

042

STONE & WEBSTER ENGINEERING CORPORATION



245 SUMMER STREET, BOSTON, MASSACHUSETTS

ADDRESS ALL CORRESPONDENCE TO P.O. BOX 2325, BOSTON, MASS. 02107

BOSTON
NEW YORK
CHERRY HILL, N.J.
DENVER
CHICAGO
HOUSTON
PORTLAND, OREGON
SAN DIEGO
WASHINGTON, D.C.

DESIGN
CONSTRUCTION
REPORTS
EXAMINATIONS
CONSULTING
ENGINEERING

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

April 6, 1979

50-309
50-334
50-333
50-280
281

Dear Sir:

OPERATING LICENSE NOS. DPR 32, 36, 37, 59 and 66
APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Reference: STONE & WEBSTER ENGINEERING CORPORATION, PROPRIETARY
COMPUTER PROGRAMS

Stone & Webster Engineering Corporation submits herewith one copy of each of the following computer programs, and information related thereto: SHOCK 1, SHOCK 2, SHOCK 3, PSTRESS and NUPIPE-SW.

Stone & Webster Engineering Corporation hereby requests withholding of this information from public disclosure pursuant to the provisions of paragraph (b)(1) of Section 2.790 of the Commission's regulations. The proprietary information is further identified in the affidavits accompanying this application. The affidavits have been executed by NUCLEAR SERVICES CORPORATION and STONE & WEBSTER ENGINEERING CORPORATION, the respective owners of the proprietary information.

The undersigned has reviewed the information sought to be withheld and is authorized to apply for its withholding.

The affidavits accompanying this application set forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations.

This information is, of course, only being furnished for the purpose of your consideration with respect to the referenced licensing proceedings and we expect that the contents will not be used for any other purpose. Moreover, by making this information available to the Commission, Stone & Webster Engineering Corporation shall not accept any liability for the unauthorized use of such information.

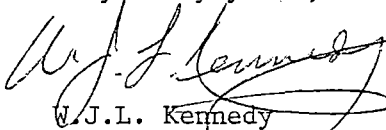
None
5/11

7904120258

Accordingly, it is respectfully requested that the enclosed information be withheld from public disclosure in accordance with Title 10 CFR Section 2.790 of the Commission's regulations.

If you or members of your staff have any questions or require clarification, please contact Mr. D.T. King or Mr. S.B. Jacobs at (617) 973-2034 and (617) 973-5264 respectively.

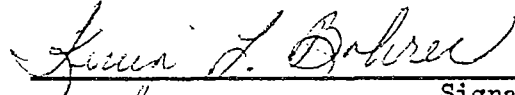
Very truly yours,

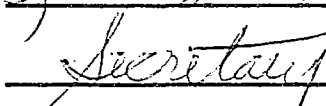

W.J.L. Kennedy
Senior Vice President

Enclosures

cc: Harold Shapar, Esq.
Office of the Executive Legal Director, NRC

I hereby acknowledge receipt of the attached material.



Signature


Title
4-9-79

Date

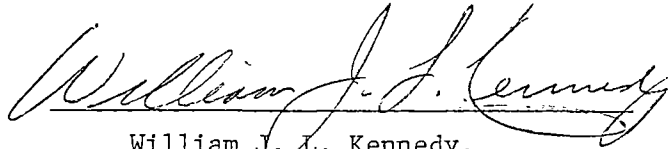
AFFIDAVIT

COMMONWEALTH OF MASSACHUSETTS:

SS

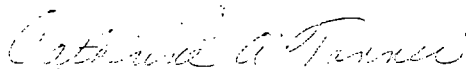
COUNTY OF SUFFOLK:

Before me, the undersigned authority, personally appeared William J. L. Kennedy, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Stone & Webster Engineering Corporation and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



William J. L. Kennedy,
Vice President and
Director of Engineering

Sworn to and subscribed
before me this 24th day
of April 1979.



