FENOC

FirstEnergy Nuclear Operating Company

Beaver Valley Power Station
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Lew W. Myers
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May 22, 2001
L-01-068

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

Subject: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
License Amendment Request Nos. 291 and 163

Pursuant to 10 CFR 50.90, FirstEnergy Nuclear Operating Company requests an amendment to the above licenses in the form of changes to the technical specifications (TS).

The proposed license amendment request (LAR) will revise the Beaver Valley Power Station (BVPS) Unit 1 and 2 TS to implement improvements endorsed in the NRC's Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, 58 FR 39132, July 22, 1993 (the policy statement). This LAR proposes changes that implement the Explosive Gas and Storage Tank Radioactivity Monitoring Program from the Improved Standard Technical Specifications (ISTS) for Westinghouse Plants. The implementation of this standard TS program effectively replaces four TS in each unit and allows those TS to be relocated to a licensee controlled document consistent with the application of the TS screening criteria from 10 CFR 50.36 and with the guidance in the policy statement. This LAR also proposes an administrative change to the Annual Radioactive Release Report requirements that is consistent with the corresponding report in the ISTS.

This LAR is part of the first phase of the BVPS plan to convert the current TS to the ISTS contained in NUREG-1431. BVPS currently plans to complete the conversion to the ISTS in two main phases. The first phase of the conversion involves changes to the BVPS TS that relocate TS consistent with the policy statement guidance and adopt certain administrative programs applicable to BVPS. The second phase of the BVPS conversion plan will include a single LAR that will encompass the re-organization, reformat, and expanded scope of the remaining TS consistent with the applicable content of NUREG-1431 and the licensing and design basis of the BVPS units. The second phase LAR will also include the development and submittal of the BVPS expanded bases documents associated with each applicable TS in the ISTS. The second phase of the BVPS conversion plan is scheduled to start when Revision 2 to NUREG-1431 is approved.

A001

The BVPS plan to provide separate LAR(s) for the conversion to the ISTS was previously discussed in a meeting with the NRC staff on October 14, 1999, and documented in the NRC minutes for that meeting dated November 18, 1999. By converting to the ISTS in two phases, the impact of an ISTS conversion on BVPS and NRC resources will be spread over time and effectively reduced. In addition, the submittal of this LAR allows for an early start of the BVPS ISTS conversion project. During the October 14, 1999 meeting with the NRC, the changes being introduced to the standard TS in Revision 2 to NUREG-1431 were discussed. This revision to the standard TS contains a significant number of changes that will affect the BVPS TS conversion. Due to the number and scope of the changes, the NRC staff recommended that BVPS utilize Revision 2 for the conversion effort. However, the approval of Revision 2 to NUREG-1431 was delayed. Therefore, in order to begin the conversion process, BVPS is focusing first on the TS requirements that are normally relocated during a conversion. This part of the conversion process can be accomplished separately and is not significantly affected by the revised content of NUREG-1431.

The proposed TS changes for Unit No. 1 and Unit No. 2 are presented in Attachments A-1 and A-2, respectively. The safety analysis (including the no significant hazards evaluation) is presented in Attachment B.

These changes have been reviewed by the Beaver Valley review committees. The changes were determined to be safe and do not involve a significant hazard consideration as defined in 10 CFR 50.92 based on the attached safety analysis. Considering that this LAR will create a new TS program, an implementation period of up to 90 days is requested following the effective date of this amendment.

If there are any questions concerning this matter, please contact Mr. Thomas S. Cosgrove, Manager, Regulatory Affairs at 724-682-5203.

Sincerely,

Mark Pearson for

Lew W. Myers

c: Mr. L. J. Burkhart, Project Manager
Mr. D. M. Kern, Sr. Resident Inspector
Mr. H. J. Miller, NRC Region I Administrator
Mr. D. A. Allard, Director BRP/DEP
Mr. L. E. Ryan (BRP/DEP)

Subject: **Beaver Valley Power Station, Unit No. 1 and No. 2**
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
License Amendment Request Nos. 291 and 163

I, Marc P. Pearson, being duly sworn, state that I am Director, Nuclear Services of FirstEnergy Nuclear Operating Company (FENOC), that I am authorized to sign and file this submittal with the Nuclear Regulatory Commission on behalf of FENOC, and that the statements made and the matters set forth herein pertaining to FENOC are true and correct to the best of my knowledge and belief.

FirstEnergy Nuclear Operating Company

Marc P. Pearson
Director, Nuclear Services - FENOC

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF BEAVER

Subscribed and sworn to me, a Notary Public, in and for the County and State above named, this 22 th day of May, 2001.

Tracey A. Baczek
My Commission Expires:

Notarial Seal
Tracey A. Baczek, Notary Public
Shippingport Boro, Beaver County
My Commission Expires Aug. 16, 2001
Member, Pennsylvania Association of Notaries

ATTACHMENT A-1

Beaver Valley Power Station, Unit No. 1
License Amendment Request No. 291

The following is a list of the affected pages:

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

BASES

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BASES

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BASES

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BASES

DESIGN FEATURES

ADMINISTRATIVE CONTROLS

(proposed Wording)

DELETE PAGE

Specification 3.3.3.9 has been moved to the OFFSITE DOSE CALCULATION MANUAL.
Specification 3.3.3.10 has been partially moved to the OFFSITE DOSE CALCULATION MANUAL and the remaining part renumbered as 3.3.3.11.

(Proposed Wording)

EXPLOSIVE GAS MONITORING INSTRUMENTATION → RELOCATE

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 3.11.2.6 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, take the ACTION shown in Table 3.3-13. Restore the inoperable instrumentation to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a Special Report in accordance with 10 CFR 50.4 within 30 days to explain why this inoperability was not corrected in a timely manner.

c. The provisions of Specification 3.0.3 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.

DELETE Page

(Proposed Wording)

TABLE 3.3-13

EXPLOSIVE GAS MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
1. Waste Gas Decay Tanks Monitor			
a. Oxygen Monitor (O_2-AS-GW-110-1,2)	(2)	**	31

** During waste gas decay tank filling operation.

RELOCATE

DELETE PAGE

(Proposed Wording)

TABLE 3.3-13, (Continued)

ACTION STATEMENTS

ACTION 27 - (This ACTION is not used)

ACTION 28 - (This ACTION is not used)

ACTION 29 - (This ACTION is not used)

ACTION 30 - (This ACTION is not used)

ACTION 31 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue provided grab samples are taken and analyzed at least once per 24 hours. With both channels inoperable, operation may continue provided grab samples are taken and analyzed at least once per 4 hours during degassing operations and at least once per 24 hours during other operations.

ACTION 32 - (This ACTION is not used)

RELOCATE

Delete Page

(Proposed Wording)

TABLE 4.3-13

EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST
1. Waste Gas Decay Tanks Monitor			
a. Oxygen Monitor (O_2-AS-GW-110-1,2)	D**	Q(1)	M

RELOCATE

** During waste gas decay tank filling operation.

RELOCATE

DELETE Page

(Proposed Wording)

TABLE 4.3-13 (Continued)

TABLE NOTATION

(1) 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

RELOCATE

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(Proposed Wording)

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Specifications 3.11.1.1 through 3.11.1.3 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(Proposed Wording)

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3/4.11 RADIOACTIVE EFFLUENTS

3/4.11.1 LIQUID EFFLUENTS → RELOCATE

LIQUID HOLDUP TANKS

LIMITING CONDITION FOR OPERATION

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

a. BR-TK-6A (Primary Water Storage Tank)

b. BR-TK-6B (Primary Water Storage Tank)

c. LW-TK-7A (Steam Generator Drain Tank)

d. LW-TK-7B (Steam Generator Drain Tank)

e. Miscellaneous temporary outside radioactive liquid storage tanks.

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, and

b. Submit a Special Report in accordance with 10 CFR 50.4 within 30 days and include a schedule and a description of activities planned and/or taken to reduce the contents to within the specified limits.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.4.1 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 7 days when radioactive materials are being added to the tank.

(Proposed Wording)

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Specifications 3.11.2.1 through 3.11.2.4 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(proposed Wording)

DELETE PAGE

RADIOACTIVE EFFLUENTS

3/4.11.2 GASEOUS EFFLUENTS → RELOCATE

GAS STORAGE TANKS

LIMITING CONDITION FOR OPERATION

3.11.2.5 The quantity of radioactivity contained in each gas storage tank shall be limited to less than or equal to 52,000 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, and

b. Submit a Special Report in accordance with 10 CFR 50.4 within 30 days and include a schedule and a description of activities planned and/or taken to reduce the contents to within the specified limits.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.5.1 The quantity of radioactive material contained in each gas storage tank shall be determined to be within the above limit at least once per 24 hours when radioactive materials are being added to the tank. Performance of this surveillance is required when the gross concentration of the primary coolant is greater than 100 uCi/ml.

