



OCT 23 2002

LR-N02-0343  
LCR H02-014

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Gentlemen:

**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS  
REVISE SECTION 6.12, "HIGH RADIATION AREA"  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NPF-57  
DOCKET NO. 50-354**

Pursuant to 10 CFR 50.90, PSEG Nuclear LLC (PSEG) hereby requests a revision to the Technical Specifications (TS) for Hope Creek Generating Station. In accordance with 10CFR50.91(b)(1), a copy of this submittal has been sent to the State of New Jersey.

The proposed change to the TS updates the reference to 10CFR20.203 with the corresponding reference to 10CFR20.1601 in conformance with NUREG-1433.

PSEG Nuclear LLC has evaluated the proposed changes in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c) and has determined that this request involves no significant hazards considerations. An evaluation of the requested changes is provided in Attachment 1 to this letter. In addition, there is no significant increase in the amounts or types of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Consequently, the proposed amendment satisfies the criteria of 10CFR51.22 (c)(9) for categorical exclusion from the requirement for an environmental assessment. The marked up Technical Specification pages affected by the proposed changes are provided in Attachment 2.

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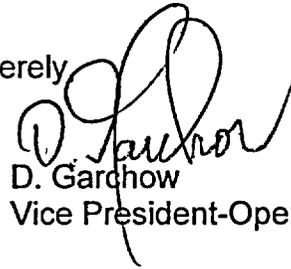
Approval of this proposed change is being requested by April 2003.

If you have any questions or require additional information, please contact Mr. Michael Mosier at (856) 339-5434.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 10/23/02

Sincerely,



D. Garchow  
Vice President-Operations

Attachments (2)

OCT 23 2002

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HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NO. NPF-57  
DOCKET NO. 50-354

EVALUATION OF REVISIONS TO THE TECHNICAL SPECIFICATIONS (TS)  
TO  
UPDATE TO NEW 10CFR PART 20

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**REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS  
TO  
REVISE SECTION 6.12, "HIGH RADIATION AREA"**

**1. DESCRIPTION**

The proposed changes to the Technical Specifications (TS) update the reference to 10CFR20.203 with the corresponding reference to 10CFR20.1601 in conformance with NUREG-1433 (reference 7.1). The new 10CFR Part 20 (reference 7.2) requirements became effective on June 20, 1991. Public Service Electric & Gas (PSEG) had previously elected not to convert to the new requirements since the existing requirements were retained in the Code of Federal Regulations and the associated TS requirements were determined to be more restrictive (reference 7.3). The proposed changes have been incorporated to maintain consistency between Hope Creek Generation Station and Salem Units 1 & 2 Administrative Controls TS.

**2. PROPOSED CHANGE**

The proposed Technical Specification change will revise Hope Creek Technical Specification 6.12, "High Radiation Area" to be consistent with the Standard Technical Specifications General Electric Plants (NUREG-1433 Rev.2). In order to accommodate the additional material provided by this change two pages will be added to the section. These pages have been numbered 24a and 24b so as not to cause any change to the balance of the section.

**3. BACKGROUND**

On September 8, 1999 the NRC issued amendment 121 Hope Creek Generating Station. This amendment revised the TS by relocating the procedural details of the Radiological Effluent Technical Specifications (RETS) to the Offsite Dose Calculation Manual. The TS were also revised to relocate the procedural details associated with solid radioactive wastes to the Process Control Program. In addition, the Administrative Controls section was revised to incorporate programmatic controls for radioactive effluents and environmental monitoring. These changes are consistent with the guidance provided in Generic Letter (GL) 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications (RETS) in the Administrative Controls Section of the Technical Specifications and the Relocation of the Procedural Details of RETS to the Offsite Dose Control Manual or to the Process Control Program."

The proposed change is similar to that approved on September 11, 2002 for Nine Mile Point Unit 1, Amendment 176, TAC No. MB2442.