Notary Public
Catherine A. Tanner
NOTARY PUBLIC
For the Commonwealth of Massachusetts
My Commission Expires Nov. 8, 1985

1. I am a Vice President and Director of Engineering of Stone & Webster Engineering Corporation and as such I am responsible for reviewing proprietary information sought to be withheld from public disclosure, and am authorized to apply for its withholding on behalf of Stone & Webster Engineering Corporation.
2. This affidavit is submitted in accordance with the provisions of 10 CFR Section 2.790 of the Nuclear Regulatory Commission's regulations and in conjunction with the Stone & Webster Engineering Corporation application for withholding accompanying this affidavit.
3. I have personal knowledge of the criteria and procedures utilized by Stone & Webster Engineering Corporation in designating information as a trade secret, privileged, proprietary or as confidential commercial or financial information.
4. Pursuant to the provisions of paragraph (b) (4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in order to determine whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Stone & Webster Engineering Corporation. The information consists of source program listings of five computer programs as follows:

1. SHOCK 1 which is owned and which has been held in confidence by Stone & Webster Engineering Corporation.
2. SHOCK 2 which is owned and which has been held in confidence by Stone & Webster Engineering Corporation.
3. SHOCK 3 which is owned and which has been held in confidence by Stone & Webster Engineering Corporation.
4. PSTRESS which is owned and which has been held in confidence by Stone & Webster Engineering Corporation.
5. NUPIPE was obtained by Stone & Webster Engineering Corporation from Nuclear Services Corporation under a licensing agreement. Under said agreement, Stone & Webster Engineering Corporation has a non-exclusive right to use the NUPIPE Program in the internal conduct of its business without disclosure to others. Stone & Webster Engineering Corporation has made certain improvements and added certain capabilities to the NUPIPE Program which are proprietary to and owned by Stone & Webster Engineering Corporation and said program is sometimes referred to as NUPIPE-SW. NUPIPE and NUPIPE-SW have been held in confidence by Stone & Webster Engineering Corporation.

(ii) The information is a type customarily held in confidence by Stone & Webster Engineering Corporation and is not disclosed to the public. Stone & Webster Engineering Corporation has always regarded and handled its computer programs and supporting documentation, not otherwise available in the public domain, as proprietary information of a confidential nature and has a rational basis for such a policy; that policy is implemented as described below:

A computer program (regardless of how it may be recorded or transmitted), its documentation, and its input data (referred to individually or collectively as "program," below) are held in confidence by Stone & Webster Engineering Corporation when any one of the following requirements is met:

- (a) A process requires the performance of substantial amounts of numerical calculations or requires the investigation of several innovative design alternatives which, if done using manual methods, would be prohibitively time consuming or impossible to complete; however, if done by using a computer program would be completed in a reasonable time and at reasonable expense. The use by Stone & Webster Engineering Corporation of such a computer program, not in the public domain, constitutes a competitive economic advantage over other engineering and construction organizations.

- (b) The program reveals the distinguishing aspects of a process (method, technique, etc.) where prevention of its use by any of Stone & Webster Engineering Corporation's competitors without license constitutes a competitive economic advantage over other companies.
- (c) The program applied to a process (method, technique, etc.) secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (d) The use of the program by a competitor would reduce its expenditure of resources or improve its competitive position in the design, delivery, construction, assurance of quality or licensing of a product or service similar to that derived with the program.
- (e) The program reveals cost or price information, production capacities, budget levels or commercial strategies of Stone & Webster Engineering Corporation, its clients, suppliers, subcontractors, or affiliated companies.
- (f) The program reveals aspects of past, present, or future Stone & Webster Engineering Corporation or customer funded development plans and actions of potential commercial value to Stone & Webster Engineering Corporation.

- (g) The process requires access to computer files containing data which is considered confidential by Stone & Webster Engineering Corporation or its clients. Any programs intended for use with confidential files must in turn be confidential in order to prevent unauthorized access. Confidential files may consist of data relative to a process whereby Stone & Webster Engineering Corporation or its clients secure a competitive economic advantage, e.g., by innovation, process optimization, or improved performance of a project upon commercial operation.
- (h) The program contains patentable ideas or material, for which patent protection may be desirable.
- (i) The program is not wholly the property of Stone & Webster Engineering Corporation but must be treated as proprietary by Stone & Webster Engineering Corporation according to agreements with the owner.

