



REQUEST REPLY BY

8/25/06


COMGBJ-06-0005

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

August 10, 2006

COMMISSIONER

Approved, with comments.

  
Dale E. Klein 8/10/06

MEMORANDUM TO: Chairman Klein  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Lyons

FROM: Gregory B. Jaczko 

SUBJECT: USE OF UNSHIELDED TRANSFER CASKS IN SPENT FUEL  
MOVEMENT

**Background**

The staff recently approved exemptions for Omaha Public Power District after a thorough analysis to allow the Fort Calhoun nuclear power plant to perform a transfer of spent fuel to dry cask storage. Fort Calhoun did not have a crane with sufficient capacity to lift and transfer the spent fuel using a system approved by the NRC. As a result, significant shielding was removed from the approved transfer cask during the spent fuel transfer campaign. A copy of this exemption is attached.

The licensee submitted a license amendment request to allow the operation to proceed using the lightweight, minimally shielded, unapproved design. The use of this design resulted in very significant radiation levels in the spent fuel handling area and necessitated that the operation be performed remotely.

The staff's licensing action was thorough and was apparently the only option that would have allowed the Fort Calhoun Station to maintain the schedule for its planned outage this fall. Upgrading the crane or submitting an application to certify the lightweight, unshielded cask design would have taken at least one or more years. While at this time the exemption may have been the only possible path, I believe that a more timely and well planned resolution should have been found earlier by the licensee and its vendor.

**Action**

In light of the safety implications, and restrictive license conditions imposed by the staff in the exemption, I believe the Commission should clearly reinforce the staff's assessment in the exemption request that this exemption should not be viewed as a precedent for resolving similar spent fuel handling operations.

Specifically, the Commission should complete the following actions:

- (1) issue a brief clarification that this exemption should not be viewed as a precedent for fuel handling operations;

06 AUG 10 AM 11  
150 151 152 153 154 155

**Chairman Klein's Comments on COMGBJ-06-0005**

I approve the actions proposed by Commissioner Jaczko in COMGBJ-06-0005, "Use of Unshielded Transfer Casks in Spent Fuel Movement." I agree that the staff should survey licensees to find out if other potentially similar situations exist so that industry can address these situations and the staff can perform the necessary reviews in a more routine manner. Regarding prior Commission notification (Item 3 in COMGBJ-06-0005), I believe that a 5-day prior notification should be sufficient. A shorter notification period (less than 5 days) is acceptable if more expedient action by the agency is needed.



COMMISSIONER

REQUEST REPLY BY: 8/25/06

COMGBJ-06-0005

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

August 10, 2006

*Approved in part / Disapproved in part  
See attached comments.*

*E. G. Jeffrey Jr.*

*8/25/06*

MEMORANDUM TO: Chairman Klein  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Lyons

FROM: Gregory B. Jaczko 

SUBJECT: USE OF UNSHIELDED TRANSFER CASKS IN SPENT FUEL  
MOVEMENT

**Background**

The staff recently approved exemptions for Omaha Public Power District after a thorough analysis to allow the Fort Calhoun nuclear power plant to perform a transfer of spent fuel to dry cask storage. Fort Calhoun did not have a crane with sufficient capacity to lift and transfer the spent fuel using a system approved by the NRC. As a result, significant shielding was removed from the approved transfer cask during the spent fuel transfer campaign. A copy of this exemption is attached.

The licensee submitted a license amendment request to allow the operation to proceed using the lightweight, minimally shielded, unapproved design. The use of this design resulted in very significant radiation levels in the spent fuel handling area and necessitated that the operation be performed remotely.

The staff's licensing action was thorough and was apparently the only option that would have allowed the Fort Calhoun Station to maintain the schedule for its planned outage this fall. Upgrading the crane or submitting an application to certify the lightweight, unshielded cask design would have taken at least one or more years. While at this time the exemption may have been the only possible path, I believe that a more timely and well planned resolution should have been found earlier by the licensee and its vendor.

**Action**

In light of the safety implications, and restrictive license conditions imposed by the staff in the exemption, I believe the Commission should clearly reinforce the staff's assessment in the exemption request that this exemption should not be viewed as a precedent for resolving similar spent fuel handling operations.

Specifically, the Commission should complete the following actions:

- (1) issue a brief clarification that this exemption should not be viewed as a precedent for fuel handling operations;

## Commissioner McGaffigan's Comments on COMGBJ-06-0005

I approve in part, and disapprove in part, the Commission actions recommended by Commissioner Jaczko.

I agree with Commissioner Jaczko that the granting to the Omaha Public Power District (OPPD) the exemption that licensee had requested to allow the movement of a limited number of long-cooled (minimum age over 16 years) spent fuel assemblies to dry cask storage should not be considered a precedent. The limited nature of the exemption was stated in the NRC staff's Safety Evaluation Report, which specified that the exemption applied only to the Fort Calhoun Station and authorized the loading of only four canisters of spent fuel, whose fuel assemblies were themselves defined as to heat, age, and radiation levels. I support reiterating this staff position in the generic communication, which I discuss below.

I join with Commissioner Jaczko in support for the issuance of a generic communication by the staff that would communicate the facts of this case, the insights that have been gained, and the Commission's expectation that such issues should normally be resolved well in advance of fuel movement through the normal License Amendment process.

I agree with Commissioner Jaczko that the Commission generally prefers that licensees utilize the normal License Amendment process which provides for longer review times and increased public notification. This agreement is tempered by the fact that exemption requests are not only explicitly authorized by regulation (10 CFR 72.7), but also constitute a regular and routine portion of the Agency's licensing activities. The processing of exemption requests is one of the activities within the authority of the staff who, as was the case here, reviews each exemption request on its own merits. I also agree with Commissioner Jaczko that the staff conducted a thorough analysis prior to granting the OPPD exemption. As a result of the conditions imposed by the staff, doses received during fuel loading were comparable to those historically received during normal fuel loading at other sites. At this point in time, I do not feel it necessary for the staff to give prior notice to the Commission on granting such license exemptions. The danger, as Commissioner Lyons stated, is that if the staff is required to wait for a Commission decision, the Commission becomes the critical path in issuing an exemption.

Additionally, I agree with Commissioner Lyons that the staff might find it useful to identify other licensees likely to face issues similar to OPPD's in this case, but that I do not feel the staff needs to be directed to do so by the Commission.



COMGBJ-06-0005

August 10, 2006

MEMORANDUM TO: Chairman Klein  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Lyons

*Approval subject to  
the attached  
modifications*

FROM: Gregory B. Jaczko /RA/

SUBJECT: USE OF UNSHIELDED TRANSFER CASKS IN SPENT FUEL  
MOVEMENT



*8/16/06*

**Background**

The staff recently approved exemptions for Omaha Public Power District after a thorough analysis to allow the Fort Calhoun nuclear power plant to perform a transfer of spent fuel to dry cask storage. Fort Calhoun did not have a crane with sufficient capacity to lift and transfer the spent fuel using a system approved by the NRC. As a result, significant shielding was removed from the approved transfer cask during the spent fuel transfer campaign. A copy of this exemption is attached.

The licensee submitted a license amendment request to allow the operation to proceed using the lightweight, minimally shielded, unapproved design. The use of this design resulted in very significant radiation levels in the spent fuel handling area and necessitated that the operation be performed remotely.

The staff's licensing action was thorough and was apparently the only option that would have allowed the Fort Calhoun Station to maintain the schedule for its planned outage this fall. Upgrading the crane or submitting an application to certify the lightweight, unshielded cask design would have taken at least one or more years. While at this time the exemption may have been the only possible path, I believe that a more timely and well planned resolution should have been found earlier by the licensee and its vendor.

**Action**

In light of the safety implications, and restrictive license conditions imposed by the staff in the exemption, I believe the Commission should clearly reinforce the staff's assessment in the exemption request that this exemption should not be viewed as a precedent for resolving similar spent fuel handling operations.

