



LR-N11-0098  
April 4, 2011

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

Hope Creek Generating Station  
Facility Operating License No. NPF-57  
NRC Docket No. 50-354

**Subject: Format and Editorial Corrections to Technical Specification Pages Issued with Amendment 187**

- References:**
- (1) Letter from PSEG to NRC, "Application for Technical Specification Change Regarding Risk-informed Justification for the Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program," dated March 19, 2010 (ML100900224)
  - (2) Letter from NRC to PSEG, "Hope Creek Generating Station – Issuance of Amendment Re: Relocation of Specific Surveillance Frequencies to a Licensee Controlled Program Based on Technical Specifications Task Force (TSTF) Change TSTF-425 (TAC NO. ME3545)," dated February 25, 2011 (ML103410243)

In Reference 1, PSEG Nuclear LLC (PSEG) submitted a license amendment request (LAR H10-01) for Hope Creek Generating Station (HCGS). The request would modify HCGS Technical Specifications (TS) by relocating specific surveillance frequencies to a licensee-controlled program, the Surveillance Frequency Control Program, with the implementation of Nuclear Energy Institute (NEI) 04-10, "Risk Informed Method for Control of Surveillance Frequencies."

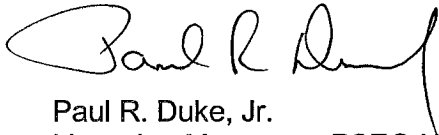
In Reference 2 the NRC issued Amendment 187 approving the Reference 1 request.

The TS camera-ready pages prepared for LAR H10-01 and provided to the NRC contained format and typographical errors; i.e., these errors were differences from the marked up TS pages provided in Reference 1. These errors were subsequently included in the revised TS pages issued with Amendment 187 (Reference 2). In Attachment 1 of this submittal PSEG is providing corrected pages that reflect the markups provided in Reference 1.

There are no regulatory commitments contained in this submittal.

If you have any questions or require additional information, please do not hesitate to contact me at (856) 339-1466.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul R. Duke, Jr.", with a stylized, cursive script.

Paul R. Duke, Jr.  
Licensing Manager – PSEG Nuclear

Attachment

W. Dean - NRC Region I  
R. Ennis, Project Manager - USNRC  
NRC Senior Resident Inspector – Hope Creek (X24)  
P. Mulligan, Manager IV, NJBNE  
Commitment Coordinator – Hope Creek  
PSEG Commitment Coordinator - Corporate

**ATTACHMENT 1**  
**TECHNICAL SPECIFICATION PAGES WITH CORRECTED FORMAT AND EDITORIAL**  
**CHANGES:**

**Amendment 187**

The following HCGS Technical Specifications pages (Facility Operating License NPF-57) are provided in this submittal:

3/4 2-1  
3/4 3-7  
3/4 3-29  
3/4 3-30  
3/4 3-39  
3/4 6-10

### 3/4.2 POWER DISTRIBUTION LIMITS

#### 3/4.2.1 AVERAGE PLANAR LINEAR HEAT GENERATION RATE

##### LIMITING CONDITION FOR OPERATION

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3.2.1 All AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGRs) shall be less than or equal to the limits specified in the CORE OPERATING LIMITS REPORT.

APPLICABILITY: OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 24% of RATED THERMAL POWER.

##### ACTION:

With an APLHGR exceeding the limits specified in the CORE OPERATING LIMITS REPORT, initiate corrective action within 15 minutes and restore APLHGR to within the required limits within 2 hours or reduce THERMAL POWER to less than 24% of RATED THERMAL POWER within the next 4 hours.

##### SURVEILLANCE REQUIREMENTS

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4.2.1 All APLHGRs shall be verified to be equal to or less than the limits specified in the CORE OPERATING LIMITS REPORT:

- a. Once within 12 hours after THERMAL POWER is greater than or equal to 24% of RATED THERMAL POWER and in accordance with the Surveillance Frequency Control Program thereafter.
- b. Initially and in accordance with the Surveillance Frequency Control Program when the reactor is operating with a LIMITING CONTROL ROD PATTERN for APLHGR.

TABLE 4.3.1.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u> <sup>(m)</sup>	<u>CHANNEL FUNCTIONAL TEST</u> <sup>(m)</sup>	<u>CHANNEL CALIBRATION</u> <sup>(a) (m)</sup>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
1. Intermediate Range Monitors:				
a. Neutron Flux - High	(b)			2 3, 4, 5
b. Inoperative	NA		NA	2, 3, 4, 5
2. Average Power Range Monitor <sup>(f)</sup> :				
a. Neutron Flux – Upscale, Setdown	(b)	(l)		2 3, 4, 5
b. Flow Biased Simulated Thermal Power-Upscale	(g)		(d) (e) (h)	1
c. Fixed Neutron Flux - Upscale			(d)	1
d. Inoperative	NA		NA	1, 2, 3, 4, 5
3. Reactor Vessel Steam Dome Pressure - High		(k)		1, 2
4. Reactor Vessel Water Level - Low, Level 3		(k)		1, 2
5. Main Steam Line Isolation Valve - Closure	NA			1
6. This item intentionally blank				
7. Drywell Pressure - High		(k)		1, 2