Physical protection of proprietary programs is implemented as follows:

- (a) Employees having access to company confidential data are required as a condition of employment to execute an agreement with Stone & Webster Engineering Corporation to maintain the confidence of data, information, etc., that is proprietary.
- (b) Programs determined to be confidential under this policy are identified as such in their documentation.
- (c) Source language for such programs is kept in a computer program library from which circulation is restricted to persons with a need to use the source. Other on-line forms of the programs are protected by computer-coded passwords.

There are sound reasons behind the Stone & Webster Engineering Corporation procedure, above, which include the following:

- (a) The use of such programs by Stone & Webster Engineering Corporation gives Stone & Webster Engineering Corporation a competitive advantage over its competitors, and the programs are therefore withheld from disclosure.

- (b) The products and services resulting from the use of the programs, and the programs themselves, are marketable in many ways. The extent to which such programs are available to competitors diminishes Stone & Webster Engineering Corporation's unique ability to sell products and services involving or deriving from such programs.
- (c) Use of the programs by a competitor would put Stone & Webster Engineering Corporation at a competitive disadvantage by reducing a competitor's expenditure of resources to achieve the same result.
- (d) Each component or subprogram of a proprietary program pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components or subprograms of a proprietary program, any one of them may provide sufficient information to derive the entire program, thereby depriving Stone & Webster Engineering Corporation of a competitive advantage. Furthermore, a single element of a program could provide the necessary "missing link" in the development of the competitor's own program.
- (e) Unrestricted disclosure of such programs would jeopardize the position of Stone & Webster Engineering Corporation in the world market and thereby give a market advantage to the competition in other countries as well as in the U.S.

(f) The Stone & Webster Engineering Corporation capacity to invest corporate assets in research and program development depends on success in obtaining and maintaining a competitive advantage.

(iii) The programs are being transmitted to the Commission in confidence and, under the provisions of 10 CFR 2.790, they are to be received in confidence by the Commission.

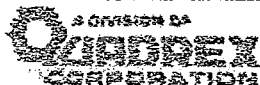
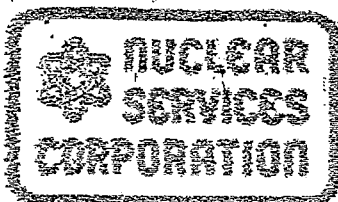
(iv) The programs are not available in public sources.

(v) The public disclosure of the information (programs) sought to be withheld, identified in (i) above, would cause substantial harm to the competitive position of Stone & Webster Engineering Corporation by virtue of:

(a) The value of the programs. The use of the programs enables Stone & Webster Engineering Corporation to perform required modeling and calculations at lower cost to clients than would be possible if Stone & Webster Engineering Corporation did not possess the programs. These reduced costs are realized through improvements in the productivity of engineers, particularly in the preparation and checking of data and in the reduced waiting time for computed results; and through the reduction of costs of computation. Public disclosure of the programs would allow competitors to exploit advantages now possessed exclusively by Stone & Webster Engineering Corporation.

- (b) The expenses incurred by Stone & Webster Engineering Corporation in acquiring and developing these programs are measured in scores of man-years and hundreds of thousands of dollars. . Public disclosure of the programs would allow competitors to obtain the benefit of them at virtually no cost.
- (c) The cost of duplication. A competitor would have to expend resources similar to those in (b) to duplicate the benefits obtained from possession of the programs which are the subject of this affidavit.

Based on the foregoing, it is respectfully requested that the aforementioned programs be withheld from public disclosure.



1700 DELL AVENUE CAMPBELL, CALIFORNIA 95008 TELEPHONE (408) 446-2500 TWX 910-590-2433

GML-79-077
April 9, 1979

Mr. Hugh Lee, Legal Department
Stone & Webster
Post Office Box 2325
Boston, MA 02107

Dear Sirs:

Attached please find a copy of an affidavit supporting your request for withholding of proprietary and confidential information regarding the NUPIPE computer program.

