

RS-10-200

December 3, 2010

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

Dresden Nuclear Power Station, Unit 1  
Facility Operating License No. DPR-2  
NRC Docket No. 50-010

Subject: Request for Exemption from 10 CFR 73 and 10 CFR 50.54(p)

Reference: Letter from B. A. Watson (U.S. NRC) to M. J. Pacilio (Exelon Generation Company, LLC), "Dresden Unit 1 – Revised Power Reactor Security Rule," dated August 2, 2010

In accordance with 10 CFR 50.12, "Specific exemptions," and 10 CFR 73.5, "Specific exemptions," Exelon Generation Company, LLC (EGC) is requesting a permanent exemption from the security requirements in 10 CFR 50.54, "Conditions of licenses," paragraph (p), and 10 CFR 73, "Physical Protection of Plants and Materials," for Dresden Nuclear Power Station (DNPS) Unit 1.

The requested exemption would eliminate the requirements for security, fitness for duty and access authorization for DNPS Unit 1, since there is no longer any special nuclear material located within DNPS Unit 1 other than that contained in plant systems as residual contamination. The Attachment provides justification, as required in 10 CFR 50.12 and 10 CFR 73.5, that the exemption would not endanger life or property or the common defense and security, and is otherwise in the public interest.

The changes proposed in this exemption are not required to address an immediate safety or security concern, but rather are being submitted in response to the referenced NRC letter requesting EGC to evaluate the applicability of the current 10 CFR 73 to DNPS Unit 1.

EGC requests approval of this exemption request by December 5, 2011.

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There are no regulatory commitments contained in this letter. Should you have any questions concerning this letter, please contact Mr. Kenneth M. Nicely at (630) 657-2803.

Respectfully,

  
Patrick R. Simpson  
Manager – Licensing

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

# **ATTACHMENT**

## **Exemption Request**

### **I. SPECIFIC EXEMPTION REQUEST**

In accordance with 10 CFR 50.12, "Specific exemptions," and 10 CFR 73.5, "Specific exemptions," Exelon Generation Company, LLC (EGC) is requesting a permanent exemption from the security requirements in 10 CFR 50.54, "Conditions of licenses," paragraph (p), and 10 CFR 73, "Physical Protection of Plants and Materials," for Dresden Nuclear Power Station (DNPS) Unit 1. The requested exemption would eliminate the requirements for security, fitness for duty and access authorization for DNPS Unit 1, since there is no longer any special nuclear material (SNM) located within DNPS Unit 1 other than that contained in plant systems as residual contamination.

#### **Background**

EGC is the licensee and holder of Facility Operating License No. DPR-2 issued for DNPS Unit 1. DNPS Unit 1 is a permanently shutdown nuclear reactor facility that began commercial operation October 1960 and shutdown on October 31, 1978. The facility is in a SAFSTOR condition. Spent fuel has been removed from the facility and is currently stored either in an Independent Spent Fuel Storage Installation (ISFSI) or the DNPS Unit 3 spent fuel pool, both located within the protected area of DNPS Units 2 and 3. Additionally, the spent fuel pool has been drained and decontaminated. The reactor vessel and primary system piping remain in place. DNPS Unit 1 is currently licensed pursuant to Section 104(b) of the Atomic Energy Act of 1954, as amended, and 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," to possess and maintain, but not to operate, the facility.

### **II. BASIS FOR EXEMPTION REQUEST**

In accordance with 10 CFR 50.12, the NRC may grant exemptions from the requirements of 10 CFR 50, when: (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security, and (2) when special circumstances are present. Special circumstances are present when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule.

Also, in accordance with 10 CFR 73.5, the NRC may grant exemptions from the requirements of 10 CFR 73 as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

10 CFR 50.54(p)(1) states:

The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with appendix C of Part 73 of this chapter for affecting the actions and decisions contained in the Responsibility Matrix of the safeguards contingency plan.

10 CFR 73 states:

This part prescribes requirements for the establishment and maintenance of a physical protection system which will have capabilities for the protection of special nuclear

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material at fixed sites and in transit and of plants in which special nuclear material is used.

10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," paragraph (b)(1) states:

The licensee shall establish and maintain a physical protection program, to include a security organization, which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety.

The NRC revised 10 CFR 73.55, in part to include the preceding language, through the issuance of a final rule on March 27, 2009. The revised regulation stated that it was applicable to all Part 50 licensees. In Reference 1, the NRC stated that some Part 50 licensees (e.g., a Part 50 licensee with a facility undergoing decommissioning) may not have recognized the applicability of the revised Power Reactor Security Rule to their facility. As a result, Part 50 licensees with facilities in decommissioning or decommissioned status may be out of compliance with the current 10 CFR 73.55 security requirements. Accordingly, the NRC informed licensees with facilities in decommissioning status and other stakeholders that the requirements of 10 CFR 73.55 were applicable to all Part 50 licensees. In Reference 1, the NRC informed EGC of the applicability of the revised rule to DNPS Unit 1 and that it would need to comply with the revised rule or request an exemption.

