 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

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)

- (ii) 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 entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
 - 1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designees, and
 - 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.
- c. 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 that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

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)

- d. Each individual group entering such an area shall possess:
1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate 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
 3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter), and
 - (i) Be under 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
 - (ii) Be under surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, or 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.
 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.
- 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 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)

- f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.