

July 19, 1990

Docket Nos. 50-338  
and 50-339

DISTRIBUTION  
See attached sheet

Mr. W. L. Stewart  
Senior Vice President - Nuclear  
Virginia Electric and Power Company  
5000 Dominion Blvd.  
Glen Allen, Virginia 23060

Dear Mr. Stewart:

SUBJECT: NORTH ANNA UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: RADIOLOGICAL  
EFFLUENT TECHNICAL SPECIFICATIONS (TAC NOS. 76868 AND 76869)

The Commission has issued the enclosed Amendment Nos. 130 and 114 to Facility  
Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station,  
Units No. 1 and No. 2 (NA-1&2). The amendments revise the Technical Speci-  
fications (TS) in response to your letter dated May 21, 1990.

The amendments relocate the NA-1&2 Radiological Effluent Technical Specifica-  
tions to the Offsite Dose Calculational Manual or the Process Control Program,  
as appropriate.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will  
be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

Leon B. Engle, Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 130 to NPF-4
- 2. Amendment No. 114 to NPF-7
- 3. Safety Evaluation

cc w/enclosures:

See next page

OFC	: LA:PD22	: PM:PD22	: D:PD22	: OGC	: <i>AD</i>	:	:
NAME	: <i>W. J. ...</i>	: LE: <i>...</i>	: H: <i>...</i>	: <i>L. Dewey</i>	:	:	:
DATE	: 6/15/90	: 6/16/90	: 6/15/90	: 6/25/90	:	:	:

OFFICIAL RECORD COPY  
Document Name: AMEND NA 1&2

*CP-1*

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PDR ADOCK 05000338  
P PDC

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Virginia Electric & Power Company

North Anna Power Station  
Units 1 and 2

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DATED: July 19, 1990

AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NO. NPF-4-NORTH ANNA UNIT 1  
AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE NO. NPF-7-NORTH ANNA UNIT 2

Docket File  
NRC & Local PDRs  
PDII-2 Reading  
S. Varga, 14/E/4  
G. Lainas, 14/H/3  
H. Berkow  
D. Miller  
L. Engle  
OGC-WF  
D. Hagan, 3302 MNBB  
E. Jordan, 3302 MNBB  
B. Grimes, 9/A/2  
G. Hill (8), P-137  
Wanda Jones, P-130A  
J. Calvo, 11/F/23  
(Principal Contributor of SE)  
ACRS (10)  
GPA/PA  
OC/LFMB  
PD Plant-specific file [Gray File]  
M. Sinkule, R-II  
Others as required

cc: Plant Service list

DF01  
111



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 130  
License No. NPF-4

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company et al., (the licensee) dated May 21, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

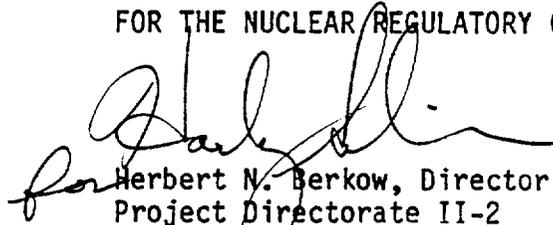
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D.(2) of Facility Operating License No. NPF-4 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 130, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: July 19, 1990.

ATTACHMENT TO LICENSE AMENDMENT NO. 130

TO FACILITY OPERATING LICENSE NO. NPF-4

DOCKET NO. 50-338

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

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## 1.0 DEFINITIONS (Continued)

### ENGINEERED SAFETY FEATURE RESPONSE TIME

1.11 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable.

### FREQUENCY NOTATION

1.12 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.2.

### GASEOUS RADWASTE TREATMENT SYSTEM

1.13 A GASEOUS RADWASTE TREATMENT SYSTEM is the system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system offgases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment. The system is composed of the waste gas decay tanks, regenerative heat exchanger, waste gas charcoal filters, process vent blowers, waste gas surge tanks and waste gas diaphragm compressor.

### IDENTIFIED LEAKAGE

1.14 IDENTIFIED LEAKAGE shall be:

- a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

### MEMBER(S) OF THE PUBLIC

1.15 MEMBER(S) OF THE PUBLIC shall include all individuals who by virtue of their occupational status have no formal association with the plant. This category shall include non-employees of the licensee who are permitted to use portions of the site for recreational, occupational, or other purposes not associated with plant functions. This category shall not include non-employees such as vending machine servicemen or postmen who, as part of their formal job function, occasionally enter an area that is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

## 1.0 DEFINITIONS (Continued)

### STAGGERED TEST BASIS

1.32 A STAGGERED TEST BASIS shall consist of:

- a. A test schedule for n systems, subsystems, trains or other designated components obtained by dividing the specified test interval into n equal subintervals,
- b. The testing of one system, subsystem, train or other designated component at the beginning of each subinterval.

### THERMAL POWER

1.33 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

### UNIDENTIFIED LEAKAGE

1.34 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE or CONTROLLED LEAKAGE.

### UNRESTRICTED AREA

1.35 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY where access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes.

### VENTILATION EXHAUST TREATMENT SYSTEM

1.36 A VENTILATION EXHAUST TREATMENT SYSTEM is the system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment (such a system is not considered to have any effect on noble gas effluents). Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

### VENTING

1.37 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

Specification 3/4.3.3.10 has been deleted

## INSTRUMENTATION

### EXPLOSIVE GAS MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

---

3.3.3.11 The explosive gas monitoring instrumentation channels shown in Table 3.3-14 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.5 are not exceeded.

APPLICABILITY: As shown in Table 3.3-14.

