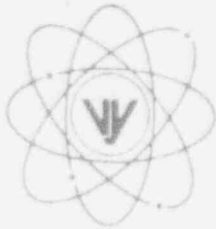


VERMONT YANKEE NUCLEAR POWER CORPORATION



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REPLY TO
ENGINEERING OFFICE
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September 28, 1993
BVY 93 - 109

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

References: a. License No. DPR-28 (Docket No. 50-271)
b. Letter, USNRC to [All Licensees], NVC 88-235, dated October 20, 1988

Subject: Plant Record Storage on Optical Disks

Dear Sir:

As requested in Generic Letter 88-18 [Reference (b)], Vermont Yankee is providing formal notification of our plans to implement optical disk technology for the purposes of storage and retrieval of plant records, including quality assurance records.

Vermont Yankee believes that incorporation of optical disk technology for document storage and retrieval represents a significant improvement to our facility. Optical disk storage will provide a higher quality media for retention of plant documents. At the same time, optical disk storage will provide a more readily accessible means of document retrieval, resulting in improved worker productivity.

Vermont Yankee intends to follow the guidance provided in Generic Letter 88-18 to implement our new optical disk system. Generic Letter 88-18 provides a listing of appropriate quality controls that licensees should include when implementing an optical disk document imaging system at their respective facilities. The discussion below addresses each of the specific line items as listed in the Generic Letter:

- *The optical disk technology does not allow deletion or modification of record images.*

Vermont Yankee plans to use "WORM" technology (write once, read many). Once a document is committed to optical disk, whether in electronic form or scanned image, the file can never be changed.

- *The image of each record is written onto two optical disks.*

As part of the implementation of optical disk storage, the program directs the copy of each document to two disks, one being the retrieval disk and the other being the permanent storage disk.

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- *The legibility of each record image is verified to ensure that the image is legible on both disks. If the image is illegible, the hard copy record is maintained as the record copy.*

After a document has been scanned or imported from the main computer (CVAX), the document is verified visually by data entry personnel and indexing information is placed on the document. The move to the optical disk system will occur as part of a batch process during backshift periods, when use of the main computer system is at a minimum. After writing to the optical disk, the system verifies that the written optical file matches the magnetic file. The write verification is performed by the drive controller. The data is written to the disk during one revolution and is read back on the next revolution. The data must be read back correctly without any assistance from integral error correction code. This test checks for data corruption anywhere in the data transfer/recording process. In the event the data is not read back correctly, the file is written to a new sector and the verification procedure is completed again. This process confirms that the data can be read back correctly over the life of the disk. A report will be produced confirming which documents were successfully moved to the optical disk system and all files that have been moved will be eliminated from the magnetic holding area.

- *One optical disk is stored in the document imaging system for on-line retrieval.*

The optical disk system will be an on-line system which remains available for document retrievals at all times. It will contain five (5) retrieval optical disks and will be the primary source for document inquiries.

- *The second (backup) optical disk is stored in a records storage facility meeting the requirements of ANSI N45.2.9-1974 for single copy storage or in a separate remote location.*

Vermont Yankee's on-site storage vault meets the requirements of ANSI N45.2.9-1979, Sections 5.6 and 5.6.1, and is consistent with industry practice. The optical disk system and the backup drive will be contained within this storage vault. When a backup disk becomes filled, it will be removed and sent to a permanent off-site storage vault.

- *To ensure permanent retention of records, the records stored on an optical disk are acceptably copied onto a new optical disk before the manufacturer's certified useful life of the original disk is exceeded. This includes verification of the records so copied.*

The life expectancy certified by the manufacturer is currently 30+ years. At the end of this time, if the life expectancy has not increased, the disks will be copied to new disks or other media which may be approved at such time. Verification of all copied data will be performed to ensure data integrity.

- *Periodic random inspections of images stored on optical disks are performed to verify that there has been no degradation of image quality.*

A random inspection program will be developed to provide for adequate image inspections. Our plans are to sample a predetermined portion of the stored documents on an annual basis, meeting Federal Energy Regulatory Commission (FERC) requirements.

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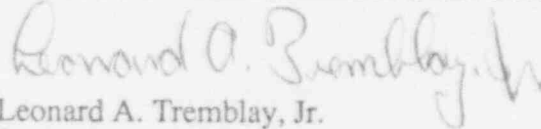
- *If the optical disk document imaging system in use is to be replaced by an incompatible new system, the records stored on the old system's disks are acceptably converted into the new system before the old system is taken out of service. This includes verification of the records so copied.*

Should the optical disk storage system be replaced by a system incompatible with existing optical storage disks, the files representing documents stored on these disks will be copied onto acceptable media and their integrity verified.

Vermont Yankee plans to begin on-line implementation of the optical disk storage and retrieval system by November 1, 1993. We trust that NRC finds the planned upgrade to our document storage and retrieval system acceptable. Should you have any questions regarding this upgrade, please contact this office.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION



Leonard A. Tremblay, Jr.
Senior Licensing Engineer

cc: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS