



444 South 16th Street Mall
Omaha, NE 68102-2247

**SECURITY-RELATED INFORMATION - WITHHOLD UNDER 10 CFR 2.390.
UPON SEPARATION OF ATTACHMENT 1, THIS LETTER AND ATTACHMENT 2 ARE
DECONTROLLED.**

September 30, 2011
LIC-11-0103

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

- References:
1. Docket No. 50-285
 2. Letter from OPPD (Jeffrey A. Reinhart) to NRC (Document Control Desk), "Request for Exemption Extending the Compliance Date for Specific Requirements of 10 CFR 73.55," dated September 2, 2011 (LIC-11-0093) (ML112500258)
 3. Email from NRC (Lynnea Wilkins) to OPPD (B. R. Hansher), "RAIs for Fort Calhoun Station Re: Part 73 Exemption," dated September 28, 2011 (NRC-11-0117)

SUBJECT: Reply to Request for Additional Information Regarding Omaha Public Power District (OPPD) Request for Exemption Extending Compliance Date for Specific Requirements of 10 CFR 73.55

As requested in Reference 3, Attachments 1 and 2 are provided in response to the NRC's request for additional information (RAI). The NRC RAI pertains to OPPD's request (Reference 2) for exemption to extend the compliance date for specific requirements of 10 CFR 73.55.

Attachment 1 contains security-related information as described in 10 CFR 2.390(d)(1) associated with the physical protection of FCS. Accordingly, OPPD requests that Attachment 1 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. Attachment 2 is a version of Attachment 1 that is suitable for public disclosure.

OPPD requests approval of the exemption by October 5, 2011, to be effective upon issuance. This letter contains no NRC commitments.

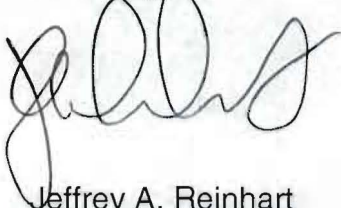
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U.S. Nuclear Regulatory Commission
LIC-11-0103
Page 2

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

Attachments:

1. Response to NRC Request for Additional Information Regarding Exemption from 10 CFR 73, "Physical Protection of Plants and Materials" (Security Related Information - Withhold Under 10 CFR 2.390)
 2. Response to NRC Request for Additional Information Regarding Exemption from 10 CFR 73, "Physical Protection of Plants and Materials" (For Public Disclosure)
- c: E. E. Collins, Jr., NRC Regional Administrator, Region IV
L. E. Wilkins, NRC Project Manager
J. C. Kirkland, NRC Senior Resident Inspector

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LIC-11-0103
Attachment 2
Page 1

**Response to NRC Request for Additional Information Regarding
Exemption from 10 CFR 73, "Physical Protection of Plants and
Materials"**

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LIC-11-0103
Attachment 2
Page 2

**REQUEST FOR ADDITIONAL INFORMATION
OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION, UNIT 1
DOCKET NO. 50-285**

By letter dated September 2, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML112500258), Omaha Public Power District (OPPD, the licensee) requested an exemption from the compliance date in 10 U.S. *Code of Federal Register* (10 CFR) 73.55(a)(1) for additional time to meet specific requirements of 10 CFR 73.55 as specified in the request. OPPD's current exemption expires on October 5, 2011 (ADAMS No. ML100630447).

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information provided in your application against the memorandum from Bonnie Schnetzler to Rich Correia dated March 2, 2011 (ADAMS No. ML102710163). This memorandum addresses the criteria for NRC staff review of additional exemption requests. The NRC staff has determined that the following additional information is required in order to complete its review and address criteria within the memorandum.

NRC Question

- 1) Identification of the specific requirement or requirements of the rule that the licensee needs additional time to implement.

No additional information is being requested.

OPPD Response

OPPD wishes to withdraw its request for exemption regarding [], which states:

[]

The protected area has adequate [] and the [] are [] from an []. As noted previously, during a [], there is a momentary loss of [] while the system transfers to the [] and during this brief period, the [] do not provide [] capability. The permanent solution that OPPD has chosen is to install [] to allow for [] during []. However, in the interim, OPPD will use [] that is independent of [] to achieve compliance with []. The [] will be [] full-time during [] to ensure that the ability to [] is still possible if [] to

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LIC-11-0103
Attachment 2
Page 3

the [] is lost. Therefore, with the installation of the [], OPPD will no longer require an exemption to [] after October 5, 2011.

Please note that OPPD continues to request an exemption from the requirements of [].

NRC Question

- 2) Detailed justification that describes the reason the licensee requires additional time to implement the specific requirement or requirements identified.

Please clarify the basis for requesting an additional 25 months to complete a project that was scheduled for completion within 6-7 months before the flooding began. Also, please describe the "new information" that was not previously available, i.e., lessons learned, and why this information must be incorporated or added to ensure compliance with regulatory requirements.