ACTION:

- a. With an explosive gas monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above Specification, declare the channel inoperable, and take the ACTION shown in Table 3.3-14.
- b. With less than the minimum number of explosive gas monitoring instrumentation channels OPERABLE, for reasons other than a above, take the ACTION shown in Table 3.3-14. Exert best efforts to return the instruments to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 to explain why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.3.11 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-14.

TABLE 3.3-14

EXPLOSIVE GAS MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1. DELETED			
2. WASTE GAS HOLDUP SYSTEM EXPLOSIVE GAS MONITORING SYSTEM (Shared with Unit 2)			
a. Hydrogen Monitor	1	* *	32
b. Oxygen Monitor	1	* *	32

\* \* During process vent system operation (treatment for primary system offgases).

ACTION 32 : With the number of channels OPERABLE less than required by the minimum channels OPERABLE requirement, operation of this system may continue for up to 14 days provided grab samples are taken and analyzed daily. With this channel inoperable, operation may continue provided grab samples are taken and analyzed: (1) every 4 hours during degassing operations and (2) daily during other operations.

TABLE 4.3-14

EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. DELETED					
2. WASTE GAS HOLDUP SYSTEM EXPLOSIVE GAS MONITORING SYSTEM					
a. Hydrogen Monitor	D	N.A.	Q(3)	M	**
b. Oxygen Monitor	D	N.A.	Q(4)	M	**

\* \* During process vent system operation (treatment for primary system offgases)

( 3 ) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent hydrogen, balance nitrogen, and
2. Four volume percent hydrogen, balance nitrogen.

( 4 ) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent oxygen, balance nitrogen, and
2. Four volume percent oxygen, balance nitrogen.

Specifications 3/4.11.1.1 through 3/4.11.1.3 have been deleted

## RADIOACTIVE STORAGE

### LIQUID HOLDUP TANKS

#### LIMITING CONDITION. FOR OPERATION

---

3.11.1.4 The quantity of radioactive material contained in each of the following unprotected outdoor tanks shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

- a. Refueling Water Storage Tank
- b. Casing Cooling Storage Tank
- c. PG Water Storage Tank\*
- d. Boron Recovery Test Tank\*
- e. Any Outside Temporary Tank\*\*

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.11.1.4 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per week when radioactive materials are being added to the tank.

\*This is a shared system with Unit 2.

\*\*Tanks included in this Specification are those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste ion exchanger system.

Specifications 3/4.11.2.1 through 3/4.11.2.4 have been deleted

## RADIOACTIVE STORAGE

### 3/4.11.2 GAS STORAGE

#### EXPLOSIVE GAS MIXTURE

#### LIMITING CONDITION. FOR OPERATION

---

3.11.2.5 The concentration of oxygen in the waste gas decay tanks shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume and is less than 96% by volume.

APPLICABILITY: At all times.

ACTION:

- a. With the concentration of oxygen in the waste gas decay tanks greater than 2% by volume but less than or equal to 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.
- b. With the concentration of oxygen in the waste gas decay tanks greater than 4% volume and the hydrogen concentration greater than 2% by volume, immediately suspend all additions of waste gases to the system and reduce the concentration of oxygen to less than or equal to 2% by volume without delay.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.11.2.5 The concentrations of hydrogen and oxygen in the waste gas decay tanks shall be determined to be within the above limits by continuously monitoring the waste gases in the waste gas decay tanks with the hydrogen and oxygen monitors required OPERABLE by Table 3.3-14 of Specification 3.3.3.11.

## RADIOACTIVE STORAGE

### GAS STORAGE TANKS

#### LIMITING CONDITION FOR OPERATION

---

3.11.2.6 The quantity of radioactivity contained in each gas storage tank shall be limited to less than or equal to  $\leq 25,000$  curies noble gases (considered as Xe-133).

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any gas storage tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.11.2.6 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least once per month when the specific activity of the primary reactor coolant is  $\leq 1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131. Under conditions which result in a specific activity  $> 1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131, the Gas Storage Tank(s) shall be sampled once per 24 hours, when radioactive materials are being added to the tank.

Specifications 3/4.11.3 through 3/4.11.4 have been deleted

Specifications 3/4.12.1 through 3/4.12.3 have been deleted

## INSTRUMENTATION

### BASES

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#### 3/4.3.3.6 POST-ACCIDENT INSTRUMENTATION

The OPERABILITY of the post-accident instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident.

#### 3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

#### 3/4.3.3.9 LOOSE PARTS MONITORING SYSTEM

OPERABILITY of the Loose Parts Monitoring System provides assurance that loose parts within the RCS will be detected. This capability is designed to ensure that loose parts will not collect and create undesirable flow blockages.

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Specifications 3/4.11.1.1 through 3/4.11.1.3 have been deleted

RADIOACTIVE STORAGE

3/4.11.1 LIQUID STORAGE

BASES

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3/4.11.1.4 LIQUID HOLDUP TANKS

The tanks listed in this Specification include all those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

Specifications 3/4.11.2.1 through 3/4.11.2.4 have been deleted.

## RADIOACTIVE STORAGE

### 3/4.11.2 GAS STORAGE

#### BASES

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#### 3/4.11.2.5 EXPLOSIVE GAS MIXTURE

This Specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas holdup system is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

#### 3/4.11.2.6 GAS STORAGE TANKS

The tanks included in this Specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification to a quantity that is less than the quantity which provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest exclusion area boundary will not exceed 0.5 rem in an event of 2 hours.

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest exclusion area boundary will not exceed 0.5 rem. This is consistent with Branch Technical Position ETSB 11-5 in NUREG-0800, July 1981.

