Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

www.exeloncorp.com

Exelon Nuclear

10 CFR 50.90

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

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: Request for Amendment to Technical Specifications Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," to Eliminate Requirements for Main Steam Line Isolation on High Turbine Building Temperature

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), requests the following amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed changes will eliminate the requirement for main steam line isolations on high Turbine Building temperatures from TS Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," Table 3.3.6.1-1, (i.e., Function 1.f). This change is consistent with the current revision (i.e., Revision 3.1) of the Improved Standard Technical Specifications (ISTS), NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6."

During operation in the summer months at CPS, the ambient temperatures within the Turbine Building trend up with increased outside air temperatures and approach their isolation setpoints. It has been determined that with a trip of a Plant Chilled Water system (WO) chiller or area coolers, there is very little operating margin between the normal operating temperature and the Turbine Building main steam line isolation setpoints. This condition could be exacerbated by minor steam leaks that are inaccessible during full power operation. The proposed TS change will allow EGC to alleviate the potential for an avoidable plant transient.

The attached amendment request is subdivided as shown below.

Attachment 1 provides an evaluation supporting the proposed changes.

Attachment 2 provides the marked-up TS pages, with the proposed changes indicated.

Attachment 3 includes the associated marked-up TS Bases pages. The TS Bases pages are provided for information only.

The proposed changes have been reviewed by the CPS Plant Operations Review Committee and approved by the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

EGC requests approval of the proposed change by June 15, 2010, with the amendment being implemented within 60 days of its issuance.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," EGC is notifying the State of Illinois of this application for changes to the TS by sending a copy of this letter and its attachments to the designated State Official.

There are no regulatory commitments associated with the changes proposed by this request.

Should you have any questions concerning this letter, please contact Mr. Mitchel A. Mathews at (630) 657-2819.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 15th day of June 2009.

Respectfully,

Patrick R. Simpson
Manager – Licensing
Exelon Generation Company, LLC

Attachment 1: Evaluation of the Proposed Changes
Attachment 2: Mark-Up of Proposed Technical Specifications Pages
Attachment 3: Mark-Up of Technical Specifications Bases Pages (For Information Only)

ATTACHMENT 1

EVALUATION OF PROPOSED CHANGES

Subject: Request for Amendment to Technical Specifications Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," to Eliminate Requirements for Main Steam Line Isolation on High Turbine Building Temperature

1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), requests the following amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed change will eliminate the requirement for main steam line (MSL) isolation on high Turbine Building temperature from TS Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," Table 3.3.6.1-1, (i.e., Function 1.f, "Main Steam Line Turbine Building Temperature-High"). This change is consistent with the current revision (i.e., Revision 3.1) of the Improved Standard Technical Specifications (ISTS), NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6."

During operation in the summer months at CPS, the ambient temperatures within the Turbine Building and surrounding areas trend higher with increased outside air temperatures and approach the MSL isolation setpoints. It has been determined that with a trip of a Plant Chilled Water system (WO) chiller or area coolers, the operating margin between the normal operating temperature and the Turbine Building MSL isolation setpoints is further reduced. This condition could be exacerbated by minor steam leaks that are inaccessible during full power operation. The proposed TS change will allow EGC to alleviate the potential for an avoidable plant transient. Once removed from the TS, EGC intends to disable the MSL Turbine Building Temperature-High isolation function. EGC intends to maintain an alarm to provide information to plant operators regarding Turbine Building temperatures. This will allow the operators to take action to investigate the cause for the alarm and initiate additional actions as needed. These changes will prevent unnecessary challenges to the operation of the plant, (i.e., a MSL isolation and subsequent plant scram), that may be caused by high ambient temperatures due to an inadvertent WO chiller or area cooler trip, or minor steam leakage.

2.0 DETAILED DESCRIPTION

The main steam tunnel at CPS provides radiation protection from the four MSLs that are contained within it. The inboard Main Steam Isolation Valves (MSIVs) are located within the Drywell inside Primary Containment. The outboard MSIVs are located in the Auxiliary Building main steam tunnel. The Auxiliary Building main steam tunnel is contained within the Secondary Containment boundary.