(Proposed Wording)

DELETE PAGE

EXPLOSIVE GAS MIXTURE → RELOCATE

LIMITING CONDITION FOR OPERATION

3.11.2.6 The concentration of oxygen in the waste gas holdup system shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume.

APPLICABILITY: At all times.

ACTION:

a. With the concentration of oxygen in the waste gas holdup system greater than 2% by volume but less than or equal to 4% by volume, immediately suspend all additions of waste gases to the gaseous waste decay tank and reduce the concentration of oxygen to less than or equal to 2% by volume within 48 hours.

b. With the concentration of oxygen in the waste gas holdup system greater than 4% by volume and the hydrogen concentration greater than 4% by volume, immediately suspend all additions of waste gases to the affected tank and reduce the concentration of oxygen to less than or equal to 4% by volume, then take ACTION a, above.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.6.1 The concentrations of oxygen in the waste gas holdup system shall be determined to be within the above limits by continuously monitoring the waste gases in the waste gas holdup system with the oxygen monitors required OPERABLE by Table 3.3-13 of Specification 3.3.3.11 or monitoring in conjunction with its associated action statement.

(Proposed Wording)

Delete Page

Specification 3.11.3.1 has been moved to the PROCESS CONTROL PROGRAM.
Specification 3.11.4.1 has been moved to the OFFSITE DOSE CALCULATION MANUAL.

(Proposed Wording)

DELETE PAGE

Specifications 3.12.1 through 3.12.3 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(Proposed Wording)

INSERT NEW Program 6.8.6.c

3) Participation in an 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.

6.9 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

6.9.1 Occupational Radiation Exposure Report

- - - - - - - - - - - - - - - - - - NOTE - - - - - - - - - - - - - - - - - -

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

- -

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

(Proposed Wording)

FROM NUREG-1431
Westinghouse Standard Tech Specs

INSERT To Page 6-16 (Unit 1)

6.8.6.C

5.5.12

Waste Gas Decay Tanks

Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], [the quantity of radioactivity contained in gas storage tanks or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks]. The gaseous radioactivity quantities shall be determined following the methodology in [Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]. The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"].

The program shall include:

1 ~~a~~. The limits for concentrations of hydrogen and oxygen in the [Waste Gas Holdup System] and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion),

Waste Gas Decay Tank

2 ~~b~~. A surveillance program to ensure that the quantity of radioactivity contained in [each gas storage tank and fed into the offgas treatment system] is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents], and

>

3 ~~c~~. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes,

ensure that the concentration of hydrogen and oxygen is maintained below the flammability limits.

INSERT TO Page 6-16 (continued)

6.8.6.C

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

greater

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

Specifications

6.9.2 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

- - - - - - - - - - - - - - - - - - NOTE - - - - - - - - - - - - - - - - - -

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

- -

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 15 of each year. The report shall include summaries, interpretations, and analyses 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 the Offsite Dose Calculation Manual (ODCM) and in 10 CFR Part 50 Appendix I Sections IV.B.2, IV.B.3, and IV.C.

6.9.3 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

- - - - - - - - - - - - - - - - - - NOTE - - - - - - - - - - - - - - - - - -

A single submittal may be made for a multi-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.

- -

* The Annual Radioactive Effluent Release Report covering the operation of the unit during the previous 12 months of operation shall be submitted before April 1 of each year in accordance with 10 CFR 50.36a. 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 consistent with the objectives outlined in the ODCM and Process Control Program (PCP) and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I Section IV.B.1.

prior to May 15 — year

6.9.4 MONTHLY OPERATING REPORT

Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the pressurizer power operated relief valves or pressurizer safety valves, shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

* Reviewers NOTE
Includes changes approved IN TSTF-152

(Proposed Wording)

BASES

3/4.3.3.11 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

→ RELOCATE

(proposed Wording)

DELETE PAGE

BASES

RELOCATE

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.4 LIQUID HOLDUP TANKS

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 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.5 GAS STORAGE TANKS

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting total body exposure to an individual located at the nearest exclusion area boundary for two hours immediately following the onset of the release will not exceed 0.5 rem. The specified limit restricting the quantity of radioactivity contained in each gas storage tank was specified to ensure that the total body exposure resulting from the postulated release remained a suitable fraction of the reference value set forth in 10 CFR 100.11 (a)(1).

3/4.11.2.6 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. Isolation of the affected tank for purposes of purging and/or discharge permits the flammable gas concentrations of the tank to be reduced below the lower explosive limit in a hydrogen rich system. 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.

(Proposed Wording)

ATTACHMENT A-2

Beaver Valley Power Station, Unit No. 2
License Amendment Request No. 163

The following is a list of the affected pages:

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LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

(Proposed Wording)

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LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

BASES

(Proposed Wording)

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BASES

(Proposed Wording)

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BASES

DESIGN FEATURES

ADMINISTRATIVE CONTROLS

(proposed Wording)

DELETE PAGE

Specification 3.3.3.9 has been moved to the OFFSITE DOSE CALCULATION MANUAL.
Specification 3.3.3.10 has been partially moved to the OFFSITE DOSE CALCULATION MANUAL and the remaining part renumbered 3.3.3.11.

(Proposed Wording)

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 3.11.2.6 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, take the ACTION shown in Table 3.3-13. Restore the inoperable instrumentation to OPERABLE status within 30 days and, if unsuccessful, prepare and submit a Special Report in accordance with 10 CFR 50.4 within 30 days to explain why the inoperability was not corrected in a timely manner.

c. The provisions of Specification 3.0.3 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.

→ RELOCATE

Delete Page

(proposed Wording)

TABLE 3.3-13

EXPLOSIVE GAS MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
1. Gaseous Waste System Surge Tank Discharge			
a. Oxygen Monitor (2GWS-OA100A & B)	2	*	31

RELOCATE

* During waste gas decay tank filling operation.

Delete Page

(Proposed Wording)

TABLE 3.3-13 (Continued)

ACTION STATEMENTS

ACTION 27 - (This ACTION is not used)

ACTION 28 - (This ACTION is not used)

ACTION 29 - (This ACTION is not used)

ACTION 30 - (This ACTION is not used)

ACTION 31 - With the number of channels OPERABLE one less than required by the MINIMUM Channels OPERABLE requirement, operation of this system may continue provided grab samples are taken and analyzed at least once per 24 hours. With both channels inoperable, operation may continue provided grab samples are taken and analyzed at least once per 4 hours during degassing operations and at least once per 24 hours during other operations.

ACTION 32 - (This ACTION is not used)

RELOCATE

Delete Page

(Proposed Wording)

TABLE 4.3-13

Explosive Gas Monitoring Instrumentation Surveillance Requirements

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST
1. Gaseous Waste System Surge Tank Discharge			
a. Oxygen Monitor (2GWS-OA100A & B)	D**	Q(1)	M

RELOCATE

Delete Page

** During waste gas decay tank filling operation.

(Proposed Wording)

TABLE 4.3-13 (Continued)

TABLE NOTATION

(1) 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

→ RELOCATE

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(proposed Wording)

DELETE PAGE

3/4.3.4 (This Specification number is not used.)

(Proposed Wording)

Delete Page

Specifications 3.11.1.1 through 3.11.1.3 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(proposed Wording)

Delete Page

3/4.11 RADIOACTIVE EFFLUENTS

3/4.11.1 LIQUID EFFLUENTS

LIQUID HOLDUP TANKS

LIMITING CONDITION FOR OPERATION

3.11.1.4 The quantity of radioactive material contained in each miscellaneous temporary outside radioactive liquid storage tank shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any of the above 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, and

b. Submit a Special Report in accordance with 10 CFR 50.4 within 30 days and include a schedule and a description of activities planned and/or taken to reduce the contents to within the specified limits.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.4.1 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 7 days when radioactive materials are being added to the tank.

RELOCATE

(Proposed Wording)

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Specifications 3.11.2.1 through 3.11.2.4 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(proposed Wording)

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RADIOACTIVE EFFLUENTS

3/4.11.2 GASEOUS EFFLUENTS

GASEOUS WASTE STORAGE TANKS → RELOCATE

LIMITING CONDITION FOR OPERATION

3.11.2.5 The quantity of radioactivity contained in any connected group of gaseous waste storage tanks shall be limited to less than or equal to 19,000 curies noble gases (considered as Xe-133).

APPLICABILITY: At all times.

ACTION:

a. With the quantity of radioactive material in any connected group of gaseous waste storage tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tanks and within 48 hours reduce the tanks' contents to within the limit, and

b. Submit a Special Report in accordance with 10 CFR 50.4 within 30 days and include a schedule and a description of activities planned and/or taken to reduce the contents to within the specified limits.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.5.1 The quantity of radioactive material contained in any connected group of gaseous waste storage tanks shall be determined to be within the above limit at least once per 24 hours when radioactive materials are being added to the tanks.

(proposed Wording)

EXPLOSIVE GAS MIXTURE → RELOCATE

DELETE Page

LIMITING CONDITION FOR OPERATION

3.11.2.6 The concentration of oxygen in the waste gas holdup system shall be limited to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume.

APPLICABILITY: At all times

ACTION:

a. With the concentration of oxygen in the waste gas holdup system greater than 2% by volume but less than or equal to 4% by volume, immediately suspend all additions of waste gases to the gaseous waste decay tank and reduce the concentration of oxygen to less than or equal to 2% within 48 hours.

b. With the concentration of oxygen in the waste gas holdup system greater than 4% by volume and the hydrogen concentration greater than 4% by volume, immediately suspend all additions of waste gases to the affected tank and reduce the concentration of oxygen to less than or equal to 4% by volume, then take action a, above.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.2.6.1 The concentrations of oxygen in the waste gas holdup system shall be determined to be within the above limits by continuously monitoring the waste gases in the waste gas holdup system with the oxygen monitors required OPERABLE by Table 3.3-13 of Specification 3.3.3.11 or monitoring in conjunction with its associated action statement.

(Proposed Wording)

Delete Page

Specification 3.11.3.1 has been moved to the PROCESS CONTROL PROGRAM.
Specification 3.11.4.1 has been moved to the OFFSITE DOSE CALCULATION MANUAL.

(proposed Wording)

DELETE PAGE

Specifications 3.12.1 through 3.12.3 have been moved to the OFFSITE DOSE CALCULATION MANUAL.

(Proposed Wording)

PROCEDURES (Continued)

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.

b. 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

INSERT NEW Program 6.8.6.C

3) Participation in an 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.

6.9 REPORTING REQUIREMENTS

The following reports shall be submitted in accordance with 10 CFR 50.4.

6.9.1 Occupational Radiation Exposure Report

- - - - - - - - - - - - - - - - - - NOTE - - - - - - - - - - - - - - - - - -
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.
- -

(Proposed Wording)

FROM NUREG-1431
WESTINGHOUSE STANDARD TECH SPECS

INSERT TO Page 6-16 (unit 2)

6.8.6.c

5.5.12

Gaseous Waste Storage Tanks

Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], [the quantity of radioactivity contained in gas storage tanks or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks]. The gaseous radioactivity quantities shall be determined following the methodology in [Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]. The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"].

The program shall include:

1. ~~a.~~ The limits for concentrations of hydrogen and oxygen in the [Waste Gas Holdup System] and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion),

connected group of Gaseous Waste Storage Tanks

2. ~~b.~~ A surveillance program to ensure that the quantity of radioactivity contained in [each gas storage tank and fed into the offgas treatment system] is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents], and

>

3. ~~c.~~ A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes,

ensure that the concentration of hydrogen and oxygen is maintained below the flammability limits.

INSERT To Page 6-16 (continued)

6.8.6.c

5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

greater

or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

The provisions of SR ~~3~~4.0.2 and SR ~~3~~4.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

Specifications

Reviewers Note -
* Includes changes approved in TSTF-152

REPORTING REQUIREMENTS (Continued)

6.9.3 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

- - - - - - - - - - - - - - - - - - NOTE - - - - - - - - - - - - - - - - - -
A single submittal may be made for a multi-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.
- -

* The Annual Radioactive Effluent Release Report (prior to May) covering the (year) operation of the unit during the previous (12 months of operation) shall be submitted (before April) 1 of each year in accordance with 10 CFR 50.36a. 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 consistent with the objectives outlined in the ODCM and Process Control Program (PCP) and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I Section IV.B.1.

6.9.4 MONTHLY OPERATING REPORT

Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the pressurizer power operated relief valves or pressurizer safety valves, shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

6.9.5 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLP for the following:

3.1.3.5	Shutdown Rod Insertion Limits
3.1.3.6	Control Rod Insertion Limits
3.2.1	Axial Flux Difference-Constant Axial Offset Control
3.2.2	Heat Flux Hot Channel Factor-$F_Q(Z)$
3.2.3	Nuclear Enthalpy Rise Hot Channel Factor-$F^N_{\Delta H}$

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (Westinghouse Proprietary).

(proposed Wording)

BASES

3/4.3.3.3 (This Specification number is not used.)

3/4.3.3.4 (This Specification number is not used.)

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

3/4.3.3.6 (This Specification number is not used).

3/4.3.3.7 (This Specification number is not used).

3/4.3.3.8 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

3/4.3.3.11 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the waste gas holdup system. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

3/4.3.4 (This Specification number is not used.)

RELOCATE

(proposed Wording)

DELETE PAGE

BASES

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.4 LIQUID HOLDUP TANKS

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 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.5 GASEOUS WASTE STORAGE TANKS

Restricting the quantity of radioactivity contained in any connected group of gaseous waste storage tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting total body exposure to an individual located at the nearest exclusion area boundary for two hours immediately following the onset of the release will not exceed 0.5 rem. The specified limit restricting the quantity of radioactivity contained in any connected group of gaseous waste storage tanks was specified to ensure that the total body exposure resulting from the postulated release remained a suitable fraction of the reference value set forth in 10 CFR 100.11(a)(1). The curie content limit is applied individually to each gaseous waste storage tank and collectively to the number of unisolated gaseous waste storage tanks.

3/4.11.2.6 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. Isolation of the affected tank for purposes of purging and/or discharge permits the flammable gas concentrations of the tank to be reduced below the lower explosive limit in a hydrogen rich system. 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.

RELOCATE

(Proposed Wording)

ATTACHMENT B

Beaver Valley Power Station, Unit Nos. 1 and 2
License Amendment Request Nos. 291 and 163
Explosive Gas and Storage Tank Radioactivity Monitoring Program

A. DESCRIPTION OF AMENDMENT REQUEST

This license amendment request (LAR) proposes to revise the Beaver Valley Power Station (BVPS) Unit 1 and 2 technical specifications (TS) to implement improvements endorsed in the NRC's Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, 58 FR 39132, July 22, 1993 (the policy statement). The policy statement describes the benefits to be derived from the Improved Standard TS (ISTS) and encouraged licensees to use the ISTS as the basis for plant-specific TS amendments and for complete conversions to the ISTS. The policy statement also clarifies that "licensees may adopt portions of the improved STS without fully implementing all STS improvements."

The changes proposed in this LAR are part of the first phase of the BVPS conversion to the ISTS for Westinghouse Plants contained in NUREG-1431. The second phase of the BVPS conversion will include the reformat, reorganization, and expanded scope (where applicable) of the remaining BVPS TS as well as the development of the new bases consistent with the ISTS. The preparation of the LAR for the second phase of the BVPS conversion is planned to coincide with the issuance of Revision 2 to NUREG-1431.

This LAR proposes the addition of an Administrative Control Program for "Explosive Gas and Storage Tank Radioactivity Monitoring" to the Administrative Controls section of BVPS Unit 1 and Unit 2 TS consistent with the corresponding ISTS program (ISTS Specification 5.5.12). This TS program provides the necessary administrative controls to ensure plant procedures are maintained to monitor and control the curie content of liquid and gaseous waste storage systems and the explosive gas concentration of gaseous waste storage systems.

In addition to incorporating the new ISTS program for "Explosive Gas and Storage Tank Radioactivity Monitoring" into the BVPS TS, this LAR proposes relocating the Unit 1 and 2 TS requirements (and associated Bases) listed in Table 1 from the BVPS TS. The TS proposed for relocation contain requirements associated with the ISTS program for "Explosive Gas and Storage Tank Radioactivity Monitoring." The addition of the ISTS program provides an appropriate level of

control for the affected requirements in the TS that allows the details contained in the TS associated with these requirements to be relocated. The TS proposed for relocation will be placed in the BVPS Offsite Dose Calculation Manual (ODCM) or the BVPS Licensing Requirements Manual (LRM). The net effect of the proposed changes is to provide adequate regulatory control in the TS while making the content of the BVPS TS more consistent with the standard TS for Westinghouse plants (NUREG-1431) and simplifying the BVPS TS consistent with the goals of the policy statement.

