FirstEnergy

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Docket Number 50-346

License Number NPF-3

Serial Number 2550

May 21, 1999

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Subject: License Amendment Application to Allow Use of Expanded Spent Fuel Storage Capability (License Amendment Request No. 98-0007; TAC No. MA5477)

Ladies and Gentlemen:

Enclosed is an application for an amendment to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Operating License Number NPF-3, Appendix A, Technical Specifications. The proposed changes involve: Technical Specification (TS) 3/4.9.7, Refueling Operations - Crane Travel - Fuel Handling Building, and associated Bases; TS 3/4.9.11, Refueling Operations - Storage Pool Water Level; TS 3/4.9.12, Refueling Operations - Storage Pool Ventilation; TS 3/4.9.13, Refueling Operations - Spent Fuel Pool Fuel Assembly Storage, and associated Bases; TS 5.6, Design Features - Fuel Storage; and related changes to the TS Index.

As the NRC staff is aware, the United States Department of Energy has not yet provided a federal, long-term storage facility for spent nuclear fuel assemblies from power reactors. Accordingly, commercial nuclear power plants, like the DBNPS, have had to store an increasing number of spent fuel assemblies. The DBNPS began the current operating Cycle 12 with insufficient storage capacity in the spent fuel pool (SFP) to fully offload the entire reactor core (177 fuel assemblies). The current spent fuel storage capacity in the spent fuel pool is 735 fuel assemblies. There are currently only 114 empty storage locations available in the spent fuel pool. A full core offload into the spent fuel pool is required for the performance of the ten-year Inservice Inspection activities required during the Twelfth Refueling Outage (12RFO), which is scheduled to commence in April 2000.

A001

ltr and 1 w/o prop

change: NRC PDR

Following the core reload during 12RFO, with 72 fuel assemblies scheduled to be permanently discharged, there would be only 42 empty storage locations available in the spent fuel pool. Refueling of the reactor during the Thirteenth Refueling Outage (13RFO), which is scheduled to commence in Spring 2002, would not be possible since there would be insufficient empty storage locations available to hold the 72 fuel assemblies scheduled to be permanently discharged.

The proposed TS changes would expand the present spent fuel storage capability by up to 289 storage locations by allowing the use of spent fuel racks in the cask pit area adjacent to the spent fuel pool (SFP). The cask pit is accessible from the SFP through a gated opening in the wall dividing the two pool areas.

In order to recover full core offload capability as quickly as possible, the DBNPS recently installed two rack modules in the cask pit, containing a total of 153 storage locations. However, this storage capacity will remain unused until the license amendment associated with this license amendment application is approved by the NRC. Prior to installation, a 10 CFR 50.59 Safety Evaluation was completed demonstrating that the installation of the empty racks does not involve an unreviewed safety question. The additional 153 storage locations will allow the core to be fully offloaded for the aforementioned ten-year Inservice Inspection, and will also provide full core offload capability during Cycle 13 (after 12RFO).

Later installation, during Cycle 13, of two additional rack modules in the cask pit, containing 136 additional storage locations, is intended to provide temporary storage for shuffling of fuel to support a complete re-racking of the SFP. Approval for re-racking of the SFP will be requested in a later license amendment submittal. It is planned to relocate all four of the cask pit storage racks into the SFP as part of the final completion of this re-racking project.

The DBNPS requests that the enclosed license amendment application be approved by the NRC by February 16, 2000.

Please note that as described in the attached Affidavit (Attachment 3 to the Enclosure), the Holtec International "Design and Licensing Report, Davis-Besse Unit 1 Cask Pit Rack Installation Project" (Attachment 4 to the Enclosure) contains information that is considered proprietary, and, pursuant to 10 CFR 2.790, it is requested that this information be withheld from public disclosure. A non-proprietary version of the report has been prepared and is included as Attachment 5 to the Enclosure.

Should you have any questions or require additional information, please contact Mr. James L. Freels, Manager - Regulatory Affairs, at (419) 321-8466.

Very truly yours,

MKL/laj

Enclosures

cc: S. J. Campbell, NRC Region III, Acting DB-1 Senior Resident Inspector
J. E. Dyer, Regional Administrator, NRC Region III
W. O. Long, NRC/NRR Senior Project Manager
J. R. Williams, Executive Director, Ohio Emergency Management Agency, State of Ohio (NRC Liaison)
Utility Radiological Safety Board

The following information is provided to support issuance of the requested changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Operating License Number NPF-3, Appendix A, Technical Specification (TS) 3/4.9.7, Refueling Operations - Crane Travel - Fuel Handling Building, and associated Bases; TS 3/4.9.11, Refueling Operations - Storage Pool Water Level; TS 3/4.9.12, Refueling Operations - Storage Pool Ventilation; TS 3/4.9.13, Refueling Operations - Spent Fuel Pool Fuel Assembly Storage, and associated Bases; TS 5.6, Design Features - Fuel Storage; and related changes to the TS Index.

