Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740

www.exeloncorp.com

Exelon Nuclear

10 CFR 2.201

SVP-06-090

August 31, 2006

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

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Response to NRC Triennial Fire Protection Baseline Inspection Report

Reference: Letter from J. Lara (U. S. NRC) to C. Crane (Exelon Generation Company, LLC), "Quad Cities Nuclear Power Station, Units 1 and 2 NRC Triennial Fire Protection Baseline Inspection - Inspection Report 05000254/2006002(DRS); 05000265/2006002(DRS)," dated July 31, 2006

In accordance with 10 CFR 2.201, "Notice of violation," and NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions," Exelon Generation Company, LLC (EGC) is contesting two Non-Cited Violations (NCVs) contained in the referenced inspection report - specifically NCVs 05000254(265)/2006002-01 and 05000254(265)/2006002-02. These two NCVs conclude that use of the safe shutdown makeup pump and opposite unit's residual heat removal service water system for post-fire safe shutdown at Quad Cities Nuclear Power Station (QCNPS) does not comply with 10 CFR 50, Appendix R, Section III.G.2.

The NRC's basis for both violations is related to the historical definition and interpretation of classifying equipment as redundant to support safe shutdown. EGC has elected to contest these two violations because we have concluded that our present approach is consistent with NRC requirements and guidance and Nuclear Energy Institute guidance in this area. Based on this guidance we have concluded that the QCNPS fire protection plan meets Appendix R, Section III.G.2. Furthermore, changing our compliance strategy to address these NCVs would be contrary to the program improvements made following the 1998 Confirmatory Action Letter, as they will increase the complexity of the safe shutdown procedures without an associated increase in plant safety. The basis for our contesting these NCVs is provided in the attachment to this letter. In addition, our review of the referenced inspection report identified an additional item related to the cross-cutting aspect of the Fire Pre-Plan NCV. This additional item is also discussed in the attachment to this letter.

IE01
A006

If you have any questions concerning this letter, please contact Mr. Wally Beck at (309) 227-2800.

Respectfully,

Timothy J. Tulon
Site Vice President
Quad Cities Nuclear Power Station

Attachment: Response to NRC Triennial Fire Protection Baseline Inspection Report
Inspection Report 05000254/2006002(DRS); 05000265/2006002(DRS)

cc: NRC Regional Administrator, Region III
NRC Director, Office of Enforcement
NRC Senior Resident Inspector, Quad Cities Nuclear Power Station

Attachment
Response to NRC Triennial Fire Protection Baseline Inspection Report
Inspection Report 05000254/2006002(DRS); 05000265/2006002(DRS)

Introduction

In accordance with 10 CFR 2.201, "Notice of violation," and NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions," Exelon Generation Company, LLC (EGC) is contesting two Non-Cited Violations (NCVs) contained in NRC Inspection Report 05000254/2006002(DRS); 05000265/2006002(DRS) (Reference 1). The two NCVs conclude that use of the safe shutdown makeup pump (SSMP) and the opposite unit's residual heat removal service water system (RHRSW) for post-fire safe shutdown at Quad Cities Nuclear Power Station (QCNPS) does not comply with 10 CFR 50, Appendix R, Section III.G.2.

EGC is contesting these two NCVs as we have concluded that QCNPS is compliant with 10 CFR 50, Appendix R, Section III.G.2. The NRC basis for both NCVs is related to the historical definition and interpretation of redundant and alternative shutdown systems discussed in 10 CFR 50 Appendix R, Section III.G. Generic Letter (GL) 86-10, "Implementation of Fire Protection Requirements," Section 3.8.3 "Redundant Trains/Alternate Shutdown," was originally published to clarify the selection of equipment used for redundant (i.e., Appendix R, Section III.G.2) or alternate (i.e., Appendix R, Section III.G.3) safe shutdown. Section 3.8.3 of GL 86-10 introduced the subjective term of "preferred" system, which has led to uncertainty and confusion in selecting systems for post-fire safe shutdown. As a result, the Boiling Water Reactor Owners Group (BWROG) and the Nuclear Energy Institute (NEI) partnered to develop clarifying guidance. Included in this guidance were clarifications regarding the application of the terminology "redundant" and "alternate/dedicated." As discussed below, EGC has elected to contest these two NCVs because our approach for selecting the systems used for compliance with III.G.2 is consistent with NRC requirements and guidance, current industry guidance, and our fire protection optimization project.