OPPD Response

OPPD Response – Summary

OPPD is requesting a schedule exemption until November 5, 2013 to upgrade the site security system at Fort Calhoun Station, Unit No. 1 for compliance with 10 CFR 73.55 and to improve the protection of public health and safety by reducing the vulnerability of security systems and equipment to damage from flooding. Lessons learned from the 2011 Missouri River flood, including relocation of an [] and construction of a new [] will be incorporated. The revised security system design will increase the effectiveness of the overall physical protection program and protective strategy and incorporating these lessons learned will mitigate the impact of flooding in the future. Therefore, the Security Program will be better able to respond to security threats and protect public health and safety during both normal, and flood conditions.

OPPD Response - Detailed Justification

On May 23, 2011, in response to rising water levels along the Missouri River, Fort Calhoun Station (FCS) operators began implementing flood protection measures around the site to protect various safety-related structures, including the intake structure, auxiliary building, and containment. On June 6, 2011, a Notification of Unusual Event (NOUE) was declared in anticipation that the Missouri River level at the plant would reach 1004 feet mean sea level (MSL). On August 29, 2011, due to receding river levels, FCS exited the NOUE.

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LIC-11-0103
Attachment 2
Page 4

Following a July 27, 2011, public meeting between NRC and OPPD personnel, OPPD issued the Fort Calhoun Station Post-Flooding Recovery Action Plan. The Plan provides for extensive reviews of plant systems, structures, and components (SSCs) to assess the impact of floodwaters at Fort Calhoun Station. Reference 1 contains the FCS post-flooding security recovery action plan that provides for extensive reviews of security SSCs to assess the impact of the floodwaters. Initial inspections completed under the recovery action plan have identified []. The new information gathered as part of the inspection includes identification of measures needed to protect [] from damage under similar flooding conditions. As a result, OPPD has deemed it prudent to relocate several [] functions and equipment. This requires new modifications and the redesign of previously finalized changes to reconfigure [] so that they are better protected from future flooding events. This effort impacts not only new equipment associated with the existing regulatory exemptions but the integration of existing [] that will rely on the new [] to operate.

Specifically the following tasks are impacted:

- []
- [];
- [];
- [];
- [];
- [];
- [];
- [];
- [];
- [];

Completion of the tasks described above and the associated changes planned under the extended exemption schedule will reduce future challenges associated with flood conditions. Although compliance could be achieved if the lessons learned are not incorporated, the benefits associated with relocation of [] and equipment would not be achieved. OPPD's position is that the increased protection of the public health and safety afforded by incorporation of lessons learned warrants an extension to November 5, 2013.

NRC Question

2.a) Licensee has considered implementation of interim security measures to meet the regulatory requirement.

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LIC-11-0103
Attachment 2
Page 5

Please describe what interim security measures have been considered to achieve compliance by October 5, 2011. Please state if interim security measures could be implemented and sustained to gain compliance prior to project completion and the basis for your determination to implement or not implement such measures.

OPPD Response

OPPD Response – Summary

OPPD has evaluated interim measures that would achieve compliance with []. These measures will be implemented prior to October 5, 2011 and OPPD anticipates that these measures will remain in place until the [] are installed and compliance with [] is achieved on November 5, 2013. OPPD has determined that there are no interim measures that totally satisfy [].

OPPD Response - Detailed Justification

[] states:
[]

Issue

During a loss of [], there is a momentary loss of [] while the [] system transfers to the alternate []. During this brief period, the [] do not provide [] capability due to the [] conditions. The planned method of compliance chosen by OPPD is to install [] backed []. This configuration allows for [] during []. As an interim measure, OPPD will use temporary [] that is independent of [] to achieve compliance with []. The temporary [] will be [] full-time during [] to ensure that the ability to [] is still possible if [] to the [] is lost. Therefore, with the installation of the [], OPPD will no longer require an exemption to [] after October 5, 2011.

[] states:
[]

Issue

Fort Calhoun Station occupies an area of 660.46 acres on the west bank of the Missouri River, approximately 19.4 miles north of Omaha, Nebraska. The navigation channel for the Missouri River is directly adjacent to the []. The [] cannot be relocated

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LIC-11-0103
Attachment 2
Page 6

further from the river channel and therefore [] must be evaluated. Evaluation of this interaction requires that equipment currently located in [] locations be redesigned. This is based on the technical requirement to provide [] capability at a minimum of [] and the equipment required to deliver that capability. The current system configuration will not support interim measures such as simple []. Relocating equipment without changing the technical design would still require extensive physical changes to the []. A full system redesign is required and is being implemented under the requested exemption.

As described in Reference 2, the [] will utilize [] and [] to [] and eliminate the need for a [] in its present location. The [] can be decoded anywhere in the [] and provide network-based, fully [] at the [] and [] consoles. Options evaluated in response to the 10CFR 73.55 requirements included [] and alternative [] designs. [] was determined to be less effective than the []. Implementing additional [] was also evaluated and determined to not provide the required []. Therefore, it also follows that none of the rejected options are suitable as an interim measure and implementation of the rejected options would require more design and installation time than currently allocated in the project plan for the [].

