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10 CFR 50.90

June 2, 2006

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

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: License Amendment Request
Proposed Changes to Technical Specifications to
Incorporate Revised 10 CFR Part 20 Requirements

References:

(1) Technical Specification Task Force, Improved Standard Technical Specifications Change Traveler, TSTF-258-A, Rev. 4, "Changes to Section 5.0, Administrative Controls," dated July 31, 2003.

(2) NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4," Rev. 3.0, dated March 2004.

(3) Letter from G. Wunder, U.S. Nuclear Regulatory Commission, to J. Knubel, Power Authority of the State of New York, "Issuance of Amendment for Indian Point Nuclear Generating Unit No. 3 RE: Radioactive Effluent Technical Specifications (TAC No. MA6225)," dated February 7, 2000.

(4) Letter from J. Stang, U.S. Nuclear Regulatory Commission, to D. Christian, Dominion Resources, Inc., "Kewaunee Power Station - Issuance of Amendment RE: Technical Specifications Changes for Radioactive Effluents Control Program and Off-Site Dose Calculation Manual (TAC No. MC5900)," dated October 4, 2005.

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (Exelon), hereby requests changes to the Technical Specifications (TS), Appendix A, of Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed changes will revise TS to incorporate revised 10 CFR Part 20 requirements. Specifically, the proposed changes will revise the definitions for Member(s) of the Public and Unrestricted Area, add a definition for Restricted Area, revise the requirements for limitations on the concentrations of radioactive material released in liquid and gaseous effluents, and revise the references for radioactive effluent control requirements in 10 CFR Part 20. Portions of the proposed TS changes are consistent with applicable portions of Technical Specification Task Force (TSTF) Change Traveler TSTF-258-A, Rev. 4 (Reference 1), which has been

incorporated into the Improved Standard Technical Specifications, NUREG-1433 (Reference 2). Similar TS changes were previously approved by the NRC for Indian Point Nuclear Generating Unit No. 3 (Reference 3) and Kewaunee Power Station (Reference 4).

The proposed changes do not result in a change in the types or amounts of effluents released. The proposed changes do not impact the operation, configuration, or testing of plant structures, systems, or components. Therefore, the proposed changes do not impose any new radiological hazard to the plant staff or the public. The proposed changes will ensure continued compliance with applicable regulatory requirements.

Exelon has concluded that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c).

Exelon requests approval of the proposed amendments by June 2, 2007. Once approved, this amendment shall be implemented within 60 days of issuance. There are no regulatory commitments contained within this letter.

The proposed changes have been reviewed by the Plant Operations Review Committee and approved by the Nuclear Safety Review Board.

If you have any questions or require additional information, please contact Glenn Stewart at 610-765-5529.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 2nd day of June, 2006.

Respectfully,

Pamela B. Cowan
Director, Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachments:
1. Evaluation of the Proposed Changes
2. Technical Specifications Markup Pages

cc: Regional Administrator - NRC Region I w/attach
NRC Senior Resident Inspector - Limerick Generating Station "
NRC Project Manager, NRR - Limerick Generating Station "
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Protection "

ATTACHMENT 1

License Amendment Request

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

EVALUATION OF THE PROPOSED CHANGES

Subject: Proposed Changes to Technical Specifications to Incorporate Revised 10 CFR Part 20 Requirements

ATTACHMENT 1
LICENSE AMENDMENT REQUEST
DOCKET NOS. 50-352, 50-353
EVALUATION OF THE PROPOSED CHANGES

1.0 DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (i.e., Exelon) requests changes to Technical Specifications (TS), Appendix A, of Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (LGS), Units 1 and 2, respectively.

The proposed changes will revise TS to incorporate revised 10 CFR Part 20 requirements. Specifically, the proposed changes will revise the definitions for Member(s) of the Public and Unrestricted Area, add a definition for Restricted Area, revise the requirements for limitations on the concentrations of radioactive material released in liquid and gaseous effluents, and revise the references for radioactive effluent control requirements in 10 CFR Part 20. Portions of the proposed TS changes are consistent with applicable portions of Technical Specification Task Force (TSTF) Change Traveler TSTF-258-A, Rev. 4 (Reference 1), which has been incorporated into the Improved Standard Technical Specifications, NUREG-1433 (Reference 2). Similar TS changes were previously approved by the NRC for Indian Point Nuclear Generating Unit No. 3 (Reference 3) and Kewaunee Power Station (Reference 4).