EGC has determined that modifying our compliance strategy will result in a negative change to the current safe shutdown approach at QCNPS. These compliance strategy changes would be contrary to the fire protection plan improvements and optimization efforts made following the 1998 NRC Confirmatory Action Letter (CAL) (Reference 2). In particular, the changes would involve an increase in the number and complexity of operator actions required to respond to plant fires. These additional operator actions would be required to employ the on-site emergency power source. Detailed analysis has confirmed that off-site power is available whenever credited, thus these actions are unwarranted and provide no additional safety benefit.

Non-Cited Violation 05000254(265)/2006002-01

Reference 1 documented one finding (of very low safety significance, "Green") to involve a violation of 10 CFR 50, Appendix R, Section III.G.2. However, because of its very low safety significance and because the issue had been entered into QCNPS's corrective action program, the issue was treated as a NCV in accordance with Section VI.A.1 of the NRC's Enforcement Policy. The subject NCV is restated below:

> 'The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix R, Section III.G.2, having very low safety significance (Green) involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown conditions was free of fire damage. Specifically, the licensee failed to ensure, in the event of a fire in any of the III.G.2 fire areas, that one redundant train of reactor coolant inventory makeup water remained free

of fire damage. Instead the licensee credited the dedicated safe shutdown makeup pump (SSMP) for reactor coolant inventory makeup water in the III.G.2 fire areas. This finding was entered into the licensee's corrective action program as Issue Report (IR) 00502702, "NRC Inspection Finding Concerning App R Redundant Trains," dated June 22, 2006. The licensee plan to review the options for resolving this issue, and pursue the appropriate resolution.'

EGC is contesting this NCV.

Background

In 1998, EGC committed to improve post-fire safe shutdown capabilities at QCNPS (Reference 3). These commitments were made to resolve inconsistencies between the 10 CFR 50, Appendix R safe shutdown procedures and supporting safe shutdown analyses. These actions were driven, in part, by a high fire risk (i.e., 5E-3) determined during the initial QCNPS Individual Plant Evaluation for External Events (IPEEE) evaluation. The initial fire-risk assessment generated a significant sense of urgency for improving post-fire capabilities at QCNPS.

To confirm EGC's actions, the NRC issued a Confirmatory Action Letter (CAL) on January 16, 1998. Following the CAL closure inspection, EGC made additional commitments and associated changes to reduce the need to evacuate the main control room for certain fire events. These actions were part of an overall effort to improve compliance with Appendix R, strengthen the safe shutdown capabilities, and reduce the complexity of required operator actions at QCNPS.

Beginning in early 1999, EGC and the NRC met periodically to status the QCNPS fire protection improvement project. The project objectives were outlined with the NRC, including actions for improving compliance with Appendix R, III.G.2. Specifically, during a meeting held on November 8, 1999, EGC provided a review of plant modifications to allow certain plant systems to be started from the main control room, including the SSMP.

As a result of these plant modifications, EGC was in a position to evaluate SSMP and RCIC as redundant systems in accordance with Appendix R, III.G.2. This was based on their similar design functions and characteristics, including the ability to provide the same design makeup flow (i.e., 400 gpm) over the same reactor pressure range (i.e., 1135-165 psia) and the ability to start each system from the main control room. In accordance with the QCNPS standard fire protection license condition, the reclassification of SSMP supporting the change to III.G.2 was evaluated and implemented under the provisions of 10 CFR 50.59. The 10 CFR 50.59 evaluation concluded that, from a system design function perspective, SSMP and RCIC are functionally redundant; therefore the changes to the fire protection program do not adversely affect the ability to achieve and maintain safe shutdown.

During the subsequent December 2000 triennial fire protection inspection (Reference 4) the NRC inspection team reviewed the revised safe shutdown analysis and the associated 10 CFR 50.59 evaluation. Reference 4 closed out several previous violations and unresolved items related to alternate safe shutdown capability. In its closeout of a 1998 violation for failure to provide alternate safe shutdown capability, Reference 4 stated "Subsequent to this violation, the licensee substantially revised their safe shutdown procedures, safe shutdown analyses, and

implemented modifications to the station for achieving safe shutdown in the event of a fire. The team noted that, as a result of these changes, the licensee did not require alternate safe shutdown capability for many fire areas."

