Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

www.exeloncorp.com

Exelon Nuclear

10 CFR 50.12
10 CFR 50, Appendix R

RS-12-011

February 13, 2012

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

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License No. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Subject: Request for Exemption from 10 CFR 50, Appendix R, Section III.L

Reference: Letter from Steven A. Reynolds (NRC) to Michael J. Pacilio (Exelon Generation Company, LLC), "Dresden Nuclear Power Station Triennial Fire Protection Inspection Report 05000237/2011008(DRS); 05000249/2011008(DRS)"

In accordance with 10 CFR 50.12, "Specific exemptions," Exelon Generation Company, LLC (EGC) is requesting a permanent exemption from the requirements in 10 CFR 50 Appendix R, "Fire Protection Program for Nuclear Facilities Operating Prior to January 1, 1979," Section III.L "Alternative and dedicated shutdown capability," paragraph 4, for Dresden Nuclear Power Station (DNPS) Units 2 and 3. The requested exemption would eliminate the requirement for the on-shift High Voltage Operator (HVO), a member of the Safe Shutdown (SSD) staff, to remain "on site at all times" and would allow the HVO to conduct normal shift duties, including those at remote Owner Controlled Areas (OCAs), while fulfilling a required position on the SSD staff. In addition, the exemption would eliminate the requirement to remain "on site at all times" for one on-shift Operations Supervisor, also a member of the SSD staff, and allow that individual to perform the duties of a Safety/First-aid Monitor during switching operations occurring at a remote OCA, i.e., the 345kV switchyard or lake lift station. This exemption is being requested in accordance with the requirements of 10 CFR 50.12(a)(2)(ii) since the application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule.

As described in the referenced letter, DNPS takes credit for the HVO to perform SSD actions for several SSD procedures. The HVO has been responsible for performing these SSD-related activities since the subject procedures were developed in the late 1980s. It was observed that the HVO performs operator rounds (i.e., log taking) at remote locations, such as the lake lift station and Goose Lake pumping station, which are outside the protected area (i.e., the security fence). Since these locations are in OCAs, compliance with 10 CFR 50 Appendix R, Section III.L.4 was considered to be satisfied; however, the HVO has to briefly leave the OCA and travel on a public road in order to get to and from the subject locations. Subsequently, as

noted in the referenced letter, the NRC concluded that use of the public road constituted a failure to ensure that all operators, required for SSD activities, remained "on site" at all times. This is contrary to the requirements of 10 CFR 50 Appendix R, Section III.L.4, and a Green Finding was issued to DNPS.

It has been demonstrated that, in the event the HVO is located at the most distant remote OCA location at the onset of a fire, the HVO is able to return to the protected area and complete the required SSD activities within the required timeframe. Also, if the HVO and an Operations Supervisor are performing switching operations in the 345kV switchyard or lake lift station at the onset of a fire, both individuals will be able to return to the protected area and complete the required SSD activities within the required timeframe.

If the HVO is not allowed to perform his normal shift duties while being considered a member of the SSD staff; and if an Operations Supervisor is not allowed to perform the Safety/First-aid Monitor function during switching operations, two additional operators will need to be added to each of the DNPS six operating crews, for a total of 12 additional operators. Increasing the number of personnel on each operating crew would represent an unwarranted burden on EGC since these additional operators are not necessary to meet the underlying purpose of the rule. Therefore, the special circumstances for issuance of the exemption are satisfied in accordance with the requirements of 10 CFR 50.12(a)(2)(ii), since application of the rule is not necessary to achieve the underlying purpose of the rule. In addition, the requested exemption is authorized by law and is consistent with the common defense and security; therefore, the requirements of 10 CFR 50.12(a)(1) are satisfied. Attachment 1 provides additional detail and justification for the requested exemption.

EGC requests approval of this exemption request by February 14, 2013.

There are no regulatory commitments contained in this letter.

Should you have any questions concerning this letter, please contact Mr. Joseph A. Bauer at (630) 657-2804.