Specifications 3/4.11.3 and 3/4.11.4 have been deleted.

Specifications 3/4.12.1 through 3/4.12.3 have been deleted

e. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM,
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,
- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,
- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1,

## ADMINISTRATIVE CONTROLS

- 8 ) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- 9 ) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR 50,
- 10 ) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

### f. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1 ) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2 ) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3 ) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT\*

6.9.1.8 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

\* A single submittal may be made for a multiple unit station.

ADMINISTRATIVE CONTROLS (Continued)

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SEMIANNUAL RADIOLOGICAL EFFLUENT RELEASE REPORT\*

6.9.1.9 The Semiannual Radioactive Effluent Release Report covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

\* A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator, Region II, within the time period specified for each report. These reports shall be submitted pursuant to the requirement of the applicable specification:

- a. Inservice Inspection Reviews, Specification 4.0.5, shall be reported within 90 days of completion.
- b. MODERATOR TEMPERATURE COEFFICIENT. Specification 3.1.1.4.
- c. RADIATION MONITORING INSTRUMENTATION. Specification 3.3.3.1, Table 3.3-6, Action 35.
- d. SEISMIC INSTRUMENTATION. Specifications 3.3.3.3 and 4.3.3.3.2.
- e. METEOROLOGICAL INSTRUMENTATION. Specification 3.3.3.4.
- f. FIRE DETECTION INSTRUMENTATION. Specification 3.3.3.7.
- g. LOOSE PARTS MONITORING SYSTEMS. Specification 3.3.3.9.
- h. REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY. Specification 3.4.8.
- i. OVERPRESSURE PROTECTION SYSTEMS. Specification 3.4.9.3.
- j. EMERGENCY CORE COOLING SYSTEMS. Specification 3.5.2 and 3.5.3.
- k. SETTLEMENT OF CLASS 1 STRUCTURES. Specification 3.7.12.
- l. GROUND WATER LEVEL - SERVICE WATER RESERVOIR. Specification 3.7.13.
- m. FIRE SUPPRESSION SYSTEMS. Specification 3.7.14.1, 3.7.14.2, 3.7.14.3, 3.7.14.4, and 3.7.14.6.
- n. RADIOACTIVE EFFLUENTS. As required by the ODCM.
- o. RADIOLOGICAL ENVIRONMENTAL MONITORING. As required by the ODCM.
- p. SEALED SOURCE CONTAMINATION. Specification 4.7.11.1.3.
- q. REACTOR COOLANT SYSTEM STRUCTURAL INTEGRITY. Specification 4.4.10. For any abnormal degradation of the structural integrity of the reactor vessel or the Reactor Coolant System pressure boundary detected during the performance of Specification 4.4.10, an initial report shall be submitted within 10 days after detection and a detailed report submitted within 90 days after the completion of Specification 4.4.10.

## ADMINISTRATIVE CONTROLS

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- r. CONTAINMENT STRUCTURAL INTEGRITY. Specification 4.6.1.6. For any abnormal degradation of the containment structure detected during the performance of Specification 4.6.1.6, an initial report shall be submitted within 10 days after the completion of Specification 4.6.1.6. A final report, which includes (1) a description of the condition of the liner plate and concrete, (2) inspection procedure, (3) the tolerance on cracking, and (4) the corrective actions taken, shall be submitted within 90 days after the completion of Specification 4.6.1.6.

### 6.10 RECORD RETENTION

- 6.10.1 The following records shall be retained for at least five years:
- a. Records and logs of facility operation covering time interval at each power level.
  - b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
  - c. ALL REPORTABLE EVENTS and Special Reports.
  - d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
  - e. Records of changes made to Operating Procedures.
  - f. Records of radioactive shipments.
  - g. Records of sealed source leak tests and results.
  - h. Records of annual physical inventory of all sealed source material of record.
  - i. Records of the annual audit of the Station Emergency Plan and implementing procedures.
  - j. Records of the annual audit of the Station Security Plan and implementation procedures.
- 6.10.2 The following records shall be retained for the duration of the Facility Operating License:

## ADMINISTRATIVE CONTROLS

- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of facility radiation and contamination surveys.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material released to the environs.
- f. Records of transient operational cycles for those facility components identified in Table 5.9-1.
- g. Records of reactor tests and experiments.
- h. Records of training and qualification for current members of the plant staff.
- i. Records of in-service inspections performed pursuant to these Technical Specifications.
- j. Records of Quality Assurance activities required by the QA Manual.
- k. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- l. Records of meetings of the SNSOC.
- m. Records of meetings of the System Nuclear Safety and Operating Committee to issuance of Amendment No. 30.
- n. Records of the service lives of all hydraulic and mechanical snubbers required to be OPERABLE by Technical Specification 3.7.10 including the date at which the service life commences and associated installation and maintenance records.
- o. Records of secondary water sampling and water quality.
- p. Records of Environmental Qualification which are covered under the provisions of Paragraph 6.13.
- q. Records of analyses required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analysis at a later date. This would include procedures effective at specified times and QA records showing that these procedures were followed.
- r. Records of reviews performed for changes made to the OFFSITE DOSE - CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

## ADMINISTRATIVE CONTROLS

### 6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

### 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 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.\* 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 level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist.

\*Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.13 DELETED

6.14 PROCESS CONTROL PROGRAM (PCP)

6.14.1 Changes to the PCP:

1. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.r. This documentation shall contain:
  - a) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - b) A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
2. Shall become effective after review and acceptance by the SNSOC and the approval of the Plant Manager.