Bases for Contesting the Non-Cited Violation

EGC maintains that the SSMP and RCIC systems meet the NRC requirements and associated industry guidance to be considered redundant and that no violation of NRC regulations exists. This is based on the SSMP and RCIC performing the same design functions.

As part of this most recent Triennial Fire Protection inspection (Reference 1), the inspectors reviewed the 50.59 evaluation discussed above, and concluded that the basis for the reclassification of SSMP as redundant to RCIC was not appropriate. Reference 1 cites Section 3.8.3 of GL 86-10 as the basis for this conclusion. The response provided in Section 3.8.3 states in full:

> "If the system is being used to provide its design function, it generally is considered redundant. If the system is being used in lieu of the preferred system because the redundant components of the preferred system does not meet the separation criteria of Section III.G.2, the system is considered an alternative shutdown capability. Thus, for the example above, it appears that the condensate system is providing alternative shutdown capability in lieu of separating redundant components of the RHR System. Fire detection and a fixed fire suppression system would be required in the area where separation of redundant components of the RHR system is not provided. However, in the event of a turbine building fire, the RHR system would be used for safe shutdown and is not considered an alternative capability. However, one train of the RHR system must be separated from the turbine building."

Based on the response in GL 86-10, Section 3.8.3, EGC concludes that a system's design function is the critical criteria for determining redundancy from an Appendix R perspective. The QCNPS UFSAR and Technical Specification Bases state that the SSMP is designed to provide cooling water to the reactor core in the event that the reactor becomes isolated from the main condenser simultaneously with a loss of the feedwater system. This is the same design function that the UFSAR and Technical Specification Bases attribute to the RCIC system. It is in the performance of this design function that the SSMP is credited in the safe shutdown analysis. Therefore, since the SSMP performs its design function during a postulated fire (i.e., the same design function credited to the RCIC system), its classification in the safe shutdown analysis as redundant to RCIC is consistent with the guidance provided in GL 86-10, Question 3.8.3.

The classification of the SSMP as redundant to RCIC is further supported by the guidance provided in NEI 00-01, "Guidance for Post-Fire Safe Shutdown Circuit Analysis," Revision 1 (Reference 5). This NEI document provides the following definition of redundant:

> "Any combination of equipment and systems with the capability to perform the shutdown functions of reactivity control, inventory control, decay heat removal, process monitoring and associated support functions when used within the capabilities of its design."

Therefore, the classification of the SSMP and RCIC systems as redundant is also consistent with this NEI guidance. Specifically, the systems have the same design function and are

capable of being operated from the control room to provide 400 gpm of makeup water to the reactor vessel, under the same reactor vessel pressure conditions, to support post-fire inventory control.

NRC Regulatory Issues Summary (RIS) 2005-30, "Clarification of Post-Fire Safe-Shutdown Circuit Regulatory Requirements," (Reference 6) gives the NRC's views on NEI 00-01. The RIS states that the deterministic methodology presented in NEI 00-01 is one acceptable approach to the analysis of post-fire, safe-shutdown circuits, when applied in accordance with the regulatory expectations described in the RIS. Our review of the RIS has not identified any expectations or exceptions to the definition of redundant presented in NEI 00-01.

EGC's contention with this NCV is based on the fact that the inspectors apparently did not fully evaluate the SSMP classification based on the design function criteria specified in the GL and NEI guidance. Instead, Reference 1 states that the reclassification of SSMP as redundant to RCIC was not appropriate based on the fact that the backup water supply for SSMP is the station fire system. Since the inspectors did not consider this backup water supply as a "preferred" source of reactor vessel inventory make-up, the SSMP could not be considered redundant to RCIC in accordance with GL 86-10. EGC does not consider this system difference to substantially alter the design function of the SSMP system, relative to the RCIC system, such that the classification of redundant cannot be made.

EGC does not agree with this basis for why the SSMP should not be classified as redundant to RCIC. There is no documented NRC or industry guidance that effectively describes the "preferred" criteria for classification that the inspector applies in this situation. EGC contends that the inspector's interpretation of "preferred" in GL 86-10, Section 3.8.3 for classifying redundant systems is narrowly focused and not consistent with the entire discussion of Section 3.8.3. Specifically, Section 3.8.3 uses the example of the condensate system versus the residual heat removal (RHR) system. In this example, there are significant design and performance differences between these two systems such that the RHR design function would be considered a "preferred" system relative to the condensate system. Most notably, RHR is a safety related emergency system designed and constructed to mitigate design basis accidents, while the condensate system is a non-safety related power generation system not credited in the accident analysis. EGC maintains, with regard to SSMP and RCIC (i.e., two high pressure systems required by technical specification due to their contribution to the reduction of overall plant risk, with the same design function and characteristics), the characterization of one system as "preferred" to the other on the basis of the difference in the backup water supply is not consistent with the example provided in GL 86-10. The performance objective during post-fire actions is to maintain adequate core cooling; the secondary source of water used for reactor makeup inventory has no consequence on the Appendix R classification.

In summary, EGC maintains that classification of SSMP and RCIC as redundant systems with respect to Appendix R, Section III.G.2 is consistent with GL 86-10 and subsequent NRC accepted industry guidance. The two systems perform the same design function of providing reactor coolant inventory makeup during credited design bases events and Appendix R fires. Furthermore, this reclassification was an important element of the fire protection optimization project. The basis for this NCV (i.e., SSMP, with fire protection system as the backup source, is not a redundant system for reactor coolant inventory makeup), is inconsistent with previous NRC inspections or any NRC or industry provided guidance related to Appendix R redundant versus alternate system classification.

Non-Cited Violation 05000254(265)/2006002-02

Reference 1 documented one finding (of very low safety significance, "Green") to involve a violation of 10 CFR 50, Appendix R, Section III.G.2. However, because of its very low safety significance and because the issue had been entered into the station's corrective action program, the issue was treated as a non-cited violation (NCV) in accordance with Section VI.A.1 of the NRC's Enforcement Policy. The subject NCV is restated below:

> 'The inspectors identified a NCV of 10 CFR Part 50, Appendix R, Section III.G.2, having very low safety significance (Green) involving the licensee failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown conditions was free of fire damage. Specifically, the licensee failed to ensure, in the event of a fire in Fire Areas TB-III, 13-1 or 24-1, that one redundant train of residual heat removal service water (RHRSW) remained free of fire damage. Instead the opposite unit's RHRSW train was cross-tied (i.e., an alternative SSD activity) and credited for torus cooling during hot shutdown for a III.G.2 fire area. In addition, the licensee failed to have an analyses and procedures that demonstrated full compliance with all of the requirements of 10 CFR Part 50, Appendix R, Section III.G.3, and Section III.L. This finding was entered into the licensee's corrective action program as IR 00502702, "NRC Inspection Finding Concerning Appendix R Redundant Trains," dated June 22, 2006. The licensee plan to review the options for resolving this issue, and pursue the appropriate resolution.'

EGC is contesting this NCV.

Basis For Contesting the Non-Cited Violation

It is EGC's understanding that this NCV is based on QCNPS classifying the RHRSW system on one unit as a redundant train, capable of supporting safe shutdown on the other unit, due to the ability to crosstie the RHRSW system between units. Reference 1 concludes that use of the RHRSW inter-unit crosstie is only permitted to be used to support alternate shutdown (i.e., can not be considered redundant), therefore a fire in areas crediting the RHRSW crosstie must meet the requirements of 10 CFR 50 Appendix R, Section III.G.3 for alternate shutdown. Based on this position, the NRC issued the NCV for failure to ensure that one redundant train of systems necessary to achieve and maintain hot shutdown was free of fire damage and for failure to have the requisite analysis for alternate shutdown.

It is EGC's contention that for multiple unit plants the systems shared between units may be credited as redundant for each unit, provided the system performs its design function within the design basis of the plant. Under this redundant classification, the fire areas crediting the RHRSW crosstie meet the 10 CFR 50 Appendix R, Section III.G.2 requirement that at least one redundant train of a system is available to support safe shutdown.

In GL 86-10, Section 3.8.3, the NRC has documented its position on what constitutes a redundant system. Specifically, if the system is being used to provide its design function, it is generally considered redundant. The RHRSW system design function is to provide cooling water to the RHR system heat exchangers, and the RHRSW system is required for containment cooling and safe reactor shutdown during abnormal operating events. Each unit's RHRSW system consists of two independent subsystems. Each independent RHRSW subsystem can

be connected via an inter-unit crosstie to the same independent RHRSW subsystem on the opposite unit (i.e., Unit 1 RHRSW Train A crosstied to Unit 2 RHRSW Train A, Unit 1 RHRSW Train B crosstied to Unit 2 RHRSW Train B). The inter-unit crosstie facilitates additional redundant capability to provide cooling water to the RHR heat exchangers and other cooling loads. The plant design basis fully acknowledges the RHRSW system and inter-unit capabilities (UFSAR Section 9.2.1). Utilization of the crosstie is fully integrated into station operating procedures, including certain procedures used for post-fire safe shutdown. These capabilities are provided to increase equipment operational flexibility, thereby optimizing plant safety.

Additionally, the NRC has acknowledged the industry's use of shared inter-unit systems for redundant safe shutdown in Technical Report R7017/U7010-3/95, "A Historical Fire Protection Licensing Document Describing Requirements for Commercial Nuclear Power Plants Operating in the United States" (Reference 7). Section 5.2.5, "Shared Equipment At Multiple Unit Sites," of this document states:

> "Some multiple unit facilities use equipment of the non-affected unit to provide a redundant safe shutdown capability. When equipment is shared among units, the shared equipment must satisfy General Design Criterion 5 (GDC 5) of Appendix A of 10 CFR 50. Specifically, the plant must demonstrate that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, an orderly shutdown and cooldown of the remaining units.
>
> Examples demonstrating use of shared equipment or equipment from another unit include:
>
> - Non-affected unit emergency diesel generators are used to provide safe shutdown power for the affected unit.
> - Service water, component cooling water, and auxiliary feedwater may be cross-connected to supply the affected unit from the non-affected unit.
> - Water supplies such as refueling water storage tanks and condensate storage tanks may be crossconnected to permit use of the non-affected unit's water inventory to supply the affected unit."

As described above, RHRSW system continues to perform its design function when crosstied to support the opposite unit. Therefore, EGC considers the redundant classification consistent with GL 86-10 and Reference 7.

Reference 1 provides the NRC's position supporting this NCV, stating that while reviewing a 1984 QCNPS submittal (Reference 8), the inspector "...noticed that the RHRSW cross-tie was only credited in alternate shutdown fire areas..[sic] Therefore, the inspectors concluded that the use of the RHRSW cross-tie was only permitted for alternate shutdown areas..." However, EGC has not identified documentation supporting this relationship (i.e., a fire area classified as an alternative shutdown area due to the use of the RHRSW crosstie). EGC asserts that previous safe shutdown analyses classified certain areas as alternative shutdown due to other system or plant limitations.

EGC has concluded that the RHRSW crosstie capability is documented as part of the QCNPS design basis and when crosstied, the system continues to perform its design function. Therefore, crediting the opposite unit's RHRSW system as redundant is consistent with

10 CFR 50, Appendix R and subsequent guidance since the design function of the system is maintained. Based on this conclusion, QCNPS meets Appendix R, Section III.G.2 by ensuring that one redundant train of RHRSW necessary to achieve and maintain safe shutdown remains free of fire damage under credited fire scenarios.

Additional Items for NRC Consideration

Section 1R05.10.b.1 (Fire Pre-Plans)

The NRC identified a NCV (05000254(265)/2006002-04) of QCNPS's license condition for fire protection involving the lack of complete and accurate information in the QCNPS's pre-fire plans for various plant fire areas. Specifically, the NCV cited the failure to include important information in the pre-fire plans, such as hydrogen and electrical hazards, to assist the fire brigade to fight a fire within those plant fires. The inspection team determined that this issue also affected the cross-cutting area of Problem Identification and Resolution (PI&R) based on a failure to ensure that issues potentially impacting nuclear safety were identified and fully evaluated.

EGC does not contest the violation and fully agrees that the fire pre-plans should have included the important information noted above. EGC concludes that an underlying cause of the performance deficiency is related to a lack of guidance in the Exelon standard for developing pre-fire plans. Exelon procedure OP-AA-201-008 (Pre-Fire Plans) provides only general guidance and does not detail the specific hazards that should be identified, which has led to inconsistencies in implementing pre-fire plans. As a result, a fleet-wide assessment is underway to improve the overall quality and consistency of pre-fire plans including enhancements to the guidance used for developing pre-fire plans.

