

THE DIEVELAND FITTING I

PO BOX 5000 . CLEVELAND, OHIO 44101 . TELEPHONE (216) 622-9800 . ILLUMINATING BLDG . 55 PUBLIC SQUARE

Serving The Best Location in the Nation

Dalwyn R. Davidson
VICE PRESIDENT
SYSTEM ENGINEERING AND CONSTRUCTION

January 28, 1981

Mr. Harold R. Denton, Director Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Denton:

RE: PERRY NUCLEAR POWER PLANT DOCKET NOS. 50-440, 50-441

The Cleveland Electric Illuminating Company, acting on its own behalf and as agent for Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and the Toledo Edison Company, hereby files three (3) signed originals and fifteen (15) copies of the General Information Section, in addition to forty (40) copies of the Final Safety Analysis Report (FSAR) for the Perry Nuclear Power Plant, Units 1 and 2.

Also, provided as separate attachments are the Electrical, Instrumentation and Control Drawings, and Piping and Instrumentation Drawings as listed in Section 1.7 of the FSAR.

The Physical Security Plan (including the Safeguards Contingency Plan) and the proprietary information concerning initial core fuel design and off-gas system technology are supplied under separate cover pursuant to 10CFR, Part 50.34(c) and Part 2.790(b)(1).

An acknowledgement of your receipt of the enclosed copies of the FSAR would be appreciated.

Lulayn R. Kunken

Dalwyn X. Davidson

Vice President

System Engineering and Construction

DRD:klm Enclosures

cc: G. Charnoff, Esq.

Dalwyn R. Davidson, who being duly sworn, deposed and said that (1) he is Vice President, System Engineering and Construction of The Cleveland Electric Illuminating Company, (2) he is duly authorized to execute and file this report on behalf of The Cleveland Electric Illuminating Company, and as duly authorized agent for Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and The Toledo Edison Company, and (3) the statements set forth therein are true and correct to the best of his knowledge, information, and belief.

Dalwyn R. Davidson

Sworn to and subscribed before me, this 28th day of January,

WILLIAM J. KERNER, Attorney NOTARY PUBLIC - STATE OF GOID My commission has no explication detr. Section 147.03 R.C.

CLEVELAND ELECTRIC ILLUMINATING COMPANY

AFFIDAVIT

Attached herewith are five (5) copies of information proprietary to the General Electric Company Initial Core Fuel Design and Off-Gas System Technology along with an AFFIDAVIT prepared by an official of the General Electric Company describing why this information should be withheld from public disclosure in accordance with 10CFR, Part 2.790(b)(1).

Dalwyn X. Davidson

Vice Exesident

System Engineering & Construction

Dalwyn R. Davidson, who being duly sworn, deposed and said that (1) he is Vice President, System Engineering and Construction of The Cleveland Electric Illuminating Company, (2) he is duly authorized to execute and file this report on behalf of The Cleveland Electric Illuminating Company, and as duly authorized agent for Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and The Toledo Edison Company, and (3) the statements set forth therein are true and correct to the best of his knowledge, information, and belief.

Sworn to and subscribed before me, this 22 dd day of

VOLUME I ACTOR IN THE POST OF THE POST OF

GENERAL ELECTRIC COMPANY

AFFIDAVIT

- I, Glenn G. Sherwood, being duly sworn, depose and state as follows:
- I am Manager of Safety and Licensing, General Electric Company, 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.
- The information sought to be withheld consists of the following figures as filed with the NRC as part of the Perry Nuclear Power Plant Final Safety Analysis Report (Perry FSAR):
 - A. Initial Core Fuel Design (Figures 4.3-5, 4.3-6, 4.3-12, 4.3-13 and 4.3-16 thru 4.3-19).
 - B. Offgas System Technology (Table 11.3-3, Figures 11.3-1 and 11.3-2.
- 3. In designating material as proprietary, General Electric utilizes the definition of proprietary information and trade secrets set forth in the American Law Institute's Restatement Of Torts, Section 757. This definition provides:

"A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business and which gives him an opportunity to obtain an advantage over competitors who do not know or use it.... A substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring information.... Some factors to be considered in determining whether given information is one's trade secret are: (1) the extent to which the information is known outside of his business; (2) the extent to which it is known by employees and others involved in his business; (3) the extent of measures taken by him to guard the secrecy of the information; (4) the value of the information to him and to his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others."

- 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 where prevention of its use by General Electric's competitors without license from General Electric constitutes a competitive economic advantage over other companies;

- b. Information consisting of supporting data and analyses, including test data, relative to a process, method or apparatus, the application of which provide a competitive economic advantage, e.g., by optimization or improved marketability;
- c. 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;
- Information which reveals cost or price information, production capacities, budget levels or commercial strategies of General Electric, its customers or suppliers;
- Information which reveals aspects of past, present or future General Electric customer-funded development plans and programs of potential commercial value to General Electric;
- f. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection;
- g. Information which General Electric must treat as proprietary according to agreements with other parties.
- In addition to proprietary treatment given to material meeting the 5. standards enumerated above, General Electric customarily maintains in confidence preliminary and draft material which has not been subject to complete proprietary, technical and editorial review. This practice is based on the fact that draft documents often do not appropriately reflect all aspects of a problem, may contain tentative conclusions and may contain errors that can be corrected during normal review and approval procedures. Also, until the final document is completed it may not be possible to make any definitive determination as to its proprietary nature. General Electric is not generally willing to release such a document to the general public in such a preliminary form. Such documents are, however, on occasion furnished to the NRC staff on a confidential basis because it is General Electric's belief that it is in the public interest for the staff to be promptly furnished with significant or potentially significant information. Furnishing the document on a confidential basis pending completion of General Electric's internal review permits early acquaintance of the staff with the information while protecting General Electric's potential proprietary position and permitting General Electric to insure the public documents are technically accurate and correct.
- 6. Initial approval of proprietary treatment of a document is made by the Subsection Manager of the originating component, the man most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within the Company is limited on a "need to know" basis and such documents at all times are clearly identified as proprietary.

