

10 CFR 50.90

RS-02-076

May 31, 2002

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374Subject: Request for Amendment to Technical Specifications  
Excess Flow Check Valve Testing Surveillance Requirement 3.6.1.3.8 and  
Relief Request RV-12

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company (EGC), LLC, proposes a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, the proposed change modifies TS Surveillance Requirement (SR) 3.6.1.3.8 to reduce the number of excess flow check valves (EFCVs) required to be tested every 24 months. The proposed SR will require that a representative sample of reactor instrumentation line EFCVs actuate to the isolation position on an actual or simulated instrumentation line break signal every 24 months. All reactor instrumentation line EFCVs will be tested at least once every 10 years (nominal). The proposed change implements Technical Specification Task Force Traveler 334 (TSTF-334), "Relaxed Surveillance Frequency for Excess Flow Check Valve Testing," Revision 2.

The LaSalle County Station radiological dose assessment for an instrument line break is documented in the LaSalle County Station Updated Final safety Analysis Report (UFSAR) Table 15.6-4, "Instrument Line Break Radiological Effects." The instrument line break analysis does not credit closure of EFCVs.

Additionally, in accordance with 10 CFR 50.55a(a)(3), this submittal includes Relief Request RV-12, Revision 0. The relief request proposes an alternative to the American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI), Operation and Maintenance of Nuclear Power Plants, OMA-1996, Subsection Inservice Testing Code (ISTC), Paragraph 4.1, "Valve Position Verification," and Table 3.6-1, "Inservice Test Requirements," that provides an acceptable level of quality and safety. The proposed change will require that a representative sample of EFCVs with remote position indication be observed locally at least

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once every two years (nominal) to verify that valve operation is accurately indicated. All EFCVs will be tested at least once every 10 years (nominal).

The proposed changes are similar to changes approved for Susquehanna Steam Electric Station, Units 1 and 2, by the NRC in two letters dated April 11, 2001.

The information supporting the proposed TS change is subdivided as follows.

1. Attachment A gives a description and safety analysis for the proposed TS change.
2. Attachment B includes the marked-up and retyped TS pages with the proposed change indicated.
3. Attachment C describes our evaluation performed using the criteria in 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (a)(1) which provides information supporting a finding of no significant hazards consideration in accordance with 10 CFR 50.92, "Issuance of amendment," paragraph (c).
4. Attachment D provides information supporting an Environmental Assessment.
5. Attachment E provides Relief Request RV-12.

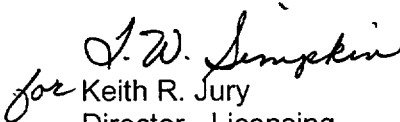
The proposed TS change has been reviewed by the LaSalle County Station Plant Operations Review Committee (PORC) and approved by the Nuclear Safety Review Board (NSRB) in accordance with the Quality Assurance Program.

EGC is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated State Official.

We request approval of the proposed changes by December 2, 2002 to support the next refueling outage of LaSalle County Station, Unit 2, currently scheduled for January, 2003.

Should you have any questions concerning this submittal, please contact Mr. T. W. Simpkin at (630) 657-2821.

Respectfully,

  
for Keith R. Jury  
Director - Licensing  
Mid-West Regional Operating Group

Attachments:

- |               |  |
|---------------|--|
| Attachment A. | Description and Safety Analysis for the Proposed TS Change               |
| Attachment B. | Marked-up and Retyped TS Pages for the Proposed TS Change                |
| Attachment C. | Information Supporting a Finding of No Significant Hazards Consideration |
| Attachment D. | Information Supporting an Environmental Assessment                       |
| Attachment E. | Valve Relief Request - RV-12.  |

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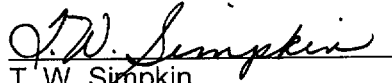
cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – LaSalle County Station  
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS )  
COUNTY OF DUPAGE )  
IN THE MATTER OF: )  
EXELON GENERATION COMPANY (EGC), LLC ) Docket Numbers  
LASALLE COUNTY STATION - UNIT 1 and UNIT 2 ) 50-373 and 50-374

SUBJECT: Request for Amendment to Technical Specifications  
Excess Flow Check Valve Testing Surveillance Requirement  
3.6.1.3.8 and Relief Request RV-12

**AFFIDAVIT**

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information, and belief.

  
T. W. Simpkin  
Manager - Licensing  
Mid-West Regional Operating Group

Subscribed and sworn to before me, a Notary Public in and  
for the State above named, this 31<sup>st</sup> day of

May, 2002



  
Notary Public

**ATTACHMENT A**  
**Proposed Technical Specifications Change**  
**LaSalle County Station, Units 1 and 2**  
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**DESCRIPTION AND SAFETY ANALYSIS**  
**FOR PROPOSED TECHNICAL SPECIFICATIONS CHANGE**

**A. SUMMARY OF PROPOSED CHANGE**

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company (EGC), LLC, proposes a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18. Specifically, the proposed change modifies TS Surveillance Requirement (SR) 3.6.1.3.8 to reduce the number of excess flow check valves (EFCVs) required to be tested every 24 months. The proposed SR will require that a representative sample of reactor instrumentation line EFCVs actuate to the isolation position on an actual or simulated instrumentation line break signal every 24 months. All reactor instrumentation line EFCVs will be tested at least once every 10 years (nominal). The proposed change implements Technical Specification Task Force Traveler 334 (TSTF-334), "Relaxed Surveillance Frequency for Excess Flow Check Valve Testing," Revision 2.

The proposed change is described in Section E of this Attachment. The marked up and retyped TS pages are shown in Attachment B. Additionally, the retyped TS Bases page, for information only, is shown in Attachment B.

**B. DESCRIPTION OF THE CURRENT REQUIREMENTS**

SR 3.6.1.3.8 requires a demonstration that each EFCV is OPERABLE by verifying that the valve actuates to the isolation position on an actual or simulated instrument line break condition at least once every 24 months.

**C. BASES FOR THE CURRENT REQUIREMENTS**

The EFCVs are used as a means of automatic isolation on all static instrument sensing lines that penetrate the drywell containment and connect to the reactor pressure boundary. SR 3.6.1.3.8 provides assurance that the instrumentation line EFCVs will perform as designed. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant refueling outage and the potential for an unplanned transient if the surveillance were performed with the reactor at power.

**D. NEED FOR REVISION OF THE REQUIREMENTS**

LaSalle County Station, Units 1 and 2, currently test all 99 high pressure EFCVs on each unit, at least once every 24 months. A review of recent LaSalle County Station EFCV operating experience demonstrates that these valves are reliable and that the incidence

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of test failures is low. A significant cost and radiation dose savings can be achieved by the proposed relaxation of the EFCV testing frequency without any significant reduction in overall plant safety or valve performance.

**E. DESCRIPTION OF THE PROPOSED CHANGE**

The current SR 3.6.1.3.8 is as follows.

“Verify each EFCV actuates to the isolation position on an actual or simulated instrument line break signal.”

The proposed SR 3.6.1.3.8 with the change underlined, will be as follows.

“Verify a representative sample of EFCVs actuate to the isolation position on an actual or simulated instrument line break signal.”

The representative sample consists of an approximately equal number of EFCVs, such that each EFCV is tested at least once every 10 years (nominal). In addition, the EFCVs in the sample are representative of various plant configurations and operating environments. This ensures that any potential common problems with a specific type or application of EFCV is detected at the earliest possible time.

**F. SAFETY ANALYSIS OF THE PROPOSED CHANGE**

The proposed change implements TSTF-334, Revision 2. TSTF-334 notes that its implementation is only allowed for plants for which General Electric Nuclear Energy Topical Report NEDO-32977-A, “Excess Flow Check Valve Testing Relaxation,” is applicable. In addition, an EFCV performance criteria and basis must be developed to ensure that the corrective action program can provide meaningful feedback for appropriate corrective actions.

The NRC approved the generic use of Topical Report NEDO-32977-A if licensees perform the following.

1. Perform a plant-specific radiological dose assessment for an instrument line break.
2. Perform a plant-specific EFCV failure rate analysis.
3. Perform a plant-specific release frequency initiated by an instrument line break.
4. Develop a feedback mechanism and corrective action program to ensure EFCV performance.

The LaSalle County Station Updated Final Safety Analysis Report (UFSAR) Section 6.2.4.1, “Design Basis,” identifies that EFCVs are used as a means of automatic isolation on all static instrument sensing lines that penetrate the drywell containment and connect to the reactor pressure boundary. The EFCV is located downstream of the root

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valve and as close as practical to the outside surface of the drywell containment. The valve is automatically closed to restrict flow in case of a sensing line break outside the drywell containment.

The following EFCV design assumptions used in Topical Report NEDO-32977-A were also verified as being applicable to LaSalle County Station.

- The single instrument line break frequency of  $3.52\text{E-}05/\text{year}$ .
- The instrument lines contain  $\frac{1}{4}$  inch orifices in series with each EFCV.
- The instrument line break event analysis in the LaSalle County Station UFSAR Section 15.6.2 does not credit closure of EFCVs.

The LaSalle County Station radiological dose assessment for an instrument line break is documented in the LaSalle County Station UFSAR Table 15.6-4, "Instrument Line Break Radiological Effects." Table 15.6-4 identifies that at the Exclusion Area Boundary the estimated Whole Body Dose is  $1.8\text{E-}07$  rem and the estimated Thyroid Dose is  $5.5\text{E-}05$  rem. The Low Population Zone Whole Body Dose is estimated to be  $4.0\text{E-}07$  rem and the Thyroid Dose is estimated to be  $2.1\text{E-}04$  rem. These estimated doses are significantly below the regulatory dose limits listed in 10CFR100, "Reactor Site Criteria." The proposed change does not change the assumptions or the estimated doses associated with a LaSalle County Station instrument line break and is consistent with Topical Report NEDO-32977-A.

A plant specific EFCV failure rate analysis was performed which included a review of the work history on all 198 reactor instrumentation line EFCVs at LaSalle County Station, Units 1 and 2. The review identified that during 2574 valve-years of EFCV operation, EFCVs failed to close 35 times during the performance of SR 3.6.1.3.8; 20 times on Unit 1, and 15 times on Unit 2. This results in a Best Estimate failure rate (i.e., failures/year) of 0.0136/year. This failure rate is greater than the Best Estimate failure rate used in Topical Report NEDO-32977-A of  $1.01\text{E-}07/\text{hour}$  or  $8.85\text{E-}04/\text{year}$ . The LaSalle County Station EFCV Best Estimate failure rate of 0.0136/year corresponds to an Upper Limit Failure Rate of 0.018/year, or  $2.05\text{E-}06/\text{hour}$ . This upper limit failure rate is greater than the composite upper limit failure rate used in the Topical Report of  $1.67\text{E-}07/\text{hour}$ .

A review of the information associated with the 35 EFCV failures revealed the following.

- Insufficient investigative work was performed or documented to assess the reason for most of the 35 EFCV failures. However, the assessment did indicate that a majority of the failures were related to inadequate test methods rather than actual valve failures. For example, there are eight Residual Heat Removal System (RHR) EFCVs associated with shutdown cooling out of a total EFCV population of 198. These EFCVs accounted for 17 of the 35 EFCV failures (i.e., approximately 48%). The available information indicates that the failures of the RHR EFCVs were the result of the failure to establish adequate test conditions which resulted in inadequate flow/pressure drop across the check valve due to a large length of tubing downstream of these EFCVs.

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- Improvements have been made to reduce the impact of testing methods on the EFCV testing. These include:
  - \* Improved test prerequisites to ensure test conditions adequately represent the specified conditions.
  - \* Installation of test taps to allow for better control of test pressures/configuration and to permit the use of external pressure sources (e.g., hydro rig) to allow enhanced control of the system test pressure.
  - \* The use of reduced weight springs, where practical, within the EFCVs that lowers the flow/differential pressure at which the valves close.
- Many of the above enhancements have been implemented in recent years. These efforts have reduced the failure rate of the EFCVs. Prior to 1996, 30 EFCVs failed the surveillance test, however, since 1996 only 5 EFCVs have failed the surveillance test. Additionally, in the last two refueling outages only one failure has been identified per outage. This corresponds to approximately a 1% failure rate (i.e., 1 of 99 EFCVs). These recent results are more consistent with the results presented in the NEDO document.

Based on the above, LaSalle County Station has had a historical EFCV failure rate that is above the industry average. However, due to changes in testing methods, recent results are more consistent with the industry average and the results presented in the NEDO document.

A LaSalle County Station release frequency due to a break in an instrument line concurrent with an EFCV failure to close was performed using the methodology contained in Topical Report NEDO-32977-A. The current LaSalle County Station release frequency associated with the current SR 3.6.1.3.8 is 1.25E-04/year. The proposed change to SR 3.6.1.3.8 will increase the release frequency to 6.26E-04/year, resulting in an increase in release frequency of 5.01E-04/year. These release frequencies are higher than the industry average release frequency due to the relatively higher upper limit failure rate, which is an input to the release frequency analysis.

TSTF-334 identifies that the failure of EFCVs must be evaluated in the corrective action program with appropriate corrective actions. LaSalle County Station will evaluate EFCV failures and take appropriate corrective actions as required by its corrective action program. Additionally, LaSalle County Station will perform the following sample expansion under its corrective action program if additional SR 3.6.1.3.8 failures are discovered under the proposed change to SR 3.6.1.3.8. A SR 3.6.1.3.8 failure is defined as a failure of the EFCV to check flow during the as-found test.

- LaSalle County Station will group the EFCVs in accordance with the Inservice Testing (IST) Program's condition monitoring program. This approach will require that a continuing review of the failures be performed to assess performance trends. The initial plan is to group the EFCVs into three to five groups. Each refueling outage approximately 20% of each group will be tested.



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This approach will ensure that a representative sample of all LaSalle's EFCVs are tested each refueling outage.

- If any one EFCV in a group fails to check flow as the result of either test methodology or valve failure, LaSalle County Station will test another representative sample (i.e., approximately 20%) of EFCVs in that group. If one of the additional EFCV fails to check flow, LaSalle County Station will test all EFCVs within that group prior to restart. Any valve that fails to check flow will be tested again in the next refueling outage, in addition to the normal required test population sample. Initially, all RHR EFCVs discussed above will be tested in the next refueling outage due to their past performance even though recent testing performance has significantly improved.

Based on the above, the proposed change for LaSalle County Station, Units 1 and 2, meets the overall requirements to implement TSTF-334, Revision 2.

**G. IMPACT ON PREVIOUS SUBMITTALS**

The proposed change has no impact on any outstanding submittal.

**H. SCHEDULE REQUIREMENTS**

Approval of the proposed change is requested by December 2, 2002 to support the next refueling outage of LaSalle County Station, Unit 2, currently scheduled for January 2003.

