

**Pre-Submittal Meeting Between NRC and
Exelon for Planned License Amendment
Request to Modify Technical Specification
3.6.1.3 Surveillance Requirement 3.6.1.3**



Purpose and Agenda

- The purpose of this meeting is to provide the NRC a brief introduction to the proposed License Amendment Request and the basis behind the request
- We will discuss:
 - The Current Surveillance Requirement
 - The Proposed Surveillance Requirement Wording
 - The Basis for the Change
 - Justification for the Change
 - Implementation Constraint
 - Summary

Current Technical Specification SR Note

- Current Surveillance Requirement 3.6.1.3 Note states:

*“-----Note-----
Not required to be met when the 20 inch and 24 inch primary containment vent and purge valves are open for inerting, de-inerting, pressure control, ALARA or air quality considerations for personnel entry, or Surveillances that require the valves to be open, provided the full-flow line to Standby Gas Treatment (SGT) System is closed and one or more SGT System reactor building suction valves are open.”*

- The existing approach for inerting/de-inerting is to align the containment with the Standby Gas Treatment system through the 6-inch pathway while maintaining an open flow path to the Reactor Building.
- The current method for inerting and de-inerting the containment atmosphere is time consuming due to inefficient flow from the containment to SGT System

Proposed Technical Specification SR Note

- Proposed Surveillance Requirement 3.6.1.3 Note Wording Change is:

“-----Note-----”

Not required to be met when the 20 inch and 24 inch primary containment vent and purge valves are open for inerting, de-inerting, pressure control, ALARA or air quality considerations for personnel entry, or Surveillances that require the valves to be open, provided the full flow line to the Standby Gas Treatment (SGT) System is closed.”

- The proposed change is to continue to align the containment vent path through the 6-inch pathway but close the SGT reactor building suction valves.

Basis for the Proposed Change

- The new proposed lineup would approximately double the flow to SGT thereby reducing the containment venting time by half.
- The benefit of a reduced containment venting time is additional available margin (i.e. time) to, when necessary, restore the primary containment within the required oxygen concentration (TS LCO 3.6.3.1).

Justification for the Proposed Change

- To maintain design basis functions of the SGT System, the design basis calculation of record evaluated that the SGT System can withstand the LOCA-induced loads during the brief periods of containment venting.
- The calculation includes the following cases:
 - Case 1 evaluates the current operating valve lineup at the time a LOCA is postulated to occur. See Figure 1.
 - Case 2 evaluates the proposed valve line lineup at the time a LOCA occurs See Figure 2.

Justification for the Proposed Change

- The original analysis was revisited to identify Case 2 analysis refinements which may eliminate or reduce the potential for a field modification to the demister loop seals.
- The calculation acceptance criterion, as shown in the next slide, were established based on the critical components of the SGT System and the Reactor Building.
- Within the original analysis, using the 6-inch line for containment venting with an initially closed Reactor Building Supply flowpath, resulted in overpressurized (displaced) demister loop seals.