NRC Question

2.b) Justification describes why the licensees' prior exemption date and schedule are not achievable and why/how the licensee provided a good faith effort to meet the original date.

No additional information is being requested.

OPPD Response

None required.

NRC Question

3) Detailed technical information that supports the licensee's solution for the requirement.

As described in your request dated August 10, 2011, the "distributive network" is needed for "defense in depth." Please clarify if the distributive network is required for compliance with regulatory requirements.

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LIC-11-0103
Attachment 2
Page 7

OPPD Response

Please note that the date of the letter in which the [] was described as needed for defense in depth is September 2, 2011 (Reference 3). The [] is required for compliance with regulatory requirements.

OPPD's approved 10 CFR 73.55 Exemption Request utilizes installation of [] technology to prevent a [] from [] both []. This includes removing existing components and replacing them with upgraded equipment to eliminate the []. The network components are distributed across the site in multiple locations such that a [] will not disable [] four (4) primary functions (i.e., []).

Other designs that could achieve compliance with the regulatory requirements were considered prior to choosing the []. These included [] and alternative [] designs. These alternatives were determined to either not provide the required compliance or to otherwise be less optimal from a performance and installation schedule perspective. A [] redesign is required to achieve full compliance with current regulatory requirements.

Therefore, the [] is the key to ensuring that OPPD meets the requirements of [].

NRC Question

- 4) A proposed implementation schedule with activity milestones that support the licensee's solution and are consistent with the scope of work to be conducted and the new compliance date requested.**

Please describe the physical impacts flood conditions have on work completed prior to the flooding event. Also, please describe the impacts flood conditions have on existing security systems. In addition, please provide detailed information that describes the relationship between the project tasks set forth in the original exemption request and the repair/replacement of existing systems with a focus on justification for the need to integrate this work for compliance with regulatory requirements.

OPPD Response

Reference 1 contains the FCS post-flooding security recovery action plan that provides for extensive reviews of plant SSCs to assess the impact of the floodwaters. Initial inspections completed under the recovery action plan have identified significant damage

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LIC-11-0103
Attachment 2
Page 8

to []. This includes physical damage to [], and the []. Additional impacts may be identified as the recovery action plan is completed. The design work completed prior to the flood must be reviewed and revised where needed to account for flood damage to existing equipment and buildings.

Repair and replacement activities associated with existing systems are outlined in Reference 1 and currently scheduled for completion in December 2011. The construction schedule for changes planned to achieve regulatory compliance must take into consideration the delay due to the site being flooded as well as the time required to implement system restoration activities. It must also take into consideration winter weather impacts due to outside construction activities.

In order to improve the protection of public health and safety, additional design changes are deemed prudent by OPPD to incorporate lessons learned from the flood as described in the response to question 2 above. This will require the relocation of [] and several [] functions as well as new modifications and the redesign of previously finalized modifications. This effort impacts not only new equipment associated with the existing regulatory exemptions but the integration of existing [] that will rely on the new [] to operate.

The additional time required to reconfigure these [] will ensure that they are better protected from future flooding events. As a result, FCS will have a more robust [] that is better able to cope with normal and abnormal events. For example, relocation of the [] would eliminate the need to institute a [] should another flood occur. This also eliminates exposure to the [] that still exists if the [] is not moved.

These modifications will improve physical security at FCS and thus it follows that public health and safety is improved as well. These additional changes are shown in more detail on the project schedule included as Figure 1 with Reference 3.

In summary, an extension to November 5, 2013 will result in a design that is more capable of coping with normal and abnormal events thereby improving the protection of public health and safety.

NRC Question

- 5) An evaluation of the impact that the additional time to implement the requirements will have on the effectiveness of the licensee's overall physical protection program and protective strategy.**

No additional information is being requested.

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LIC-11-0103
Attachment 2
Page 9

OPPD Response

None required.

References

1. Letter from OPPD (J. A. Reinhart) to NRC (Document Control Desk), "Fort Calhoun Station Post-Flooding Security Recovery Action Plan, Revision 1," dated August 30, 2011 (LIC-11-0096)
2. Letter from OPPD (Jeffrey A. Reinhart) to NRC (Document Control Desk), "Request for Exemption from Physical Security Requirements," dated December 31, 2009 (LIC-09-0071) (ML100050032)
3. Letter from OPPD (Jeffrey A. Reinhart) to NRC (Document Control Desk), "Request for Exemption Extending the Compliance Date for Specific Requirements of 10 CFR 73.55," dated September 2, 2011 (LIC-11-0093) (ML112500258)

KUHR, MIRANDA E

From: EIEAdmin@nrc.gov
Sent: Friday, September 30, 2011 4:08 PM
To: KUHR, MIRANDA E
Subject: EIE: Submittal Confirmation!

Your EIE submission to the US Nuclear Regulatory Commission for docket 50-285 entitled 'Reply to Request for Additional Information Regarding Omaha Public Power District Request for Exemption Extending Compliance Date for Specific Requirements of 10 CFR 73.55' was received at 09/2011/30 17:06:59. Thank you.