

- (3) FENOC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, 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) FENOC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, 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;
- (5) FENOC, pursuant to the Act and 10 CFR Parts 30, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter 1: 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; 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

FENOC is authorized to operate the facility at a steady state reactor core power level of 2900 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 277, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Auxiliary River Water System

(Deleted by Amendment No. 8)

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TABLE NOTATIONS

- (1) (Not used)
- (2) During movement of recently irradiated fuel assemblies within the containment and during movement of fuel assemblies over recently irradiated fuel assemblies within the containment.
- (3) Above background.
- (4) During movement of recently irradiated fuel assemblies and during movement of fuel assemblies over recently irradiated fuel assemblies.

ACTION STATEMENTS

- ACTION 20 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.
- ACTION 21 - This Action is not used.
- ACTION 22 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.
- ACTION 35 - With the number of OPERABLE channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:
  - a) Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and
  - b) Return the channel to OPERABLE status within 30 days, or, explain in the next Annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.
- ACTION 41 - a) With the number of Unit 1 OPERABLE channels one less than the Minimum Channels OPERABLE requirement:
  - 1. Verify the respective Unit 2 control room radiation monitor train is OPERABLE within 1 hour and at least once per 31 days.

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

ACTION 41 (Continued)

2. With the respective Unit 2 control room radiation monitor train inoperable, suspend all operations involving movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies within 1 hour and restore the Unit 1 control room radiation monitor to OPERABLE status within 7 days or isolate the control room from the outside atmosphere by closing all series air intake and exhaust isolation dampers, unless the respective Unit 2 control room radiation monitor train is restored to OPERABLE status within 7 days.
- b) With no Unit 1 control room radiation monitors OPERABLE:
1. Verify both Unit 2 control room radiation monitors are OPERABLE within 1 hour and at least once per 31 days.
  2. With either Unit 2 control room radiation monitor inoperable, suspend all operations involving movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies within 1 hour and restore the respective Unit 1 control room radiation monitor train to OPERABLE status within 7 days or isolate the control room from the outside atmosphere by closing all series air intake and exhaust isolation dampers, unless the respective Unit 2 control room radiation monitor train is restored to OPERABLE status within 7 days.
  3. With no Unit 2 control room radiation monitors OPERABLE, immediately isolate the combined control room by closing all series air intake and exhaust isolation dampers and be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. AREA MONITORS				
a. Deleted				
b. Containment				
i. Purge & Exhaust Isolation (RMVS 104 A & B)	S	R	M	**
ii. Area (RM-RM-219 A & B)	S	R	M	1, 2, 3, & 4
c. Control Room Isolation (RM-RM-218 A & B)	S	R	M###	1, 2, 3, 4, and ##
2. PROCESS MONITORS				
a. Containment				
i. Gaseous Activity RCS Leakage Detection (RM 215B)	S	R#	M	1, 2, 3 & 4
ii. Particulate Activity RCS Leakage Detection (RM 215A)	S	R#	M	1, 2, 3 & 4
b. Deleted				

\*\* During movement of recently irradiated fuel assemblies within the containment and during movement of fuel assemblies over recently irradiated fuel assemblies within the containment.

# Surveillance interval may be extended to the upcoming refueling outage if the interval between refueling outages is greater than 18 months.

## During movement of recently irradiated fuel assemblies and during movement of fuel assemblies over recently irradiated fuel assemblies.

### Control Room intake and exhaust isolation dampers are not actuated.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY AIR COOLING SYSTEM (CREACS)

LIMITING CONDITION FOR OPERATION

3.7.6 Two CREACS trains shall be OPERABLE\*.

----- General Note -----  
The heat removal function of CREACS is not required OPERABLE to support fuel movement involving non-recently irradiated fuel.  
-----

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

During movement of irradiated fuel assemblies, and

During movement of fuel assemblies over irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

- a.1 With one CREACS train inoperable, restore the CREACS train to OPERABLE status within 30 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.2 With two CREACS trains inoperable, enter Specification 3.0.3 immediately.

During movement of irradiated fuel assemblies and during movement of fuel assemblies over irradiated fuel assemblies:

- b.1 With one CREACS train inoperable, restore the CREACS train to OPERABLE status within 30 days or immediately place the OPERABLE CREACS train in operation or immediately suspend movement of irradiated fuel assemblies and movement of fuel assemblies over irradiated fuel assemblies.
- b.2 With two CREACS trains inoperable, immediately suspend movement of irradiated fuel assemblies and movement of fuel assemblies over irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.6.1 CREACS shall be demonstrated OPERABLE at least once per 18 months by verifying each CREACS train has the capability to remove the required heat load and purge the control room atmosphere at the required flow rate.

