Mr. Michael R. Kansler, President Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR

ADDITIONAL INFORMATION REGARDING AMENDMENT APPLICATION FOR

FUEL STORAGE BUILDING GANTRY CRANE (TAC NO. MC5036)

Dear Mr. Kansler:

On November 1, 2004, Entergy Nuclear Operations, Inc. (Entergy), submitted an application for a proposed amendment to the licensing basis for Indian Point Nuclear Generating Unit No. 2 to allow use of a new single-failure proof gantry crane to be installed in the fuel storage building. In addition, Entergy has a commitment to not move the spent fuel cask over any region of the spent fuel pool until the cask handling has been reviewed by the Nuclear Regulatory Commission (NRC) and found to be acceptable.

The NRC staff is reviewing the information provided and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). During a telephone call on February 10, 2005, the Entergy staff indicated that a response to the RAI would be provided within 45 days.

Please contact me at (301) 415-1457 if you have any guestions on this issue.

Sincerely,

/RA/

Patrick D. Milano, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosure: RAI

cc w/encl: See next page

February 25, 2005

Mr. Michael R. Kansler, President Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR

ADDITIONAL INFORMATION REGARDING AMENDMENT APPLICATION FOR

FUEL STORAGE BUILDING GANTRY CRANE (TAC NO. MC5036)

Dear Mr. Kansler:

On November 1, 2004, Entergy Nuclear Operations, Inc. (Entergy), submitted an application for a proposed amendment to the licensing basis for Indian Point Nuclear Generating Unit No. 2 to allow use of a new single-failure proof gantry crane to be installed in the fuel storage building. In addition, Entergy has a commitment to not move the spent fuel cask over any region of the spent fuel pool until the cask handling has been reviewed by the Nuclear Regulatory Commission (NRC) and found to be acceptable.

The NRC staff is reviewing the information provided and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). During a telephone call on February 10, 2005, the Entergy staff indicated that a response to the RAI would be provided within 45 days.

Please contact me at (301) 415-1457 if you have any guestions on this issue.

Sincerely,

/RA/

Patrick D. Milano, Senior Project Manager, Section 1 Project Directorate I Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-247 Enclosure: RAI

cc w/encl: See next page

DISTRIBUTION:

PUBLIC S. Jones A. Wong G. Matakas, R-I

PDI-1 Reading File K. Manoly J. Ma OGC DLPM DPR P. Milano S. Little ACRS

R. Laufer

ADAMS ACCESSION NUMBER: ML050470515

OFFICE	PDI-1/PM	PDI-1/LA	SPLB/SC	EMEB/SC	PDI-1/SC
NAME	PMilano	SLittle	SJones	KManoly	RLaufer
DATE	02/24/05	02/24/05	01/24/05	02/24/05	02/25/05

CC:

Mr. Gary J. Taylor Chief Executive Officer Entergy Operations, Inc. 1340 Echelon Parkway Jackson, MS 39213

Mr. John T. Herron Senior Vice President and Chief Operating Officer Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Mr. Fred Dacimo Site Vice President Entergy Nuclear Operations, Inc. Indian Point Energy Center 295 Broadway, Suite 2 P.O. Box 249 Buchanan, NY 10511-0249

Mr. Christopher Schwarz General Manager, Plant Operations Entergy Nuclear Operations, Inc. Indian Point Energy Center 295 Broadway, Suite 1 P.O. Box 249 Buchanan, NY 10511-0249

Mr. Danny L. Pace Vice President Engineering Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Mr. Brian O'Grady Vice President, Operations Support Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Mr. John McCann
Director, Nuclear Safety Assurance
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Charlene D. Faison Manager, Licensing Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Mr. Michael J. Colomb Director of Oversight Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Mr. James Comiotes
Director, Nuclear Safety Assurance
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Patric Conroy
Manager, Licensing
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P. O. Box 249
Buchanan, NY 10511-0249

Mr. John M. Fulton Assistant General Counsel Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Senior Resident Inspector's Office Indian Point 2 U. S. Nuclear Regulatory Commission P.O. Box 59 Buchanan, NY 10511-0038

Indian Point Nuclear Generating Unit No. 2

CC:

Mr. Peter R. Smith, President New York State Energy, Research, and Development Authority 17 Columbia Circle Albany, NY 12203-6399

Mr. Paul Eddy Electric Division New York State Department of Public Service 3 Empire State Plaza, 10th Floor Albany, NY 12223