#### 4. TECHNICAL ANALYSIS

TS 6.12 provides high radiation access control alternatives pursuant to 10 CFR20.203 (c)(2) (to be revised to 10CFR20.1601 (c)). This specification has been significantly revised as a result of the changes to 10CFR20, the guidance provided in Regulatory Guide 8.38, "Control of Access to Radiation and Very High Radiation Areas in Nuclear Power Plants," and current industry technology in controlling access to high radiation areas. The proposed changes include capping dose rate to differentiate a high radiation area from a very high radiation area, additional requirements for groups entering high radiation areas, and clarification of the need for communication with, and control of, workers in high radiation areas. These alternate controls relate to the protection of plant personnel from radiation hazards during normal plant operations. As such, the proposed changes have no impact on protection of the public from the consequences of any DBA or transient. The changes are consistent with NUREG- 1433 (reference 7.1) and provide acceptable alternate methods for controlling access to high radiation areas.

#### 5. REGULATORY SAFETY ANALYSIS

##### 5.1 No Significant Hazards Consideration

PSEG Nuclear LLC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed below:

**1. The proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The proposed changes do not affect accident initiators or precursors and do not alter the design assumptions, conditions, configuration of the facility, or manner in which the plant is operated. The proposed changes do not alter or prevent the ability of structures, systems, or components to perform their intended safety function to mitigate the consequences of an initiating event within the acceptance limits assumed in the UFSAR. The proposed changes are administrative in nature. Technical Specification (TS) 6.12 will be updated to include the new 10CFR20 (effective 06/20/91) requirements. The proposed changes do not alter the conditions or assumptions in any of the previous accident analyses, and as a result, the radiological consequences associated with these analyses remain unchanged.

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

**2. The proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The proposed changes do not alter the design assumptions, conditions, configuration of the facility, or the manner in which the plant is operated.

The proposed changes are administrative in nature and the relocated procedural details do not change the level of programmatic controls and procedural details. Accordingly, the proposed changes do not create any new failure modes or limiting single failures associated with a plant structure, system, or component important to safety. Also, there will be no change in the types or increase in the amounts of any effluents released offsite.

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

**3. The proposed amendment would not involve a significant reduction in the margin of safety.**

The proposed changes do not impact equipment design or operation, nor do the changes affect any TS safety limits or safety system settings that could adversely affect plant safety. The proposed changes are administrative in nature. Technical Specification (TS) 6.12 will be updated to include the new 10CFR20 requirements (effective 06/20/91) and are in conformance with NUREG-1433. Furthermore, the proposed changes do not result in a change in the types or an increase in the amounts of any effluents released offsite.

Therefore, it is concluded that the proposed changes do not involve a significant reduction in a margin of safety.

## **5.2. Applicable Regulatory Requirements/Criteria**

PSEG has determined that the proposed changes to the TS are in compliance with the following regulatory criteria.

- 5.2.1 NUREG-1433, Revision 2, June 2001, "Standard Technical Specifications, General Electric Plants, BWR/4"
- 5.2.2 Title 10 Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation"
- 5.2.3 Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants"

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted 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.

## 6. ENVIRONMENTAL IMPACT EVALUATION

PSEG has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent 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.

## 7. REFERENCES

- 7.1. NUREG-1433, Revision 2, June 2001, "Standard Technical Specifications, General Electric Plants, BWR/4"
- 7.2. 10CFR Part 20, "Standards for Protection Against Radiation"
- 7.3. Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants"
- 7.4. LCR H99-02, March 29, 1999, "Radioactive Effluent Technical Specifications"

**HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NPF-57  
DOCKET NO. 50-354  
REVISIONS TO THE TECHNICAL SPECIFICATIONS**

**TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES**

The following Technical Specifications for Facility Operating License NPF-57 are affected by this change request:

<b><u>Technical Specification</u></b>	<b><u>Page</u></b>
Section 6.12	6-24
	6-24a added
	6-24b added

## ADMINISTRATIVE CONTROLS

### 6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 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)\*\*. 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 which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which 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 have been made knowledgeable of them.
- c. A radiation protection qualified individual (i.e., 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 Supervisor in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose greater than 1000 mrem\* shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Senior Nuclear Shift Supervisor on duty and/or the radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose in excess of 1000 mrem\* that are located within large areas, such as the containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted, and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, continuous surveillance direct or remote (such as use of closed circuit TV cameras), may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

\*Measurement made at 18 inches from source of radioactivity.

\*\*Radiation protection personnel or personnel escorted by radiation protection personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.



## ADMINISTRATIVE CONTROLS

### 6.12 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:

- 6.12.1 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

(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.

6.12.2 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 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.
- 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.
- 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 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 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
    - (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 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.
- 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.