**ATTACHMENT B**  
**Proposed Technical Specifications Change**  
**LaSalle County Station, Units 1 and 2**

**MARKED-UP AND RETYPED TECHNICAL SPECIFICATION PAGES**  
**FOR THE PROPOSED CHANGE**

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.6	Verify the isolation time of each MSIV is $\geq 3$ seconds and $\leq 5$ seconds.	In accordance with the Inservice Testing Program
SR 3.6.1.3.7	Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.	24 months
SR 3.6.1.3.8	Verify <del>each EFCV actuates a</del> representative sample of EFCVs actuate to the isolation position on an actual or simulated instrument line break signal.	24 months
SR 3.6.1.3.9	Remove and test the explosive squib from each shear isolation valve of the TIP System.	24 months on a STAGGERED TEST BASIS
SR 3.6.1.3.10	Verify leakage rate through any one main steam line is $\leq 100$ scfh and through all four main steam lines is $\leq 400$ scfh when tested at $\geq 25.0$ psig.	In accordance with the Primary Containment Leakage Rate Testing Program
SR 3.6.1.3.11	Verify combined leakage rate through hydrostatically tested lines that penetrate the primary containment is within limits.	In accordance with the Primary Containment Leakage Rate Testing Program

SURVEILLANCE REQUIREMENTS

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SR 3.6.1.3.6	Verify the isolation time of each MSIV is $\geq 3$ seconds and $\leq 5$ seconds.	In accordance with the Inservice Testing Program
SR 3.6.1.3.7	Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.	24 months
SR 3.6.1.3.8	Verify a representative sample of EFCVs actuate to the isolation position on an actual or simulated instrument line break signal.	24 months
SR 3.6.1.3.9	Remove and test the explosive squib from each shear isolation valve of the TIP System.	24 months on a STAGGERED TEST BASIS
SR 3.6.1.3.10	Verify leakage rate through any one main steam line is $\leq 100$ scfh and through all four main steam lines is $\leq 400$ scfh when tested at $\geq 25.0$ psig.	In accordance with the Primary Containment Leakage Rate Testing Program
SR 3.6.1.3.11	Verify combined leakage rate through hydrostatically tested lines that penetrate the primary containment is within limits.	In accordance with the Primary Containment Leakage Rate Testing Program

BASES

SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.6.1.3.8

This SR requires a demonstration that a representative sample of EFCVs are OPERABLE by verifying that the valves actuate to the isolation position on an actual or simulated instrument line break condition. The representative sample consists of an approximately equal number of EFCVs, such that each EFCV is tested at least once every 10 years (nominal). In addition, the EFCVs in the sample are representative of various plant configurations, models, sizes, and operating environments. This ensures that any potential common problems with a specific type or application of EFCV is detected at the earliest possible time. This SR provides assurance that the instrumentation line EFCVs will perform as designed. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown that these components usually pass this Surveillance when performed at the 24 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint. The nominal 10 year interval is based on performance testing as discussed in Topical Report NEDO 32977-A, "Excess Flow Check Valve Testing Relaxation." Furthermore, any EFCV failures will be evaluated to determine if additional testing in that test interval is warranted to ensure overall reliability is maintained. Operating experience has demonstrated that these components are highly reliable and that failures to isolate are very infrequent. Therefore, testing a representative sample was concluded to be acceptable from a reliability standpoint.

SR 3.6.1.3.9

The TIP shear isolation valves are actuated by explosive charges. An in place functional test is not possible with this design. The explosive squib is removed and tested to provide assurance that the valves will actuate when required. The replacement charge for the explosive squib shall be from the same manufactured batch as the one fired or from another batch that has been certified by having one of the batch successfully fired. Other administrative controls, such as those that limit the shelf life and operating life, as applicable, of the explosive charges, must be followed. The Frequency of 24 months on a STAGGERED TEST BASIS is considered adequate given the administrative

**ATTACHMENT C**  
**Proposed Technical Specifications Change**  
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**INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS  
CONSIDERATION**

Exelon Generation Company (EGC), LLC, has evaluated the proposed change to the Technical Specifications (TS) for LaSalle County Station, Unit 1 and Unit 2, and has determined that the proposed change does not involve a significant hazards consideration and is providing the following information to support a finding of no significant hazards consideration. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

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

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

Involve a significant reduction in a margin of safety.

The proposed change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. NPF-11 and NPF-18 would modify TS Surveillance Requirement (SR) 3.6.1.3.8 to reduce the number of excess flow check valves (EFCVs) required to be tested every 24 months. The proposed SR will require that a representative sample of reactor instrumentation line EFCVs actuate to the isolation position on an actual or simulated instrumentation line break signal every 24 months. All reactor instrumentation line EFCVs will be tested at least once every 10 years (nominal). The proposed change implements Technical Specification Task Force Traveler 334 (TSTF-334), "Relaxed Surveillance Frequency for Excess Flow Check Valve Testing," Revision 2.

The information supporting the determination that the criteria set forth in 10 CFR 50.92 are met for the proposed change is provided below.

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

The proposed change to LaSalle County Station, Unit 1 and Unit 2 Technical Specifications (TS) modifies TS Surveillance Requirement (SR) 3.6.1.3.8 to reduce the number of excess flow check valves (EFCVs) required to be tested every 24 months. The proposed SR will require that a representative sample of reactor instrumentation line EFCVs actuate to the isolation position on an actual or simulated instrumentation line break signal every 24 months. All reactor instrumentation line EFCVs will be tested at least once every 10 years (nominal).

