



Nuclear Management Company, LLC
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241

Mark E. Reddemann
Site Vice President
Kewaunee & Point Beach Nuclear Plants

NRC 2001-054

10 CFR 72.244

August 24, 2001

Ms. Becky Karas
Spent Fuel Project Office
Nuclear Material Safety Safeguards
U. S. Nuclear Regulatory Commission
11555 Rockville Pike M/S 0-6-F-18
Rockville, MD 20852

71-1004

Dear Ms. Karas:

ASSIGNMENT OF REVIEW PRIORITY FOR APPLICATION FOR
AMENDMENT NO. 5 OF NUHOMS® CERTIFICATE OF COMPLIANCE NO. 1004
FOR DRY SPENT FUEL STORAGE CASKS

- References:
- 1) R. Grenier Letter to B. Karas dated July 19, 2001, "Assignment of Review Priority for Application for Amendment No. 5 of NUHOMS® Certificate of Compliance No. 1004 for Dry Spent Fuel Storage Casks."
 - 2) M. E. Reddemann Letter to B. Karas dated July 24, 2001, "Assignment of Review Priority for Application for Amendment No. 5 of NUHOMS® Certificate of Compliance No. 1004 for Dry Spent Fuel Storage Casks."

References 1 and 2 requested high priority review by the Nuclear Regulatory Commission (NRC) of the Application for Amendment No. 5 of NUHOMS® Certificate of Compliance No. 1004 for Dry Spent Fuel Storage Casks. As previously reported, Transnuclear is under contract to the Nuclear Management Company, LLC (NMC) to supply the NUHOMS® 32PT DSC dry storage systems for use at the Point Beach Nuclear Plant (PBNP). PBNP has an immediate need for this system to preclude loss of full core off-load capability in 2003.

During a telephone conversation with Mr. Jim Becka' on July 24, 2001, you requested additional information to support our appeal for expedited NRC review of the NUHOMS® amendment in order to facilitate NRC allocation of staff resources. The following provides the brief history of the dry fuel storage program at PBNP and a characterization of our prospective need for the NUHOMS® system.

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NMSSO Public

PBNP is a General Licensee, as defined in 10 CFR 72, currently using the storage-only Ventilated Storage Cask (VSC-24) system. Our first loading was in December 1995. The effort laying the groundwork for this first loading included obtaining permission from the Public Service Commission of Wisconsin (PSCW) for the project. This process included preparation of an Environmental Impact Report to support the application to the PSCW; testimony before the PSCW; three public hearings held both locally in Manitowoc and in Madison, Wisconsin; and issuance of an Environmental Impact Statement by the PSCW. In its decision authorizing the project in 1995, the PSCW limited Wisconsin Electric Power Company (WE) to loading 12 casks of the VSC-24 design.

An incident that occurred at PBNP in May 1996 during loading of the third canister halted loading operations for all plants utilizing the VSC-24 design pending further reviews by the NRC in areas of material compatibility and closure weld design. NRC Bulletin 96-04 was issued to address the first issue, and Confirmatory Action Letters, issued to the designer and general licensees using the VSC-24 system, addressed the second issue. PBNP and other licensees received permission to resume loading operations of VSC-24 casks in the fall of 1998.

During the two-year recovery period, full core off-load capability was lost and the potential for plant shutdown arose. Precautionary measures were taken and a backup to the VSC-24 was procured. Based upon all other available alternatives, the backup chosen was the TN-32. To ensure timely deployment of the backup, permission was requested from the NRC to start fabrication while the TN-32 application was under standard (non-expedited) NRC review. Since resumption of loading in the fall of 1998, PBNP has successfully loaded the remaining ten VSC-24 casks authorized by the PSCW, obviating the need to employ the TN-32s. Accordingly PBNP has recovered full core off-load capability in the spent fuel pool.

The decision to request permission from the PSCW to build and load additional canisters at PBNP was made by WE, the plant asset owner. In May 2000, WE initiated proceedings requesting PSCW approval for PBNP to load additional canisters of any NRC-approved design to allow plant operation through the end of both units' current operating licenses (2010 for Unit 1, 2013 for Unit 2 respectively). In March 2001, the PSCW issued an Order approving that request with a caveat that WE transition to a dual purpose system to eliminate the need to repackage the fuel for transport. Prospective options for dry storage at PBNP were evaluated. These included continued use of the VSC-24; completing fabrication of the three TN-32s and placing them into service; and utilization of a dual purpose system. NMC management decided to continue use of the VSC-24 in the interim and transition to a dual purpose design.¹

¹ The decision to not use the three TN-32s was based on a number of factors including limiting the variety of systems employed, impact on plant resources, and the magnitude of attendant infrastructure changes that would be required (cost vs. benefit of the attendant program, procedure, and plant and equipment modifications).

Four additional storage-only VSC-24s were ordered to satisfy interim plant storage needs and to ensure full core off-load capability through mid-2003.² NMC also issued a Request for Proposals (RFP) for a dual purpose storage system as a follow-on to the VSC-24. As specified in the RFP, evaluations of the proposed alternatives would consider: (1) Physical design compatibility with the plant and existing Independent Spent Fuel Storage Installation (ISFSI); (2) sufficiency of storage capability for PBNP spent fuel characteristics; (3) maturity of the product line; (4) quality of design and fabrication; and (5) simplicity of operation.

Based upon these attributes, the NUHOMS[®] 32PT was determined to best meet the criteria. While all systems examined would accommodate the spent fuel characteristics and were of high quality, only the NUHOMS[®] met PBNP's physical compatibility constraints (primarily, in-pool loading area size, existing ISFSI pad design and other plant structural clearances). NMC and WE believe the NUHOMS[®] 32PT presents the best solution for PBNP's spent fuel storage needs.

In June 2001, a contract between NMC and Transnuclear was signed to supply the NUHOMS[®] 32PT dry storage system to Point Beach for loading in 2003. In addition to the NUHOMS[®] 32PT enhanced storage capabilities, this selection offers many advantages over the design currently in use at PBNP, including the use of stainless steel materials, a dual purpose design, simplicity of operation, and increased storage efficiency.

PBNP plans to demonstrate, through NRC-observed dry runs, implementation of this system and complete necessary loadings by mid-2003. Implementation of this plan will avoid loss of full core off-load capability following the planned fall 2003 refueling outage without pursuing additional stop-gap measures.³ Timely NRC review of the Amendment 5 application will allow us to accomplish this plan and ensure this significant source of emission-free energy for the State of Wisconsin continues its safe and reliable operation.

Should additional information be required, please contact me or Jim Becka at 920/755-7500.

Sincerely,



Mark E. Reddemann
Site Vice President

² Once loaded, the current licensed capabilities of the VSC-24 will have been exhausted considering the remaining current spent fuel inventory and fuel design. There is barely enough spent fuel (Westinghouse 14x14 Standard) to load into the VSC-24s. This is further limited by the neutron intensity of this fuel. Finally, although not of immediate concern, is the preservation of older-colder fuel for future transport considerations.

³ Among these are pursuing the amendment of the VSC-24 CoC for additional storage capabilities, exploring the use of temporary racks in the spent fuel pool cask loading area, or procuring a less capable system.