ADMINISTRATIVE CONTROLS

6.15 OFFSITE DOSE CALCULATION MANUAL (ODCM)

Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.r. This documentation shall contain:
  - 1 ) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - 2 ) A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the SNSOC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Semiannual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6.16 DELETED



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 114  
License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company, et al., (the licensee) dated May 21, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;  
and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

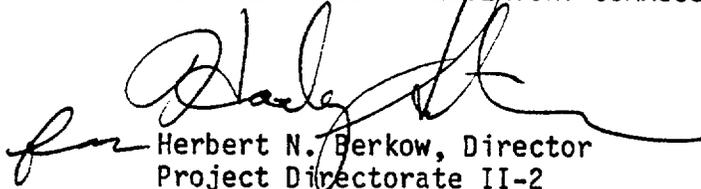
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-7 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 130, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: July 19, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 114

TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

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### ENGINEERED SAFETY FEATURE RESPONSE TIME

1.11 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable.

### FREQUENCY NOTATION

1.12 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.2.

### GASEOUS RADWASTE TREATMENT SYSTEM

1.13 A GASEOUS RADWASTE TREATMENT SYSTEM is the system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system offgases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment. The system is composed of the waste gas decay tanks, regenerative heat exchanger, waste gas charcoal filters, process vent blowers, waste gas surge tanks and waste gas diaphragm compressor.

### IDENTIFIED LEAKAGE

1.14 IDENTIFIED LEAKAGE shall be:

- a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

### MEMBER(S) OF THE PUBLIC

1.15 MEMBER(S) OF THE PUBLIC shall include all individuals who by virtue of their occupational status have no formal association with the plant. This category shall include non-employees of the licensee who are permitted to use portions of the site for recreational, occupational, or other purposes not associated with plant functions. This category shall not include non-employees such as vending machine servicemen or postmen who, as part of their formal job function, occasionally enter an area that is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

OFFSITE DOSE CALCULATION MANUAL

1.16 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semi-annual Radioactive Effluent Release Reports required by Specifications 6.9.1.8 and 6.9.1.9.

OPERABLE - OPERABILITY

1.17 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).

OPERATIONAL MODE - MODE

1.18 An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature specified in Table 1.1.

PHYSICS TESTS

1.19 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 14.0 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

PRESSURE BOUNDARY LEAKAGE

1.20 PRESSURE BOUNDARY LEAKAGE shall be leakage (except steam generator tube leakage) through a non-isolable fault in a Reactor Coolant System component body, pipe wall or vessel wall.

PROCESS CONTROL PROGRAM

1.21 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, tests and determinations to be made to ensure that the processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of the radioactive waste.

PURGE - PURGING

1.22 PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

## 1.0 DEFINITIONS (Continued)

### QUADRANT POWER TILT RATIO

1.23 QUADRANT POWER TILT RATIO shall be the ratio of the maximum upper ex-core detector calibrated output to the average of the upper ex-core detector calibrated outputs, or the ratio of the maximum lower ex-core detector calibrated output to the average of the lower ex-core detector calibrated outputs, whichever is greater. With one ex-core detector inoperable, the remaining three detectors shall be used for computing the average.

### RATED THERMAL POWER

1.24 RATED THERMAL POWER shall be a total reactor core heat transfer rate to the reactor coolant of 2893 MWt.

### REACTOR TRIP SYSTEM RESPONSE TIME

1.25 The REACTOR TRIP SYSTEM RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until loss of stationary gripper coil voltage.

### REPORTABLE EVENT

1.26 A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

### SHUTDOWN MARGIN

1.27 SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming all full length rod cluster assemblies (shutdown and control) are fully inserted except for the single rod cluster assembly of highest reactivity worth which is assumed to be fully withdrawn.

### SITE BOUNDARY

1.28 The SITE BOUNDARY shall be that line beyond which the land is not owned, leased or otherwise controlled by the licensee.

### SLAVE RELAY TEST

1.29 A SLAVE RELAY TEST shall be the energization of each slave relay and verification of OPERABILITY of each relay. The SLAVE RELAY TEST shall include a continuity check, as a minimum, of associated testable actuation devices.

### SOURCE CHECK

1.30 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to radiation. This applies to installed radiation monitoring systems.

## 1.0 DEFINITIONS (Continued)

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### STAGGERED TEST BASIS

- 1.32 A STAGGERED TEST BASIS shall consist of:
- a. A test schedule for n systems, subsystems, trains or other designated components obtained by dividing the specified test interval into n equal subintervals,
  - b. The testing of one system, subsystem, train or other designated component at the beginning of each subinterval.

### THERMAL POWER

1.33 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

### UNIDENTIFIED LEAKAGE

1.34 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE or CONTROLLED LEAKAGE.

### UNRESTRICTED AREA

1.35 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY where access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes.

### VENTILATION EXHAUST TREATMENT SYSTEM

1.36 A VENTILATION EXHAUST TREATMENT SYSTEM is the system designed and installed to reduce gaseous radiiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment (such a system is not considered to have any effect on noble gas effluents). Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

### VENTING

1.37 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

Specifications 3.3.3.9 and 4.3.3.10 have been deleted.

3.3.3.10 has been changed to 3.3.3.11

## INSTRUMENTATION

### EXPLOSIVE GAS MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

---

3.3.3.11 The explosive gas monitoring instrumentation channels shown in Table 3.3-13 shall be OPERABLE with their alarm/trip setpoints set to ensure that the limits of Specification 3.11.2.5 are not exceeded.