The performance of EFCV surveillance testing is not a precursor to any accident previously evaluated and is not related to the frequency of instrument line

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failures. Thus, the proposed change to modify the test frequency associated with EFCV surveillance does not have any effect on the probability of an accident previously evaluated.

The performance of the EFCV surveillance testing does provide assurance that the EFCV will perform as designed. The LaSalle County Station radiological dose assessment for an instrument line break is documented in the LaSalle County Station UFSAR Table 15.6-4, "Instrument Line Break Radiological Effects." The assessment does not credit performance of the EFCV to limit instrument line flows during an assumed break. These estimated doses are significantly below the regulatory dose limits listed in 10CFR100, "Reactor Site Criteria." The proposed change does not change the assumptions or the estimated doses associated with a LaSalle County Station instrument line break. Thus, the radiological consequences of any accident previously evaluated are not increased.

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

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

The proposed change modifies TS SR 3.6.1.3.8 to reduce the number of excess flow check valves (EFCVs) required to be tested every 24 months while requiring all EFCVs to be tested at least once every 10 years (nominal). The proposed change does not affect the performance of any LaSalle County Station structure, system, or component credited with mitigating any accident previously evaluated. The proposed change to modify the surveillance will not affect the control parameters governing unit operation or the response of plant equipment to transient conditions. The proposed change does not introduce any new equipment, modes of system operation or failure mechanisms.

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

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

The proposed change for LaSalle County Station, Units 1 and 2, implements Technical Specification Task Force Traveler 334 (TSTF-334), "Relaxed Surveillance Frequency for Excess Flow Check Valve Testing," Revision 2. TSTF-334 notes that its implementation is only allowed for plants for which General Electric Nuclear Energy Topical Report NEDO-32977-A, "Excess Flow Check Valve Testing Relaxation," is applicable. In addition, an EFCV performance criteria and basis must be developed to ensure that the corrective

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action program can provide meaningful feedback for appropriate corrective actions.

LaSalle County Station, in accordance with Topical Report NEDO-32977-A, has performed a plant-specific radiological dose assessment for an instrument line break, EFCV failure rate analysis, release frequency initiated by an instrument line break analysis and has proposed a corrective action program to ensure continued EFCV performance. The result of the assessment and analyses meets the overall requirements to allow implementation TSTF-334, Revision 2

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

Therefore, based upon the above, it is concluded that the proposed change involves no significant hazards consideration.



**ATTACHMENT D**  
**Proposed Technical Specifications Change**  
**LaSalle County Station, Units 1 and 2**

**INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT**

Exelon Generation Company (EGC), LLC, has evaluated the proposed change against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments." EGC has determined that the proposed change meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that the change is being proposed as an amendment to a license issued pursuant to 10 CFR 50, that the proposed change is to a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or that a change is proposed to an inspection or a surveillance requirement, and the amendment meets the following specific criteria.

- (i) The proposed change involves no significant hazards consideration.

As demonstrated in Attachment C, the proposed change involves no significant hazards consideration.

- (ii) There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.

The proposed change does not affect the types or amount of any effluent that may be released offsite. Therefore, there will be no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.

- (iii) There is no significant increase in individual or cumulative occupational radiation exposure.

There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal result in any change in the normal radiation levels within the plant. Therefore, there will be no significant increase in individual or cumulative occupational radiation exposure resulting from the proposed change.

**ATTACHMENT E**  
**Proposed Technical Specifications Change**  
**LaSalle County Station, Units 1 and 2**

**Valve Relief Request - RV-12**

## **Valve Relief Request – RV-12**

Rev. 0

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### **Component Identification**

Code Class: 2

Reference: American Society of Mechanical Engineers (ASME) / American National Standards Institute (ANSI), Operation and Maintenance of Nuclear Power Plants, OMa-1996, Subsection ISTC.

Examination Category: AC

Description: Excess Flow Check Valves (EFCVs) which connect to the reactor coolant pressure boundary

Affected Components: See attached Table.

### **Code Requirements**

The applicable Code of record for LaSalle County Station is ASME OMa-1988 Part 10, and check valve portions of ASME OMa-1996, Subsection Inservice Testing Code (ISTC), and Appendix II, "Check Valve Condition Monitoring Program."

OMa-1996, Section ISTC 4.1, "Valve Position Verification", and Table ISTC 3.6-1, "Inservice Test Requirements" require that Category C valves with remote position indication shall be observed locally at least once every two years to verify that valve operation is accurately indicated.

### **Basis for Relief**

Pursuant to 10 CFR 50.55a(a)(3), relief is requested on the basis that the proposed alternative provides an acceptable level of quality and safety.

Previously, all EFCVs were closure tested and Position Indication Tested (PIT) every refuel cycle to satisfy Inservice Testing requirements set forth by the ASME Code and LaSalle County Station Technical Specifications (TS). TS Surveillance Requirement (SR) 3.6.1.3.8 required verification that each EFCV actuated to the isolation position on an actual or simulated instrument line break signal on a 24 month frequency.