\* Emergency backup power for only one CREACS train is required in MODES 5, 6 and with no fuel assemblies in the reactor pressure vessel.

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEMS (CREVS)

LIMITING CONDITION FOR OPERATION

3.7.7 Two CREVS trains shall be OPERABLE\*:

----- General Note -----  
The control room boundary may be opened intermittently under administrative control.  
-----

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

During movement of recently irradiated fuel assemblies, and

During movement of fuel assemblies over recently irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

- a.1 With one required CREVS train inoperable, restore the CREVS train to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.2 With two required CREVS trains inoperable due to an inoperable control room boundary, restore the control room boundary to OPERABLE status within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.3 With two required CREVS trains inoperable for reasons other than described in ACTION a.2, enter Specification 3.0.3 immediately.

---

\* Emergency power for only one CREVS train is required in MODES 5, 6 and with no fuel assemblies in the reactor pressure vessel.

PLANT SYSTEMS

LIMITING CONDITION FOR OPERATION (continued)

During movement of recently irradiated fuel assemblies and during movement of fuel assemblies over recently irradiated fuel assemblies:

- b.1 With one required CREVS train inoperable, restore the CREVS train to OPERABLE within 7 days, or immediately place the OPERABLE CREVS train in the emergency pressurization mode of operation, or immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.
- b.2 With two required CREVS trains inoperable, immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

- 4.7.7.1 The CREVS shall be demonstrated OPERABLE:
- a. Deleted.
  - b. At least once per 31 days by verifying that the CREVS train operates for  $\geq 15$  minutes with the heaters in operation.
  - c. At least once per 18 months or after every 720 hours of system operation or (1) after each complete or partial replacement of a HEPA filter or charcoal adsorber bank, or (2) after any structural maintenance on the HEPA filter or charcoal adsorber housing or (3) following painting, fire or chemical release in any ventilation zone communicating with the system by:
    1. Verifying that the filtration system satisfies the in-place penetration and by-pass leakage testing acceptance criteria of less than 0.05% when tested in accordance with ANSI N510-1980 while operating the CREVS train at a flow rate of 800 - 1000 cfm.
    2. Within 31 days after removal, subjecting the carbon contained in at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers to a laboratory carbon sample analysis and verifying a removal efficiency of  $\geq 99\%$  for radioactive methyl iodine at an air flow velocity of .68 ft/sec with an inlet methyl iodide concentration of 1.75 mg/m<sup>3</sup>,  $\geq 70\%$  relative humidity, and 30°C; other test conditions including test parameter tolerances shall be in accordance with ASTM D3803-1989. The carbon samples not obtained from test canisters shall be prepared by either:
      - a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining a sample volume equivalent to at least two inches in diameter and with a length equal to the thickness of the bed, or
      - b) Removing a longitudinal sample from an adsorber tray using a slotted-tube sampler, mixing the adsorbent thoroughly, and obtaining a sample volume equivalent to at least two inches in diameter and with length equal to the thickness of the bed.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (continued)

3. Verifying a system flow rate of 800 - 1000 cfm during operation of the CREVS train.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the CREVS train at a flow rate of 800 - 1000 cfm.
  2. Verifying that each CREVS train actuates on a simulated or actual actuation signal.
  3. Deleted.
  4. Verifying that the heaters dissipate at least 3.87 kw and not exceeding 5.50 kw when tested in accordance with ANSI N510-1980.
- e. By verifying at least once every 36 months on a STAGGERED TEST BASIS, each CREVS train can maintain the control room at a positive pressure of  $\geq 1/8$  inch Water Gauge relative to the outside atmosphere during operation at a flow rate of 800-1000 cfm.

4.7.7.2 The BV-2 CREVS, when utilized to meet BV-1 Technical Specification 3.7.7, shall be demonstrated OPERABLE in accordance with BV-2 Technical Specification 4.7.7.1.

transactions shall have no effect on the license for the BVPS Unit 2 facility throughout the term of the license.

- (b) Further, the licensees are also required to notify the NRC in writing prior to any change in: (i) the term or conditions of any lease agreements executed as part of these transactions; (ii) the BVPS Operating Agreement, (iii) the existing property insurance coverage for BVPS Unit 2, and (iv) any action by a lessor or others that may have adverse effect on the safe operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations set forth in 10 CFR Chapter 1 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

FENOC is authorized to operate the facility at a steady state reactor core power level of 2900 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 159, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. FENOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY AIR COOLING SYSTEM (CREACS)

LIMITING CONDITION FOR OPERATION

3.7.6 Two CREACS trains shall be OPERABLE\*.

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

During movement of recently irradiated fuel assemblies, and

During movement of fuel assemblies over recently irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

- a.1 With one CREACS train inoperable, restore the CREACS train to OPERABLE status within 30 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.2 With two CREACS trains inoperable, enter Specification 3.0.3 immediately.