APPLICABILITY: As shown in Table 3.3-13

ACTION:

- a. With an explosive gas monitoring instrumentation channel alarm/trip setpoint less conservative than required by the above Specification, declare the channel inoperable, and take the ACTION shown in Table 3.3-13.
- b. With less than the minimum number of explosive gas monitoring instrumentation channels OPERABLE, for reasons other than a above, take the ACTION shown in Table 3.3-13. Exert best efforts to return the instruments to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 to explain why the inoperability was not corrected in a timely manner.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.3.3.11 Each explosive gas monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-13.

TABLE 3.3-13

EXPLOSIVE GAS MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1. DELETED			
2. WASTE GAS HOLDUP SYSTEM EXPLOSIVE GAS MONITORING SYSTEM (Shared with Unit 2)			
a. Hydrogen Monitor	1	• •	32
b. Oxygen Monitor	1	• •	32

• • During process vent system operation (treatment for primary system offgases).

ACTION 32 - With the number of channels OPERABLE less than required by the minimum channels OPERABLE requirement, operation of this system may continue for up to 14 days provided grab samples are taken and analyzed daily. With this channel inoperable, operation may continue provided grab samples are taken and analyzed: (1) every 4 hours during degassing operations and (2) daily during other operations.

TABLE 4.3-13

EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. DELETED					
2. WASTE GAS HOLDUP SYSTEM EXPLOSIVE GAS MONITORING SYSTEM					
a. Hydrogen Monitor	D	N.A.	Q(3)	M	**
b. Oxygen Monitor	D	N.A.	Q(4)	M	**

\* \* During process vent system operation (treatment for primary system offgases)

( 3 ) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent hydrogen, balance nitrogen, and
2. Four volume percent hydrogen, balance nitrogen.

( 4 ) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent oxygen, balance nitrogen, and
2. Four volume percent oxygen, balance nitrogen.

Specifications 3/4.11.1.1 through 3/4.11.1.3 have been deleted

## RADIOACTIVE STORAGE

### LIQUID HOLDUP TANKS

#### LIMITING CONDITION FOR OPERATION

---

3.11.1.4 The quantity of radioactive material contained in each of the following unprotected outdoor tanks shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

- a. Refueling Water Storage Tank
- b. Casing Cooling Storage Tank
- c. PG Water Storage Tank\*
- d. Boron Recovery Test Tank\*
- e. Any Outside Temporary Tank\*\*

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.11.1.4 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per week when radioactive materials are being added to the tank.

\*This is a shared system with Unit 1.

\*\*Tanks included in this Specification are those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste ion exchanger system.

Specifications 3/4.11.2.1 through 3/4.11.2.4 have been deleted

RADIOACTIVE STORAGE

3/4.11.2 GAS STORAGE

EXPLOSIVE GAS MIXTURE

LIMITING CONDITION FOR OPERATION

---

3.11.2.5 The concentration of oxygen in the waste gas decay tanks shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume and is less than 96% by volume.

APPLICABILITY: At all times.

ACTION:

- a. With the concentration of oxygen in the waste gas decay tanks greater than 2% by volume but less than or equal to 4% by volume, reduce the oxygen concentration to the above limits within 48 hours.
- b. With the concentration of oxygen in the waste gas decay tanks greater than 4% volume and the hydrogen concentration greater than 2% by volume, immediately suspend all additions of waste gases to the system and reduce the concentration of oxygen to less than or equal to 2% by volume without delay.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.11.2.5 The concentrations of hydrogen and oxygen in the waste gas decay tanks shall be determined to be within the above limits by continuously monitoring the waste gases in the waste gas decay tanks with the hydrogen and oxygen monitors required OPERABLE by Table 3.3-13 of Specification 3.3.3.11.

## RADIOACTIVE STORAGE

### GAS STORAGE TANKS

#### LIMITING CONDITION. FOR OPERATION

---

3.11.2.6 The quantity of radioactivity contained in each gas storage tank shall be limited to less than or equal to  $\leq 25,000$  curies noble gases (considered as Xe-133).

APPLICABILITY: At all times.

ACTION:

- a. With the quantity of radioactive material in any gas storage tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.11.2.6 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least once per month when the specific activity of the primary reactor coolant is  $\leq 1.0 \mu\text{Ci/gm DOSE EQUIVALENT I-131}$ . Under conditions which result in a specific activity  $> 1.0 \mu\text{Ci/gm DOSE EQUIVALENT I-131}$ , the Gas Storage Tank(s) shall be sampled once per 24 hours, when radioactive materials are being added to the tank.

Specifications 3/4.11.3 through 3/4.11.4 have been deleted

Specifications 3/4.12.1 through 3/4.12.3 have been deleted

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Specifications 3/4.11.1.1 through 3/4.11.1.3 have been deleted

## RADIOACTIVE STORAGE

### 3/4.11.1 LIQUID STORAGE

#### BASES

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#### 3/4.11.1.4 LIQUID HOLDUP TANKS

The tanks listed in this Specification include all those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

Specifications 3/4.11.2.1 through 3/4.11.2.4 have been deleted.

## RADIOACTIVE STORAGE

### 3/4.11.2 GAS STORAGE

#### BASES

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#### 3/4.11.2.5 EXPLOSIVE GAS MIXTURE

This Specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas holdup system is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

#### 3/4.11.2.6 GAS STORAGE TANKS

The tanks included in this Specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification to a quantity that is less than the quantity which provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest exclusion area boundary will not exceed 0.5 rem in an event of 2 hours.

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to an individual at the nearest exclusion area boundary will not exceed 0.5 rem. This is consistent with Branch Technical Position ETSB 11-5 in NUREG-0800, July 1981.

Specifications 3/4.11.3 and 3/4.11.4 have been deleted.