The proposed changes do not result in a change in the types or amounts of effluents released. The proposed changes do not impact the operation, configuration, or testing of plant structures, systems, or components. Therefore, the proposed changes do not impose any new radiological hazard to the plant staff or the public. The proposed changes will ensure continued compliance with applicable regulatory requirements.

A description of the proposed changes is provided in Section 2.0, "Proposed Changes," of this Attachment. Attachment 2 provides the marked-up TS pages indicating the proposed changes.

2.0 PROPOSED CHANGES

LGS has separate TS for Unit 1 and Unit 2; however, the proposed changes are identical for both units.

Implementation of the revised 10 CFR Part 20 includes updating definitions, revising radiological effluent release control requirements, and updating references to the applicable sections of 10 CFR Part 20. The specific TS changes are described below.

1. Definition 1.22, "MEMBER(S) OF THE PUBLIC," will be revised to state: "Member of the Public means any individual except when that individual is receiving an occupational dose."

2. Definition 1.36a, "RESTRICTED AREA," will be added and state: "Restricted area means an area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. Restricted area does not include areas used as residential quarters, but separate rooms in a residential building may be set apart as a restricted area."

3. Definition 1.45, "UNRESTRICTED AREA," will be revised to state: "Unrestricted Area means an area, access to which is neither limited nor controlled by the licensee."

4. TS Section 6.8.4.d.2, which specifies the limitations on the concentrations of radioactive material released in liquid effluents to Unrestricted Areas, will be revised to change "10 CFR Part 20, Appendix B, Table II, Column 2" to "10 times the concentration values in 10 CFR Part 20, Appendix B, Table 2, Column 2."

5. TS Section 6.8.4.d.3 will be revised to reference "10 CFR 20.1302" instead of "10 CFR 20.106."

6. TS Section 6.8.4.d.7, which specifies the limitations on the concentrations of radioactive material released in gaseous effluents to areas beyond the Site Boundary, will be revised to state the following:

   "Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY shall be limited to the following:

   a. For noble gases: less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin, and

   b. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to 1500 mrem/yr to any organ."

7. TS Section 6.14.1.a.2 will be revised to reference "10 CFR 20.1302" instead of "10 CFR 20.106."

8. TS Bases Section 3/4.11.1.4, which discusses restricting the quantity of radioactive material contained in specified liquid holdup tanks relative to an uncontrolled release of the tanks' contents, will be revised to change "the limits of 10 CFR Part 20, Appendix B, Table II, Column 2" to "10 times the limits of 10 CFR Part 20, Appendix B, Table 2, Column 2."

3.0 BACKGROUND

10 CFR Part 20 was revised in its entirety, effective January 1, 1994. Note that 10 CFR Part 50, Appendix I, which is the basis for the Offsite Dose Calculation Manual (ODCM), was not revised at that time. The NRC had determined that it was acceptable for the licensees to retain their existing level of effluent control by implementing the "as low as is reasonably achievable" (ALARA) requirement after January 1, 1994, without submitting individual requests for amending their TS to comply with the new 10 CFR 20.1101(b). Therefore, the current LGS TS and ODCM are based on the pre-1994 version of 10 CFR Part 20.

The intent of TSTF-258-A was to clarify the Improved Standard Technical Specifications to be consistent with the intent of 10 CFR Part 20, and eliminate possible confusion or improper implementation of the revised 10 CFR Part 20 requirements.

LGS is submitting this LAR to update the TS to be consistent with the revised 10 CFR Part 20 requirements and to include the clarifying updates consistent with TSTF-258-A. Implementation of this LAR will result in the LGS ODCM being based on the current version of 10 CFR Part 20.

4.0 TECHNICAL ANALYSIS

Definitions 1.22, " MEMBER(S) OF THE PUBLIC," and 1.45, "UNRESTRICTED AREA," are being revised and Definition 1.36a, "RESTRICTED AREA," is being added as administrative changes to the LGS TS Definitions to make the affected LGS TS Definitions consistent with the same definitions provided in 10 CFR Part 20.