The MSL piping exits the Auxiliary Building main steam tunnel (i.e., Secondary Containment) and continues inside the Turbine Building up to the MSL equalizing header and the main turbine. Ambient temperatures along the MSLs in the Turbine Building are monitored by twenty (20) temperature modules (1E31-N559A, B, C, D; 1E31-N560A, B, C, D; 1E31-N561A, B, C, D; 1E31-N562A, B, C, D; and 1E31-N563A, B, C, D), and sensors. Each channel consists of five temperature modules (those modules designated as "A" comprise one channel, those modules designated as "B" comprise a second channel, etc.) and their associated sensors. The channel is considered operable only if all five temperature modules and associated sensors are operable. These detectors will also detect leakage from the feedwater system. Closure of the MSIVs is initiated when the sensors detect ambient temperatures along the MSL that exceed the nominal trip setpoints. These trip setpoints are established at a temperature low enough to

detect a MSL leak equivalent to 25 gpm. This isolation is redundant to other MSL isolation functions.

The outputs of the five modules associated with a given division are combined into a single divisional trip signal for the Main Steam Line Turbine Building Temperature – High isolation. A high temperature in any one of the five inputs in a division will cause a trip of that division. This combined divisional trip signal is fed into the 2-out-of-4 trip unit for the associated division and it is also supplied to the 2-out-of-4 trip unit for the other three divisions. If a high temperature trip is initiated from the combined outputs of two divisions, all four divisional 2-out-of-4 trip units will trip activating the inboard and outboard MSIVs. There are no pre-alarms associated with this trip. There are no recorders associated with these indications.

EGC proposes to eliminate the requirement for MSL isolation on high Turbine Building temperatures from TS Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," Table 3.3.6.1-1, Function 1.f.

The MSL isolation from Main Steam Tunnel Temperature – High (Function 1.e) in TS Table 3.3.6.1-1, "Primary Containment and Drywell Isolation Instrumentation," as well as the other redundant and diverse MSL isolation functions will be retained. The MSLs will isolate on a high temperature in the Auxiliary Building main steam tunnel. This area contains four sensors (1E31N604A, B, C, D), one in each division, that will cause an MSIV isolation. Closure of the MSIVs is initiated when the sensors detect ambient temperatures along the MSLs that exceed the nominal trip setpoints. These trip setpoints are established at a temperature low enough to detect a MSL leak equivalent to 25 gpm.

Once the isolation function has been eliminated, an alarm is intended to be maintained to alert the operator in the Control Room of a high temperature condition in the Turbine Building main steam tunnel. This will allow the operator to respond to the alarm and determine if an actual leak is occurring. Confirmation of a leak may be obtained by reading the indication of the existing temperature modules, by a second alarm on high temperature, Turbine Building high radiation alarms, plant stack radiation alarms, or visual observation. In summary, the proposed change will revise the CPS TS to eliminate the requirements for the Main Steam Line Turbine Building Temperature – High input to the MSL isolation logic (i.e., TS Table 3.3.6.1-1, Function 1.f). The marked-up TS pages showing the proposed changes are provided in Attachment 2. Respective changes will also be made to the TS Bases in accordance with TS Section 5.5.11, "Technical Specifications (TS) Bases Control Program." The Bases for TS 3.3.6.1 will remain for the Main Steam Tunnel Temperature – High, Function 1.e. The changes to the TS Bases are provided in Attachment 3 for information only.

3.0 TECHNICAL EVALUATION

The current design of the Turbine Building MSL leak detection system provides an isolation signal on detection of high temperatures along the steam lines outside Secondary Containment and near the MSL equalizing header. A discussion of MSL leak detection is provided in Section 5.2.5.1.3 of the CPS Updated Safety Analysis Report (USAR). Sensors are used to detect a MSL leak greater than or equal to 25 gpm. No credit is taken in the transient or accident analysis for the automatic isolation of the MSIVs by these Turbine Building area temperature switches. Thus, the Turbine Building temperature switches are not assumed to function to mitigate any accident described in Chapters 6 or 15 of the CPS USAR.

Detection of excessive leakage external to the primary containment (e.g., process line break outside containment) is provided by diverse and redundant features. These include detection by low reactor vessel water level, low MSL pressure, high MSL flow, and high ambient temperature in the Auxiliary Building Main Steam Tunnel. These monitors provide alarm and indication in the main control room and trip the isolation logic to cause closure of appropriate system isolation valves on indication of excessive MSL leakage.