This LAR includes administrative changes to the TS and Bases to accommodate the removal of the TS and associated Bases proposed for relocation. These administrative changes include both the modification and deletion of the affected pages. The TS and Bases index pages are revised accordingly. The changes proposed in this LAR also include a revision of BVPS Specification 6.9.3 "Annual Radioactive Release Report." The proposed revisions to the reporting requirements of Specification 6.9.3 include changing the due date of the report and minor editorial changes made to more closely conform to the version of this report contained in NUREG-1431 including approved NEI Technical Specification Task Force (TSTF) changes.

The following Table contains a summary of the BVPS TS requirements that were identified for relocation. In addition to listing the BVPS TS identified for relocation, Table 1 shows the relationship of each BVPS TS to the comparable previous standard TS (NUREG-0452) and the current ISTS (NUREG-1431). Table 1 shows the BVPS TS proposed for relocation correspond to a previous standard TS that has already been evaluated by both Westinghouse and the NRC and was not included in the current standard TS. Table 1 also shows the proposed destination for each relocated requirement and summarizes additional information pertinent to the locations selected for the relocated TS.

TABLE 1

SUMMARY OF TECHNICAL SPECIFICATIONS PROPOSED FOR RELOCATION

Unit	BVPS Technical Specification	Contained In Previous Standard Technical Specifications NUREG 0452	Contained In Current Standard Technical Specifications NUREG 1431	Destination Document For Relocated Requirements
1&2	3/4.3.3.11 Explosive Gas Monitoring Instrumentation	Yes	No	LRM(1)
1&2	3/4.11.1.4 Liquid Effluents Liquid Holdup Tanks	Yes	No	ODCM(2)
1&2	3/4.11.2.5 Gaseous Effluents Gas Storage Tanks (Unit 2 title is Gaseous Waste Storage Tanks)	Yes	No	ODCM(2)
1&2	3/4.11.2.6 Explosive Gas Mixture	Yes	No	LRM(1)

(1) For relocated TS, the LRM or Licensing Requirements Manual is an appendix of the Unit 1 and 2 BVPS UFSAR. Changes to the LRM are controlled via the 10 CFR 50.59 process. BVPS TS 3/4.3.3.11 Explosive Gas Monitoring Instrumentation, and TS 3/4.11.2.6 Explosive Gas Mixture do not contain requirements directly related to calculations in the ODCM and will be relocated to the LRM.

(2) The ODCM or Offsite Dose Calculation Manual is referenced in the BVPS Unit 1 and 2 UFSAR and in the TS (6.14). The ODCM is an appropriate location for effluent related TS consistent with the recommendations of Generic Letter 89-01. The ODCM currently contains requirements for effluent related TS relocated from the TS by Generic Letter 89-01. Changes to the ODCM are controlled by the TS and 10 CFR 50.59. BVPS TS 3/4.11.1.4 Liquid Holdup Tanks and 3/4.11.2.5 Gas Storage Tanks contain requirements directly related to calculations contained in the ODCM. Therefore, these TS are proposed for relocation to the ODCM.

B. DESIGN BASES

The explosive gas related TS include requirements for instrumentation to monitor and control potentially explosive gas concentrations as well as limits on those concentrations in the waste gas storage system. Maintaining the concentration of hydrogen and oxygen below their flammability limits reduces the risk of an event that could lead to an uncontrolled release of radioactive material from the waste gas storage system.

The other TS requirements associated with the liquid and gaseous waste storage systems place limits on the curie content of specified liquid and gas storage tanks. The particular liquid storage tanks addressed by the TS are those for which no dikes, dams, or liners are available to contain the contents of the tank and for which there are no surrounding area drains connected to the liquid radwaste treatment system. Restricting the quantity of radioactive material in the specified tanks provides assurance that in the event of an uncontrolled release of the tank's contents the resulting dose would not exceed the limits of the applicable federal regulations. In the case of the liquid waste storage tanks, the TS limit assures that the resulting concentrations from an uncontrolled release would be less than the limits of 10 CFR Part 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and at the nearest surface water supply in an unrestricted area. The TS specified curie limit for the gas storage tanks ensures that the total body exposure resulting from a postulated uncontrolled release remains a suitable fraction of the reference value in 10 CFR 100.11(a)(1).

C. JUSTIFICATION

The proposed changes add an administrative controls program to the TS that provides sufficient regulatory control to replace the individual affected TS. The proposed change allows the TS to be simplified consistent with the goals of the policy statement and content of NUREG-1431. Also consistent with the policy statement, the resulting BVPS TS will help to enhance safe plant operation by focusing BVPS and NRC personnel attention on those plant conditions most important to safety. The revised and simplified BVPS TS will also result in more efficient use of NRC and BVPS resources.

Consistent with the guidance of NRC Administrative Letter 96-04, "Efficient Adoption of Improved Standard Technical Specifications," BVPS proposes to relocate the TS details and associated Bases that are no longer required in the TS to

one of two manuals, the LRM or ODCM. Both of these manuals are referenced in the BVPS Unit 1 and 2 UFSAR and the control of changes to the ODCM is also specified in the TS (Section 6.14). Relocation of TS requirements to the LRM or ODCM is acceptable as changes to these documents will be adequately controlled by 10 CFR 50.59. The provisions of 10 CFR 50.59 establish adequate controls for material removed from the TS, including record retention and reporting requirements.

The TS relocations proposed in this LAR differ from typical relocations that remove all the requirements of a given TS. The relocations proposed in this LAR do not remove the key requirements contained in the affected TS. The changes proposed in this LAR include the addition of a program to the TS that addresses the key requirements contained in the TS being relocated. The program controls replace the detailed TS requirements. The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program is consistent with the standard TS program in NUREG-1431. The net effect of the proposed change is to retain key requirements within the TS while simplifying the overall content of the BVPS TS consistent with the content of the standard TS in NUREG-1431. The implementation of the proposed program and removal of the affected TS details is also consistent with the stated purpose and reasoning for Generic Letter 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications."

At the time the TS criteria was being used to develop the content of the Improved Standard TS in NUREG-1431, the NRC was working on a generic solution for removing Radioactive Effluent TS (RETS). The resulting Generic Letter 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications" removed all of the RETS except for the TS currently proposed for relocation in Table 1 of this LAR. Generic Letter 89-01 allowed the RETS to be placed in a plant's ODCM or Process Control Program (PCP). The ODCM and PCP program requirements were specified in the TS and were determined to provide adequate regulatory control to address the RETS requirements relocated by Generic Letter 89-01. As stated in Generic Letter 89-01:

> "The NRC staff has examined the contents of the Radiological Effluent Technical Specifications (RETS) in relation to the Commission's Interim Policy Statement on Technical Specification Improvements. The staff has determined that programmatic controls can be implemented in the Administrative Controls section of the

> Technical Specifications (TS) to satisfy existing regulatory requirements for RETS. At the same time, the procedural details of the current TS on radioactive effluents and radiological environmental monitoring can be relocated to the Offsite Dose Calculation Manual (ODCM). Likewise, the procedural details of the current TS on solid radioactive wastes can be relocated to the Process Control Program (PCP). These actions simplify the RETS, meet the regulatory requirements for radioactive effluents and radiological environmental monitoring, and are provided as a line-item improvement of the TS, consistent with the goals of the Policy Statement."

The RETS not relocated by Generic Letter 89-01 were not adequately addressed by the existing ODCM or PCP administrative controls. However, during development of the new standard TS in NUREG-1431, the RETS not addressed by Generic Letter 89-01 were removed from the standard TS. Similar to Generic Letter 89-01, the removal of the remaining RETS was justified by the inclusion of a program in the administrative controls section of the standard TS that provided adequate regulatory control to address the remaining RETS requirements.

