



Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802
Tel 479-858-4888

Dale E. James
Acting Director
Nuclear Safety Assurance - ANO

OCAN050502

May 23, 2005

Attn: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Request for Exemption from Holtec International
Certificate of Compliance (CoC) (72-1014)
Arkansas Nuclear One – Units 1 and 2
Docket Nos. 50-313, 50-368, and 72.13
License Nos. DPR-51 and NPF-6

Dear Sir or Madam:

Pursuant to 10 CFR 72.7, Entergy Operations requests an exemption from the requirements of 10 CFR 72.212(a)(2) and 10 CFR 72.214. The regulations require, in part, compliance to the terms and conditions of the Holtec International (Holtec) Certificate of Compliance (CoC) (72-1014). Specifically, an exemption is requested to permit loading under Amendment No. 2 to the Holtec CoC for the HI-STORM 100 System, which is in final rulemaking.

An initial amendment request, as supplemented, was submitted to the NRC staff by Holtec on March 4, 2002. The request included changes to materials used in construction, changes to the types of fuel that can be loaded, changes to shielding and confinement methodologies and assumptions, revisions to various temperature limits, and changes in allowable fuel enrichments. This proposed amendment was noticed in the Federal Register on February 28, 2005, concurrently, as a proposed rule and a direct final rule with an effective date of May 16, 2005. The direct final rule was withdrawn on May 12, 2005, due to the receipt of significant adverse comments; however, rule making under the proposed rule remains active.

The delay in issuance of this amendment, directly impacts the cask loading campaigns at Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2). The ANO-2 spent fuel pool (SFP), currently does not contain enough space to allow a full offload of fuel in the reactor core, should it become necessary. Adequate storage in the SFP is limited by fuel assemblies that do not meet the current CoC requirements. These assemblies must be dispositioned to regain full core reserve and to allow for new fuel receipt prior to the next ANO-2 refueling outage. In order to meet this need, Entergy Operations requests approval of the proposed exemption by June 20, 2005, to support the planned ANO-1 and ANO-2 loading campaigns beginning in July 2005.

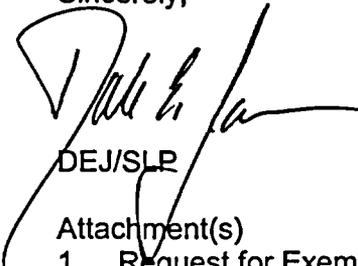
lfm5501

The proposed CoC amendment has been reviewed by the NRC and a preliminary Safety Evaluation Report (SER) has been issued. The changes requested in the proposed amendment request are not considered to reduce margins of safety in the loading or storage of spent fuel. Therefore, Entergy Operations' request exemption for the interim period until rulemaking can be finalized and the CoC revised.

Details of Entergy Operations' need and justification for the issuance of an exemption are included in Attachment 1. Should you have any questions concerning this submittal, please contact Stephenie Pyle at 479-858-4704.

New commitments contained in this submittal are summarized in Attachment 2.

Sincerely,

A handwritten signature in black ink, appearing to read 'DEJ/SLP', is written over the typed name. The signature is stylized and includes a large loop at the beginning.

DEJ/SLP

Attachment(s)

1. Request for Exemption Request from Holtec International Certificate of Compliance (CoC) (72-1014)
2. List of Regulatory Commitments

cc: Dr. Bruce Mallett
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One
P.O. Box 310
London, AR 72847

U. S. Nuclear Regulatory Commission
Attn: Mr. Drew Holland
Mail Stop 0-7 D1
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. Thomas Alexion
Mail Stop 0-7 D1
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. John Monninger
Mail Stop 0-13 D13
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. Christopher Regan
Mail Stop 0-13 D13
Washington, DC 20555-0001

U. S. Nuclear Regulatory Commission
Attn: Mr. Scott Atwater
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Attachment 1

OCAN050502

**Request for Exemption from Holtec International
Certificate of Compliance (CoC) (72-1014)**

Request for Exemption from Holtec International Certificate of Compliance (CoC) (72-1014)

1.0 Request for Exemption

Pursuant to 10 CFR 72.7, Entergy Operations requests an exemption from the requirements of 10 CFR 72.212(a)(2) and 10 CFR 72.214 for its Arkansas Nuclear One (ANO) facility. The regulations require, in part, compliance to the terms and conditions of the Holtec International Certificate of Compliance (CoC) (72-1014). Specifically, an exemption is requested to permit loading under Amendment No. 2 to the Holtec CoC for the HI-STORM 100 System, which is in final rulemaking.

2.0 Background

An initial amendment request (Amendment No. 2), which included changes to materials used in construction, changes to the types of fuel that can be loaded, changes to shielding and confinement methodologies and assumptions, revisions to various temperature limits, and changes in allowable fuel enrichments, was submitted to the NRC staff by Holtec on March 4, 2002 and was supplemented by letters dated October 31, 2002, August 6 and November 14, 2003, and February 20, April 23, July 22, August 13, October 14, and December 3, 2004. A preliminary license and Safety Evaluation Report (SER) for Amendment No. 2 to the CoC was prepared and issued by the NRC staff to Holtec on December 6, 2004. This proposed amendment was noticed in the Federal Register on February 28, 2005, as a proposed rule and a direct final rule with an effective date of May 16, 2005; however, the direct final rule was withdrawn on May 12, 2005, due to the receipt of significant adverse comments. The proposed rule is currently in final rulemaking.