In addition to these containment isolation system features, areas outside the containment are monitored by the radiation monitoring system, which alarms on detection of high radiation levels. The Turbine Building equipment drain tanks collect leakage and alarm on high tank level.

Elimination of the MSL Turbine Building High Temperature inputs to the MSL isolation logic was evaluated for risk implications for both the MSIV Closure Initiating Event and the Main Steam Line Break (MSLB) Outside Containment Initiating Event frequency in the CPS PRA model. The PRA model does not explicitly model the MSL Turbine Building High Temperature function as a cause for losing the main condenser during the mission time of the PRA, because logic circuits are typically not modeled, however they are implicitly addressed by various MSIV closure events in the model.

From the standpoint of the MSIV Closure Initiating Event, elimination of the MSL Turbine Building High Temperature isolation would reduce the incidence of this initiating event due to unwarranted causes, such as minor steam leaks, degraded area cooler performance, high ambient temperatures and temperature instrument failures. While spurious high temperature trips are a potential cause of MSIV closure, they are not the only possible cause. In any case, a reduction in this initiating event frequency would cause a reduction in calculated risk from the MSIV closure initiator, which contributes to approximately 1% of the Core Damage Frequency.

From the standpoint of the MSLB Outside Containment Initiating Event, MSIV closure has been credited as a means of mitigating this initiator. That is, the initiating event frequency was calculated considering the likelihood of a MSLB coupled with the likelihood that MSIVs would not close to isolate the break. In this frequency calculation, the failure rate for the instrumentation supplying the MSIV closure signal was not calculated because there are multiple signals that could detect a MSLB, including high MSL flow, MSL low pressure, and low reactor water level. In addition to these automatic isolations, the operators can manually isolate the MSIVs if the automatic isolations do not occur. Moreover, the probability of successful MSL isolation remains high without the MSIV closure signals from the Turbine Building area

temperature sensors, and when coupled with the steam line break probability, this initiator is judged to remain an insignificant contributor to core damage risk.

Removal of this function from the TS would have no significant impact on plant risk. Additionally, the function provided by isolation of MSIVs on high Turbine Building temperature is not a risk-significant function.

In conclusion, the MSL Turbine Building Temperature – High isolation function does not meet the 10 CFR 50.36 criteria for inclusion in the CPS TS based on the following:

- The Turbine Building temperature sensors are used to detect a MSL leak equivalent to 25 gpm. This does not represent a significant degradation of the reactor coolant system pressure boundary.
- As stated in USAR section 15.6.4, the pressure and temperature transients associated with a MSLB outside containment are insufficient to cause fuel damage.
- During a design basis MSLB outside containment, MSIV closure is assumed to occur due to high MSL flow.
- As stated in the CPS TS Bases, no credit is taken for these instruments in any transient or accident analysis.

The MSL leak detection in the Turbine Building, for TS Table 3.3.6.1-1 Function 1.f, does not meet the criteria in 10 CFR 50.36 and may therefore be removed from the TS.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

The NRC's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. The NRC has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (Final Policy Statement), 58 FR 39132, July 22, 1993. The Final Policy Statement identified four criteria to be used in determining whether particular safety functions are required to be included in the TS. The criteria set forth in the Final Policy Statement have been codified and incorporated into 10 CFR 50.36 (60 FR 36953, July 19, 1995). The criteria are (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (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; (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; and (4) a structure, system, or component which operating experience or probabilistic risk assessment (PRA) has shown to be significant to public health and safety. As a result, TS requirements which satisfy any of the criteria in 10 CFR 50.36 must be retained in the TS.

As stated in the CPS TS Bases, credit is not taken for the Turbine Building temperature instruments in any transient or accident analysis in the USAR, since bounding analyses are performed for large breaks such a MSLBs which are isolated by other MSL leakage detection methods as discussed in Section 3.0. Moreover, this trip is not assumed to mitigate the consequences of a design basis accident (DBA) or transient, and is not input into the assumptions for any DBA analysis. Based on PRA insights, the proposed change does not present a significant risk to the health and safety of the public. Therefore, since the proposed change does not meet the requirements of 10 CFR 50.36, the automatic MSL isolation function on Turbine Building temperature is not required to be maintained within the CPS TS.

