



Fort Calhoun Station  
9610 Power Lane  
Blair, NE 68008

~~SECURITY-RELATED INFORMATION - WITHHOLD UNDER 10 CFR 2.390.~~  
UPON SEPARATION OF ENCLOSURES 1 AND 2, THIS LETTER AND  
ENCLOSURES 3, 4, AND 5 ARE DECONTROLLED.

December 31, 2009  
LIC-09-0071

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, D.C. 20555

- References: 1. Docket No. 50-285  
2. Federal Register Notice, "Power Reactor Security Requirements; Final Rule," dated March 27, 2009 (74 FR 13926)

**SUBJECT: Request for Exemption from Physical Security Requirements**

In accordance with the requirements of 10 CFR 73.5, the Omaha Public Power District (OPPD) requests the Nuclear Regulatory Commission (NRC) approve an exemption for Fort Calhoun Station (FCS), Unit No. 1 from specific requirements of 10 CFR Part 73, "Physical Protection of Plants and Materials." The requested exemption would extend the date for complying with certain new security requirements issued by the NRC as published in the Federal Register on March 27, 2009 (Reference 2).

Pursuant to the Final Rule, the new security requirements must be implemented by March 31, 2010. OPPD has evaluated these new requirements and determined that many of them can be implemented by that date. However, specific parts of the new requirements will require more time to implement since they involve significant physical upgrades to the FCS security system, which will have a large impact on the FCS security strategy. Therefore, additional time is requested to complete the security modifications.

As described in the Enclosures, OPPD is requesting that the implementation date for certain new security requirements contained in 10 CFR 73.55 be extended from March 31, 2010 to October 5, 2011. The requested date is based on the time required to design

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and construct modifications of this scope, considering impediments to construction such as a planned refueling outage and winter weather conditions.

OPPD's current security program and the new security requirements that will be implemented by March 31, 2010, provide continued assurance of public health and safety and the common defense and security. Accordingly, the requested exemption is authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5.

OPPD requests approval of this exemption request by March 1, 2010 to allow time to prepare and implement compensatory measures if the exemption is not granted. If granted, the proposed exemption is requested to be effective upon issuance.

Enclosure 1 contains the exemption requested and Enclosure 2 provides the basis for the proposed exemption. Enclosures 1 and 2 contain security-related information as described in 10 CFR 2.390(d)(1) associated with the physical protection of FCS. Accordingly, OPPD requests that Enclosures 1 and 2 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390.

Enclosures 3 and 4 are versions of Enclosures 1 and 2 respectively that are suitable for public disclosure. Enclosure 5 provides an Environmental Assessment that is also suitable for public disclosure.

This letter contains no NRC commitments.

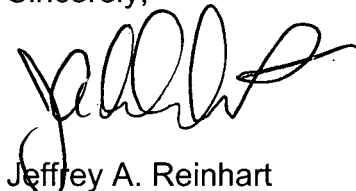
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If you should have any additional questions or require additional information, please contact Mr. Bill Hansher at (402) 533-6894.

Sincerely,



Jeffrey A. Reinhart  
Site Vice President

JAR/MLE/mle

Enclosures:

1. Request for Exemption from Physical Security Requirements (Security Related Information - Withhold Under 10 CFR 2.390)
  2. Basis for Proposed Exemption (Security Related Information - Withhold Under 10 CFR 2.390)
  3. Request for Exemption from Physical Security Requirements (For Public Disclosure)
  4. Basis for Proposed Exemption (For Public Disclosure)
  5. Environmental Assessment (For Public Disclosure)
- c: E. E. Collins, NRC Regional Administrator, Region IV  
L. E. Wilkins, NRC Project Manager  
J. C. Kirkland, NRC Senior Resident Inspector

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## Omaha Public Power District Request for Exemption from Physical Security Requirements

### A. BACKGROUND

The NRC issued a Final Rule for new security requirements in the Federal Register (FR) dated March 27, 2009 (74 FR 13926). Pursuant to 10 CFR 73.55(a)(1) of the Final Rule, the new security requirements must be implemented by March 31, 2010. The Omaha Public Power District (OPPD) has evaluated these new requirements and determined that many of them can be implemented by then. However, OPPD has also determined that implementation of specific parts of the new requirements will require significant security modifications. Thus, additional time beyond the March 31, 2010 date is requested for compliance with the Final Rule. Full compliance with the Final Rule will require Fort Calhoun Station (FCS), Unit No. 1 to upgrade the capability of its security system. The upgrade will be completed by October 5, 2011 after which OPPD will be in full compliance.

### B. FCS SECURITY SYSTEM UPGRADE

FCS is a single unit plant located in Washington County Nebraska on the banks of the Missouri river.

The FCS Security System upgrade will include the following major items:

1. Ensure certain security-related equipment remains capable of performing its design function at all times.
2. Relocate certain security-related equipment to hardened areas. A second option involves the elimination of specific target functions with the use of digital network technologies.
3. Upgrade certain delay barriers and intrusion detection equipment and add or relocate surveillance equipment.

Due to the amount of design, procurement and installation activities, completion of some of the new requirements contained in 10 CFR 73.55 will require additional

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time beyond March 31, 2010. With NRC approval of this exemption request, the 10 CFR 73 provisions required to be implemented by March 31, 2010 will be complete except for the items described in Section C below. The items described in Section C, subject to this request for an exemption, will be implemented by October 5, 2011 at which point FCS will be in full compliance with the Final Rule.

**C. PROPOSED EXEMPTION**

OPPD requests an exemption from the date of compliance (March 31, 2010) required by the Final Rule for the items described below to allow sufficient time to complete modifications necessary for full compliance with the Final Rule. FCS's current security program and the new security requirements that will be implemented by March 31, 2010, provide continued assurance of public health and safety, and the common defense and security. OPPD will determine the optimum methods to address the issues itemized below subject to this request for an exemption, and will implement them by October 5, 2011 at which point FCS will be in full compliance with the Final Rule. Accordingly, the requested exemption is authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5.

Item No. 1

An assessment of certain security-related equipment was performed and while adequate, enhancements are needed. Two conceptual designs are under consideration.

Item No. 2

Certain security-related equipment must be relocated or have additional protection provided. An alternative involves the use of digital network technology.

Item No. 3

Certain delay barriers and intrusion detection equipment must be enhanced and

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surveillance equipment added or relocated.

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## Basis for Proposed Exemption

The Omaha Public Power District (OPPD) is requesting an exemption from the March 31, 2010 date for compliance with 10 CFR 73.55. The basis for requesting an exemption from March 31, 2010 to October 5, 2011 is to allow for completion of required upgrades to the Fort Calhoun Station (FCS), Unit No. 1 security system. The upgrade will require significant design, procurement, and installation activities. These activities, addressing the new Part 73 rule requirements, include the enhancement of security system equipment, the relocation of equipment to hardened areas, and modification of security computer system software.

Using established processes, the duration (study, design, construction, testing, and turnover) of a project of this magnitude is typically 18 – 24 months. This timeframe is further challenged by resources and the logistical impacts of a plant refueling outage and severe cold weather conditions. OPPD is continuing efforts to implement the remaining new Part 73 requirements identified in the Final Rule and associated Regulatory Guides issued in July 2009 by the March 31, 2010 compliance date.

An overview of the work activities associated with the physical modifications is as follows:

### Physical Modifications Overview

The scope of the physical modifications includes:

1. Enhancements to ensure certain security-related equipment remains capable of performing its design function at all times.
2. Relocate certain security-related equipment to hardened areas. A second option involves the elimination of specific target functions with the use of digital network technologies.
3. Upgrade certain delay barriers and intrusion detection equipment and add or relocate surveillance equipment.