A. Time Required to Implement: The License Amendment associated with this license amendment application is to be implemented within 120 days after NRC issuance.

B. Reason for Change (License Amendment Request Number 98-0007):

There is currently no available federal, long-term spent fuel storage facility for nuclear power plants such as the DBNPS. The DBNPS began the current operating Cycle 12 with insufficient storage capacity in the SFP to fully offload the entire reactor core (177 fuel assemblies). The current spent fuel storage capacity in the spent fuel pool is 735 fuel assemblies. There are currently only 114 empty storage locations available in the spent fuel pool. A full core offload into the spent fuel pool is required for the performance of the ten-year Inservice Inspection activities required during the Twelfth Refueling Outage (12RFO), which is scheduled to commence in April 2000.

Following the core reload during 12RFO, with 72 fuel assemblies scheduled to be permanently discharged, there would be only 42 empty storage locations available in the spent fuel pool. Refueling of the reactor during the Thirteenth Refueling Outage (13RFO), which is scheduled to commence in Spring 2002, would not be possible since there would be insufficient empty storage locations available to hold the 72 fuel assemblies scheduled to be permanently discharged.

The proposed changes would expand the present spent fuel storage capability to allow the use of spent fuel racks in the cask pit area adjacent to the spent fuel pool (SFP). The cask pit is accessible from the SFP through a gated opening in the wall dividing the two pool areas. The expansion will include four rack modules in the cask pit, increasing the available spent fuel storage locations by 289 cells.

C. Attachments:

1. Safety Assessment and Significant Hazards Consideration
2. Environmental Assessment
3. Affidavit Pursuant to 10 CFR 2.790
4. "Design and Licensing Report, Davis-Besse Unit 1 Cask Pit Rack Installation Project," Holtec International, *Proprietary Version*
5. "Design and Licensing Report, Davis-Besse Unit 1 Cask Pit Rack Installation Project," Holtec International, *Non-Proprietary Version*

Docket Number 50-346
License Number NPF-3
Serial Number 2550
Attachment 3

AFFIDAVIT PURSUANT TO 10 CFR 2.790

(4 pages follow)

AFFIDAVIT PURSUANT TO 10CFR2.790

I, Scott H. Pellet, being duly sworn, depose and state as follows:

(1) I am the Project Manager for Holtec International and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.

(2) The information sought to be withheld is contained in the document entitled "Design and Licensing Report, Davis-Besse Nuclear Power Station Unit 1, Cask Pit Rack Installation Project," Holtec Report HI-981933, revision 2. The proprietary material in this document is delineated by proprietary designation (i.e., shaded text) on pages 4-6, 4-21, and 6-33.

(3) In making this application for withholding of proprietary information of which it is the owner, Holtec International relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4) and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10CFR Part 9.17(a)(4), 2.790(a)(4), and 2.790(b)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).

(4) Some examples of categories of information which fit into the definition of proprietary information are:

a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by Holtec's competitors without license from Holtec International constitutes a competitive economic advantage over other companies;

b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.

c. Information which reveals cost or price information, production, capacities, budget levels, or commercial strategies of Holtec International, its customers, or its suppliers;

d. Information which reveals aspects of past, present, or future Holtec International customer-funded development plans and programs of potential commercial value to Holtec International;

e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs 4.a, 4.b, 4.d, and 4.e, above.

(5) The information sought to be withheld is being submitted to the NRC in confidence. The information (including that compiled from many sources) is of a sort customarily held in confidence by Holtec International, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by Holtec International. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

(6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within Holtec International is limited on a "need to know" basis.

(7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his designee), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside Holtec International are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

(8) The information classified as proprietary was developed and compiled by Holtec International at a significant cost to Holtec International. This information is classified as proprietary because it contains detailed historical data and analytical results not available elsewhere. This information would provide other parties, including competitors, with information from Holtec International's technical database and the results of evaluations performed using codes developed by Holtec International. Release of this information would improve a competitor's position without the competitor having to expend similar resources for the development of the database. A substantial effort has been expended by Holtec International to develop this information.

(9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to Holtec International's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Holtec International's comprehensive spent fuel storage technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology, and includes development of the expertise to determine and apply the appropriate evaluation process.

The research, development, engineering, and analytical costs comprise a substantial investment of time and money by Holtec International.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

AFFIDAVIT PURSUANT TO 10CFR2.790

Holtec International's competitive advantage will be lost if its competitors are able to use the results of the Holtec International experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to Holtec International would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive Holtec International of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

STATE OF NEW JERSEY)
) ss:
COUNTY OF BURLINGTON)

Scott H. Pellet, being duly sworn, deposes and says:

That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at Marlton, New Jersey, this 19th day of May, 1999.

Scott H. Pellet

Mr. Scott H. Pellet
Holtec International

Subscribed and sworn before me this 19 day of May, 1999.

Maria C. Pepe

MARIA C. PEPE
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 25, 2000