The security requirements of 10 CFR 73, as applicable to a 10 CFR 50 licensed facility, presume that the purpose of the facility is to possess and utilize SNM. With the completion of the transfer of the DNPS Unit 1 spent nuclear fuel to either the ISFSI site or DNPS Unit 3 spent fuel pool, both located within the protected area of Units 2 and 3, there is no longer any SNM located within DNPS Unit 1 other than that contained in plant systems as residual contamination. As discussed in Reference 2, the remaining radioactive material of concern (i.e., reactor vessel, piping systems, and building structures) for DNPS Unit 1 is in a form that does not pose a risk of removal (i.e., an intact reactor pressure vessel) and is well dispersed and is not easily aggregated into significant quantities. Therefore, the potential for radiological sabotage or diversion of SNM at this 10 CFR 50 licensed facility has been eliminated. The continued application of the 10 CFR 73 requirements to the DNPS Unit 1 facility is no longer necessary to achieve the underlying purpose of the rule.

Based on the above, the lack of the fuel containing SNM at DNPS Unit 1 constitutes special circumstances. Other than residual contamination as previously noted, SNM is no longer located at the DNPS Unit 1 facility. Therefore, protection of SNM is no longer a requirement of the 10 CFR 50 license. With no SNM to protect, there is no need for a safeguards contingency plan or procedures, physical security plan, guard training and qualification plan, or cyber security plan for DNPS Unit 1.

Regarding the remaining source and byproduct material, the configuration of DNPS Unit 1 is such that it is completely contained within the protected area of DNPS Units 2 and 3, and the radioactive material is in a form that does not pose a risk of removal and is well dispersed and is not easily aggregated into significant quantities.

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### Related Precedent

In Reference 3, the NRC granted Humboldt Bay Power Plant Unit 3 a permanent exemption from the requirements of 10 CFR 50.54(p) and 10 CFR 73, based on the fact that in 1985, Humboldt Bay Unit 3 was placed in a SAFSTOR status and all fuel had been removed to an ISFSI.

In Reference 4, the NRC granted Fermi Unit 1 a permanent exemption from the requirements of 10 CFR 50.54(p) and 10 CFR 73. Fermi Unit 1 was a fast breeder reactor power plant cooled by sodium and operated at essentially atmospheric pressure. In 1972, the decision was made to decommission Fermi Unit 1. The fuel and blanket subassemblies were shipped offsite in 1973. The facility is permanently shut down and defueled and the licensee is no longer authorized to operate or place fuel in the reactor.

### **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 50.54(p) and 10 CFR 73 for DNPS Unit 1.

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**

As demonstrated above, the proposed exemption from the requirements of 10 CFR 50.54(p) is in accordance with the criteria of 10 CFR 50.12. Specifically, EGC has determined that, in accordance with 10 CFR 50.12(a), the proposed exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. The proposed exemption is based on the special circumstances present since application of the regulation in the particular circumstances would not serve the underlying purpose of the rule due to the transfer of the spent fuel from the DNPS Unit 1 facility to either the ISFSI site or the DNPS Unit 3 spent fuel pool.

The criteria for granting specific exemptions from the requirements in 10 CFR 73 are specified in 10 CFR 73.5. In accordance with 10 CFR 73.5(a)(1), the NRC is authorized to grant an exemption upon determining that the exemption is authorized by law, since the application of

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the regulation in this particular circumstance would not endanger life or property or the common defense and security, and are otherwise in the public interest.

**V. REFERENCES**

1. Letter from B. A. Watson (U.S. NRC) to M. J. Pacilio (Exelon Generation Company, LLC), "Dresden Unit 1 – Revised Power Reactor Security Rule," dated August 2, 2010
2. Letter from L. W. Camper (U.S. NRC) to C. M. Crane (Exelon Generation Company, LLC), "Request for Relief from Orders EA-09-204 and EA-09-205 for Dresden Nuclear Power Station, Unit 1," dated August 20, 2010
3. Letter from J. B. Hickman (U.S. NRC) to J. T. Conway (Pacific Gas and Electric Company), "Humboldt Bay Power Plant Unit 3 – Issuance of Amendment and Exemption from Requirements of 10 CFR Part 50 and 10 CFR Part 73 Security Requirements (TAC No. J00337)," dated June 16, 2008
4. Letter from T. B. Smith (U.S. NRC) to J. H. Plona (DTE Energy), "Enrico Fermi Atomic Power Plant Unit 1 – Issuance of Exemption from Requirements of 10 CFR Part 50 and 10 CFR Part 73 Security Requirements," dated October 8, 2010