



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

John A. Scalice
Site Vice President, Watts Bar Nuclear Plant

JUN 03 1997

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION REGARDING TVA'S REQUEST FOR LICENSE
AMENDMENT TO TECHNICAL SPECIFICATIONS (TS-WBN-96-010) - SPENT FUEL
POOL STORAGE CAPACITY INCREASE (TAC NO. M96930)

The purpose of this letter is to provide information request by
the NRC's Structural Engineering Branch during a teleconference on
May 23, 1997.

Enclosure 1 provides the Holtec Report HI-971716, "Dynamics
Equations for Fuel Racks." Please note that HI-971716 contains
information proprietary to Holtec International. Accordingly, it
is requested that the information in Enclosure 1 be withheld from
public disclosure, in accordance with 10 CFR 2.790 of the
Commission's regulations.

Enclosure 2 provides a detailed calculation of fuel rack springs
for use in DYNARACK. The reference cited in this enclosure
regarding the seismic response of a free standing fuel rack, is
included in Enclosure 1 in its entirety.

Enclosure 3 provides copies of the mass matrices for single rack
cases with and without fluid coupling between the rack base and
the pool liner. The 3-D single rack analysis of the 15 x 15 rack
module is used to illustrate the effect of fluid coupling.

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MATERIALS TRANSMITTED HEREWITH
CONTAINS 2790 INFORMATION

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Enclosure 4 provides the Affidavit for withholding Enclosure 1 pursuant to 10 CFR 2.790. The Affidavit sets forth the basis on which the information provided in Enclosure 1 may be withheld from public disclosure by the Commission and addressees, with specific considerations listed in 10 CFR Parts 2.790(a)(4), 2.790(b)(1), and 9.17(a)(4) of the Commission's regulations.

During the teleconference, a question was raised concerning the adequacy of intermediate welds between rack cells. The construction of the rack modules is described in Section 3 of Enclosure 2 of TVA's initial letter dated October 23, 1996. Specific features of the Programmed and Remote System Corporation (PaR) flux trap rack modules are illustrated in Figures 3.1.1, 3.1.2, and 3.1.3. As indicated during the teleconference, there are no intermediate "can-to-can" welds for these racks. The top and bottom grid castings, which are Type CF-3M stainless steel, locate and support the poison cans and fuel assemblies. The inner tubes of each storage cell are welded to the top and bottom grids and act as structural elements between the grids.

No new commitments are identified in this letter. If you should have any questions, please contact P. L. Pace at (423) 365-1824.

Sincerely,



J. A. Scalice

Enclosures

cc (Enclosures):

NRC Resident Inspector
Watts Bar Nuclear Plant
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Spring City, Tennessee 37381

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PLP:RNM

cc (w/o Enclosures):

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RIMS, MDB 1A-WBN (with Enclosures)

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AFFIDAVIT PURSUANT TO 10CFR2.790

II, Alan I. Soler, being duly sworn, depose and state as follows:

- (1) I am Executive Vice President of Engineering, 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 "Dynamics Equations for Fuel Raeks", Holtec Report Number HI-971716. The proprietary material in this document is delineated by proprietary designation on specific pages or by shaded text identified as being proprietary.
- (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.

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- 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

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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.

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.

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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)

Dr. Alan I. Soler, 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 2nd day of June 1997.



Dr. Alan I. Soler
Holtec International

Subscribed and sworn before me this 2nd day of June, 1997.



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

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1

HOLTEC REPORT HI-971716
DYNAMICS EQUATIONS FOR FUEL RACKS