The new Explosive Gas and Storage Tank Radioactivity Monitoring Program contained provisions that incorporated the bases for the affected RETS requirements (i.e., that explosive gas concentrations and radioactivity content must be monitored and controlled to assure the applicable design limitations of the systems and offsite dose limits are not exceeded). The program provided TS requirements to assure that appropriate procedures were maintained to monitor and control both the radioactivity and explosive gas content of the storage systems. In addition, the program contained TS requirements that specified the use of accepted NRC methodologies for determining the curie content limits of the gas and liquid storage tanks. Therefore, the incorporation of the new Explosive Gas and Storage Tank Radioactivity Monitoring Program into the standard TS provided adequate regulatory control and assurance that the explosive gas and radioactivity content of the tanks are monitored and controlled within applicable limits. After the addition of the Explosive Gas and Storage Tank Radioactivity Monitoring Program, the remaining RETS effectively contained only the procedural details necessary for implementing the program requirements. Therefore, similar to Generic Letter 89-01, the remaining RETS requirements were adequately addressed by a program specified in the TS and the individual RETS could be removed from the TS.

In 1995, the NRC issued further generic guidance that pertained to one of the TS related to the remaining RETS (monitoring requirements for explosive gas concentrations in the Waste Gas Storage Tanks). In Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation" the NRC evaluated several instrument related TS for relocation including the Explosive Gas Monitoring Instrumentation TS. The generic letter concluded that:

> "Acceptable concentrations of explosive gases are actually controlled by other limiting conditions for operation (e.g., Gaseous Effluents, Explosive Gas Mixture) or by programs described in the "Administrative Controls" section of TSs. The requirements related to explosive gas monitoring instrumentation do not conform to the 10 CFR 50.36 criteria for inclusion in the TSs. Therefore, licensees may propose to relocate the explosive gas monitoring instrumentation requirements....."

In the conclusion cited above, Generic Letter 95-10 justifies, in part, the relocation of the affected TS requirements when a program exists (within the TS) that provides adequate controls for the affected requirement(s). Thus, Generic Letter 95-10 provided further support for the replacement of detailed TS requirements with an administrative controls program such as the Explosive Gas and Storage Tank Radioactivity Monitoring Program.

The BVPS TS proposed for relocation in this LAR correspond closely with the standard Explosive Gas Monitoring Instrumentation requirements evaluated by the NRC in Generic Letter 95-10 and the RETS requirements evaluated during the development of the ISTS and the new Explosive Gas and Storage Tank Radioactivity Monitoring Program. Therefore, the conclusions of Generic Letter 95-10 for Explosive Gas Monitoring Instrumentation and the replacement of the remaining RETS by the Explosive Gas and Storage Tank Radioactivity Monitoring Program are applicable for BVPS.

The Explosive Gas and Storage Tank Radioactivity Monitoring Program proposed for the BVPS TS contains all of the requirements that are in the standard TS program. The NRC approved references for calculating the curie content of the liquid and gas storage tanks have been adopted in the BVPS program without change. In addition, the regulatory bases for the limits imposed on the radioactive content of the tanks have been incorporated in the BVPS program, also without

change from the standard TS requirements. A limit on explosive gas concentration is also incorporated into the proposed BVPS program that utilizes text from the current BVPS TS Bases to provide a more specific requirement for the explosive gas concentration. As in the standard TS, the proposed BVPS program contains all the key elements to address the required limits specified in the affected RETS. Consistent with the conclusions of Generic Letter 89-01 and Generic Letter 95-10, after incorporation of the proposed BVPS program into the administrative controls section of the TS, the remaining BVPS RETS are effectively reduced to describing the procedural details necessary for implementing the program requirements.

10 CFR 50.36 Criteria Evaluation

The four policy statement criteria contained in 10 CFR 50.36(c)(2)(ii) for determining which regulatory requirements and operating restrictions should be included in the TS are as follows:

> **Criterion 1.** Installed instrumentation that is used to detect and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
>
> **Criterion 2.** A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
>
> **Criterion 3.** A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
>
> **Criterion 4.** A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

During the development of the new standard TS in NUREG-1431, the corresponding standard RETS and monitoring instrumentation TS were evaluated against the selection criteria by Westinghouse in WCAP-11618, "Methodically Engineered, Restructured, And Improved Technical Specifications - Criteria Application." In WCAP-11618, Westinghouse found that these TS did not meet any of the criteria for retention in the TS. As the requirements contained in the

BVPS TS proposed for relocation are similar in purpose and scope to the standard TS evaluated by Westinghouse, the conclusions of WCAP 11618 are applicable to BVPS. However, the key elements of the affected RETS and associated monitoring instrumentation TS requirements were conservatively retained in the new standard TS in the form of the Explosive Gas and Storage Tank Radioactivity Monitoring Program.

As previously explained, the TS relocations proposed in this LAR differ from typical relocations that remove all the requirements of a given TS. The relocations proposed in this LAR do not remove the key requirements contained in the affected TS. The changes proposed in this LAR include the addition of a program to the TS that addresses the key requirements contained in the TS being relocated. Therefore, rather than a simple evaluation of the TS being relocated against the selection criteria of 10 CFR 50.36, the following discussions will explain how each TS is effectively replaced by the program requirements included in this LAR. Consistent with Generic Letter 89-01, the proposed changes are shown to provide adequate programmatic controls to effectively replace the affected TS requirements.

The following discussion of each BVPS TS proposed for relocation provides a more detailed and BVPS-specific description of how the proposed program replaces the key requirements of the affected TS. The discussions include how existing regulatory requirements will continue to be met and how sufficient regulatory control is maintained while simplifying the TS consistent with the goals of the policy statement and content of NUREG-1431. The discussions apply to the TS of both BVPS Unit 1 and Unit 2.

3/4.3.3.11 Explosive Gas Monitoring Instrumentation

This BVPS TS contains requirements applicable to the Waste Gas Decay Tank oxygen monitoring instrument channels. The TS requires that the instrument channels be operable with alarm/trip setpoints set to ensure the limits specified in TS 3/4.11.2.6, "Explosive Gas Mixture" are not exceeded. The Actions provided in the TS when one or more of the channels are inoperable include sampling to verify the gas concentration and reporting requirements to explain why the instrumentation was not restored in a timely manner. The TS also contains surveillance requirements to ensure the instrumentation is periodically calibrated and functionally tested.

The Explosive Gas Monitoring Instrumentation TS contains requirements necessary to support the Explosive Gas Mixture TS requirements that limit the concentration of potentially explosive gases. The monitoring instrumentation requirements do not contain limits that are relied on in a safety analysis to prevent or mitigate design basis accidents. The Explosive Gas Monitoring Instrumentation requirements address the detection of possible precursors to the failure of a waste gas system but do not actuate to prevent or mitigate design basis accidents or transients which assume a failure of or present a challenge to a fission product barrier. Consistent with the guidance contained in Generic Letter 95-10 and Westinghouse WCAP-11618 the BVPS Explosive Gas Monitoring Instrumentation TS does not conform to the 10 CFR 50.36 criteria for inclusion in the TSs and may be relocated. However, the requirement to maintain an explosive gas limit and surveillance program to ensure that limit is not exceeded was retained within NUREG-1431.

The Explosive Gas and Storage Tank Radioactivity Monitoring Program requires that the concentrations of oxygen and hydrogen be maintained below the flammability limits and that a surveillance program be implemented to ensure the limits are maintained. The specification of both a limit and the requirement to verify and maintain that limit effectively captures the need for monitoring instrumentation requirements and alternate sampling Actions contained in the Explosive Gas Monitoring Instrumentation TS. The monitoring instrumentation requirements are an essential part of any surveillance program designed to monitor and control the explosive gas concentration of the waste gas holdup system. As such, the need for the Explosive Gas Monitoring instrumentation requirements is conservatively retained within the TS by the Explosive Gas and Storage Tank Radioactivity Monitoring Program's surveillance requirement. Therefore, consistent with the guidance of Generic Letter 89-01, the procedural details contained in the Explosive Gas Monitoring Instrumentation TS may be relocated as the requirements are not relied on to meet the selection criteria of 10 CFR 50.36.

3/4.11.1.4 Liquid Effluents - Liquid Holdup Tanks

This BVPS TS provides requirements for specific liquid storage tanks described in the Limiting Condition For Operation (LCO). The LCO contains a curie limit for the radioactive material contained in each tank.

The TS contains Actions to reduce the amount of radioactive material in a tank if the limit is exceeded or to submit a report describing how and when the limit would be met. The TS also contains a surveillance to periodically verify the amount of radioactive material in each tank. The bases for these TS requirements states the following:

> "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 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area."