Specifications 3/4.12.1 through 3/4.12.3 have been deleted

## ADMINISTRATIVE CONTROLS

### b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for monitoring, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

### c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- (i) Identification of a sampling schedule for the critical variables and control points for these variables,
- (ii) Identification of the procedures used to measure the values of the critical variables,
- (iii) Identification of process sampling points,
- (iv) Procedures for the recording and management of data,
- (v) Procedures defining corrective actions for all control point chemistry conditions,
- (vi) A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action; and
- (vii) Monitoring of the condensate at the discharge of the condensate pumps for evidence of condenser inleakage. When condenser in-leakage is confirmed, the leak shall be repaired, plugged, or isolated within 96 hours.

### d. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for sampling and analysis,
- (iii) Provisions for maintenance of sampling and analysis equipment.

## ADMINISTRATIVE CONTROLS

### e. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM,
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,
- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,
- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1,

6.8.4 e. Radioactive Effluent Controls Program (Cont.)

- 8 ) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50.
- 9 ) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR 50,
- 10 ) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

f. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1 ) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2 ) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3 ) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

## ADMINISTRATIVE CONTROLS

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### 6.9 REPORTING REQUIREMENTS

#### ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

#### STARTUP REPORTS

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (a) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

ADMINISTRATIVE CONTROLS (Continued)

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT\*

6.9.1.8 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

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\* A single submittal may be made for a multiple unit station.

ADMINISTRATIVE CONTROLS (Continued)

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SEMIANNUAL RADIOLOGICAL EFFLUENT RELEASE REPORT\*

6.9.1.9 The Semiannual Radioactive Effluent Release Report covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

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\*A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

## ADMINISTRATIVE CONTROLS

### SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator, Region II, within the time period specified for each report. These reports shall be submitted pursuant to the requirement of the applicable specification:

- a. Inservice Inspection Reviews, Specification 4.0.5, shall be reported within 90 days of completion.
- b. MODERATOR TEMPERATURE COEFFICIENT. Specification 3.1.1.4.
- c. FIRE DETECTION INSTRUMENTATION. Specification 3.3.3.7.
- d. RADIATION MONITORING INSTRUMENTATION. Specification 3.3.3.1, TABLE 3.3-6 Action 35.
- e. REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY. Specification 3.4.8.
- f. OVERPRESSURE PROTECTION SYSTEMS. Specification 3.4.9.3.
- g. EMERGENCY CORE COOLING SYSTEMS. Specification 3.5.2 and 3.5.3
- h. SETTLEMENT OF CLASS 1 STRUCTURES. Specification 3.7.12.
- i. GROUND WATER LEVEL - SERVICE WATER RESERVOIR. Specification 3.7.13.
- j. FIRE SUPPRESSION SYSTEMS. Specification 3.7.14.1, 3.7.14.2, 3.7.14.3, 3.7.14.4, 3.7.14.5 and 3.7.14.6.
- k. PENETRATION FIRE BARRIERS. Specification 3.7.15.
- l. RADIOACTIVE EFFLUENTS. As required by the ODCM.
- m. RADIOLOGICAL ENVIRONMENTAL MONITORING. As required by the ODCM.
- n. SEALED SOURCE CONTAMINATION. Specification 4.7.11.1.3.
- o. REACTOR COOLANT SYSTEM STRUCTURAL INTEGRITY. Specification 4.4.10. For any abnormal degradation of the structural integrity of the reactor vessel or the Reactor Coolant System pressure boundary detected during the performance of Specification 4.4.10, an initial report shall be submitted within 10 days after detection and a detailed report submitted within 90 days after the completion of Specification 4.4.10.
- p. CONTAINMENT STRUCTURAL INTEGRITY. Specification 4.6.1.6. For any abnormal degradation of the containment structure detected during the performance of Specification 4.6.1.6, an initial report shall be submitted within 10 days after completion of Specification 4.6.1.6. A final report, which includes (1) a description of the condition of the liner plate and concrete, (2) inspection procedure, (3) the tolerance on cracking, and (4) the corrective actions taken, shall be submitted within 90 days after the completion of Specification 4.6.1.6.

6.10 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
- c. All REPORTABLE EVENTS and Special Reports.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
- e. Records of changes made to Operating Procedures.
- f. Records of radioactive shipments.
- g. Records of sealed source leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.
- i. Records of the annual audit of the Station Emergency Plan and implementing procedures.
- j. Records of the annual audit of the Station Security Plan and implementing procedures.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of facility radiation and contamination surveys.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material release to the environs.
- f. Records of transient or operational cycles for those facility components identified in Table 5.7-1.

## ADMINISTRATIVE CONTROLS (Continued)

- g. Records of reactor tests and experiments.
- h. Records of training and qualification for current members of the plant staff.
- i. Records of in-service inspections performed pursuant to these Technical Specifications.
- j. Records of Quality Assurance activities required by the QA Manual.
- k. Records of the service life of all hydraulic and mechanical snubbers required to be operable by Technical Specification 3.7.10 including the date at which the service life commences and associated installation and maintenance records.
- l. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- m. Records of meetings of the SNSOC.
- n. Records of meetings of the System Nuclear Safety and Operating Committee to issuance of Amendment No. 11.
- o. Records of secondary water sampling and water quality.
- p. Records for Environmental Qualification which are covered under the provisions of Paragraph 2.C(4) (3) of License No. NPF-7.
- q. Records of analyses required by the radiological environmental monitoring program that would permit evaluation of the accuracy of the analysis at a later date. This would included procedures effective at specified times and QA records showing that these procedures were followed.
- r. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.