General Design Criterion (GDC) 54, "Piping systems penetrating containment," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR 50, requires that piping systems penetrating primary reactor containment shall be provided with leak detection, isolation, and containment having redundancy, reliability, and performance capabilities which reflect the importance to safety of isolating these piping systems. The CPS design incorporates various and diverse leak detection and containment isolation features to meet the requirements of GDC 54. It is proposed that the MSL Turbine Building High Temperature isolation function be removed from the TS requirements for containment isolation instrumentation. Appropriate automatic isolations for MSIVs are still retained in accordance with GDC 54 by other diverse leakage detection features such as detection of low reactor water level, high MSL flow, low MSL pressure, and Auxiliary Building main steam tunnel high ambient temperature.

EGC has determined that the proposed changes do not require any exemptions or relief from regulatory requirements, other than the proposed TS changes, and do not affect conformance with any GDC differently than described in the USAR.

4.2 Precedent

The proposed change is consistent with Improved Standard Technical Specifications (ISTS), NUREG-1434, Revision 3.1, "Standard Technical Specifications General Electric Plants, BWR/6," and is similar to changes approved for the River Bend Station (Reference 1). River Bend Station removed their Turbine Building High Temperature inputs into the MSL isolation logic and relocated these requirements to licensee control to prevent avoidable plant transients. River Bend Station has since eliminated this function from the MSL isolation logic.

4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC), requests the following amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed changes will eliminate the requirement for main steam line (MSL) isolation on high Turbine Building temperature from TS Section 3.3.6.1, "Primary Containment and Drywell Isolation Instrumentation," Table 3.3.6.1-1, Function 1.f, "Main Steam Line Turbine Building Temperature-High."

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

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

Response: No.

There is no credit taken in any licensing basis analysis for the MSL main steam isolation valve (MSIV) closure on MSL Turbine Building High Temperature, and there are no calculations that credit the subject isolation function as a mitigative feature. A review of Chapters 6 and 15 of the USAR confirmed that the MSL isolation function on MSL Turbine Building High Temperature was not credited in any analysis for mitigating: fuel cladding damage, challenges to vessel integrity, or dose to plant staff or the general public. This conclusion is consistent with the discussion of the function in the current Technical Specifications Bases Section B 3.3.6.1. EGC intends to make changes that will reduce unnecessary challenges to the MSIVs, associated isolation and actuation logic, and minimize the likelihood of an avoidable plant transient due to increased ambient temperatures for reasons other than a significant steam leak.

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

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

Response: No.

The proposed change eliminates the automatic MSIV isolation function associated with Turbine Building High Temperature from the requirements of the TS. Eliminating the requirements for this isolation function does not introduce any new failure mechanisms or introduce any new accident precursors.

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

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

Response: No.

There is no credit taken in any licensing basis analysis for the MSIV closure on MSL Turbine Building High Temperature. Therefore, since the MSIV isolation function on the MSL Turbine Building High Temperature is not credited as a mitigating feature in any analysis which establishes thermal limits, evaluates peak vessel pressure, evaluates peak containment or drywell pressure, or evaluates onsite and offsite radiological consequences, there is no adverse impact on any margin of safety.

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

Based on the above, EGC concludes that the proposed amendment presents 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.

4.4 Conclusions

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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCE

1. Letter from M. Webb (U. S. NRC) to P. Hinnenkamp (Entergy Operations, Inc.), "River Bend Station, Unit 1 – Issuance of Amendment Re: Relocate Requirements for Main Steam Isolation Valve Isolations on Certain Area Temperatures (TAC No. MB4025)," dated July 11, 2002

ATTACHMENT 2

MARK-UP OF PROPOSED TECHNICAL SPECIFICATIONS PAGE CHANGES

Revised Technical Specifications Page

3.3-55

Table 3.3.6.1-1 (page 1 of 6)
Primary Containment and Drywell Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION F.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Main Steam Line Isolation					
a. Reactor Vessel Water Level-Low Low Low, Level 1	1,2,3	4	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.6 SR 3.3.6.1.7 SR 3.3.6.1.8	≥ -148.1 inches
b. Main Steam Line Pressure-Low	1	4	H	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7	≥ 841 psig
c. Main Steam Line Flow-High	1,2,3	4	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7	≤ 284 psid
d. Condenser Vacuum-Low	1,2[(a)], 3[(a)]	4	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 7.6 inches Hg vacuum
e. Main Steam Tunnel Temperature-High	1,2,3	4	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 171°F
f. Main Steam Line Turbine Building Temperature-High	1,2,3	4	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	Modules 1-4 ≤ 142°F, Module 5 ≤ 150°F
g. Manual Initiation	1,2,3	4	J	SR 3.3.6.1.6	NA

Deleted.