The changes proposed in this LAR include the removal from the TS of the requirements described above and the addition of program requirements in the Administrative Controls section of the TS to address the requirements of TS 3/4.11.1.4 Liquid Effluents - Liquid Holdup Tanks. The proposed Administrative Controls contain three key provisions that provide the required control and allow for the removal of the TS 3/4.11.1.4. A discussion of the key provisions of the proposed program and how it addresses the TS requirements being removed follows:

1. The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program broadly defines the liquid storage tanks to which it applies such that all the required tanks are addressed by the program requirements. The program specifies the requirements apply to "all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System...." The tank type defined in the program fully captures the intent of the TS 3/4.11.1.4 requirement and provides assurance that all the tanks previously addressed by TS 3/4.11.1.4 will continue to be addressed by the Explosive Gas and Storage Tank Radioactivity Monitoring Program.

2. The proposed program does not contain a specific curie limit (numerical value) for the affected storage tanks. Instead the program contains two more provisions that provide the required guidance for determining the

curie limit applicable to the affected storage tanks. One program provision requires that "The liquid radwaste quantities shall be determined in accordance with Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures." The review procedures and acceptance criteria contained in the Standard Review plan provide adequate regulatory assurance that the liquid radwaste quantities calculated for the affected storage tanks will be consistent with NRC approved standards. The reliance on an approved standard in the TS instead of a specific value is not new to TS requirements. In Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits From Technical Specifications" the NRC approved the removal of specific numerical values where an approved method was incorporated into the TS. NUREG-1431 has applied this concept to other parameters such as the RCS pressure and temperature limits (heat up and cooldown curves) and the low temperature overpressure protection system setpoints. However, the proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program contains another provision to ensure that appropriate limits are clearly defined for the quantity of radioactivity in the affected tanks.

3. The proposed program further specifies that a surveillance program be implemented to ensure the quantity of radioactive material in each tank is limited such that an uncontrolled release of the tank's contents would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area. This program requirement is consistent with the Bases for TS 3/4.11.1.4 Liquid Effluents - Liquid Holdup Tanks and provides further assurance that the quantities of radioactive material will be restricted to ensure an uncontrolled release will be within the applicable federal regulations.

The program provisions described above provide adequate regulatory assurance that the quantity of radioactive material in the affected tanks will be controlled consistent with NRC approved standards and the dose consequences of an unplanned release restricted to within limits dictated by federal regulations. Similar to the conclusions in Generic Letter 95-10, the limit for acceptable concentrations of radioactive material will continue to be controlled by the Administrative Controls program retained in the TS. As

such, the requirements of TS 3/4.11.1.4 are reduced to procedural guidance for implementing the Administrative Controls program and are not relied on to meet any of the 10 CFR 50.36 criteria for inclusion in the TS. Therefore, TS 3/4.11.1.4 may be relocated.

3/4.11.2.5 Gaseous Effluents Gas Storage Tanks (Unit 2 title is Gaseous Waste Storage Tanks)

The requirements in this TS include a specific curie limit for the waste gas storage tanks as well as Actions to reduce the tank contents to within the limit when the limit is exceeded or submit a report with the action planned to reduce the contents to within the limit. The TS also contains a surveillance requirement to periodically verify the contents of the tanks are within the limit.

The changes proposed in this LAR include the removal from the TS of the requirements described above and the addition of program requirements in the Administrative Controls section of the TS to address the requirements of TS 3/4.11.2.5 Gaseous Effluents Gas Storage Tanks. The proposed Administrative Controls contain three key provisions that provide the required control and allow for the removal of the TS 3/4.11.2.5. A discussion of the key provisions of the proposed program and how it addresses the TS requirements being removed follows:

1. The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program clearly specifies the affected tanks for each unit. The tanks specified in the program are consistent with the tanks that the current TS requirements apply to. As such, the proposed program will continue to control the radioactive material content in the required tanks.

2. The proposed program does not contain a specific curie limit for the affected tanks. Instead the program contains two more provisions that provide the required guidance for determining the curie limit applicable to the affected tanks. One program provision requires that "The gaseous radwaste quantities shall be determined following the methodology in Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure." BTP ETSB 11-5 is part of the NRC Standard Review Plan. The stated purpose of the Technical Position is stated as follows:

> "The purpose of this BTP is to provide guidelines on postulated radioactive releases due to a radioactive waste gas system leak or failure. The goal is to minimize potential radiation exposures to workers and the public, and to provide reasonable assurance that the radiological consequences of a single failure of an active component in the waste gas system would not result in exceeding the guidelines of 10 CFR Part 20 for a unique unplanned release and would, therefore, be substantially below the guidelines of 10 CFR Part 100 for a postulated event."

The guidelines contained in the BTP provide adequate regulatory assurance that the gaseous radwaste quantities calculated for the affected tanks will be consistent with NRC approved methods. As discussed previously, the reliance on an approved method in the TS instead of a specific value is not new to TS requirements. In Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits From Technical Specifications" the NRC approved the removal of specific numerical values where an approved method was incorporated into the TS. However, the proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program contains another provision to ensure that appropriate limits are clearly defined for the quantity of radioactivity in the affected tanks.

3. The proposed program further specifies that a surveillance program be implemented to ensure the quantity of radioactivity in each tank is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tank's contents. This program requirement provides a specific dose limit consistent with BTP ETSB 11-5. The specific program limit provides further assurance that the quantities of radioactivity will be restricted to ensure an uncontrolled release will be within the applicable federal regulations cited in BTP ETSB 11-5.

The program provisions described above provide adequate regulatory assurance that the quantity of radioactivity in the affected tanks will be controlled consistent with NRC approved standards and the dose consequences of an unplanned release restricted to within limits dictated by federal regulations. Similar to the conclusions in Generic Letter 95-10, the limit for acceptable concentrations of radioactive material will continue to

be controlled by the Administrative Controls program retained in the TS. As such, the requirements of TS 3/4.11.2.5 are reduced to procedural guidance for implementing the Administrative Controls program and are not relied on to meet any of the 10 CFR 50.36 criteria for inclusion in the TS. Therefore, TS 3/4.11.2.5 may be relocated.

3/4.11.2.6 Explosive Gas Mixture

The Explosive Gas Mixture LCO contains requirements to limit the oxygen concentration to less than or equal to 2% by volume whenever the hydrogen concentration exceeds 4% by volume. The TS also contains Actions to suspend the addition of waste gases to the decay tanks and reduce the oxygen concentration in the decay tanks when the LCO limit is exceeded. The TS surveillance requires the concentration of oxygen in the waste gas decay tanks to be monitored continuously with oxygen monitors required operable by the Explosive Gas Monitoring Instrumentation TS. The current Bases for the Explosive Gas Mixture TS states:

> "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."

The changes proposed in this LAR include the removal from the TS of the requirements described above and the addition of program requirements in the Administrative Controls section of the TS to address the requirements of TS 3/4.11.2.6 Explosive Gas Mixture. The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program contains requirements to:

1. Limit the concentrations of hydrogen and oxygen in the waste gas holdup system to below the flammability limits, and

2. Establish a surveillance program to ensure the limits are maintained

The program provisions described above provide adequate regulatory assurance that the concentrations of potentially explosive gases in the waste gas holdup system will be limited consistent with the Bases for the current TS requirement (below the flammability limit). Similar to the conclusions in Generic Letter 95-10, the limit for potentially explosive gases will continue to be controlled by the Administrative Controls program retained in the TS.

As such, the requirements of TS 3/4.11.2.6 Explosive Gas Mixture are reduced to procedural guidance for implementing the Administrative Controls program and are not relied on to meet any of the 10 CFR 50.36 criteria for inclusion in the TS. Therefore, TS 3/4.11.2.6 may be relocated.

Changes to the Relocated TS

The requirements relocated to the LRM or ODCM will be technically the same as the current TS. However, administrative changes in format and presentation (i.e., titles, numbering of requirements and sections, pagination, etc.) of the relocated material will be made as necessary to fit the LRM or ODCM. Each relocated TS will reference the Explosive Gas and Storage Tank Radioactivity Monitoring Program in the TS. All future changes to the relocated material will be in accordance with 10 CFR 50.59 and consistent with the Explosive Gas and Storage Tank Radioactivity Monitoring Program requirements.

Changes to the ISTS Explosive Gas and Storage Tank Radioactivity Monitoring Program

The proposed change adds the program specified in 5.5.12 of NUREG-1431 to the BVPS TS. The standard program is revised only to the extent necessary to incorporate the BVPS-specific design and licensing basis information applicable to the TS being replaced by the program and to conform the program to the current BVPS TS numbering and format. The following changes are proposed to the standard program:

1. The generic bracketed term "gas storage tank" was replaced for BVPS Unit 1 by the unit-specific name of "Waste Gas Decay Tank." The BVPS Unit 2 reference to these tanks is revised to the unit-specific name "Gaseous Waste Storage Tanks" and the Unit 2 limit applicable to these tanks is revised to state "each connected group of Gaseous Waste Storage Tanks."