In addition to those concerns set forth in the Affidavit it is imperative to Nuclear Services Corporation that any resulting protective agreement with the NRC will contain provisions restricting access to the computer listing to NRC staff. Specifically, no outside consultants shall be allowed access to this information.

If there are any further questions please do not hesitate to contact the undersigned.

Very truly yours,

G. M. Leonard
Manager of Contracts
and Procurement

kc
enclosure

AFFIDAVIT

STATE OF CALIFORNIA

COUNTY OF SANTA CLARA

SS

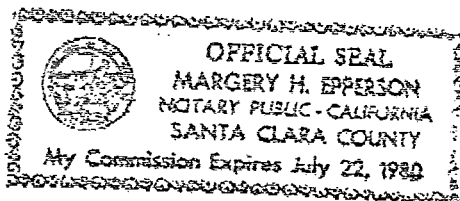
Before me, the undersigned authority, personally appeared Thomas J. Pashos, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Quadrex Corporation ("Quadrex") and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information and belief:

Thomas J. Pashos

Thomas J. Pashos
Senior Vice President
Engineering

Sworn to and subscribed
before me on this 9th
day of April 1979.

Margery H. Epperson
Notary Public



- (1) I am Senior Vice President, in Nuclear Services Corporation, a Division, of Quadrex Corporation and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with the seismic analysis of piping systems, and am authorized to apply for its withholding on behalf of the Quadrex Corporation.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.790 of the Commission's regulations and in conjunction with the Stone & Webster's application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Quadrex, Nuclear Services Corporation in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Quadrex.
 - (ii) The information is of a type customarily held in confidence by Quadrex and not customarily disclosed to the public. Quadrex has a rational basis for determining the types of information customarily held in confidence by it.

On this basis, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive

advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Quadrex competitors without license from Quadrex constitutes a competitive economic advantage over other companies.
- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, programming, utilization, assurance of quality, delivery of associated services, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Quadrex, its customers or suppliers.

There are sound policy reasons behind the Quadrex basis for such designs which include the following:

- (a) The use of such information by Quadrex gives Quadrex a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Quadrex competitive position.
- (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Quadrex ability to sell products and services involving the use of the information.

- (c) Use by our competitor would put Quadrex at a competitive disadvantage by reducing his expenditures of resources at our expense.
- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Quadrex of a competitive advantage.
- (e) Unrestricted disclosure would jeopardize the position of prominence of Quadrex in the world market, and thereby give a market advantage to the competition in those countries.
- (f) The Quadrex capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.790, it is to be received in confidence by the Commission.
- (iv) The information is not available in public sources to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is the complete computer program listing of the MUPIPE computer program in accordance with Enclosures 1 through 3 of the NRC letter from Victor Stello to Mr. W. L. Profitt of Virginia Electric and Power Company, dated April 2, 1979.

This information enables Quadrex to:

- (a) Justify the design basis for piping systems
- (b) Assist its customers to obtain licenses

Further, this information has substantial commercial value as follows:

- (a) Quadrex sells the use of the information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (b) Quadrex uses the information to perform and justify analyses which are sold to customers.
- (c) Quadrex uses the information to sell piping analyses and related services to its customers.

Public disclosure of this information is likely to cause substantial harm to the competitive position of Quadrex in selling piping analysis computer programs.

This information is a product of Quadrex computer software and piping analysis expertise. As such, it is broadly applicable to the analysis and licensing of piping systems in light water reactors. The development of this information is the result of many years of Quadrex effort and the expenditure of a considerable sum of money. While the analysis for this specific application was not unique, in order for competitors of Quadrex to duplicate this information would require the investment of substantially the same amount of effort and expertise that Quadrex possesses and which was acquired over a period of more than five years and by considerable investment of resources. Over the years, this has included the development of heat transfer codes, nuclear analysis codes, transient analysis codes, and an experimental data base to support them.

Further, the deponent sayeth not.