The delay in issuance of this amendment directly impacts the cask loading campaigns at Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2). Current plans call for loading seven casks during the remainder of 2005. The loading of all but one of these casks is constrained by the need for Amendment No. 2 to the Holtec CoC. This amendment is specifically required because existing cask storage candidate fuel assemblies do not meet all conditions required such as sufficient cooling time in the spent fuel pool (SFP), intact fuel classification or has higher decay heat values than allowed by the existing Holtec CoC. Some casks scheduled to be loaded have also been fabricated with METAMIC[®] as an alternate neutron poison material, which is not licensed under the current CoC.

The ANO-2 SFP, currently does not contain enough space to allow a full offload of fuel in the reactor core, should it become necessary. Adequate storage in the SFP is limited by fuel assemblies that do not meet the current CoC requirements. These assemblies must be dispositioned to regain full core reserve and to allow for new fuel receipt prior to the next ANO-2 refueling outage.

3.0 Technical Considerations

Entergy has reviewed the Holtec amendment request submittals and the NRC draft SER and agrees with the methodology and results of these submittals and with the NRC's conclusions. None of the changes requested in the Amendment 2 request are considered to

reduce margins of safety in the loading or storage of spent fuel. It is believed that compensating actions such as use of the Supplemental Cooling System and application of ALARA (as-low-as-reasonably-achievable radiological controls) at the site offset any perceived increases in risk. In addition, ANO plans to apply the requirements of interim staff guidance (ISG) 18 to the vent and drain port welds and will continue the practice until the cask system is otherwise certified. However, all other changes in the proposed Amendment No. 2 request, including proposed FSAR revisions that support the amendment, are integral to this exemption request.

4.0 Regulatory Considerations

Entergy Operations has reviewed 10 CFR 72 and determined that an exemption to a portion of 10 CFR 72.212(a)(2) and 10 CFR 72.214 is necessary to allow loading under proposed Amendment No. 2 to the Holtec CoC. 10 CFR 72.210 provides a general license to store spent fuel in an ISFSI (Independent Spent Fuel Storage Installation) at reactor sites as long as the Part 50 reactor license remains in effect. 10 CFR 72.212(a)(2) limits the storage of spent fuel to casks approved in 10 CFR 72 Subpart K. 10 CFR 72.214 states that these casks "are approved for storage under the conditions specified in their Certificates of Compliance." Since cask loading cannot occur under the current Holtec CoC amendment, an exemption to 10 CFR 72.212(a)(2) and 10 CFR 72.214 may be granted to allow loading in variance with the CoC.

A preliminary license and SER for Amendment No. 2 to the Holtec CoC was issued by the staff on December 6, 2004. This SER documented the staff's review and concurrence with the proposed amendment and concluded that the requirements of 10 CFR Part 72 were met.

In Environmental Assessment and Finding of No Significant Impact on the Proposed Amendment, dated January 2005, the NRC documented the staff's detailed review of the proposed amendment and found that acceptable margin was maintained. In addition, the staff found that there was reasonable assurance that public health and safety and the environment will remain adequately protected.

The specific requirements for granting exemptions to 10 CFR Part 72 licensing requirements are set forth in 10 CFR 72.7, Specific Exemptions, which reads as follows:

The Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part 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.

As discussed above, loading under proposed Amendment No. 2 has low safety significance and therefore, will not endanger life and property of the common defense and security. It is also in the public's best interest to grant an exemption in order to gain full normal core off-load capability.

While 10 CFR 72.7 does not specify a showing of "special circumstances" like those required for 10 CFR 50 exemptions, Entergy Operations' exemption request can be elucidated by using three of the special circumstances identified in 10 CFR 50.12. The applicable special circumstances are discussed below:

1. 10 CFR 50.12(a)(2)(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.

The underlying purpose of 10CFR72.212 is to allow reactor licensees to utilize dry fuel storage casks that have previously been found to be safe and appropriately analyzed for use by the cask designer, the cask user, and the NRC. As described above, the loading of dry fuel storage casks under the proposed amendment has been found to be non-safety significant.

2. 10 CFR 50.12(a)(2)(iii) - Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

The ANO-2 SFP currently does not contain enough space to allow a full offload of fuel in the reactor core, should it become necessary. Adequate storage in the SFP is limited by fuel assemblies that do not meet the current CoC requirements. These assemblies must be dispositioned to regain full core reserve and to allow for new fuel receipt prior to the next ANO-2 refueling outage.

3. 10 CFR 50.12(a)(2)(v) – The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation.

Since an amendment has been submitted by Holtec International to generically revise the CoC, Entergy's Operations' request is only for the interim time period until rulemaking on the Holtec International submittal is completed. Good faith efforts have been made by Entergy Operations to have the CoC revised prior to the actual need date by having Holtec International submit the initial request for amendment in March, 2002.

5.0 Summary

In conclusion, Entergy Operations requests an exemption from the requirements of 10 CFR 72.212(a)(2) and 10 CFR 72.214. Specifically, an exemption is requested to permit loading under Amendment No. 2 to the Holtec CoC for the HI-STORM 100 System in its entirety. Additionally, ANO will apply the requirements of ISG-18 to the vent and drain port welds and will continue this practice until the cask system is otherwise certified. As discussed above, the requested exemption has low safety significance and therefore, will not endanger life or property or the common defense and security. Entergy Operations' request exemption for the interim period until rulemaking can be finalized and the CoC revised.

Attachment 2

OCAN050502

List of Regulatory Commitments

List of Regulatory Commitments

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check One)		SCHEDULED COMPLETION DATE (If Required)
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
ANO will apply the requirements of ISG-18 to the vent and drain port welds and will continue this practice until the cask system is otherwise certified.		X	Interim commitment until rulemaking can be finalized and the CoC revised.