Respectfully,

David M. Gullott
Manager – Licensing
Exelon Generation Company, LLC

Attachment 1: Request for Exemption Request from 10 CFR 50 Appendix R, Section III.L "Alternative and dedicated shutdown capability"

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector – Dresden Nuclear Power Station

ATTACHMENT 1
Request for Exemption Request from 10 CFR 50 Appendix R, Section III.L
"Alternative and dedicated shutdown capability"

I. SPECIFIC EXEMPTION REQUEST

In accordance with 10 CFR 50.12, "Specific exemptions," Exelon Generation Company, LLC (EGC) is requesting a permanent exemption from the requirements in 10 CFR 50 Appendix R, "Fire Protection Program for Nuclear Facilities Operating Prior to January 1, 1979," Section III.L "Alternative and dedicated shutdown capability," paragraph 4, for Dresden Nuclear Power Station (DNPS) Units 2 and 3. The requested exemption would eliminate the requirement for the on-shift High Voltage Operator (HVO), a member of the Safe Shutdown (SSD) staff, to remain "on site at all times" and would allow the HVO to conduct normal shift duties, including those at remote Owner Controlled Areas (OCAs), while fulfilling a required position on the SSD staff. In addition, the exemption would eliminate the requirement to remain "on site at all times" for one on-shift Operations Supervisor, also a member of the SSD staff, and allow that individual to perform the duties of a Safety/First-aid Monitor during switching operations occurring at a remote OCA. This exemption is being requested in accordance with the requirements of 10 CFR 50.12(a)(2)(ii) since the application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule.

Background

10 CFR 50 Appendix R, Section III.L.4 states the following:

> *"If the capability to achieve and maintain cold shutdown will not be available because of fire damage, the equipment and systems comprising the means to achieve and maintain the hot standby or hot shutdown condition shall be capable of maintaining such conditions until cold shutdown can be achieved. If such equipment and systems will not be capable of being powered by both onsite and offsite electric power systems because of fire damage, an independent onsite power system shall be provided. The number of operating shift personnel, exclusive of fire brigade members, required to operate such equipment and systems shall be on site at all times."*

As described in Reference 1, DNPS takes credit for the HVO (i.e., a non-licensed operator) to perform SSD actions for several SSD procedures. The HVO has been responsible for performing these SSD-related activities since the subject procedures were developed in the late 1980s. It was observed that the HVO performs operator rounds (i.e., log taking) at remote locations, such as the lake lift station and Goose Lake pumping station, which are outside the protected area (i.e., the security fence). Since these locations are part of the OCA, compliance with 10 CFR 50 Appendix R, Section III.L.4 was considered to be satisfied; however, the HVO has to briefly leave the OCA and travel on a public road in order to get to and from the noted locations. Subsequently, as noted in Reference 1, the NRC concluded that use of a public road constituted a failure to ensure that all operators, required for SSD activities, remained on-site at all time. This is contrary to the requirements of 10 CFR 50 Appendix R, Section III.L.4, and a Green Finding was issued to DNPS.

II. BASIS FOR EXEMPTION REQUEST

In accordance with 10 CFR 50.12, the NRC may grant exemptions from the requirements of 10 CFR 50, which are:

> *"(1) Authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security."*

Further, 10 CFR 50.12(2) notes that: "The Commission will not consider granting an exemption unless special circumstances are present." Paragraph (ii) specifies one of those special circumstances:

> *"(ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule;"*

On Site Definition

10 CFR 50 Appendix R, Section III.L.4 uses the term "on site" as noted above; however, "on site" is not specifically defined in the CFR. For the purposes of the following discussion, DNPS considers "on site" as used in Appendix R to be equivalent to OCAs. Note that the DNPS OCA extends beyond the protected area (i.e., outside the security fence).

The intent of restricting operators, dedicated to SSD activities, to an "on site" location is to ensure they are readily available to perform their assigned SSD duties in the timeframe required by the associated analysis of record (AOR). As discussed below, it has been demonstrated that an operator, located anywhere in the subject remote OCAs, is able to return to the station and perform his/her assigned SSD duties within the required timeframe.