Using the guidance and justification contained in TS Task Force Traveler 334 (TSTF-334), "Relaxed Surveillance Frequency for Excess Flow Check Valve Testing," Revision 2 and General Electric Topical Report NEDO-32977-A, "Excess Flow Check Valve Testing Relaxation," the frequency for exercise testing is proposed to be relaxed. The detailed justification for this proposed testing relaxation is contained in Attachment A, Section F, "Safety Analysis of the Proposed Change," of the licensing amendment submittal. The proposed requirements will be to test a representative sample of EFCVs every 24 months (nominal). All EFCVs will be tested at least once every 10 years (nominal).

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Since position indication testing is performed in conjunction with the exercise test, relief is requested to perform position indication testing on this same frequency, instead of the Code required frequency of at least once every two years. Relief is not required to extend the exercise frequency, since exercise testing will be controlled using Appendix II, Check Valve Condition Monitoring Program, which allows the Owner to establish the test frequency.

### **Alternative Test**

OMa-1996, Section ISTC 4.1 and Table ISTC 3.6-1 require that Category C valves with remote position indication shall be observed locally at least once every two years to verify that valve operation is accurately indicated. In lieu of this requirement, this submittal requests that a representative sample of EFCV be tested every 24 months (nominal) when practicable. All EFCVs will be tested at least once every 10 years (nominal). At LaSalle County Station, position indication testing is performed concurrently with exercise testing. The remote position indication will be verified at the same frequency as the exercise test, which will be performed at a frequency prescribed in TS SR 3.6.1.3.8.

### **Applicable Time Period**

This alternative is requested for the remaining duration of the Inservice Testing Program 2nd ten-year interval for LaSalle County Station, Units 1 and 2.

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**Affected Components Table**

EPN NUMBER	DESCRIPTION
1B21-F325A	A MS Line Hi Flow D/P Inst 1E31-N008A/N008B Hi Excess Flow Check Valve (EFCV)
1B21-F325B	B MS Hi Line Flow D/P Inst 1E31-N009A/N009B Hi EFCV
1B21-F325C	C MS Line Hi Flow D/P Sw 1E31-N010A/N010B Hi EFCV
1B21-F325D	D MS Line Hi Flow D/P Sw 1E31-N011A/N011B Hi EFCV
1B21-F326A	A MS Line Hi Flow D/P Inst 1E31-N008A/N008B Lo EFCV
1B21-F326B	B MS Hi Line Flow D/P Inst 1E31-N009A/N009B Lo EFCV
1B21-F326C	C MS Line Hi Flow D/P Sw 1E31-N010A/N010B Lo EFCV
1B21-F326D	D MS Line Hi Flow D/P Sw 1E31-N011A/N011B Lo EFCV
1B21-F327A	A MS Line Hi Flow D/P Sw 1E31-N008D/N008C Lo EFCV
1B21-F327B	B MS Line Hi Flow D/P Sw 1E31-N009D/N009C Lo EFCV
1B21-F327C	C MS Line Hi Flow D/P Inst 1E31-N010C/N010D Lo EFCV
1B21-F327D	D MS Line Hi Flow D/P Inst 1E31-N011C/N011D Lo EFCV
1B21-F328A	A MS Line Hi Flow D/P Sw 1E31-N008D/N008C Hi EFCV
1B21-F328B	B MS Line Hi Flow D/P Sw 1E31-N009D/N009C Hi EFCV
1B21-F328C	C MS Line Hi Flow D/P Inst 1E31-N010C/N010D Hi EFCV
1B21-F328D	D MS Line Hi Flow D/P Inst 1E31-N011C/N011D Hi EFCV
1B21-F344	Jet Pump Pressure EFCV
1B21-F346	RPV Bottom Head Drain Flow EFCV
1B21-F348	RPV / HPCS dP EFCV
1B21-F350	Core dP EFCV
1B21-F353	RPV Level and Pressure EFCV
1B21-F355	RPV Level and Pressure EFCV
1B21-F357	RPV Level and Pressure EFCV
1B21-F359	RPV Level and Pressure EFCV
1B21-F361	RPV Level and Pressure EFCV
1B21-F363	RPV Level and Pressure EFCV
1B21-F370	RPV Level and Pressure EFCV
1B21-F372	RPV Level and Pressure EFCV
1B21-F374	RPV Level and Pressure EFCV
1B21-F376	RPV Level and Pressure EFCV
1B21-F378	RPV Level and Pressure EFCV
1B21-F413A	RCIC Steam Supply Flow Instr EFCV
1B21-F413B	RCIC Steam Supply Flow Instr EFCV
1B21-F415A	RCIC Steam Supply Flow Instr EFCV
1B21-F415B	RCIC Steam Supply Flow Instr EFCV
1B21-F437	Jet Pump Flow EFCV
1B21-F439	Jet Pump Flow EFCV
1B21-F441	Jet Pump Flow EFCV
1B21-F443	Jet Pump Flow EFCV
1B21-F445A	Jet Pump Flow EFCV
1B21-F445B	Jet Pump Flow EFCV
1B21-F447	Jet Pump Flow EFCV
1B21-F449	Jet Pump Flow EFCV
1B21-F451	Jet Pump Flow EFCV
1B21-F453	Jet Pump Flow EFCV
1B21-F455A	Jet Pump Flow EFCV
1B21-F455B	Jet Pump Flow EFCV