During movement of recently irradiated fuel assemblies and during movement of fuel assemblies over recently irradiated fuel assemblies:

- b.1 With one CREACS train inoperable, restore the CREACS train to OPERABLE status within 30 days or immediately place the OPERABLE CREACS train in operation or immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.
- b.2 With two CREACS trains inoperable, immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

4.7.6.1 CREACS shall be demonstrated OPERABLE at least once per 18 months by verifying each CREACS train has the capability to remove the required heat load and purge the control room atmosphere at the required flow rate.

\* Emergency backup power for only one CREACS train is required in MODES 5, 6 and with no fuel assemblies in the reactor pressure vessel.

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (CREVS)

LIMITING CONDITION FOR OPERATION

3.7.7 Two CREVS trains shall be OPERABLE\*.

----- General Note -----  
The control room boundary may be opened intermittently under administrative control.  
-----

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

During movement of recently irradiated fuel assemblies, and

During movement of fuel assemblies over recently irradiated fuel assemblies.

ACTION:

MODES 1, 2, 3 and 4:

- a.1 With one required CREVS train inoperable, restore the CREVS train to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.2 With two required CREVS trains inoperable due to an inoperable control room boundary, restore the control room boundary to OPERABLE status within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- a.3 With two required CREVS trains inoperable for reasons other than described in ACTION a.2, enter Specification 3.0.3 immediately.

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\* Emergency backup power for only one CREVS train is required in MODES 5, 6 and with no fuel assemblies in the reactor pressure vessel.

## PLANT SYSTEMS

### LIMITING CONDITION FOR OPERATION (continued)

#### ACTION (Continued)

During movement of recently irradiated fuel assemblies and during movement of fuel assemblies over recently irradiated fuel assemblies:

- b.1 With one required CREVS train inoperable, restore the CREVS train to OPERABLE status within 7 days, or immediately place the OPERABLE CREVS train in the emergency pressurization mode of operation, or immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.
- b.2 With two required CREVS trains inoperable, immediately suspend movement of recently irradiated fuel assemblies and movement of fuel assemblies over recently irradiated fuel assemblies.

#### SURVEILLANCE REQUIREMENTS

- 4.7.7.1 The CREVS shall be demonstrated OPERABLE:
- a. Deleted.
  - b. At least once per 31 days by verifying that each CREVS train operates for  $\geq 15$  minutes with the heaters in operation.
  - c. At least once per 18 months or (1) after each complete or partial replacement of a HEPA filter or charcoal adsorber bank, or (2) after any structural maintenance on the HEPA filter or charcoal adsorber housings by:
    1. Verifying that the charcoal adsorber satisfies the in-place penetration and by-pass leakage testing acceptance criteria of less than 0.05% when tested in accordance with ANSI N510-1980 while operating the CREVS train at a flow rate of 800 to 1000 cfm.
    2. Verifying that the HEPA filter bank satisfies the in-place penetration and by-pass leakage testing acceptance criteria of less than 0.05% when tested in accordance with ANSI N510-1980 while operating the CREVS train at a flow rate of 800 to 1000 cfm.
    3. Verifying a system flow rate of 800 to 1000 cfm during operation of each CREVS train.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- d. At least once per 18 months or (1) after 720 hours of system operation, or (2) following painting, fire or chemical release in the vicinity of control room outside air intakes while the system is operating, within 31 days after removal, subjecting the carbon contained in at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers to a laboratory carbon sample analysis and verifying a removal efficiency of  $\geq 99\%$  for radioactive methyl iodide at an air flow velocity of 0.7 ft/sec with an inlet methyl iodide concentration of 1.75 mg/m<sup>3</sup>,  $\geq 70\%$  relative humidity, and 30°C; other test conditions including test parameter tolerances shall be in accordance with ASTM D3803-1989. The carbon samples not obtained from test canisters shall be prepared by either:
- a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed, or
  - b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.
- e. At least once per 18 months by:
1. Verifying that the pressure drop for the combined HEPA filters and charcoal adsorber banks is less than 5.6 inches Water Gauge while operating each CREVS train at a flow rate of 800 to 1000 cfm.
  2. Verifying that each CREVS train actuates on a simulated or actual actuation signal.
  3. Deleted
  4. Deleted.
  5. Verifying that the heaters dissipate at least 3.87 kw and not exceeding 5.50 kw when tested in accordance with ANSI N510-1980.
- f. By verifying at least once every 36 months on a STAGGERED TEST BASIS, that each CREVS train can maintain the control room at a positive pressure of  $\geq 1/8$  inch Water Gauge relative to the outside atmosphere during operation at a flow rate of 800 to 1000 cfm.