Specifically, the Commission should complete the following actions:

- (1) issue a brief clarification that this exemption should not be viewed as a precedent for ~~fuel handling operations~~; transferring spent fuel to dry cask storage when a

**crane does not have sufficient capacity to lift and transfer the approved transfer cask.**

(2) direct the staff to identify to the Commission other licensees that are likely to confront this or a similar challenge; **(e.g. removing shielding from an approved transfer cask).**

(3) direct the staff to **provide** notify the Commission ~~10-day prior notification of issuance of any similar exemptions, and when a licensee requests an exemption to transfer spent fuel using a transfer cask that has not been approved so that the Commission is aware early in the review process; and~~

(4) direct the staff to prepare an appropriate generic communication on this issue to **communicate the facts of this scenario, to emphasize that this modification was subject to NRC approval and could not be justified using the 10 CFR 72.48 process, and to communicate the Commission's expectation that such issues should be resolved well in advance of spent fuel movement that would require the use of a transfer cask that has not been approved.**

SECY, please track.

Attachment:  
As stated

cc: OGC  
EDO



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

August 10, 2006

COMMISSIONER

Approved in part,  
disapproved in part,  
per attached comments.

MEMORANDUM TO: Chairman Klein  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Lyons

*Peter B. Lyons* 8/25/06  
Peter B. Lyons Date

FROM: Gregory B. Jaczko *G. Jaczko*

SUBJECT: USE OF UNSHIELDED TRANSFER CASKS IN SPENT FUEL  
MOVEMENT

**Background**

The staff recently approved exemptions for Omaha Public Power District after a thorough analysis to allow the Fort Calhoun nuclear power plant to perform a transfer of spent fuel to dry cask storage. Fort Calhoun did not have a crane with sufficient capacity to lift and transfer the spent fuel using a system approved by the NRC. As a result, significant shielding was removed from the approved transfer cask during the spent fuel transfer campaign. A copy of this exemption is attached.

The licensee submitted a license amendment request to allow the operation to proceed using the lightweight, minimally shielded, unapproved design. The use of this design resulted in very significant radiation levels in the spent fuel handling area and necessitated that the operation be performed remotely.

The staff's licensing action was thorough and was apparently the only option that would have allowed the Fort Calhoun Station to maintain the schedule for its planned outage this fall. Upgrading the crane or submitting an application to certify the lightweight, unshielded cask design would have taken at least one or more years. While at this time the exemption may have been the only possible path, I believe that a more timely and well planned resolution should have been found earlier by the licensee and its vendor.

**Action**

In light of the safety implications, and restrictive license conditions imposed by the staff in the exemption, I believe the Commission should clearly reinforce the staff's assessment in the exemption request that this exemption should not be viewed as a precedent for resolving similar spent fuel handling operations.

Specifically, the Commission should complete the following actions:

- (1) issue a brief clarification that this exemption should not be viewed as a precedent for fuel handling operations;

Commissioner Lyons' Comments on COMGBJ-06-0005

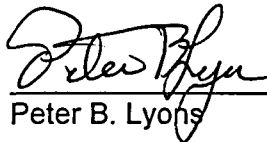
I approve in part, and disapprove in part, Commissioner Jaczko's recommended Commission actions.

Specifically, I share his view that the modification to the Ft. Calhoun dry spent fuel transfer and storage cask would best have been addressed by the licensee through the normal license amendment request process rather than the relatively more expedited action of an exemption request.

Therefore regarding proposed actions (1) and (4), I approve directing the staff to prepare an appropriate generic communication to include, at a minimum, the facts of the Ft. Calhoun exemption and the Commission's expectation that such issues should normally be resolved through the license amendment process and that the Ft. Calhoun exemption should not be viewed as a precedent. However, the generic communication should make it clear that failure of a licensee to resolve such issues through the license amendment process will not be a basis for rejecting an exemption request, since such failure has no bearing on the standards set forth in 10 CFR §72.7 for issuing an exemption to regulations in Part 72.

Regarding action (2), although I believe the staff might find it useful to identify other licensees that are likely to confront this or a similar challenge, I do not believe that staff needs to be so directed by the Commission.

I disapprove action (3) because although a notification such as that proposed does not require Commission action, I am concerned that staff may delay an exemption approval action until Commission feedback is received, thereby potentially placing the Commission in the critical path of a technical decision without a policy issue at stake. This concern does not preclude requests for information by individual Commissioners, which in my experience are promptly and appropriately satisfied by the staff. Furthermore, I have confidence that if a matter of policy should arise in any staff decision process, the staff will promptly bring that matter to the attention of the Commission.

 8/28/06  
Peter B. Lyons Date