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EPN NUMBER	DESCRIPTION
1B21-F457	Jet Pump Flow EFCV
1B21-F459	Jet Pump Flow EFCV
1B21-F461	Jet Pump Flow EFCV
1B21-F463	Jet Pump Flow EFCV
1B21-F465A	Jet Pump Flow EFCV
1B21-F465B	Jet Pump Flow EFCV
1B21-F467	Jet Pump Flow EFCV
1B21-F469	Jet Pump Flow EFCV
1B21-F471	Jet Pump Flow EFCV
1B21-F473	Jet Pump Flow EFCV
1B21-F475A	Jet Pump Flow EFCV
1B21-F475B	Jet Pump Flow EFCV
1B21-F570	RPV Level and Pressure EFCV
1B21-F571	Drywell Pressure EFCV
1B33-F301A	Recirc Pump Suction Pressure EFCV
1B33-F301B	Recirc Pump Suction Pressure EFCV
1B33-F305A	Recirc Pump Flow EFCV
1B33-F305B	Recirc Pump Flow EFCV
1B33-F305C	Recirc Pump Flow EFCV
1B33-F305D	Recirc Pump Flow EFCV
1B33-F307A	Recirc Pump Flow EFCV
1B33-F307B	Recirc Pump Flow EFCV
1B33-F307C	Recirc Pump Flow EFCV
1B33-F307D	Recirc Pump Flow EFCV
1B33-F311A	Recirc Pump Flow EFCV
1B33-F311B	Recirc Pump Flow EFCV
1B33-F311C	Recirc Pump Flow EFCV
1B33-F311D	Recirc Pump Flow EFCV
1B33-F313A	Recirc Pump Flow EFCV
1B33-F313B	Recirc Pump Flow EFCV
1B33-F313C	Recirc Pump Flow EFCV
1B33-F313D	Recirc Pump Flow EFCV
1B33-F315A	Recirc Pump dP EFCV
1B33-F315B	Recirc Pump dP EFCV
1B33-F315C	Recirc Pump dP EFCV
1B33-F315D	Recirc Pump dP EFCV
1B33-F317A	Recirc Pump Seal Pressure EFCV
1B33-F317B	Recirc Pump Seal Pressure EFCV
1B33-F319A	Recirc Pump Seal Pressure EFCV
1B33-F319B	Recirc Pump Seal Pressure EFCV
1E12-F315	A RHR LPCI Inj Line Integrity EFCV
1E12-F317	B RHR Inj Line Integrity EFCV
1E12-F319	C RHR Inj Line Integrity EFCV
1E12-F359A	RHR SDC Suct Hdr D/P Sw 1E31-N012AA/AB Lo Side EFCV
1E12-F359B	RHR SDC Suct Hdr D/P Sw 1E31-N012AA/AB Hi Side EFCV
1E12-F360A	RHR SDC Suct Hdr D/P Sw 1E31-N012BA/BB Hi Side EFCV
1E12-F360B	RHR SDC Suct Hdr D/P Sw 1E31-N012BA/BB Lo Side EFCV
1E21-F304	LPCS/RHR Integrity EFCV
1E22-F304	HPCS/Rx Vessel D/P Sw 1E22-N009 EFCV
1G33-F309	RX Vessel Drain Flow Instr EFCV

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<b>EPN NUMBER</b>	<b>DESCRIPTION</b>
1G33-F312A	RWCU Flow Instr EFCV
1G33-F312B	RWCU Flow Instr EFCV
2B21-F325A	A MS Line Hi Flow D/P Inst 2E31-N008A/N008B Hi EFCV
2B21-F325B	B MS Hi Line Flow D/P Inst 2E31-N009A/N009B Hi EFCV
2B21-F325C	C MS Line Hi Flow D/P Sw 2E31-N010A/N010B Hi EFCV
2B21-F325D	D MS Line Hi Flow D/P Sw 2E31-N011A/N011B Hi EFCV
2B21-F326A	A MS Line Hi Flow D/P Inst 2E31-N008A/N008B Lo EFCV
2B21-F326B	B MS Hi Line Flow D/P Inst 2E31-N009A/N009B Lo EFCV
2B21-F326C	C MS Line Hi Flow D/P Sw 2E31-N010A/N010B Lo EFCV
2B21-F326D	D MS Line Hi Flow D/P Sw 2E31-N011A/N011B Lo EFCV
2B21-F327A	A MS Line Hi Flow D/P Sw 2E31-N008D/N008C Lo EFCV
2B21-F327B	B MS Line Hi Flow D/P Sw 2E31-N009D/N009C Lo EFCV
2B21-F327C	C MS Line Hi Flow D/P Inst 2E31-N010C/N010D Lo EFCV
2B21-F327D	D MS Line Hi Flow D/P Inst 2E31-N011C/N011D Lo EFCV
2B21-F328A	A MS Line Hi Flow D/P Sw 2E31-N008D/N008C Hi EFCV
2B21-F328B	B MS Line Hi Flow D/P Sw 2E31-N009D/N009C Hi EFCV
2B21-F328C	C MS Line Hi Flow D/P Inst 2E31-N010C/N010D Hi EFCV
2B21-F328D	D MS Line Hi Flow D/P Inst 2E31-N011C/N011D Hi EFCV
2B21-F344	Jet Pump Pressure EFCV
2B21-F346	RPV Bottom Head Drain Flow EFCV
2B21-F348	RPV / HPCS dP EFCV
2B21-F350	Core dP EFCV
2B21-F353	RPV Level and Pressure EFCV
2B21-F355	RPV Level and Pressure EFCV
2B21-F357	RPV Level and Pressure EFCV
2B21-F359	RPV Level and Pressure EFCV
2B21-F361	RPV Level and Pressure EFCV
2B21-F363	RPV Level and Pressure EFCV
2B21-F370	RPV Level and Pressure EFCV
2B21-F372	RPV Level and Pressure EFCV
2B21-F374	RPV Level and Pressure EFCV
2B21-F376	RPV Level and Pressure EFCV
2B21-F378	RPV Level and Pressure EFCV
2B21-F413A	RCIC Steam Supply Flow Instr EFCV
2B21-F413B	RCIC Steam Supply Flow Instr EFCV
2B21-F415A	RCIC Steam Supply Flow Instr EFCV
2B21-F415B	RCIC Steam Supply Flow Instr EFCV
2B21-F437	Jet Pump Flow EFCV
2B21-F439	Jet Pump Flow EFCV
2B21-F441	Jet Pump Flow EFCV
2B21-F443	Jet Pump Flow EFCV
2B21-F445A	Jet Pump Flow EFCV
2B21-F445B	Jet Pump Flow EFCV
2B21-F447	Jet Pump Flow EFCV
2B21-F449	Jet Pump Flow EFCV
2B21-F451	Jet Pump Flow EFCV
2B21-F453	Jet Pump Flow EFCV
2B21-F455A	Jet Pump Flow EFCV
2B21-F455B	Jet Pump Flow EFCV
2B21-F457	Jet Pump Flow EFCV

