

**ATTACHMENT 5**

**Oyster Creek Generating Station**

**Docket No. 50-219**

**License No. DPR-16**

**License Amendment Request**

**“Increase Safety Valve As-Found Setpoint Tolerance from  $\pm 1\%$  to  $\pm 3\%$ ”**

**GE-NE-0000-0046-3343-R0, Oyster Creek  
SSV Set-point Tolerance Change Effects on Anticipated Operational Occurrences,**

**NON-PROPRIETARY VERSION**



**GE Energy - Nuclear**

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**Revision 1**

**Class I**

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*Non-proprietary Version*

**Oyster Creek  
SSV Set-point Tolerance Change Effects on Anticipated  
Operational Occurrences**



## **Non-Proprietary Notice**

### **IMPORTANT NOTICE**

This is a non-proprietary version of GE-NE-0000-0046-3343-P, Rev 1, which has the proprietary information removed. Portions of the document that have been removed are indicated by an open and closed bracket as shown here [[            ]].

### **IMPORTANT NOTICE REGARDING**

### **CONTENTS OF THIS REPORT**

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### Revision History

#### Revision 1:

1. Changes to create proprietary version of the document to satisfy 10 CFR2.390. Changes include the addition of the affidavit, and proprietary markings; revised headers and proprietary notices, and the deletion of references. No technical changes were made.



## Summary

This report documents the results of a sensitivity study performed for the Oyster Creek Generating Station (Oyster Creek) to determine the effect on the [[ ]] of a -3% tolerance on the opening set point of the Spring Safety Valves (SSVs). The [[ ]] analysis case for Oyster Creek Cycle 20 was run with the SSVs set to open when pressure was [[ ]] below the [[ ]] opening set point. [[ ]] the change in [[ ]] results were determined to be [[ ]] relative to the original Cycle 20 case. Therefore, changing the SSV opening pressure set points by -3% will have no effect on the core operating thermal limits.

Note that this report identifies the effects on Anticipated Operational Occurrences (AOO) based thermal limits of a change in the SSV opening pressure set point tolerance from -1% to -3%. The results discussed in this report are [[ ]]

## Evaluation

Exelon is evaluating the potential to relax the Oyster Creek SSV opening pressure set point tolerance. Currently, Oyster Creek technical specifications require a SSV opening pressure set point tolerance of  $\pm 1\%$ . Exelon is evaluating a relaxation of this requirement to  $\pm 3\%$  for Oyster Creek. The purpose of this report is to document the effect on the [[ ]] of a change in the negative side of the SSV opening pressure set point tolerance to -3%. Note that the Oyster Creek Cycle 20 reload analysis assumed a SSV opening set point of [[ ]] in the ASME overpressure analysis.

This evaluation addressed the effect of this tolerance relaxation on the [[ ]] Specifically, the evaluation addressed the effect of the lower limit (-3%) of the tolerance band. This evaluation was performed by first re-running the original Cycle 20 limiting core thermal limits case, [[ ]]

[[ ]] Note, the reload licensing [[ ]]  
[[ ]] analyses [[ ]]. Subsequently, [[ ]]  
[[ ]] was run for the same conditions with [[ ]]  
[[ ]] the -3% tolerance point.



Results for these [[ ]] show that the point of [[ ]] occurs about [[ ]]. The [[ ]] also occurs [[ ]] which is why there is no change to the thermal-mechanical results. Given that the [[ ]] cases, [[ ]] The results of the analysis confirm this expectation. These [[ ]] cases adequately represent the thermal limit transients for the purpose of evaluating the impact of the -3% tolerance. The analysis results support [[ ]] the SSV opening pressure tolerance band to -3% for AOO application. [[ ]]