TS Sections 6.8.4.d.3 and 6.14.1.a.2 are being revised as administrative changes to make the LGS TS references to 10 CFR Part 20 in these sections consistent with the applicable sections of 10 CFR Part 20. The 1994 revision to 10 CFR Part 20 replaced 10 CFR 20.106 with Sections 20.1301 and 20.1302, which state the requirements for dose limits for individual members of the public, and compliance with the dose limits, respectively.

The existing LGS TS Section 6.8.4.d.2 and TS Bases Section 3/4.11.1.4 reference the old (i.e., the pre-1994) 10 CFR Part 20, Appendix B, Table II. The concentrations referenced in Table II are specific values based on maximum permissible concentrations, which relate to an annual dose of 500 mrem. The radioactive liquid effluent concentration limits given in the current 10 CFR Part 20, Appendix B, Table 2, are based on an annual dose of 50 mrem total effective dose equivalent. An instantaneous release concentration corresponding to a dose rate of 500 mrem/year has been acceptable as the current TS limit for liquid effluents. Since this limit applies at all times to assure that the values in Appendix I of 10 CFR Part 50 are not likely to be exceeded, it is not necessary to reduce this limit by a factor of 10. The use of liquid effluent concentration values that are 10 times those listed in Appendix B, Table 2 will not have a negative impact on the ability to continue to operate within the design objectives in Appendix I to 10 CFR Part 50. Thus, the proposed changes maintain the same overall level of effluent control while retaining the operational flexibility that exists with the current TS under the old 10 CFR Part 20 requirements.

The existing LGS TS Section 6.8.4.d.7 also references the old (i.e., the pre-1994) 10 CFR Part 20, Appendix B, Table II. The concentrations referenced in Table II are specific values based on maximum permissible concentrations, which relate to an annual dose of 500 mrem. As indicated in the introduction to Appendix B of the revised 10 CFR Part 20, the gaseous effluent concentration limits given in Appendix B, Table 2, Column 1, are based on an annual dose of 50 mrem for isotopes for which inhalation or ingestion is limiting. Release concentrations corresponding to limiting dose rates at the site boundary from noble gases less than or equal to 500 mrem/yr to the total body and 3000 mrem/yr to the skin; and 1500 mrem/yr to any organ from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than eight days has been acceptable as TS limits for gaseous effluents to assure that the limits of 10 CFR Part 50, Appendix I, are not likely to be exceeded as evidenced by NRC approval of similar TS changes for other utilities. The proposed change maintains the same overall level of effluent control and dose rate limits as referenced in the current wording of TS Section 6.8.4.d.7, while also maintaining consistency with the methods of the LGS Offsite Dose Calculation Manual (ODCM) for calculating these dose rates. Recognizing that this limit is an ALARA constraint on the release rate for gaseous effluents and not an annual dose limit, reference to the 10 CFR Part 20, Appendix B, Table 2, Column 1 values is not necessary.

In addition, the proposed changes to TS Sections 6.8.4.d.2 and 6.8.4.d.7 are consistent with Change Traveler TSTF-258-A, Rev. 4, which states that these changes were made to eliminate possible confusion or improper implementation of the revised 10 CFR Part 20 requirements. The TSTF-258-A changes have been incorporated into the Improved Standard Technical Specifications, NUREG-1433.

The proposed changes do not result in a change in the types or amounts of effluents released. The proposed changes do not impact the operation, configuration, or testing of plant structures, systems, or components. Therefore, the proposed changes do not impose any new radiological hazard to the plant staff or the public. The proposed changes do not affect any Updated Final Safety Analysis Report (UFSAR) accident analysis nor do the changes require any new analyses be performed. The proposed changes will ensure continued compliance with applicable regulatory requirements.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

Exelon has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. **Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?**

   Response: No. Updating the Technical Specifications (TS) to be consistent with 10 CFR Part 20 has no impact on plant structures, systems, or components, does not affect any accident initiators, and does not change any safety analysis. Therefore, the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.