EGC does not believe there is a cross-cutting aspect to this violation because Problem Identification and Resolution was not the underlying cause of the performance deficiency. Inspection Manual Chapter (IMC) 612, "Power Reactor Inspection Reports," indicates cross-cutting aspects should be considered the underlying cause of the performance deficiency rather than an independent issue, and should play a significant role in contributing to the performance deficiency. As noted above EGC contends that the lack of guidance for developing pre-fire plans was a significant contributor to the performance deficiency.

The inspection report concludes that QCNPS failed to identify the presence of hydrogen and oxygen hazards in fire areas RB-7 and RB-19 as part of a pre-fire plan improvement effort initiated following a deficiency identified in 2004 (IR 221528). The 2004 pre-fire plan deficiency was related to fire-fighting gear (i.e., protection turn-out gear and SCBA equipment). The specific corrective action for this item was completed in a timely manner. Additionally, QCNPS implemented management actions (i.e., periodic pre-fire plan reviews) to improve the overall quality of the station's pre-fire plans. This action was implemented in 2004, has identified deficiencies, and has resulted in improvements to the station pre-fire plans. While the periodic reviews failed to identify the hydrogen and oxygen hazards in the 2004/2005 timeframe, this should not constitute an ineffective corrective action since the original condition identified in IR 221528 was identified and corrected in a timely manner; the periodic pre-fire plan review was an enhancement aimed at improving the pre-fire plans; and these efforts have been effective in improving the quality of the pre-fire plans at QCNPS.

In addition, prior to the triennial fire protection inspection, the fire areas in questions had been identified and evaluated as requiring additional reviews, which had been captured in the QCNPS corrective action program (IR 00478821 dated April 14, 2006). As noted in the inspection report: "The licensee's review of IR 00478821 noted that Fire Areas RB-7 and RB-19 needed hydrogen and oxygen hazards added to the fire pre-plans." A revision to the pre-fire

plans was in progress prior to the inspection. Draft revision 20 was initiated on April 17, 2006 to modify the pre-fire plans for RB-7 and RB-19 to include the hydrogen and oxygen cylinders. The station Fire Marshall approved revision 20 on May 23, 2006 and the updated plans are in place and in use.

This issue is believed to have minimal impact on nuclear safety. EGC is confident that the identified deficiency would not have adversely affected the fire response capabilities due to the extensive training and qualification requirements required for brigade members. The incident commander has the final authority for determining how a fire is combated. In addition, the QCNPS safe shutdown analysis does not credit manual fire fighting capabilities to achieve reactor shutdown and maintain adequate core cooling.

References

1. Letter from J. Lara (U. S. NRC) to C. Crane (Exelon Generation Company, LLC), "Quad Cities Nuclear Power Station, Units 1 and 2 NRC Triennial Fire Protection Baseline Inspection - Inspection Report 05000254/2006002(DRS); 05000265/2006002(DRS)," dated July 31, 2006
2. Letter from A. B. Beach (U. S. NRC) to O. Kingsley (Commonwealth Edison Company), "Confirmatory Action Letter," dated January 16, 1998
3. Letter from E. Kraft, Jr. (Commonwealth Edison Company) to U. S. NRC, "Appendix R Safe Shutdown Analysis (SSA)," dated January 2, 1998
4. Letter from J. Grobe (U. S. NRC) to O. Kingsley (Commonwealth Edison Company), "Quad Cities Triennial Fire Protection Baseline Inspection Report No. 50-254/00-16(DRS); 50-265/00-16(DRS)," dated January 26, 2001
5. NEI 00-01, "Guidance for Post-Fire Safe Shutdown Circuit Analysis," Revision 1, dated January 2005
6. Regulatory Issue Summary 2005-30, "Clarification of Post-Fire Safe-Shutdown Circuit Regulatory Requirements," dated December 20, 2005
7. Technical Report R7017/U7010-3/95, "A Historical Fire Protection Licensing Document Describing Requirements for Commercial Nuclear Power Plants Operating in the United States," March 1995
8. Letter from B. Rybak (Commonwealth Edison Company) to H. Denton (U. S. NRC), "Submittal of Appendix R Reverification Results," dated December 18, 1984