- 7. The procedure for approval of external release of such a document is reviewed by the Section Manager, Project Manager, Principal Scientist or other equivalent authority, by the Section Manager of the cognizant Marketing function (or his delegate) and by the Legal Operation for technical content, competitive effect and determination of the accuracy of the proprietary designation in accordance with the standards enumerated above. Disclosures outside General Electric are generally limited to regulatory bodies, customers and potential customers and their agents, suppliers and licensees only in accordance with appropriate regulatory provisions or proprietary agreements.
- 8. The document mentioned in paragraph 2 above has been evaluated in accordance with the above criteria and procedures and has been found to contain information which is proprietary and which is customarily held in confidence by General Electric.
- The information in the Perry-FSAR, considered proprietary to General Electric, consists of Initial Core Fuel Design information related to the use of gadolinia and Offgas System Technology.
- 10. The information, to the best of my knowledge and belief, has consistently been held in confidence by the General Electric Company, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties have been made pursuant to regulatory privisions or proprietary agreements which provide for maintenance of the information in confidence.
- 11. Public disclosure of the information sought to be withheld is likely to cause substantial harm to the competitive position of the General Electric Company and deprive or reduce the availability of profit-making opportunities for the following reasons:
 - A. Initial Core Fuel Design
 - The cost of developing the proprietary information in the figures mentioned in paragraph 2A above has been estimated to be \$600,000.

Extensive modification to lattice computer codes to account for gadolinia, and reactor surveillance of gadolinia bearing fuel, including gamma-scran of exposed fuel, reactivity monitoring, etc., have required the expediture of \$500,000 in labor and computer costs. Although we cannot estimate costs incurred for the other items, they should be included.

- The development of gadolinia technology has been in progress since 1969. This has required:
 - a. Extensive experimental programs at Vallecitos to confirm nuclear and material properties.

- Extensive modification to lattice computer codes to account for gadolinia.
- c. Reactor surveillance of gadolinia bearing fuel. This includes gamma-scan of exposed fuel, reactivity monitoring, etc.
- Development of manufacturing techniques and QA procedures.
- e. Modifications to Manufacturing Facilities.
- 3. The competitors likely to gain from disclosure of this information are, directly; Exxon, who competes directly with General Electric for reload fuel contracts and General Electric licensees, who would otherwise purchase this information from General Electric, and, indirectly; Westinghouse, Babcock and Wilcox, and Combustion Engineering.
- 4. Competitors in the relead fuel market lack the methods capability and experience which GE has developed. Knowing the design information in the figures would allow them to reduce the uncertainty factors included in these reload fuel bids. This would cause GE to lose its current competitive advantage.
- Availability of this information to competitors would enable them to utilize this information without similar expeditures of effort and money.
- The information sought to be withheld is not available in public sources.

B. Offgas System Technology

- The cost of developing the proprietary information in the Table and Drawing mentioned in paragraph 2B above, as detailed in Table I, exceeds \$1,236,000.
- We believe the difficult of obtaining information, such as the above represents, is substantial; as our engineering would have to be duplicated in large part.
- Our competitors are CTI-Nuclear, Ebasco, Suntac, CVI, Stone and Webster, Air Products & Chemicals, Linde, Airco, AEG*, Hitachi*, Toshiba*.

*Indicates GE licensees who can obtain the information from GE, but have to pay for it, and are allowed and do bid in competition with GE under the license.

4. Commercial advantage to the competitors include cost savings if the information were free, and thus with reduced write-off could underbid GE. Also sales advantage features instead of on their own system merit alone.

- GE competitive position as supplier of about 80% of the 5. BWR plant offgas system would be harmed to the extent described above.
- 6. The nature of the damage would be loss of cost advantage from engineering development involved and potential serious inroads in future sales of GE offgas systems.
- 7. The information contained in the offgas system drawing and process data table is not available from commercial sources and has been protected by GE proprietary stamps and handling for some years.

Glenn G. Sherwood, 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 San Jose, California, this 13 day of January

General Electric Company

STATE OF CALIFORNIA COUNTY OF SANTA CLARA

Subscribed and sworn before me this 13 day of

OFFICIAL SEAL KAREN S. VOGELHUBER NOTARY PUBLIC - CALIFORNIA' SANIA CLAN

SANIA CLAN

My Commission Expires Dec. 21, 1984

San consormation conso

TABLE I

APPROXIMATE EXPENDITURES FOR THE DEVELOPMENT OF PROPRIETARY OFFGAS SYSTEM INFORMATION IN PERRY-FSAR

	t of Offgas System Technology and Development	
a.	German Licensing Cost and Consulation	\$ 6,000
b.	Design study (3 man years)	90,000
c.	Development Support (10 man years)	400,000
	Test Equipment	400,000
d.	Design Development, System and Equipment (10 man years)	300,000
e.	Startup Special Test - Verification of Design Performance	
	Equipment	25,000
	Labor	15,000
	Total Approximate Cost	\$1,236,000