HVO Safe Shutdown Duties

Dresden Safe Shutdown Procedures (i.e., DSSP series of procedures) addresses activities associated with safe shutdown of the plant following a severe fire. These procedures were initially developed in the late 1980s timeframe. The HVO has activities specified in the following procedures:

DSSP 0100-A1, "Hot Shutdown Procedure - Path A1," Revision 31
DSSP 0100-B1, "Hot Shutdown Procedure - Path B1," Revision 32
DSSP 0100-CR, "Hot Shutdown Procedure - Control Room Evacuation," Revision 42
DSSP 0100-B, "Hot Shutdown Procedure – Path B," Revision 22
DSSP 0100-B1, "Hot Shutdown Procedure – Path B1," Revision 32
DSSP 0100-C, "Hot Shutdown Procedure – Path C," Revision 22
DSSP 0100-CR, "Hot Shutdown Procedure – Control Room Evacuation," Revision 42
DSSP 0100-D, "Hot Shutdown Procedure – Path D," Revision 22
DSSP 0100-E, "Hot Shutdown Procedure – Path E," Revision 30
DSSP 0100-F, "Hot Shutdown Procedure – Path F," Revision 28

Section F, "Limitations and Actions," of each of these procedures, in part, states:

> *"DSSPs define actions to be performed by specific individuals. Time critical actions need to be completed within the assumed time. Operations personnel outside the protected area (i.e., switchyard, lift station, etc.) will be recalled to assist in the safe shutdown efforts. In the event that person assigned to perform an action is NOT available OR is performing other tasks, any qualified individual can perform the required actions, as determined by the Shift Manager."*

It should be noted that all operators dedicated to SSD activities are trained and qualified to perform all non-licensed operator SSD related activities and; therefore, are interchangeable.

As noted in Reference 1, Attachment D, "HVO Actions," of DSSP 0100-A1 and DSSP 0100-B1 directs the HVO to perform a number of activities, one of which is to remove power and de-energize a spuriously open safety relief valve. This is a time critical action assumed to occur within 10 minutes as defined in the Appendix R hydraulic AOR. In the event that the HVO is performing rounds in a remote OCA, another available operator within the protected area would perform this action as allowed by the procedural limitations and actions noted above. The shift staffing levels discussed below are of sufficient number to complete this time critical action regardless of HVO availability. With the exception of DSSP-0100-CR as discussed below, shift staffing levels are of sufficient number to complete all SSD-related time critical actions regardless of HVO availability for all DSSPs noted above.

Reference 1 also discusses HVO activities directed by DSSP-0100-CR. DSSP-0100-CR describes SSD activities required in the event of a Control Room (CR) evacuation due to a fire in the CR or Auxiliary Electrical Equipment Room (AEER); and is the most limiting DSSP with regard to resources; i.e., all SSD-dedicated operators are needed to complete the SSD-required actions. The hydraulic AOR requires that the time critical actions assigned to the HVO be completed within 32 minutes. As acknowledged in Reference 1, a time validation of DSSP 0100-CR was completed in January 2006. All required actions in this procedure were completed in 25 minutes assuming all necessary operators were readily available. Attachment H, "HVO Actions," of DSSP 0100-CR directs the HVO to perform a number of activities, one of which is to locally start the 2A (3A) Control Rod Drive (CRD) pump. The noted time validation indicated that this time critical action could be completed in 14 minutes. For this case, the HVO is relied on to complete this action as the shift staffing levels discussed below are not such that an extra operator would be available to perform this function in lieu of the HVO. In the event that DSSP 0100-CR is initiated while the HVO is performing rounds at a remote OCA, the HVO would be immediately notified and directed to return to the protected area and perform the required HVO SSD duties.