2. **Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?**

   Response: No. Updating the TS to be consistent with 10 CFR Part 20 will not change any equipment, require new equipment to be installed, or change the way current equipment operates. No credible new failure mechanisms, malfunctions, or accident initiators are created by the proposed changes. Therefore, the changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Do the proposed changes involve a significant reduction in a margin of safety?**

   Response: No. Updating the TS to be consistent with 10 CFR Part 20 does not adversely affect existing plant safety margins or the reliability of equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits or limiting safety system settings that would adversely affect plant safety as a result of the proposed changes. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, Exelon concludes that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The basic requirements for the content of TS concerning radioactive effluents from nuclear power plants are contained in 10 CFR 50.36a (Reference 5). 10 CFR 50.36a requires licensees to maintain control over radioactive material in gaseous and liquid effluents to unrestricted areas, produced during normal reactor operations, including expected occurrences, to levels that are as low as reasonably achievable (ALARA). For nuclear power reactors, Appendix I to 10 CFR Part 50 (Reference 6) contains the numerical guidance to meet this ALARA requirement. The dose values specified in Appendix I of 10 CFR Part 50 are small percentages of the limits specified in 10 CFR Part 20 (Reference 7), specifically, the old 10 CFR 20.106 (i.e., the current 10 CFR 20.1301). 10 CFR 50.36a indicates that compliance with the effluent TS will help maintain average annual releases of radioactive material in gaseous and liquid effluents to within small percentages of the dose limits specified in 10 CFR 20.1301, i.e., within the dose values specified in Appendix I of 10 CFR Part 50. The effluent TS requirements allow operational flexibility, compatible with considerations of health and safety, which may temporarily result in release rates higher than specified in Appendix I of 10 CFR Part 50, but still within the limits specified in the old 10 CFR 20.106 or the current 10 CFR 20.1302, which references 10 CFR Part 20, Appendix B, Table 2 concentrations. The use of effluent concentration values that are 10 times those listed in Appendix B, Table 2 will not have a negative impact on the ability to continue to operate within the design objectives in Appendix I to 10 CFR Part 50. Thus, the proposed changes maintain the same overall level of effluent control while retaining the operational flexibility that exists with the current TS under the old 10 CFR Part 20 requirements.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement, or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

1. Technical Specification Task Force, Improved Standard Technical Specifications Change Traveler, TSTF-258-A, Rev. 4, "Changes to Section 5.0, Administrative Controls, " dated July 31, 2003.

2. NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4," Rev. 3.0, dated March 2004.

3. Letter from G. Wunder, U.S. Nuclear Regulatory Commission, to J. Knubel, Power Authority of the State of New York, "Issuance of Amendment for Indian Point Nuclear Generating Unit No. 3 RE: Radioactive Effluent Technical Specifications (TAC No. MA6225), " dated February 7, 2000.

4. Letter from J. Stang, U.S. Nuclear Regulatory Commission, to D. Christian, Dominion Resources, Inc., "Kewaunee Power Station - Issuance of Amendment RE: Technical Specifications Changes for Radioactive Effluents Control Program and Off-Site Dose Calculation Manual (TAC No. MC5900)," dated October 4, 2005.

5. 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors."

6. 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low As Is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents."

7. 10 CFR Part 20, "Standards for Protection Against Radiation."

ATTACHMENT 2

License Amendment Request

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

Proposed Changes to Technical Specifications to Incorporate Revised 10 CFR Part 20 Requirements

"Marked-up" Technical Specifications Pages

Units 1 TS Pages	Unit 2 TS Pages
1-4	1-4
1-7	1-7
1-8	1-8
B 3/4 11-2	B 3/4 11-2
6-14a	6-14a
6-22	6-22

LOGIC SYSTEM FUNCTIONAL TEST

1.20 A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all logic components, i.e., all relays and contacts, all trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

LOW (POWER) TRIP SETPOINT (LTSP)

1.20a The low power trip setpoint associated with the Rod Block Monitor (RBM) rod block trip setting applicable between 30% and 65% reactor thermal power.

1.21 (Deleted) REPLACE WITH INSERT A

MEMBER(S) OF THE PUBLIC

1.22 MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the utility, its contractors, or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

MAPFAC(F)-(MAPLHGR FLOW FACTOR)

1.22a A core flow dependent multiplication factor used to flow bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

MAPFAC(P)-(POWER DEPENDENT MAPLHGR MULTIPLIER)

1.22b A core power dependent multiplication factor used to power bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

MINIMUM CRITICAL POWER RATIO (MCPR)

1.23 The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core (for each class of fuel). Associated with the minimum critical power ratio is a core flow dependent (MCPR(F)) and core power dependent (MCPR(P)) minimum critical power ratio.

