

- (2) Pursuant to the Act and 10 CFR Part 70, VEPCO to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or component; and
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the North Anna Power Station, Unit No. 1, at reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 250 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations as set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2893 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 230 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the

Renewed License No NPF-7  
Amendment No. 230

Table 3.3.2-1 (page 2 of 4)  
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Containment Spray Systems					
a. Manual Initiation	1, 2, 3, 4	2 per train, 2 trains	B	SR 3.3.2.7	NA
b. Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4	2 trains	C	SR 3.3.2.2 SR 3.3.2.3 SR 3.3.2.5	NA
c. Containment Pressure					
High High	1, 2, 3	4	E	SR 3.3.2.1 SR 3.3.2.4 SR 3.3.2.8 SR 3.3.2.9	≤ 28.45 psia
d. Refueling Water Storage Tank (RWST) Level-Low	1, 2, 3	3	D	SR 3.3.2.1 SR 3.3.2.4 SR 3.3.2.8 SR 3.3.2.9	≥ 59% and ≤ 61%
Coincident with Containment Pressure-High High	Refer to Function 2.c (Containment Spray-Containment Pressure-High High) for all functions and requirements.				
3. Containment Isolation					
a. Phase A Isolation					
(1) Manual Initiation	1, 2, 3, 4	2	B	SR 3.3.2.7	NA
(2) Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4	2 trains	C	SR 3.3.2.2 SR 3.3.2.3 SR 3.3.2.5	NA
(3) Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.				
b. Phase B Isolation					
(1) Manual Initiation	Refer to Function 2.a (Containment Spray-Manual Initiation) for all functions and requirements.				
(2) Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4	2 trains	C	SR 3.3.2.2 SR 3.3.2.3 SR 3.3.2.5	NA
(3) Containment Pressure					
High High	Refer to Function 2.c (Containment Spray-Containment Pressure High High) for all functions and requirements.				

Table 3.3.2-1 (page 4 of 4)  
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
6. Auxiliary Feedwater					
a. Automatic Actuation Logic and Actuation Relays	1, 2, 3	2 trains	G	SR 3.3.2.2 SR 3.3.2.3 SR 3.3.2.5	NA
b. SG Water Level—Low Low	1, 2, 3	3 per SG	D	SR 3.3.2.1 SR 3.3.2.4 SR 3.3.2.8 SR 3.3.2.9	≥ 17%
c. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.				
d. Loss of Offsite Power	1, 2, 3	1 per bus, 2 buses	F	SR 3.3.2.6 SR 3.3.2.8 SR 3.3.2.9	≥ 2184 V
e. Trip of all Main Feedwater Pumps	1, 2	2 per pump	H	SR 3.3.2.7 SR 3.3.2.9	NA
7. Automatic Switchover to Containment Sump					
a. Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4	2 trains	C	SR 3.3.2.2 SR 3.3.2.3 SR 3.3.2.5	NA
b. RWST Level—Low Low	1, 2, 3, 4	4	I	SR 3.3.2.1 SR 3.3.2.4 SR 3.3.2.8 SR 3.3.2.9	≥ 15% and ≤ 17%
Coincident with Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.				
8. ESFAS Interlocks					
a. Reactor Trip, P-4	1, 2, 3	1 per train, 2 trains	F	SR 3.3.2.7	NA
b. Pressurizer Pressure, P-11	1, 2, 3	3	J	SR 3.3.2.1 SR 3.3.2.8	≤ 2010 psig
c. T <sub>avg</sub> —Low Low, P-12	1, 2, 3	1 per loop	J	SR 3.3.2.1 SR 3.3.2.8	≥ 542°F and ≤ 545°F

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY														
SR 3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months														
SR 3.5.2.6	Verify each ECCS pump capable of starting automatically starts automatically on an actual or simulated actuation signal.	18 months														
SR 3.5.2.7	Verify each ECCS throttle valve listed below is secured in the correct position.  <table><tr><td><u>Unit 1 Valve Number</u></td><td><u>Unit 2 Valve Number</u></td></tr><tr><td>1-SI-188</td><td>2-SI-89</td></tr><tr><td>1-SI-191</td><td>2-SI-97</td></tr><tr><td>1-SI-193</td><td>2-SI-103</td></tr><tr><td>1-SI-203</td><td>2-SI-116</td></tr><tr><td>1-SI-204</td><td>2-SI-111</td></tr><tr><td>1-SI-205</td><td>2-SI-123</td></tr></table>	<u>Unit 1 Valve Number</u>	<u>Unit 2 Valve Number</u>	1-SI-188	2-SI-89	1-SI-191	2-SI-97	1-SI-193	2-SI-103	1-SI-203	2-SI-116	1-SI-204	2-SI-111	1-SI-205	2-SI-123	18 months
<u>Unit 1 Valve Number</u>	<u>Unit 2 Valve Number</u>															
1-SI-188	2-SI-89															
1-SI-191	2-SI-97															
1-SI-193	2-SI-103															
1-SI-203	2-SI-116															
1-SI-204	2-SI-111															
1-SI-205	2-SI-123															
SR 3.5.2.8	Verify, by visual inspection, each ECCS train containment sump component is not restricted by debris and shows no evidence of structural distress or abnormal corrosion.	18 months														