The HVO conducts operator rounds and takes logs in various plant locations, including a number of "remote OCAs" that are outside the protected area. Rounds at remote OCAs are conducted every shift (i.e., three shifts/day on weekdays; two shifts/day on weekends) and are accessed by driving a company vehicle to the location. The total time the HVO spends performing rounds in the remote OCAs varies from approximately one-two hours per shift. These remote OCAs include the 345kV electrical switchyard, lake lift station, Goose Lake pumping station and hot and cold cooling towers. The HVO may also need to perform switching

operations in the 345kV electrical switchyard and lake lift station. The most limiting location, from a travel time standpoint, is the Goose Lake pumping station which is approximately 1.5 miles from the plant entrance. It has recently (i.e., February 2012) been demonstrated that the HVO, when performing duties at the Goose Lake pumping station, can be notified using the normal radio communication system, and return to the protected area within 15 minutes to perform the required SSD-related activities. Note that the HVO maintains radio contact capability with the control room at all times.

Adding the 15 minute travel time back to the plant to the 14 minutes to complete the HVO time-critical task described above, indicates that this task can be completed in 29 minutes; i.e., within the acceptable time of 32 minutes noted in the Appendix R hydraulic AOR.

HVO Travel Time and Station Access Impediments

Unforeseen issues affecting the ability of the HVO to return to the protected area to perform the required SSD functions have also been assessed.

As noted in Reference 1, one instance (documented by AR 01258591, "Truck Stranded Operator During Rounds") was identified when an operator performing duties outside of the protected area was delayed for approximately 40 minutes due to vehicle related issues. Unforeseen equipment problems affecting travel time back to the protected area would be similar to an unforeseen personal injury or illness that would incapacitate an individual during an event requiring a SSD-related action by that individual. These types of issues are of low probability and are not specifically addressed in a staffing plan. However, environmental conditions, such as severe weather, that may impact travel times, will be considered. In the case of severe weather where travel times may be unacceptably impacted, discretion will be used for conducting HVO rounds in remote OCAs consistent with procedures OP-AA-108-111-1001, "Severe Weather and Natural Disaster Guidelines," and OP-AA-102-102, "General Area Checks and Operator Field Rounds."

In the event a loss of off-site power would occur while the HVO is outside the protected area, access to the protected area through normal gatehouse security turnstiles would not be impacted as there is a backup power supply to security equipment. In the event that the security turnstiles are non-functional for some unforeseen issue, the Security personnel would allow the HVO access to the protected area through key-locked doors.

Operations Supervisor Electrical Switching Safety/First-Aid Monitor Duties

During switching operations, the HVO is procedurally required to be accompanied by a Safety/First-aid qualified individual. This Safety/First-aid Monitor role is fulfilled by an on-shift Operation Supervisor. If switching operations are performed at a remote OCA (i.e., the 345kV electrical switchyard or lake lift station), the Operations Supervisor would need to accompany the HVO to these remote OCAs; thus, the exemption from Appendix R Section III.L.4 is also requested for a single Operations Supervisor during remote OCA switching operations. Planned switching operations occur approximately two times per week and take approximately two hours for each operation. Typically, no switching operations are conducted during the summer months (i.e., June, July and August) except for emergent events.

Only one of the DSSPs; i.e., DSSP 0100-CR, "Hot Shutdown Procedure - Control Room Evacuation," Revision 42, specifies SSD-related duties for all on-shift Operations Supervisors. As noted above, it has been demonstrated that the HVO is able to return to the protected area in 15 minutes from the most distance remote OCA, (i.e., the Goose Lake pumping station). Therefore, if an Operation Supervisor was performing switching operations in the 345 kV switchyard or lake lift station at the onset of a fire, the supervisor could also return to the protected area within 15 minutes or less and would be able to complete the time critical activities defined in DSSP-0100-CR required by the Appendix R hydraulic AOR.

The "HVO Travel Time and Station Access Impediments" discussion above, addressing injury or illness, severe weather, and loss of off-site power, is also applicable to the Operations Supervisor.