OFFSITE DOSE CALCULATION MANUAL

1.24 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual RadiologicaT Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.7 and 6.9.1.8.

OPERABLE - OPERABILITY

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

REFUELING FLOOR SECONDARY CONTAINMENT INTEGRITY (Continued)

1. Capable of being closed by an OPERABLE secondary containment automatic isolation system, or

2. Closed by at least one manual valve, blind flange, slide gate damper, or deactivated automatic valve secured in its closed position, except as provided by Specification 3.6.5.2.2.

b. All refueling floor secondary containment hatches and blowout panels are closed and sealed.

c. The standby gas treatment system is in compliance with the requirements of specification 3.6.5.3.

d. At least one door in each access to the refueling floor secondary containment is closed.

e. The sealing mechanism associated with each refueling floor secondary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE.

f. The pressure within the refueling floor secondary containment is less than or equal to the value required by Specification 4.6.5.1.2a.

REPORTABLE EVENT

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

ADD INSERT B

ROD DENSITY

1.37 ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.

SHUTDOWN MARGIN

1.38 SHUTDOWN MARGIN shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is assumed to be fully withdrawn and the reactor is in the shutdown condition; cold, i.e. 68°F; and xenon free.

SITE BOUNDARY

1.39 The SITE BOUNDARY shall be that line as defined in Figure 5.1.3-1a.

1.40 (Deleted)

SOURCE CHECK

1.41 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.

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STAGGERED TEST BASIS

1.42 A STAGGERED TEST BASIS shall consist of:

a. A test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals.

b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

THERMAL POWER

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

TURBINE BYPASS SYSTEM RESPONSE TIME

1.43A The TURBINE BYPASS SYSTEM RESPONSE TIME shall be that time interval from when the turbine bypass control unit generates a turbine bypass valve flow signal until the turbine bypass valves travel to their required position. The response time may be measured by any series of sequential, overlapping, or total steps such that the entire response time is measured.

UNIDENTIFIED LEAKAGE

1.44 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE.

UNRESTRICTED AREA

REPLACE WITH INSERT C

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

VENTILATION EXHAUST TREATMENT SYSTEM

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

VENTING

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

3/4.11.1.3 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

3/4.11.1.4 LIQUID HOLDUP TANKS

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

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

3/4.11.2.1 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

PROCEDURES AND PROGRAMS (Continued)

d. Radioactive Effluent Controls Program

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

1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2, (2, 10 times the concentration values in

3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR ~~20.106~~ 20.1302 and with the methodology and parameters in the ODCM,

4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,

5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1, (from the site, at or, replace with INSERT D)

PROCESS CONTROL PROGRAM (Continued)

2. A determination that the change did not reduce the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

b. Shall become effective upon review and acceptance by the PORC and approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

a. Shall be documented with the following information:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR ~~20.106~~, 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

b. Shall become effective upon review and acceptance by the PORC and the approval of the Plant Manager.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6.15 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

LGS TS MARKUP INSERTS

INSERT A

MEMBER(S) OF THE PUBLIC

1.22 Member of the Public means any individual except when that individual is receiving an occupational dose.

INSERT B

RESTRICTED AREA

1.36a Restricted Area means an area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. Restricted area does not include areas used as residential quarters, but separate rooms in a residential building may be set apart as a restricted area.

INSERT C

UNRESTRICTED AREA

1.45 Unrestricted Area means an area, access to which is neither limited nor controlled by the licensee.

INSERT D

shall be limited to the following:

a. For noble gases: less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin, and

b. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to 1500 mrem/yr to any organ.

LOGIC SYSTEM FUNCTIONAL TEST

1.20 A LOGIC SYSTEM FUNCTIONAL TEST shall be a test of all logic components, i.e., all relays and contacts, all trip units, solid state logic elements, etc, of a logic circuit, from sensor through and including the actuated device, to verify OPERABILITY. The LOGIC SYSTEM FUNCTIONAL TEST may be performed by any series of sequential, overlapping or total system steps such that the entire logic system is tested.

LOW (POWER) TRIP SETPOINT (LTSP)

1.20a The low power trip setpoint associated with the Rod Block Monitor (RBM) rod block trip setting applicable between 30% and 65% reactor thermal power.

1.21 (Deleted)

REPLACE WITH INSERT A

MEMBER(S) OF THE PUBLIC

1.22 MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the utility, its contractors, or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

MAPFAC(F)-(MAPLHGR FLOW FACTOR)

1.22a A core flow dependent multiplication factor used to flow bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

MAPFAC(P)-(POWER DEPENDENT MAPLHGR MULTIPLIER)

1.22b A core power dependent multiplication factor used to power bias the standard Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit.

MINIMUM CRITICAL POWER RATIO (MCPR)

1.23 The MINIMUM CRITICAL POWER RATIO (MCPR) shall be the smallest CPR which exists in the core (for each class of fuel). Associated with the minimum critical power ratio is a core flow dependent (MCPR(F)) and core power dependent (MCPR(P)) minimum critical power ratio.

OFFSITE DOSE CALCULATION MANUAL

1.24 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.7 and 6.9.1.8.

OPERABLE - OPERABILITY

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

REFUELING FLOOR SECONDARY CONTAINMENT INTEGRITY (Continued)

1. Capable of being closed by an OPERABLE secondary containment automatic isolation system, or

2. Closed by at least one manual valve, blind flange, slide gate damper or deactivated automatic valve secured in its closed position, except as provided by Specification 3.6.5.2.2.

b. All refueling floor secondary containment hatches and blowout panels are closed and sealed.

c. The standby gas treatment system is in compliance with the requirements of Specification 3.6.5.3.

d. At least one door in each access to the refueling floor secondary containment is closed.

e. The sealing mechanism associated with each refueling floor secondary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE.

f. The pressure within the refueling floor secondary containment is less than or equal to the value required by Specification 4.6.5.1.2a.

REPORTABLE EVENT

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

ROD DENSITY (ADD INSERT B)

1.37 ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.

SHUTDOWN MARGIN

1.38 SHUTDOWN MARGIN shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is assumed to be fully withdrawn and the reactor is in the shutdown condition; cold, i.e. 68°F; and xenon free.

SITE BOUNDARY

1.39 The SITE BOUNDARY shall be that line as defined in Figure 5.1.3-1a.

1.40 (Deleted)

SOURCE CHECK

1.41 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.

STAGGERED TEST BASIS

1.42 A STAGGERED TEST BASIS shall consist of:

a. A test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals.

b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

THERMAL POWER

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

TURBINE BYPASS SYSTEM RESPONSE TIME

1.43A The TURBINE BYPASS SYSTEM RESPONSE TIME shall be that time interval from when the turbine bypass control unit generates a turbine bypass valve flow signal until the turbine bypass valves travel to their required position. The response time may be measured by any series of sequential, overlapping, or total steps such that the entire response time is measured.

UNIDENTIFIED LEAKAGE

1.44 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE.

UNRESTRICTED AREA — REPLACE WITH INSERT C

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

VENTILATION EXHAUST TREATMENT SYSTEM

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

VENTING

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

3/4.11.1.3 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

3/4.11.1.4 LIQUID HOLDUP TANKS

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

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

3/4.11.2.1 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

PROCEDURES AND PROGRAMS (Continued)

d. Radioactive Effluent Controls Program

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

1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2, (2) 10 times the concentration values in

3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR ~~20.106~~ 20.1302 and with the methodology and parameters in the ODCM,

4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,

5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1, from the site at or replace with INSET D

PROCESS CONTROL PROGRAM (Continued)

2. A determination that the change did not reduce the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.

b. Shall become effective upon review and acceptance by the PORC and approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

a. Shall be documented with the following information:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR ~~20.106~~, 20.1302 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

b. Shall become effective upon review and acceptance by the PORC and the approval of the Plant Manager.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6.15 (Deleted) - INFORMATION FROM THIS SECTION RELOCATED TO THE ODCM.

LGS TS MARKUP INSERTS

INSERT A

MEMBER(S) OF THE PUBLIC

1.22 Member of the Public means any individual except when that individual is receiving an occupational dose.

INSERT B

RESTRICTED AREA

1.36a Restricted Area means an area, access to which is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials. Restricted area does not include areas used as residential quarters, but separate rooms in a residential building may be set apart as a restricted area.

INSERT C

UNRESTRICTED AREA

1.45 Unrestricted Area means an area, access to which is neither limited nor controlled by the licensee.

INSERT D

shall be limited to the following:

a. For noble gases: less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin, and

b. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to 1500 mrem/yr to any organ.