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u> <sup>(c)</sup>	<u>CHANNEL FUNCTIONAL TEST</u> <sup>(c)</sup>	<u>CHANNEL CALIBRATION</u> <sup>(c)</sup>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
4. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. RWCU $\Delta$ Flow - High				1, 2, 3
b. RWCU $\Delta$ Flow – High, Timer	NA			1, 2, 3
c. RWCU Area Temperature - High	NA			1, 2, 3
d. RWCU Area Ventilation $\Delta$ Temperature - High	NA			1, 2, 3
e. SLCS Initiation	NA	(b)	NA	1, 2
f. Reactor Vessel Water Level - Low Low, Level 2				1, 2, 3
g. Manual Initiation	NA	(a)	NA	1, 2, 3
5. <u>REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION</u>				
a. RCIC Steam Line $\Delta$ Pressure (Flow) - High	NA			1, 2, 3
b. RCIC Steam Line $\Delta$ Pressure (Flow) – High, Timer	NA			1, 2, 3
c. RCIC Steam Supply Pressure - Low	NA			1, 2, 3
d. RCIC Turbine Exhaust Diaphragm Pressure - High	NA			1, 2, 3
e. RCIC Pump Room Temperature - High	NA			1, 2, 3
f. RCIC Pump Room Ventilation Ducts $\Delta$ Temperature - High	NA			1, 2, 3
g. RCIC Pipe Routing Area Temperature - High	NA			1, 2, 3
h. RCIC Torus Compartment Temperature -High	NA			1, 2, 3
i. Drywell Pressure - High				1, 2, 3
j. Manual Initiation	NA		NA	1, 2, 3

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u> <sup>(c)</sup>	<u>CHANNEL FUNCTIONAL TEST</u> <sup>(c)</sup>	<u>CHANNEL CALIBRATION</u> <sup>(c)</sup>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
6. <u>HIGH PRESSURE COOLANT INJECTION SYSTEM ISOLATION</u>				
a. HPCI Steam Line $\Delta$ Pressure (Flow) - High	NA			1, 2, 3
b. HPCI Steam Line $\Delta$ Pressure (Flow) - High, Timer	NA			1, 2, 3
c. HPCI Steam Supply Pressure - Low	NA			1, 2, 3
d. HPCI Turbine Exhaust Diaphragm Pressure - High	NA			1, 2, 3
e. HPCI Pump Room Temperature - High	NA			1, 2, 3
f. HPCI Pump Room Ventilation Ducts $\Delta$ Temperature - High	NA			1, 2, 3
g. HPCI Pipe Routing Area Temperature - High	NA			1, 2, 3
h. HPCI Torus Compartment Temperature -High	NA			1, 2, 3
i. Drywell Pressure - High	NA			1, 2, 3
j. Manual Initiation	NA		NA	1, 2, 3
7. <u>RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Level 3				1, 2, 3
b. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	NA			1, 2, 3
c. Manual Initiation	NA	<sup>(a)</sup>	NA	1, 2, 3

**TABLE 4.3.3.1-1**  
**EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS**

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u> <sup>(a)</sup>	<u>CHANNEL FUNCTIONAL TEST</u> <sup>(a)</sup>	<u>CHANNEL CALIBRATION</u> <sup>(a)</sup>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>1. <u>CORE SPRAY SYSTEM</u></b>				
a. Reactor Vessel Water Level – Low Low Low, Level 1				1, 2, 3, 4*, 5*
b. Drywell Pressure - High				1, 2, 3
c. Reactor Vessel Pressure - Low				1, 2, 3, 4*, 5*
d. Core Spray Pump Discharge Flow - Low (Bypass)				1, 2, 3, 4*, 5*
e. Core Spray Pump Start Time Delay - Normal Power	NA			1, 2, 3, 4*, 5*
f. Core Spray Pump Start Time Delay - Emergency Power	NA			1, 2, 3, 4*, 5*
g. Manual Initiation	NA		NA	1, 2, 3, 4*, 5*
<b>2. <u>LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM</u></b>				
a. Reactor Vessel Water Level – Low Low Low, Level 1				1, 2, 3, 4*, 5*
b. Drywell Pressure - High				1, 2, 3
c. Reactor Vessel Pressure – Low (Permissive)				1, 2, 3, 4*, 5*
d. LPCI Pump Discharge Flow - Low (Bypass)				1, 2, 3, 4*, 5*
e. LPCI Pump Start Time Delay - Normal Power	NA			1, 2, 3, 4*, 5*
f. Manual Initiation	NA		NA	1, 2, 3, 4*, 5*
<b>3. <u>HIGH PRESSURE COOLANT INJECTION SYSTEM</u><sup>#</sup></b>				
a. Reactor Vessel Water Level – Low Low, Level 2				1, 2, 3
b. Drywell Pressure - High				1, 2, 3
c. Condensate Storage Tank Level - Low				1, 2, 3
d. Suppression Pool Water Level - High				1, 2, 3
e. Reactor Vessel Water Level - High, Level 8				1, 2, 3
f. HPCI Pump Discharge Flow – Low (Bypass)				1, 2, 3
g. Manual Initiation	NA		NA	1, 2, 3



## CONTAINMENT SYSTEMS

### DRYWELL AVERAGE AIR TEMPERATURE

#### LIMITING CONDITION FOR OPERATION

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3.6.1.7 Drywell average air temperature shall not exceed 135°F.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

With the drywell average air temperature greater than 135°F, reduce the average air temperature to within the limit within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

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4.6.1.7 The drywell average air temperature shall be the volumetric average of the temperatures at the following locations and shall be determined to be within the limit in accordance with the Surveillance Frequency Control Program:

	<u>Elevation Zone</u>	<u>Approximate Azimuth*</u>
a.	86'11"-112'8" (under vessel)	90°, 225°, 90°, 270°
b.	86'11"-111'10" (outside of pedestal)	135°, 300°, 100°, 190°
c.	111'10"-139'2"	55°, 240°, 155°, 315°
d.	139'2"-168'0"	45°, 215°, 0°, 90°, 180°, 270°
e.	168'0"-192'7"	95°, 130°, 300°, 355°, 45°, 225°

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\* At least one reading from each elevation zone is required for a volumetric average calculation.