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EPN NUMBER	DESCRIPTION
2B21-F459	Jet Pump Flow EFCV
2B21-F461	Jet Pump Flow EFCV
2B21-F463	Jet Pump Flow EFCV
2B21-F465A	Jet Pump Flow EFCV
2B21-F465B	Jet Pump Flow EFCV
2B21-F467	Jet Pump Flow EFCV
2B21-F469	Jet Pump Flow EFCV
2B21-F471	Jet Pump Flow EFCV
2B21-F473	Jet Pump Flow EFCV
2B21-F475A	Jet Pump Flow EFCV
2B21-F475B	Jet Pump Flow EFCV
2B21-F570	RPV Level and Pressure EFCV
2B21-F571	RPV Level EFCV
2B33-F301A	Recirc Pump Suction Pressure EFCV
2B33-F301B	Recirc Pump Suction Pressure EFCV
2B33-F305A	Recirc Pump Flow EFCV
2B33-F305B	Recirc Pump Flow EFCV
2B33-F305C	Recirc Pump Flow EFCV
2B33-F305D	Recirc Pump Flow EFCV
2B33-F307A	Recirc Pump Flow EFCV
2B33-F307B	Recirc Pump Flow EFCV
2B33-F307C	Recirc Pump Flow EFCV
2B33-F307D	Recirc Pump Flow EFCV
2B33-F311A	Recirc Pump Flow EFCV
2B33-F311B	Recirc Pump Flow EFCV
2B33-F311C	Recirc Pump Flow EFCV
2B33-F311D	Recirc Pump Flow EFCV
2B33-F313A	Recirc Pump Flow EFCV
2B33-F313B	Recirc Pump Flow EFCV
2B33-F313C	Recirc Pump Flow EFCV
2B33-F313D	Recirc Pump Flow EFCV
2B33-F315A	Recirc Pump dP EFCV
2B33-F315B	Recirc Pump dP EFCV
2B33-F315C	Recirc Pump dP EFCV
2B33-F315D	Recirc Pump dP EFCV
2B33-F317A	Recirc Pump Seal Pressure EFCV
2B33-F317B	Recirc Pump Seal Pressure EFCV
2B33-F319A	Recirc Pump Seal Pressure EFCV
2B33-F319B	Recirc Pump Seal Pressure EFCV
2E12-F315	A RHR LPCI Inj Line Integrity EFCV
2E12-F317	B RHR Inj Line Integrity EFCV
2E12-F319	C RHR Inj Line Integrity EFCV
2E12-F359A	RHR SDC Suct Hdr D/P Sw 2E31-N012AA/AB Lo Side EFCV
2E12-F359B	RHR SDC Suct Hdr D/P Sw 2E31-N012AA/AB Hi Side EFCV
2E12-F360A	RHR SDC Suct Hdr D/P Sw 2E31-N012BA/BB Lo Side EFCV
2E12-F360B	RHR SDC Suct Hdr D/P Sw 2E31-N012BA/BB Hi Side EFCV
2E21-F304	LPCS/RHR Integrity EFCV
2E22-F304	HPCS/Rx Vessel D/P Sw 1E22-N009 EFCV
2G33-F309	RX Vessel Drain Flow Instr EFCV
2G33-F312A	RWCU Flow Instr EFCV



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EPN NUMBER	DESCRIPTION
2G33-F312B	RWCU Flow Instr EFCV