2. The general statement referencing the limits for concentrations of hydrogen and oxygen as "...appropriate for the system's design criteria..." was replaced with the more specific BVPS requirement that the limits "ensure that the concentration of hydrogen and oxygen is maintained below the flammability limits."

3. The references to standard specifications SR 3.0.2 and SR 3.0.3 are revised to the corresponding BVPS Specifications 4.0.2 and 4.0.3.

4. The standard program requirement for gaseous waste storage tanks is revised to be more consistent with the current BVPS licensing basis requirement. The standard program requirement in Section 5.5.12.b specifies a dose limit of ≥ 0.5 rem. This limit is revised to > 0.5 rem in the proposed BVPS program.

5. A correction was made to the standard program requirement for the amount of radioactivity contained in liquid radwaste storage tanks (5.5.12.c). The phrase "...to ensure that the quantity of radioactivity ... is less than the amount that would result in concentrations <u>less</u> than the limits of 10 CFR 20..." is revised to read as follows "...to ensure that the quantity of radioactivity... is less than the amount that would result in concentrations <u>greater</u> than the limits of 10 CFR 20...." The proposed change in wording is underlined.

6. The standard program numbering (Specification 5.5.12) was revised as necessary to fit into the format of the current BVPS administrative controls section of the TS. The program will appear in the BVPS TS as Specification 6.8.6.c.

The proposed change to the standard program term "gas storage tanks" is made to conform with the BVPS Unit 1 and Unit 2 specific terminology for these tanks. The proposed change is not a technical change to the intent of the program. The Unit 2 reference to a "connected" group of tanks is consistent with the Unit 2 design and with the current Unit 2 licensing basis as specified in Unit 2 TS 3/4.11.2.5 Gaseous Effluents – Gaseous Waste Storage Tanks. These changes are necessary to correctly identify the affected tanks at each unit and to correctly represent the current Unit 2 tank design.

The change proposed to the explosive gas concentration limit referenced in the standard program provides a more specific limit applicable to this requirement. The proposed change to maintain the concentrations of hydrogen and oxygen below the flammability limit is consistent with the current licensing bases of BVPS Units 1 and 2 as stated in the Bases of the BVPS TS 3/4.11.2.6 Explosive Gas Mixture. The proposed change is not intended to affect the intent of the standard program and serves only to provide a clearer plant-specific limit in place of the generic standard wording.

The references to standard specifications SR 3.0.2 and SR 3.0.3 were revised to the corresponding BVPS specifications 4.0.2 and 4.0.3. This change does not affect the intent of the standard program. The proposed change simply provides the

correct BVPS-specific references for the specifications addressing the use and application of surveillance requirements.

The change proposed to the gaseous waste dose limit (≥ 0.5 rem to > 0.5 rem) in Section 5.5.12.b of the standard program is consistent with the current BVPS dose limit associated with the requirements for gaseous waste storage tanks as described in the Bases for TS 3/4.11.2.5 (gas storage tanks). This change maintains the current BVPS licensing basis for the affected limit and does not represent a change from the current BVPS TS requirements. The revision of the standard program dose limit of ≥ 0.5 rem to > 0.5 rem results in a limit that is consistent with the NRC Standard Review Plan waste gas system leak or failure analysis criteria in Branch Technical Position (BTP) ETSB 11-5. In the discussion of the analysis criteria, the BTP also states that this limit is consistent with 10 CFR 20. 10 CFR 20 defines "limits" as "the permissible upper bounds". Therefore, equal to the 0.5 rem limit is within the allowance of the applicable regulations. As such, the proposed change is also more consistent with the requirements of 10 CFR 20.

A necessary correction of the standard program wording is proposed for Section 5.5.12.c of the program. The specific standard wording is summarized as follows: the amount of radioactivity in the tank is controlled to less than the amount that would result in concentrations less than the limits of 10 CFR 20. The use of the word "less" as applied to the stated regulatory limits (10 CFR 20) in this section of the program appears correct when taken out of context. As in being less than the limit is acceptable. However, when the intent of the remaining part of the sentence regarding "controlling the radioactivity in the tank to less than the amount" is considered, the use of the word "less" is confusing. The amount of radioactivity in the tank is controlled to less than the amount that would result in concentrations greater than the limits of 10 CFR 20 more clearly states the requirement. Additionally, 10 CFR 20 defines "limits" as "the permissible upper bounds". Therefore, less than or equal to the limit is acceptable per 10 CFR 20. As such, the proposed change which controls the amount of radioactivity to less than the amount that would result in concentrations greater than the limits of 10 CFR 20 is consistent with the use of the term "limit" in 10 CFR Part 20.

In summary, the proposed changes to the standard program are consistent with the existing licensing bases of the BVPS TS involved and the design of the affected BVPS systems or are necessary to clarify the standard requirements. Each change to the standard program is identified in the markup in Attachments A-1 (Unit 1) and A-2 (Unit 2) of this LAR. As such, the resulting BVPS-specific program:

1. Effectively retains the current licensing and design bases requirements for the affected BVPS TS,

2. Maintains consistency with the applicable regulations (10 CFR 20),

3. Improves the clarity and understanding of the standard program requirement for liquid radwaste storage tanks, and

4. Provides the requirements necessary to assure that the explosive gas and radioactivity content of the tanks are monitored and controlled within acceptable limits.

Therefore, the proposed BVPS-specific program is acceptable.

Changes to 6.9.3 Annual Radioactive Release Report

The changes proposed in this LAR include some minor changes to the Annual Radioactive Release Report (Specification 6.9.3). This report summarizes the quantities of radioactive material released from each unit during the previous year. The current BVPS report must be submitted before April 1 of each year. The proposed change would revise the April 1 due date to May 1 consistent with the requirements for the corresponding report in standard TS. Additional editorial changes are proposed to the description of the BVPS report. The proposed editorial changes are made solely to conform more closely to the standard TS description of this report. The additional editorial changes have no effect on the content or timing of the report and are shown in the markup of the BVPS report in Attachment A. The proposed changes include changes introduced from approved TSTF-152 to Revision 1 of NUREG-1431.

The proposed change to the due date for the report is made to conform with the standard TS requirement and to conform more closely with the corresponding reporting requirements of other FirstEnergy Nuclear Operating Company plants (Perry and Davis Besse). The proposed change is also consistent with the requirements of 10 CFR 50.36a. As such, the proposed change is acceptable.

D. SAFETY ANALYSIS

The proposed changes include the addition of an administrative controls program that effectively replaces the current TS requirements associated with the explosive gas concentration and curie content limits of the waste gas and liquid storage tanks.

Similar to the guidance found in Generic Letter 89-01, the proposed changes provide programmatic controls in place of the affected TS that are consistent with regulatory requirements and that allow relocation of the procedural details in the associated TS. As such, the proposed change only affects the level of detail included in the TS for these requirements. The net effect of the proposed change is to retain key requirements within the TS to assure adequate regulatory control is maintained while simplifying the overall content of the BVPS TS consistent with the standard TS in NUREG-1431 and the goals of the policy statement.

The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program contains provisions that are consistent with regulatory requirements and that provide adequate regulatory control to replace the relocated TS requirements. The explosive gas related provisions of the program include requirements to monitor and control potentially explosive gas concentrations to maintain the concentration of hydrogen and oxygen below their flammability limits. The program provision to maintain the concentration of potentially explosive gases below the flammability limit reduces the risk of an event that could lead to an uncontrolled release of radioactive material from the waste gas storage system. The other provisions of the program associated with the liquid and gaseous waste storage systems place limits on the curie content of specified liquid and gas storage tanks. The program restrictions on the quantity of radioactive material in the specified tanks provides assurance that in the event of an uncontrolled release of the tank's contents the resulting dose would not exceed the limits of the applicable federal regulations cited in the program.

Due to the addition of the Explosive Gas and Storage Tank Radioactivity Monitoring Program, the requirements of the TS being relocated are no longer relied on to meet the 10 CFR 50.36 criteria for inclusion in the TS. The proposed Explosive Gas and Storage Tank Radioactivity Monitoring Program contains provisions that address the primary design basis events associated with the TS requirements being relocated (waste gas storage tank failure and liquid storage tank failure). Consistent with the conclusions of Generic Letter 89-01, the addition of adequate programmatic controls to the TS allows the procedural details in the affected TS to be relocated. Therefore, it can be concluded that the TS proposed for relocation no longer meet the 10 CFR 50.36 criteria for inclusion in the TS.