### 6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

### 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 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 a high radiation area and entrance

ADMINISTRATIVE CONTROLS (Continued)

thereto shall be controlled by requiring issuance of a Radiation Work Permit\*. 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 level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in the protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist.

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\*Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry in high radiation areas.

## ADMINISTRATIVE CONTROLS

### 6.13 PROCESS CONTROL PROGRAM (PCP)

Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.r. This documentation shall contain:
  - 1 ) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - 2 ) A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the SNSOC and the approval of the Plant Manager.

### 6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.r. This documentation shall contain:
  - 1 ) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
  - 2 ) A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the SNSOC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Semiannual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6-15 is DELETED



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 130 AND 114 TO  
FACILITY OPERATING LICENSE NOS. NPF-4 AND NPF-7  
VIRGINIA ELECTRIC AND POWER COMPANY  
OLD DOMINION ELECTRIC COOPERATIVE  
NORTH ANNA POWER STATION, UNITS NO. 1 AND NO. 2  
DOCKET NOS. 50-338 AND 50-339

INTRODUCTION

By letter dated May 21, 1990, the Virginia Electric and Power Company (the licensee) proposed changes to the Technical Specifications (TS) for the North Anna Power Station, Units 1 and 2 (NA-1&2). Specifically, the proposed changes would relocate the Radiological Effluent TS (RETS) to the Offsite Dose Calculation Manual (ODCM) or the Process Control Program (PCP), as appropriate. The proposed changes are in accordance with the guidance provided in NRC Generic Letter (GL) 89-01, dated January 31, 1989. GL 89-01 stated that the NRC would approve a TS amendment to delete RETS if the requirements would be relocated to the ODCM or PCP.

DISCUSSION

The following changes would be made to the NA-1&2 TS in order to relocate the RETS to the ODCM or PCP.

1. The following items are deleted from the index:

Under Section 1.0 - "solidification"

Under Section 3/4.3.3 - "Radioactive Liquid Effluent Monitoring  
Instrumentation"

Under Section 3/4.11.1:

"Concentration"

"Dose"

"Liquid Radwaste Treatment"

Under Section 3/4.11.2:

"Dose Rate"

"Dose - Noble Gases"

"Dose - Iodine - 131, Tritium, and Radionuclides in Particulate Form"

"Gaseous Radwaste Treatment"

Section 3/4.11.3

Section 3/4.11.4

Section 3/4.12 and all subsections

Bases Section 3/4.11.3

Bases Section 3/4.11.4

Bases Section 3/4.12 and all subsections

Section 6.16 (6.15 for Unit 2)

2. In the index under Section 3/4.3.3, "Radioactive Gaseous Effluent" would be change to "Explosive Gas."
3. In the index, the word "Effluents" in items 3/4.11, 3/4.11.1 and 3/4.11.2 would be changed to "Storage" and "Gaseous" in item 3/4.11.2 would be changed to "gas". The same changes would be made to the Bases index items.
4. Specification 1.16, the ODCM definition, would be replaced with item number 1.17 from Enclosure 3 of the Generic Letter, except references to Specifications 6.9.1.3 and 6.9.1.4 are changed to 6.9.1.8 and 6.9.1.9. The revision would reflect the expanded role of the ODCM.
5. Specification 1.21, the PCP definition, would be replaced with item number 1.22 from Enclosure 3 of the Generic Letter. This adds references to 10 CFR Part 61 and burial ground requirements which were previously included in "other requirements."
6. Section 1.29 would be deleted. The requirements are added to the PCP.
7. Section 3.3.3.10 (3.3.3.9 for NA-2) and 4.3.3.10 would be deleted. The requirements would be added to the ODCM.
8. Although not reflected in the title, Specifications 3.3.3.11 (3.3.3.10 for Unit 2) and 4.3.3.11 cover explosive gas storage in addition to radioactive gaseous effluents. The change would delete effluent monitoring requirements, which have been added to the ODCM, but would retain the explosive monitoring requirements.
- 8a. Unit 2 Specification 3.3.3.10 would be renumbered 3.3.3.11 for consistency with its corresponding surveillance requirement and NA-1 TS.
- 8b. The phrase "radioactive gaseous effluent" in the title of Specification 3.3.3.11 and Tables 3/4.3-14 (NA-1) and 3/4.3-13 (NA-2) and the first sentences of 3.3.3.11, 3.3.3.11a, 3.3.3.11b and 4.3.3.11 would be replaced with "explosive gas."
- 8c. The reference to Specifications 3.11.2.1 in 3.3.3.11 would be changed to 3.11.2.5.
- 8d. The last sentence of 3.3.11, before "Applicability" would be deleted.
- 8e. "With a" 3.3.3.11a would be changed to "With an."
- 8f. The phrase "without delay suspend the release of radioactive gaseous effluents monitored by the affected channel or" in 3.3.3.11a would be deleted.
- 8g. The phrase "or change the setpoint so it is acceptably conservative" in 3.3.3.11a would be replaced with "and take the ACTION shown in Table 3.3-14."
- 8h. The phrase "explain in the next Semiannual Radioactive Effluent Release Report" in 3.3.3.11b would be replaced with "prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 to explain."