# Containment Pressure 3.6.4

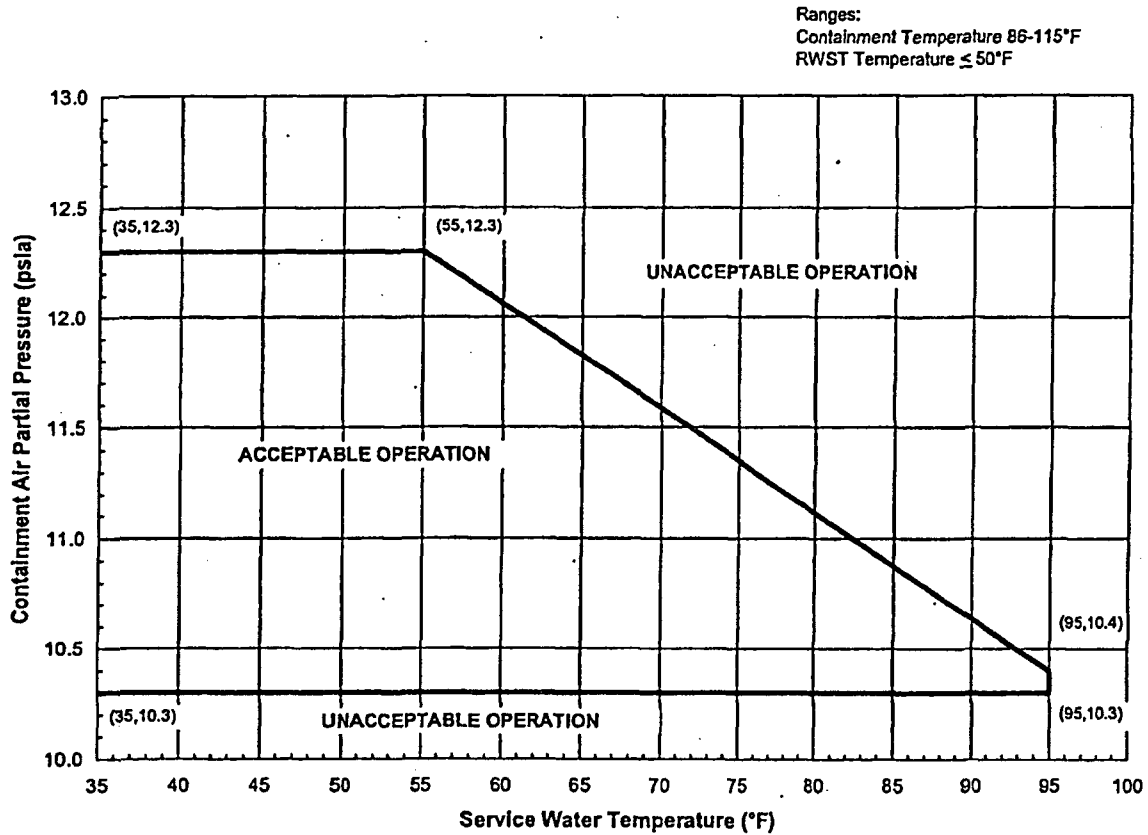


Figure 3.6.4-1 (page 1 of 1)  
Containment Air Partial Pressure Versus  
Service Water Temperature

Containment Air Temperature  
3.6.5

3.6 CONTAINMENT SYSTEMS

3.6.5 Containment Air Temperature

LCO 3.6.5      Containment average air temperature shall be  $\geq 86^{\circ}\text{F}$  and  $\leq 115^{\circ}\text{F}$ .

APPLICABILITY:    MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Containment average air temperature not within limits.	A.1    Restore containment average air temperature to within limits.	8 hours
B. Required Action and associated Completion Time not met.	B.1    Be in MODE 3.	6 hours
	<u>AND</u> B.2    Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.5.1    Verify containment average air temperature is within limits.	24 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.7.6	<p>Verify on an actual or simulated actuation signal(s):</p> <ul style="list-style-type: none"> <li>a. Each RS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position;</li> <li>b. Each RS pump starts automatically; and</li> <li>c. Each casing cooling pump starts automatically.</li> </ul>	18 months
SR 3.6.7.7	<p>Verify, by visual inspection, each RS train containment sump component is not restricted by debris and shows no evidence of structural distress or abnormal corrosion.</p>	18 months
SR 3.6.7.8	<p>Verify each spray nozzle is unobstructed.</p>	Following maintenance which could cause nozzle blockage



## 5.5 Programs and Manuals

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### 5.5.14 Safety Function Determination Program (SFDP) (continued)

analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

- a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or
- b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or
- c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered. When a loss of safety function is caused by the inoperability of a single Technical Specification support system, the appropriate Conditions and Required Actions to enter are those of the support system.

### 5.5.15 Containment Leakage Rate Testing Program

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995 as modified by the following exception:

NEI 94-01-1995, Section 9.2.3: The first Unit 1 Type A test performed after the April 3, 1993 Type A test shall be performed no later than April 2, 2008.

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is 42.7 psig. The containment design pressure is 45 psig.
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be 0.1% of containment air weight per day.

(continued)