

November 3, 2014

Ms. Stephenie L. Pyle
Manager, Regulatory Assurance
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802

SUBJECT: REQUEST FOR EXEMPTION FROM HOLTEC INTERNATIONAL
CERTIFICATE OF COMPLIANCE NO. 1014 FUEL SPECIFICATION AND
LOADING CONDITIONS AT ARKANSAS NUCLEAR ONE INDEPENDENT
SPENT FUEL STORAGE INSTALLATION – REQUEST FOR ADDITIONAL
INFORMATION (TAC NO. L24954)

Dear Ms. Pyle:

By letter dated October 2, 2014, as supplemented October 14, 2014, Entergy Operations, Inc. (Entergy) submitted a request for exemption from fuel specification and loading conditions in the Holtec International Certificate of Compliance No. 1014, Amendment No. 5, which is employed at their Arkansas Nuclear One Independent Spent Fuel Storage Installation.

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is required to complete its technical review of your application. The request for additional information (RAI) is identified in the enclosure to this letter. We request that you provide this information by December 9, 2014, to support issuance of the exemption in January, 2015. Please inform us at your earliest convenience, but no later than November 28, 2014, if you are not able to provide the information by that date. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay.

Please reference Docket Nos. 50-313, 50-368, 72-13, and 72-1014 as well as TAC No. L24954 in future correspondence related to this exemption request. If you have any questions regarding this matter, feel free to contact me at (301) 287-9225.

Sincerely,

/RA/

Chris Allen, Project Manager
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket Nos.: 50-313, 50-368, 72-13, 72-1014
TAC No. L24954

Ms. Stephenie L. Pyle
 Manager, Regulatory Assurance
 Arkansas Nuclear One
 Entergy Operations, Inc.
 1448 S.R. 333
 Russellville, AR 72802

SUBJECT: REQUEST FOR EXEMPTION FROM HOLTEC INTERNATIONAL CERTIFICATE OF COMPLIANCE NO. 1014 FUEL SPECIFICATION AND LOADING CONDITIONS AT ARKANSAS NUCLEAR ONE INDEPENDENT SPENT FUEL STORAGE INSTALLATION – REQUEST FOR ADDITIONAL INFORMATION (TAC NO. L24954)

Dear Ms. Pyle:

By letter dated October 2, 2014, as supplemented October 14, 2014, Entergy Operations, Inc. (Entergy) submitted a request for exemption from fuel specification and loading conditions in the Holtec International Certificate of Compliance No. 1014, Amendment No. 5, which is employed at their Arkansas Nuclear One Independent Spent Fuel Storage Installation.

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is required to complete its technical review of your application. The request for additional information (RAI) is identified in the enclosure to this letter. We request that you provide this information by December 9, 2014, to support issuance of the exemption in January, 2015. Please inform us at your earliest convenience, but no later than November 28, 2014, if you are not able to provide the information by that date. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay.

Please reference Docket Nos. 50-313, 50-368, 72-13, and 72-1014 as well as TAC No. L24954 in future correspondence related to this exemption request. If you have any questions regarding this matter, feel free to contact me at (301) 287-9225.

Sincerely,

/RA/

Chris Allen, Project Manager
 Spent Fuel Licensing Branch
 Division of Spent Fuel Management
 Office of Nuclear Material Safety
 and Safeguards

Docket Nos.: 50-313, 50-368, 72-13, 72-1014
 TAC No. L24954

DISTRIBUTION: DMarcano, RKellar/ RIV SFM R/F Andrea George, NRR

G:\SFST\Allen\Part 72\ANO\Misload 2014\RAI\Letter.docx

ADAMS Accession No.: ML14308A015

OFC:	SFM		SFM		SFM		SFM		SFM	
NAME:	WAllen		WWheatley via e-mail		JSolis via e-mail		CAraguas via e-mail		MSampson	
DATE:	10/31/14		10/31/14		11/3/14		11/3/14		11/3/14	

OFFICIAL RECORD COPY

Arkansas Nuclear One

cc:

Senior Vice President
Chief Operating Officer
Entergy Operations, Inc.
1340 Echelon Parkway
Jackson, MS 39286-1995

Arkansas Department of Health
Radiation Control Section
4815 West Markham St., Slot 30
Little Rock, AR 72205-3867

Winston & Strawn
1700 K Street, N.W.
Washington, DC 20006-3817

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 310
London, AR 72847

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
1600 East Lamar Blvd.
Arlington, TX 76011-4511

County Judge of Pope County
100 West Main Street
Russellville, AR 72801

Executive Vice-President, Nuclear
Operations and CNO
Entergy Services, Inc.
1340 Echelon Parkway
Jackson, MS 39286-1995

Vice President, Oversight
Entergy Operations, Inc.
1340 Echelon Parkway
Jackson, MS 39286-1995

Wise, Carter, Child & Caraway
P. O. Box 651
Jackson, MS 39205

Director, Nuclear Safety Assurance
Entergy Operations, Inc.
Arkansas Nuclear One
1448 S.R. 333
Russellville, AR 72802

Mr. Jeremy Browning
Vice President Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S. R. 333
Russellville, AR 72801

Manager, Licensing
Entergy Operations, Inc.
Arkansas Nuclear One
1448 S.R. 333
Russellville, AR 72802

Arkansas Department of Health
Arkansas Nuclear Planning and Response
Program
P.O. Box 1749
Russellville, AR 72811

Request for Additional Information
Entergy Operations, Inc.
Docket Nos. 50-313, 50-368, 72-13, 72-1014
Exemption Request

By letter dated October 2, 2014, as supplemented October 14, 2014, Entergy Operations, Inc. (Entergy) submitted a request for exemption from fuel specification and loading conditions in the Holtec International Certificate of Compliance No. 1014, Amendment No. 5, which is employed at their Arkansas Nuclear One Independent Spent Fuel Storage Installation.

Request for Additional Information

1. Identify the technical specifications or applicable Final Safety Analysis Report location where there is any specified limit on the MPC surface while it is located in the transfer cask (HI-TRAC).

Page 2 of Attachment 1 to ANO letter "OCAN101403" states that HI-TRAC/MPC annulus temperatures have remained steady at approximately 130°F to 135°F. This temperature monitoring may indicate the user needs to show compliance with an established limit. Therefore, the staff needs to make sure a thermal limit is not been exceeded for the MPC in this configuration.

This information is needed to assure compliance with 10 CFR 72.236(f).

2. Clarify the statements "None of the rectangular openings in the entire fuel basket are credited in the thermal analysis, so that the deposition of any fuel-related debris such as crud would be bounded." and "A fuel pellet in contact with the baseplate would efficiently reject heat to the baseplate through conduction and would continue to be cooled by the thermosiphon natural convection flow through the mouseholes."

The first statement (see Section 2.2.3 of Holtec Report HI-2146265) seems to contradict Page 4.4.-4 of FSAR Section 4.4.1.1.ii.d which states the mouseholes are explicitly modeled, while the second statement (on same report) contradicts the first statement. In addition, the impact of one or more blocked mouseholes, either partially or completely, on the natural convection heat transfer capabilities of the MPC does not appear to have been analyzed in the FSAR. Therefore, since natural convection heat transfer was employed in the HI-STORM thermal model, it is difficult for staff to determine how the statements in the FSAR bound the current as-loaded configuration.

This information is needed to assure compliance with 10 CFR 72.236(f).