Operating Shift Staffing Requirements

The operating shift staffing requirements are specified in Dresden Operating Procedure, OP-DR-101-111-1001, "On-Shift Staffing Requirements." The number of operations individuals noted in Attachment A of OP-DR-101-111-1001 meets the following staffing requirements:

10 CFR 50.54(m)(2)(i) for licensed operators
10 CFR 50 Appendix R, Section H for Fire Brigade; and
10 CFR 50 Appendix R, Section L for Safe Shutdown

The requirements for Fire Brigade and SSD staffing exceeds the staffing requirements for licensed operators under 10 CFR 50.54(m); therefore, this discussion will focus on the requirements for the Fire Brigade and SSD staff.

As specified in OP-DR-101-111-1001 Attachment A, "Staffing Requirements with either Unit in Mode 1, 2, 3," the "SSD Staffing" consists of the following operations individuals:

Position	Safe Shutdown (SSD) Staffing
Shift Manager	1
Unit Supervisor	2
WEC [Work Execution Center] Supervisor	1
Field Supervisor	1
NSO [Nuclear Station Operator]	4
STA	1
Equipment Operator (EO)	7

It should be noted that the Shift Manager also serves as the Site Emergency Director and is not a member of either the Fire Brigade or SSD staff. The STA position is filled as a concurrent responsibility of one of the noted Operations Supervisors and is not a separate individual. Also, the Field Supervisor position is not required to be staffed to meet the Fire Brigade or SSD staffing requirements. DNPS electively staffs this position for additional operational support and as a contingency for unforeseen operator absences. Thus, there are 14 individuals (i.e., three Supervisors, four NSOs and seven EOs) dedicated to the Fire Brigade and SSD staff. Note that one of the EOs is the HVO.

As stated in OP-DR-101-111-1001, Step 4.1, "Per Technical Requirements Manual (TRM) Section 5.0, a site Fire Brigade of at least five members shall be maintained on-site at all times. The Fire Brigade SHALL NOT include the personnel necessary for safe shutdown of the unit." The Fire Brigade is comprised of four EOs and one Supervisor.

As stated in OP-DR-101-111-1001, Step 5.2, "Per 10 CFR Appendix R to Part 50 documentation, the personnel assigned to perform Safe Shutdown duties SHALL NOT include the personnel assigned to Fire Brigade staffing. SSD staffing consists of two Supervisors, four NSOs, and three Equipment Operators." Therefore, nine individuals are dedicated to SSD activities.

The five Fire Brigade members plus the nine SSD staff members account for all 14 operations positions staffed on an operating crew. Thus, is can be seen that if the HVO is not allowed to perform his/her normal shift duties in remote OCAs while being considered a member of the SSD staff, an additional operator would need to be added to each of the DNPS six operating crews. Further, if one of the on-shift Operations Supervisors is not allowed to provide the Safety/First-aid Monitor function during switching operations at a remote OCA, an additional supervisor would also need to be added to each of the six operating crews; for a total of 12 additional operators.

NUREG-1791 Guidance

In July 2005, the NRC published NUREG-1791, "Guidance for Assessing Exemption Requests from the Nuclear Power Plant Licensed Operator Staffing Requirements Specified in 10 CFR 50.54(m)," (i.e., Reference 2). The Foreword of the NUREG states the following:

> *"This document provides guidance for the NRC staff to systematically review and assess requests by licensees of nuclear power plants for exemption from the licensed operator staffing requirements of Title 10, Part 50 of the Code of Federal Regulations (10 CFR 50) contained in 10 CFR 50.54(m). The purpose of the NRC's review is to ensure public health and safety by verifying that the applicant's staffing plan and supporting analyses sufficiently justify the requested exemption.*
>
> *The increased use of advanced automation technologies in existing nuclear power plants and the introduction of advanced reactor designs will likely change the roles, responsibilities, composition, and size of the crews required to control plant operations. Current regulations regarding control room staffing, which are based on the concept of operation for existing light-water reactors, may no longer apply. Licensees of nuclear power plants who have implemented significant changes to existing control rooms or who have introduced increased use of advanced automation technologies may submit applications for exemption from the requirements. Likewise, because of the anticipated changes in operator roles and responsibilities in new reactor designs, an applicant for an operating license for a new reactor may wish to seek exemption from the current licensed operator staffing requirements."*