The current NRC approved FCS Physical Security Plan contains adequate compensatory measures such that the additional time requested to implement these modifications will

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not negatively impact the overall FCS physical protection program or protective strategy. A project milestone schedule for the physical modifications associated with this exemption request has been developed. These milestones represent the design, installation and testing activities which must be completed to comply with the new Part 73 requirements. The milestone schedule was developed based on current information and anticipated challenges.

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## Fort Calhoun Station, Unit No. 1 Environmental Assessment

1. Describe any change to the types, characteristics, or quantities of non-radiological effluents discharged to the environment as a result of the proposed exemption.

### OPPD Response

There are no expected changes in the types, characteristics, or quantities of non-radiological effluents discharged to the environment associated with the proposed exemption. The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule, "Power Reactor Security Requirements" published in the Federal Register on March 27, 2009 (74 FR 13926). Extending the date of compliance for certain new requirements of the Final Rule from March 31, 2010 to October 5, 2011 will allow sufficient time for security modifications to occur. The requested exemption will not result in changes to the design basis requirements for the structures, systems, and components (SSCs) at Fort Calhoun Station (FCS), Unit No. 1 that function to limit the release of non-radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of offsite non-radiological effluents will therefore continue to be able to perform their functions. As a result, there is no significant non-radiological effluent impact. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of non-radiological effluents. In addition, the method of operation of non-radiological waste systems will not be affected by the proposed exemption.

2. Describe any changes to liquid radioactive effluents discharged as a result of the proposed exemption.

### OPPD Response

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. There is no expected change to the liquid radioactive effluents discharged as a

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result of the proposed exemption. The proposed exemption will not interact to produce any different quantity or type of radioactive material in the reactor coolant system. The proposed exemption will not result in changes to the design basis requirements for the SSCs at FCS that function to limit the release of liquid radiological effluents during and following postulated accidents. All SSCs associated with limiting the release of liquid radiological effluents will therefore continue to be able to perform their functions. As a result, there is no liquid radiological effluent impact.

**3. Describe any changes to gaseous radioactive effluents discharged as a result of the proposed exemption.**

**OPPD Response**

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. For the same reasons as described in number 2 above, the proposed exemption would have no effect on the characteristics of gaseous radioactive effluents.

**4. Describe any change in the type or quantity of solid radioactive waste generated as a result of the proposed exemption.**

**OPPD Response**

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. The requested exemption will not result in changes to the design basis requirements for the SSCs at FCS that function to limit the release of solid waste during and following postulated accidents. All SSCs associated with limiting the release of solid radioactive waste will therefore continue to be able to perform their function.

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**5. What is the expected change in occupational dose as a result of the proposed exemption under normal and design basis accident conditions?**

**OPPD Response**

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. As such, no change in occupational dose as a result of the proposed exemption under normal or design basis accident conditions is expected.

**6. What is the expected change in the public dose as a result of the proposed exemption under normal and [design basis accident (DBA)] conditions?**

**OPPD Response**

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. Dose to the public will not be changed by the proposed exemption during normal operations or DBA conditions. As noted in items 2, 3 and 4 above, there is no basis to contemplate an increased source of liquid, gaseous or solid radiological effluents that could contribute to increased public exposure during normal operations or DBA conditions. The proposed security modifications do not impact systems used during normal operation or systems used to detect or mitigate a DBA.

**7. What is the impact to land disturbance for the proposed exemption?**

**OPPD Response**

The proposed exemption will allow an extension to the date for compliance with certain new requirements of the Final Rule to allow sufficient time for security modifications to occur. The security modifications involve the installation of new components and/or software in, on, or around existing equipment, buildings or structures. New buildings are not being added. Therefore, the proposed exemption and associated security modifications will have minimal impact on land disturbance.

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Conclusion:

There is no significant radiological environmental impact associated with the proposed exemption or associated security modifications at FCS. These proposed changes will not affect any historical sites nor will they affect non-radiological plant effluents.

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