- 8i. The phrase "SOURCE CHECK" in 4.3.3.11 would be deleted.
- 8j. Items 1, 3 and 4 in Table 3.3-14 would be deleted.
- 8k. In Table 3.3-14, Table Notation the phrase "\*At all times" and paragraphs for ACTION numbers 30, 31, 31A, 33 and 34 would be deleted.
- 8l. Items 1, 3, and 4 in Table 4.3-14 would be deleted.
- 8m. Items \*, 1, 2 and 5 in Table 4.3-14 Table Notation would be deleted.
9. The word "Effluents" in the titles of Section 3/4.11, 3/4.11.1 and 3/4.11.2 would be changed to "Storage."
10. All subsections of 3/4.11.1 and 3/4.11.2, except 3/4.11.1.4 "Liquid Holdup Tanks," 3/4.11.2.5 "Explosive Gas Mixture" and 3/4.11.2.6 "Gas Storage Tanks" would be deleted.
11. All of Section 3/4.12, "Radiological Environmental Monitoring" would be deleted.
12. The word "Effluents" in the titles of Bases sections 3/4.11, 3/4.11.1 and 3/4.11.2 would be changed to "Storage."
13. The Bases for Sections 3/4.3.3.9, 3/4.3.3.10, 3/4.11.1.1, 3/4.11.1.2, 3/4.11.1.3, 3/4.11.2.1, 3/4.11.2.2, 3/4.11.2.3, 3/4.11.2.4, 3/4.11.3, 3/4.11.4, 3/4.12.1, 3/4.12.2 and 3/4.12.3 would be deleted.
14. A new Specification, 6.8.4e, "Radioactive Effluent Controls Program, would be added. This is the same as the Specification 6.8.4g in Enclosure 3 of Generic Letter 89-01 except paragraph 10, which is not applicable to PWRs, is omitted and paragraph 11 is renumbered 10. The new section contains administrative controls removed from 3/4.11.
15. A new Specification, 6.8.4f, "Radioactive Environmental Monitoring Program," would be added. This is the same as the Specification 6.8.4g in Enclosure 3 of the Generic Letter. The new section contains administrative controls that were in 3/4.12.
16. Specification 6.9.1.8, "Annual Radiological Environmental Operating Report" would be replaced with the corresponding 6.9.1.3 from Enclosure 3 of the Generic Letter.
17. Specification 6.9.1.9, "Semiannual Radioactive Effluent Release Report" would be replaced with the corresponding 6.9.1.4 from Enclosure 3 of the Generic Letter. The replacement Specifications 6.9.1.8 and 6.9.1.9 are more simple and general. The details would be relocated to the ODCM.
18. In NA-1 Specification 6.9.2.n and NA-2 Specification 6.9.2.l, the phrase "Specifications 3.11.1.2, 3.11.1.3, 3.11.2.2, 3.11.2.3, 3.11.2.4 and 3.11.4" would be changed to "as required by the ODCM."
19. In NA-1 Specification 6.9.2.o and NA-2 Specification 6.9.2.m, the phrase "Specification 3.12.1.b" would be replaced with "As required by the ODCM."

20. Under 6.10.2 records to be retained for the duration of the license, a new section r would added be as follows:

"r. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM."

21. Section 6.14.1, which deals with PCP changes, would be replaced with 6.13 from Enclosure 3 of the Generic Letter, except that reference to 6.10.3o is changed to 6.10.2r and "URG" is changed to "SNSOC." This removes the requirement that the licensee send changes to the NRC and adds the requirement that they be approved by the Plant Manager.
22. Section 6.15, "Offsite Dose Calculation Manual (ODCM)" would be replaced with the corresponding Section 6.14 from Enclosure 3 of the Generic Letter except that reference to 6.10.3o is changed to 6.10.3r and "URG" is changed to "SNSOC." This adds the requirement that the Plant Manager approve changes. Also, instead of sending changes to NRC, complete documents are submitted.
23. Section 6.16, "Major Changes to Radioactive Solid Waste Treatment Systems" and all subsections would be deleted.

The requirements presently specified in the NA-1&2 TS would be removed to either the ODCM or PCP as specified below:

<u>Specification</u>	<u>Addition</u>
1.29	PCP
3/4.3.3.10	ODCM 6.2.2 TS 6.8.4.e.1
3/4.3.3.11 (except explosive gas)	ODCM 6.3.2 TS 6.8.4.e.1
3/4.11.1.1	ODCM 6.2.1 TS 6.8.4.e.2-3
3/4.11.1.2	ODCM 6.2.3 TS 6.8.4.e.4-5
3/4.11.1.3	ODCM 6.2.4 TS 6.8.4.e.6
3/4.11.2.1	ODCM 6.3.1 TS 6.8.4.e.3 TS 6.8.4.e.7
3/4.11.2.2	ODCM 6.3.3 TS 6.8.4.e.5 TS 6.8.4.e.8
3/4.11.2.3	ODCM 6.3.4 TS 6.8.4.e.5 TS 6.8.4.e.9
3/4.11.2.4	ODCM 6.3.5 TS 6.8.4.e.6
3/4.11.3	PCP
3/4.11.4	ODCM 6.4 TS 6.8.4.e.10

Specification

Addition

3/4.12.1	ODCM 6.5.1
	TS 6.8.4.f.1
3/4.12.2	ODCM 6.5.2
	TS 6.8.4.f.2
3/4.12.3	ODCM 6.5.3
	TS 6.8.4.f.3
6.9.1.8	ODCM 6.6.1
6.9.1.9	ODCM 6.6.2
6.16	PCP

EVALUATION

The proposed changes, as discussed above, are based on NRC GL 89-01 dated January 31, 1989. These changes follow the guidance as specified in GL 89-01 for removing RETS to the ODCM or PCP, as appropriate. In addition, the changes do not alter the conditions or assumptions of any accident analysis, as stated in the NA-1&2 Updated Final Safety Analysis Report. Therefore, we find the proposed changes to be acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). This amendment also involves changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, with respect to these items, the amendments meet eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: July 19, 1990

Principal Contributor:  
Leon B. Engle