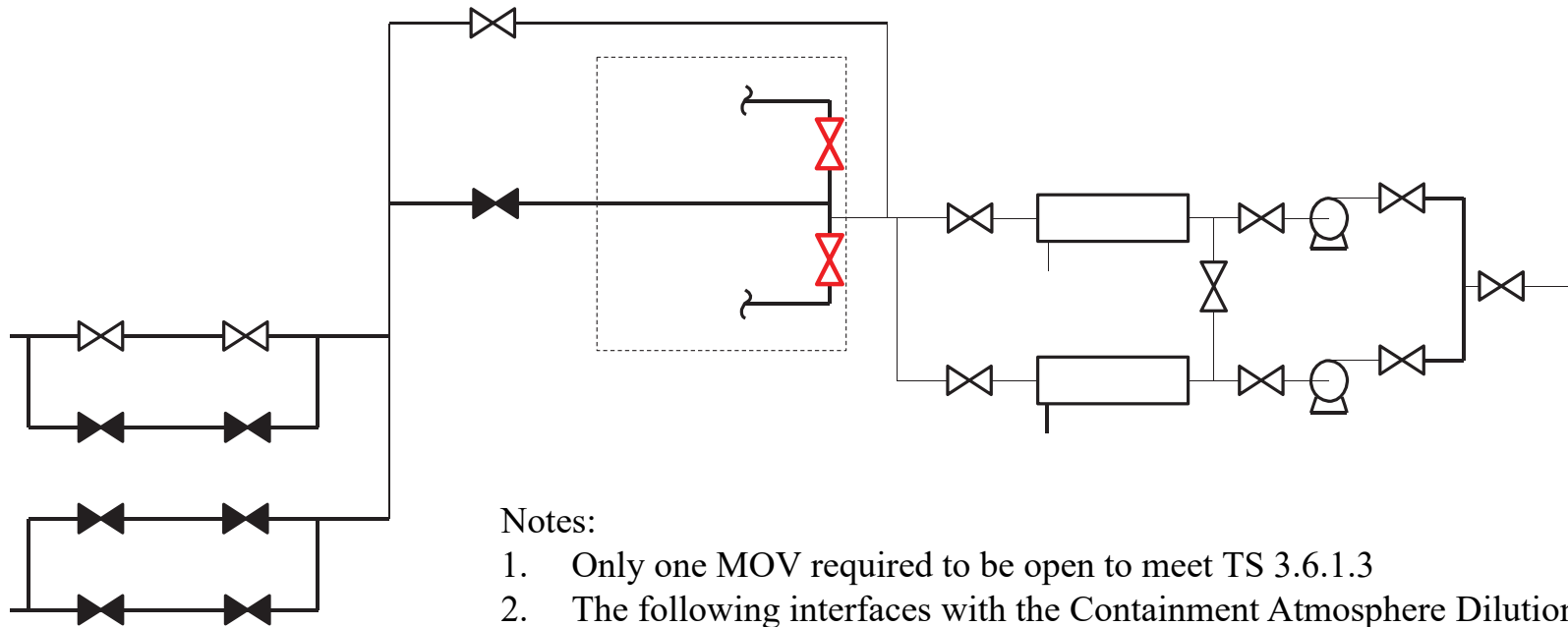
Justification for the Proposed Change

SBGT Component	Acceptance Criterion	Case 2 Previous Result	Case 2 Reanalysis Result	Conclusion
HEPA Filter Inlet	1.0 psig	0.89 psig	0.52 psig	Limit Not Exceeded
HEPA Filter Outlet	0.79 psig	0.74 psig	0.45 psig	Limit Not Exceeded
HEPA Filter Pressure Drop	8.0 inches H ₂ O	6.73 inches H ₂ O	5.0 inches H ₂ O	Limit Not Exceeded
Reactor Building Pressure Rise	0.28 psi	0.024 psi	0.06 psi	Limit Not Exceeded
Demister Loop Seal	18 inches H ₂ O (see below)	24.6 inches H ₂ O	14.4 inches H ₂ O	<i>Limit No Longer Exceeded</i>

Implementation Constraints

- During update of the analysis, an field walkdowns it was discovered that the demister loop seals are shorter than the calculation acceptance criterion.
- The modification of the demister loop seal restoration must be completed prior to implementing this license amendment.
- This modification to match the design basis documentation (calculation and drawing) is being tracked as part of the James FitzPatrick Engineering Change and the station corrective action process.
- It is also important to note that although the existing loop seal is less than the calculation acceptance criteria, the length still bounds the current design basis for the existing operational limitation in TS SR 3.6.1.3.1.

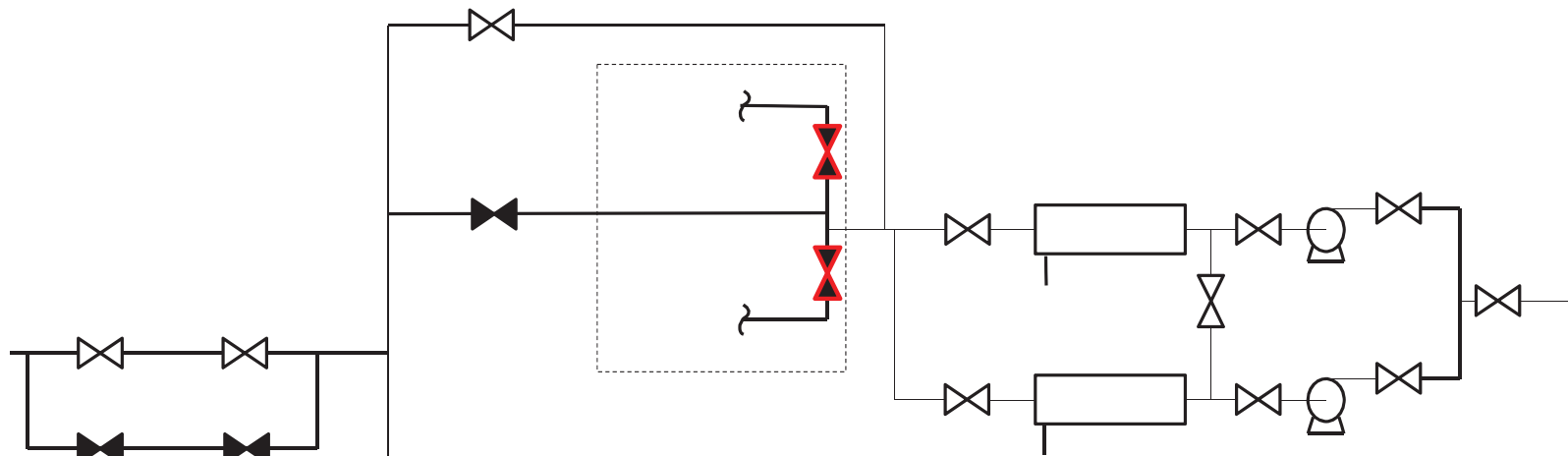
Figure 1 Current lineup



Notes:

1. Only one MOV required to be open to meet TS 3.6.1.3
2. The following interfaces with the Containment Atmosphere Dilution I SGT systems are not depicted but are isolated during operations:
 - Air for decay Heat Cooling
 - Aux Gas Treatment System
 - HPCI Gland Seal Exchanger
 - Hardened Containment Vent System
 - Main Steam Leakage Collection System

Figure 2 Revised lineup



Notes:

1. The following interfaces with the Containment Atmosphere Dilution I SGT systems are not depicted but are isolated during operations:
 - Air for decay Heat Cooling
 - Aux Gas Treatment System
 - HPCI Gland Seal Exchanger
 - Hardened Containment Vent System
 - Main Steam Leakage Collection System

Summary

- The approval of this license amendment will greatly improve the time and efficiency in which the containment is being inerted or de-inerted
- Exelon acknowledges that the modification of the demister loop seal is a constrain to the implementation of this amendment and is currently tracked in the Exelon Corrective Action Program
- Exelon current goal is to submit this LAR by XXX, YY, 2020 with and approval by XXX, YY, 2021.