Additionally, the relocation of TS requirements does not reduce the effectiveness of the requirements being relocated. Rather, the relocation of the TS result in a change in the regulatory control required for future changes made to the affected

requirements. The relocated requirements will continue to be implemented by the appropriate plant procedures (e.g., operating and maintenance procedures) in the same manner as before. However, future changes to the relocated requirements will be controlled in accordance with 10 CFR 50.59 instead of requiring a license amendment per 10 CFR 50.90.

Consistent with the guidance of NRC Administrative Letter 96-04, the proposed destination documents (LRM and ODCM) for the relocated TS are referenced in the BVPS Unit 1 and 2 UFSAR. In addition, changes to the ODCM are controlled by the TS (Section 6.14). Both the LRM and ODCM have been previously determined by the NRC to be acceptable for relocated TS. The ODCM was identified as an acceptable location for relocated TS in Generic Letter 89-01 and the LRM was previously approved in BVPS license amendment numbers 233 and 115 (SER dated 9/7/00) for the relocation of TS. Therefore, adequate regulatory control of the destination documents exists to ensure that future changes to these requirements are controlled by the provisions of 10 CFR 50.59 and that prior NRC review and approval of changes will be requested when required by 10 CFR 50.59. The provisions of 10 CFR 50.59 establish adequate controls for material removed from the TS, including record retention and reporting requirements. The provisions of 10 CFR 50.59 assure that future changes to the relocated material will be consistent with safe plant operation.

Based on the addition of the Explosive Gas and Storage Tank Radioactivity Monitoring Program and the control of future changes to the relocated TS provided by 10 CFR 50.59, the relocation of the affected TS will not: 1) affect the applicable accident analyses, 2) adversely affect the safe operation of the BVPS units, or 3) reduce the margin of safety derived from the affected TS. Therefore, these changes have no effect on the safe operation of the plant.

The remaining changes proposed in this LAR consist of miscellaneous administrative changes to support the removal of material from the TS and the minor changes made to the reporting requirements of Specification 6.9.3. The changes made to Specification 6.9.3 only affect the due date of the report or are editorial in nature. Therefore, the changes to Specification 6.9.3, and the miscellaneous administrative changes made to support the relocation of TS discussed above do not impact the operation of the plant and have no effect on safety.

E. NO SIGNIFICANT HAZARDS EVALUATION

This license amendment request (LAR) proposes to revise the Beaver Valley Power Station (BVPS) Unit 1 and 2 technical specifications (TS) to implement improvements endorsed in the NRC's Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, 58 FR 39132, July 22, 1993 (the policy statement).

This license amendment request (LAR) proposes the addition of an Administrative Control Program for "Explosive Gas and Storage Tank Radioactivity Monitoring" to the Administrative Controls section of the Beaver Valley Power Station (BVPS) Unit 1 and 2 technical specifications (TS) consistent with the corresponding standard TS program (NUREG-1431 Specification 5.5.12). In addition to incorporating the standard TS program into the BVPS TS, the LAR proposes relocating the Unit 1 and 2 TS requirements associated with the curie content limit for liquid and gaseous waste storage systems and the explosive gas concentration limit for gaseous waste storage systems. The addition of the Standard TS program provides an appropriate level of control for the affected requirements in the TS that allows the details contained in the TS associated with these requirements to be relocated. The TS proposed for relocation will be placed in the BVPS Offsite Dose Calculation Manual (ODCM) or the BVPS Licensing Requirements Manual (LRM). The net effect of the proposed changes is to provide adequate regulatory control in the TS while making the content of the BVPS TS more consistent with the standard TS for Westinghouse plants (NUREG-1431) and simplifying the BVPS TS consistent with the goals of the NRC's Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, 58 FR 39132, July 22, 1993.

The changes proposed in this LAR also include various administrative changes made to support the relocation of TS. The LAR also includes a revision of BVPS Specification 6.9.3 "Annual Radioactive Release Report." The proposed revisions to the reporting requirements of Specification 6.9.3 include changing the due date of the report and minor editorial changes made to more closely conform to the version of this report contained in NUREG-1431.

The no significant hazard considerations involved with the proposed amendment have been evaluated, focusing on the three standards set forth in 10 CFR 50.92(c) as quoted below:

The Commission may make a final determination, pursuant to the procedures in paragraph 50.91, that a proposed amendment to an operating license for a facility licensed under paragraph 50.21(b) or paragraph 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The following evaluation is provided for the no significant hazards consideration standards.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed amendment does not involve a significant increase in the probability of an accident previously evaluated because no changes are being made to any event initiator. Nor is any analyzed accident scenario being revised. The initiating conditions and assumptions for accidents described in the UFSAR remain as previously analyzed.

The proposed amendment also does not involve a significant increase in the consequences of an accident previously evaluated. The amendment does not reduce the current operability requirements contained in the TS proposed for relocation. The proposed relocation of TS requirements only affects the level of regulatory control involved in future changes to the requirements. The proposed changes include additions to the TS in the form of programmatic controls that effectively replace the key TS requirements being relocated. As such, the TS proposed for relocation no longer meet the 10 CFR 50.36 criteria for retention in the TS.

The additional administrative changes are editorial in nature, and are made to support the relocation of TS. The additional administrative changes and the changes to Specification 6.9.3 have no adverse effect on the safety

analyses for design basis accidents described in the UFSAR. The initiating conditions and assumptions for accidents described in the UFSAR remain as previously analyzed.

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

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed amendment does not involve any physical changes to the plant or the modes of plant operation defined in the TS. The proposed amendment does not involve the addition or modification of plant equipment nor does it alter the design or operation of any plant systems. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of these changes.

There are no changes in this amendment that would cause the malfunction of safety-related equipment assumed to be operable in accident analyses. No new mode of failure has been created and no new equipment performance requirements are imposed. The proposed amendment has no effect on any previously evaluated accident.

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

3. Does the change involve a significant reduction in a margin of safety?

The margin of safety depends on the maintenance of specific operating parameters and systems within design requirements and safety analysis assumptions.

The proposed amendment does not involve revisions to any safety limits or safety system setting that would adversely impact plant safety. The proposed amendment does not alter the functional capabilities assumed in a safety analysis for any system, structure, or component important to the mitigation and control of design bases accident conditions within the facility. Nor does this amendment revise any parameters or operating restrictions that are assumptions of a design basis accident. In addition, the proposed amendment does not affect the ability of safety systems to ensure that the

facility can be placed and maintained in a shutdown condition for extended periods of time.

The proposed change includes the addition of programmatic controls that allow the affected TS to be relocated. The relocation of TS does not reduce the effectiveness of the requirements being relocated. Rather, the relocation of the TS results in a change in the regulatory control required for future changes made to the requirements. Additionally, due to the new programmatic controls, the TS proposed for relocation no longer meet the 10 CFR 50.36 criteria for retention in the TS.

The requirements contained within the affected TS will continue to be implemented by the appropriate plant procedures (e.g., operating and maintenance procedures) in the same manner as before. However, future changes to the relocated requirements will be controlled in accordance with 10 CFR 50.59 instead of a license amendment pursuant to 10 CFR 50.90. The provisions of 10 CFR 50.59 establish adequate controls over requirements removed from the TS and assure future changes to these requirements will be consistent with safe plant operation.

The additional administrative changes are editorial in nature, and are made to support the relocation of TS. The additional administrative changes and the proposed changes to Specification 6.9.3 do not alter any operating parameters or design requirements assumed in a safety analysis for systems or components important to the mitigation and control of design bases accident conditions within the facility. Nor do these changes alter safety limits or safety system settings required for safe operation of the plant or the assumptions of any safety analysis.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

F. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the considerations expressed above, it is concluded that the activities associated with this license amendment request satisfy the requirements of 10 CFR 50.92(c) and, accordingly, a no significant hazards consideration finding is justified.

G. ENVIRONMENTAL CONSIDERATION

This license amendment request changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. It has been determined that this license amendment request involves 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. This license amendment request may change requirements with respect to installation or use of a facility component located within the restricted area or change an inspection or surveillance requirement; however, the category of this licensing action does not individually or cumulatively have a significant effect on the human environment. Accordingly, this license amendment request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this license amendment request.