Although this guidance was published specifically for exemptions to licensed operator staffing requirements in 10 CFR 50.54(m) due to advanced automation technologies or advanced reactor designs, the same rationale for acceptability can also be applied to the subject

exemption request. NUREG-1791 Part II, "Evaluation of Exemption Requests," lists 11 review areas. Section 8, "Review of the Staffing Plan," states the following:

> *"The purpose of the staffing plan review is to ensure that the applicant has systematically analyzed the requirements for the numbers of qualified personnel that are necessary to operate the plant safely under the operational conditions analyzed. That is, the staffing plan should answer the question, "How many individuals must be qualified and available to fill each job?"*
>
> *The applicant's staffing plan should be supported by the results of the functional requirements analysis and function allocation, task analyses, and the job definitions for each position required under the operational conditions considered. In addition, the applicant's submittal should define the proposed shift composition and shift scheduling. Shift composition refers to the different types of jobs that must be filled on each shift and the number of personnel required for each of the jobs on a shift. In the case of remote operations or operations that will take place outside of a traditional control room, the applicant should also define the locations of the personnel comprising a shift."*

Section 8.3, "Review Criteria," lists a number of staffing plan review criteria. Two of these criteria are:

> *The staffing plan will provide an adequate number of qualified personnel to operate the plant safely under the operational conditions considered."* and
>
> *"Travel and response times are adequate and do not trigger adverse conditions for the safety of the plant."*

Section 10, "Review the Staffing Plan Validation," states:

> *"The purpose of reviewing the validation of the staffing plan is to ensure that the applicant fully considered the dynamic interactions between the plant design, its systems, and control personnel for the operational conditions identified for the exemption request."*

Section 10.1.1, "Operational Conditions Sampling," also states:

> *"The applicant should include the operational conditions relevant to the exemption request in the staffing plan validation. As a practical matter, however, it may be unnecessary to address all of the possible variations of these conditions. It may be reasonable to combine some of them into scenarios."*

Section 10.3.4, "Staffing Plan Validation Outcomes," lists a number of criteria. The first criterion states:

> *"The results of analyses demonstrate that control personnel, individually and working in crews, if applicable, can accomplish their tasks within performance criteria."*

These specific excerpts from NUREG-1791 and the overall philosophy of the guidance support the subject exemption request as presented above.

NUREG 1852 Guidance

In October 2007, the NRC also published NUREG-1852, "Demonstrating the Feasibility and Reliability of Operator Manual Actions in Response to Fire," (i.e., Reference 3) as a reference guide for NRC Staff who evaluate the acceptability of manual actions, submitted by licensees as exemption requests from the requirements of Appendix R, Section III.G, "Fire protection of safe shutdown capability," paragraph 2. This guidance does not directly address staffing levels; however, it does provide insights into "feasibility and reliability criteria" for completing manual operator actions, similar to SSD activities, which are germane to the subject exemption request.

The issue of the HVO being located at a remote OCA at the onset of an event appears to be specifically acknowledged in Section 3.2.2, "Analysis Showing Adequate Time Available to Ensure Reliability." Item 2 of this section discusses potential demonstration shortcomings; however, states the following:

> *"The demonstration might be limited in its ability to account for (or envelop) all possible fire locations where the actions are needed and for all the different travel paths and distances to where the actions are to be performed. A similar limitation concern is that the current location and activities of needed plant personnel when the fire starts could delay their participation in executing the operator manual actions (e.g., they may typically be at a location that is on the opposite side of the plant relative to a postulated fire location and/or may need to restore certain equipment before being able to participate such as if they are routinely doing maintenance). The intent is not to address temporary/infrequent situations but to account for those that are typical and may impact the timing of the action."*

Again, in Section 3.2.10, "Staffing," the NUREG acknowledges that some required staff responding to a fire may be located off-site but able to respond in an acceptable timeframe: Section 3.2.10 states:

> *"The intent of the staffing criterion is to ensure that an adequate number of qualified personnel will be available so that hot shutdown conditions can be achieved and maintained in the event of a fire. Credited personnel may be normally on site, or available through the emergency planning staff augmentation system in time to successfully perform the desired action. Further, individuals that might be needed to perform the operator manual actions should not have collateral duties, such as firefighting, security duties, or control room operation, during the evolution of the fire scenario. In other words, enough trained people, without collateral duties during a fire, should be available to ensure that operator manual actions can be completed as needed."*

Another reference that would appear to support the HVO being able to conduct rounds at remote OCAs is Section 4.2.10, "Information Regarding the Staffing Criterion." Section 4.2.10 states:

> *"Adequate numbers of qualified personnel should be available within the timeframe credited in the analysis for performing the various operator manual actions. Credited personnel may be normally on site, or available through the emergency planning staff augmentation system, as long as the necessary timing of the action(s) can be met."*

III. ENVIRONMENTAL ASSESSMENT

In accordance with 10 CFR 51.30, "Environmental assessment," and 51.32, "Finding of no significant impact," the following information is provided in support of an environmental assessment and finding of no significant impact for the proposed action. The proposed action would result in a permanent exemption from the requirements of 10 CFR 50 Appendix R, "Fire Protection Program for Nuclear Facilities Operating Prior to January 1, 1979," Section III.L "Alternative and dedicated shutdown capability," paragraph 4 for DNPS Units 2 and 3.

The proposed exemption will not significantly increase the probability or consequences of accidents, no changes are being made in the types or quantities of any radiological effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed exemption. In addition, the proposed exemption does not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological impacts associated with the proposed exemption. As a result, the proposed exemption will not have a significant effect on the quality of the human environment.

IV. CONCLUSION

The proposed exemption from the requirements of 10 CFR 50 Appendix R, Section III.L.4 will not result in undue risk to the public health and safety. The intent of Appendix R, Section III.L.4 is to ensure that sufficient operating shift personnel are available to operate systems and equipment necessary to achieve hot shutdown in the event of fire damage. As discussed above, it has been demonstrated that, in the event the HVO is conducting operator rounds at the most distant remote OCA location at the onset of a fire, the HVO will be able to return to the protected area and complete the required SSD activities within the required timeframe. In addition, if the HVO and an Operations Supervisor are performing switching operations in either the 345kV switchyard or lake lift station at the onset of a fire, both individuals will be able to return to the protected area and complete the required SSD activities within the required timeframe.

If the HVO is not allowed to perform his normal shift duties while being considered a member of the SSD staff; and if an Operations Supervisor is not allowed to perform the Safety/First-aid Monitor function during switching operations, two additional operators will need to be added to each of the DNPS six operating crews, for a total of 12 additional operators. Increasing the number of personnel on each operating crew would represent an unwarranted burden on EGC

since these additional operators are not necessary to meet the underlying purpose of the rule as discussed above. Therefore, the special circumstances for issuance of the exemption are satisfied in accordance with the requirements of 10 CFR 50.12(a)(2)(ii) since application of the rule is not necessary to achieve the underlying purpose of the rule. In addition, the requested exemption is authorized by law and is consistent with the common defense and security; therefore, the requirements of 10 CFR 50.12(a)(1) are satisfied.

V. REFERENCES

1. Letter from Steven A. Reynolds (NRC) to Michael J. Pacilio (Exelon Generation Company, LLC), "Dresden Nuclear Power Station Triennial Fire Protection Inspection Report 05000237/2011008(DRS); 05000249/2011008(DRS)"

2. NUREG-1791, "Guidance for Assessing Exemption Requests from the Nuclear Power Plant Licensed Operator Staffing Requirements Specified in 10 CFR 50.54(m)"

3. NUREG-1852, "Demonstrating the Feasibility and Reliability of Operator Manual Actions in Response to Fire"