Mr. Charles Donaldson, Esquire Assistant Attorney General New York Department of Law 120 Broadway New York, NY 10271

Mayor, Village of Buchanan 236 Tate Avenue Buchanan, NY 10511

Mr. Ray Albanese Executive Chair Four County Nuclear Safety Committee Westchester County Fire Training Center 4 Dana Road Valhalla, NY 10592

Ms. Stacey Lousteau Treasury Department Entergy Services, Inc. 639 Loyola Avenue Mail Stop: L-ENT-15E New Orleans, LA 70113

Mr. William DiProfio PWR SRC Consultant 139 Depot Road East Kingston, NH 03827 Mr. Dan C. Poole PWR SRC Consultant 20 Captains Cove Road Inglis, FL 34449

Mr. William T. Russell PWR SRC Consultant 400 Plantation Lane Stevensville, MD 21666-3232

Mr. Jim Riccio Greenpeace 702 H Street, NW Suite 300 Washington, DC 20001

REQUEST FOR ADDITIONAL INFORMATION

REGARDING FUEL STRAGE BUILDING GANTRY CRANE

ENTERGY NUCLEAR OPERATIONS, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

DOCKET NO. 50-247

In a letter dated November 1, 2004 (ADAMS Accession No. ML043140282), Entergy Nuclear Operations, Inc., submitted an application for a proposed amendment to the licensing basis for Indian Point Nuclear Generating Unit No. 2 (IP2) to allow use of a new single-failure proof gantry crane to be installed in the fuel storage building. The Nuclear Regulatory Commission staff has the following questions regarding the information in the application.

- 1. On page 3 of Attachment 1 of the November 1 letter, it states that the crane main hoist has a 110-ton capacity while an auxiliary hoist has a 45-ton capacity. On page 4, it states that the 110-ton hoist is used to lift the Holtec HI-TRAC 100 transfer cask, whereas the 45-ton hoist is used to handle the ancillary components of the HI-STORM 100 Cask System.
 - a. Describe the means to ensure that the 45-ton hoist will not be inadvertently used to handle loads that exceed its rated capacity.
 - b. Provide prints, if available, to show the details of the crane and its location relative to the spent fuel pool and the existing 40-ton overhead crane. Are there any postulated scenarios whereby the new crane may interfere with the existing crane (or vice versa) during load handling operations?
- 2. On page 2 of Appendix B to Attachment 3, it states that the crane will not be used to lift fuel elements from the spent fuel racks. Therefore, interlocks to prevent trolley and bridge movements while hoisting were not provided.
 - Describe the control(s) used to ensure the crane will not be inadvertently used for other unintended purposes (e.g., lifting fuel elements from the spent fuel racks), given no interlocks are provided.
- 3. In Attachment 4, it states that the entire new crane is seismically qualified by response spectrum analysis. Briefly describe the components that constitute the entire new crane.
- 4. Provide drawings that show the configuration and member sizes of the proposed crane, the steel counterweight box, the crane wheel, and crane rails, and their locations in the fuel storage building. The drawing should also show how the counterweight box is embedded below the floor.
- 5. Attachment 5 includes the method of analysis of the anchorage system. It states that

the required weight of the steel counterweight box was determined by treating the box as a foundation, which provides gravity weight resistance for both operating-basis earthquake and safe-shutdown earthquake loading. Provide the weight of the steel counterweight box.

- 6. In Attachment 4, it states that the crane is installed on new rails connected to a new foundation forming part of the reconstructed truck bay floor in the fuel storage building. Is this new foundation the same as the foundation (steel counterweight box) mentioned above? If not, provide the drawing that shows the relationship among the crane, rails, new foundation, and the structural members that support the new foundation.
- 7. In Attachment 4, it also states that restraining lugs and anchors are provided to withstand the calculated uplift forces. Provide drawings that show the lugs and anchors and their surrounding material(s), and describe the methods and procedures on how the restraining forces were calculated.
- 8. In Attachment 5, it states that the steel counterweight box is embedded below the floor to resist the uplift forces.
 - Provide the magnitude of the maximum uplift force at the location of the steel counterweight box resulting from all applicable loading combinations, and identify the loading combination. Provide the punching shear stress and punching shear strength (capacity) in the floor resulting from the maximum uplift force.
- 9. In Attachment 5, it states that turnbuckles are used as tie-downs. Provide the maximum stress in the turnbuckles for all applicable loading combinations and the allowable stress for the turnbuckles.