(continued)

(a) With any turbine stop valve not closed.

ATTACHMENT 3

MARK-UP OF TECHNICAL SPECIFICATIONS BASES PAGES (FOR INFORMATION ONLY)

Revised Technical Specifications Bases Pages

B 3.3-142

B 3.3-143

BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY (continued)

1.d. Condenser Vacuum-Low

The Condenser Vacuum-Low Function is provided to prevent overpressurization of the main condenser in the event of a loss of the main condenser vacuum. Since the integrity of the condenser is an assumption in offsite dose calculations, the Condenser Vacuum-Low Function is assumed to be OPERABLE and capable of initiating closure of the MSIVs. The closure of the MSIVs is initiated to prevent the addition of steam that would lead to additional condenser pressurization and possible rupture of the diaphragm installed to protect the turbine exhaust hood, thereby preventing a potential radiation leakage path following an accident.

Condenser vacuum pressure signals are derived from four pressure transmitters that sense the pressure in the condenser. Four channels of Condenser Vacuum-Low Function are available and are required to be OPERABLE to ensure no single instrument failure can preclude the isolation function.

The Allowable Value is chosen to prevent damage to the condenser due to pressurization, thereby ensuring its integrity for offsite dose analysis. As noted (footnote (a) to Table 3.3.6.1-1), the channels are not required to be OPERABLE in MODES 2 and 3, when all turbine stop valves (TSVs) are closed, since the potential for condenser overpressurization is minimized. Switches are provided to manually bypass the channels when all TSVs are closed.

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1.e, 1.f. Main Steam Tunnel Ambient Temperature-High and Main Steam Line Turbine Building Temperature-High

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Ambient Temperature-High is provided to detect a leak in the RCPB, and provides diversity to the high flow instrumentation. The isolation occurs when a very small leak has occurred. If the small leak is allowed to continue without isolation, offsite dose limits may be reached. However, credit for these instruments is not taken in any transient or accident analysis in the USAR, since bounding analyses are performed for large breaks such as MSLBs.

Ambient temperature signals are initiated from thermocouples located in the area being monitored. Four channels of Main Steam Tunnel Temperature-High Function are available and are required to be OPERABLE to ensure that no single

(continued)

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BASES

APPLICABLE SAFETY ANALYSES, LCO, and APPLICABILITY

1.e, 1.f. Main Steam Tunnel Ambient Temperature-High and Main Steam Line Turbine Building Temperature-High (continued)

instrument failure can preclude the isolation function. Each Function has one temperature element.

Delete

Twenty temperature modules (1E31-N559A, B, C, D; 1E31-N560A, B, C, D; 1E31-N561A, B, C, D; 1E31-N562A, B, C, D; and 1E31-N563A, B, C, D) and sensors are provided for monitoring the temperature of the main steam tunnel in the turbine building. Each channel consists of five temperature modules (those modules designated as "A" comprise one channel, those modules designated as "B" comprise a second channel, etc.) and their associated sensors. The channel is considered OPERABLE only if all five temperature modules and associated sensors are OPERABLE.

The ambient temperature monitoring Allowable Value is chosen to detect a leak equivalent to 25 gpm.

1.g. Manual Initiation

The Manual Initiation push button channels introduce signals into the MSL isolation logic that are redundant to the automatic protective instrumentation and provide manual isolation capability. There is no specific USAR safety analysis that takes credit for this Function. It is retained for the isolation function as required by the NRC in the plant licensing basis.

There are four push buttons for the logic, one manual initiation push button per division. There is no Allowable Value for this Function since the channels are mechanically actuated based solely on the position of the push buttons. Four channels of Manual Initiation Function are available and are required to be OPERABLE.

(continued)