

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
The Cincinnati Gas & Electric)	Docket No. 50-358
Company, et al.)	
)	
(Wm. H. Zimmer Nuclear Power)	
Station))	

APPLICANTS' RESPONSES TO "NRC STAFF
SECOND INTERROGATORIES TO APPLICANTS"

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APPLICANTS' RESPONSES TO
"NRC STAFF SECOND
INTERROGATORIES TO APPLICANTS"
Wm. H. Zimmer Nuclear Power Station,
Unit No. 1
Docket No. 50-358

Interrogatory #1

Identify by interrogatory number the names, addresses, place of employment and position therein, of all persons who answered, or contributed to each such answer, excluding clerical personnel.

Response

All "NRC Staff Second Interrogatories to Applicants" have been answered on behalf of the applicants by Mr. Larry S. Weiss, Project Engineer of Stone & Webster Engineering Corporation, located at 250 West 34th Street, New York, New York, 10119.

Interrogatory #2

Set forth a statement of professional qualifications for each person identified in answer to Interrogatory 1.

Response

The professional qualifications are attached hereto.

Interrogatory #3

Identify by name, address, place of employment and position therein, of all persons who contributed to the S&W Study, excluding clerical personnel.

Response

The following individuals at Stone & Webster Engineering Corporation have contributed over 90 percent of the engineering effort associated with the S&W Study: Edward J. Siskin, Engineering Manager; John H. MacKinnon, Project Manager; Larry S. Weiss, Project Engineer; Jean L. McCluskey, Senior Environmental Engineer; Anthony M. Callendrello, Environmental Engineer; Theodore O. Leissing, Jr., Engineer - Environmental; and Steven L. Willins, Engineer - Power.

Interrogatory #4

Provide a statement of professional qualifications for each person identified in answer to Interrogatory 3.

Response

The professional qualifications are attached hereto.

Interrogatory #5

Identify specifically and in detail the contribution to the S&W Study made by each person identified in answer to Interrogatory 3.

Response

The S&W Study was performed under the direction of Messrs. Edward J. Siskin, John H. MacKinnon, and Larry S. Weiss. For that work Mr. Edward J. Siskin served as Engineering Manager, Mr. John H. MacKinnon as Project Manager, and Mr. Larry S. Weiss as Project Engineer. Primary responsibility for the administration, coordination and execution of the work was assigned to the Project Engineer. The other named individuals worked under the direct supervision of the Project Engineer in performing tasks necessary to the completion of the S&W Study.

Interrogatory #6

Identify in terms of hours, the time spent on the S&W Study by each person identified in answer to Interrogatory 3, specifying where these hours were spent, i.e., in New York City, in travel, in Kentucky, etc.

Response

Accumulated engineering hours spent directly attributed to preparation of the S&W Study include 415 hours spent at Stone & Webster Engineering Corporation in New York City. Prior to the preparation of this study, there were additional hours spent in New York City, Kentucky, and Ohio relating to the radiological emergency planning efforts for the Zimmer Station which aided in the preparation of the S&W Study. These tasks had been in progress before the start of work on the S&W Study and information acquired during each of these efforts has been utilized in the preparation of the S&W Study. Records of the accumulated hours worked on each task are not sufficiently detailed to now separate the portion of the hours supporting the S&W Study, an individual's contribution to the S&W Study, nor the nature of that contribution. It is therefore not possible to specifically attribute an exact number of hours spent on the S&W Study.

Interrogatory #7

Identify all State and local government agencies contacted in making the S&W Study, setting forth the names of the persons contacted, the dates of the contact, and who, on behalf of the licensees, made such contact.

Response

Telephone contact by Stone and Webster was made with the following State and local planning personnel in both Kentucky and Ohio during the period of August 4, 1980 through August 18, 1980; the primary period of preparation of the S&W Study.

1. Robert Alexander - Campbell County Coordinator Kentucky Disaster and Emergency Services
2. John Dixon - Kentucky Disaster and Emergency Services
3. Charles Bogart - Kentucky Disaster and Emergency Services
4. Kenneth Conover - Clermont County Disaster Services Agency
5. Myron Reinhardt - Campbell County Superintendent of Transportation
6. Herbert Fitzer - A.J. Jolly Park, Campbell County, Kentucky
7. Robert Clark - Principal, Norther Elementary School, Butler, Kentucky
8. Delbert Reid - Kincaid Lake State Park, Pendleton County, Kentucky
9. Mr. Lowe - Superintendent, Felicity School, Felicity, Ohio
10. Sgt. V. Reilly - Ohio National Guard - Felicity Armory

Interrogatory #8

Summarize the subjects discussed and the conclusions reached in all meetings with State and local government agencies while preparing the S&W Study.

Response

There were no meetings with State and local government agencies conducted during the preparation of the S&W Study.

Interrogatory #9

Specify in detail the criteria and parameters which define a "best estimate" as that term is used on S&W Study page 1-1, line 21. Set forth all assumptions and judgments used in defining that term.

Response

The December 26, 1979 Nuclear Regulatory Commission letter to Applicants for Construction Permits and Licenses of Plants Under Construction requesting "Information Regarding Evacuation Times" utilizes the term "best estimate" without specific definition. The letter requests both "best estimate" and "adverse weather" estimates for movement of the population. In the absence of an NRC definition, the term "best estimate" was used in the S&W Study to denote times not adversely affected by weather conditions, utilizing the other assumptions specified in the study.

Interrogatory #10

Identify all studies and set forth all methodologies and calculations employed which resulted in the conclusion that the evacuation time of general population in Zone I for adverse weather would be 10% longer than the best estimation evacuation time.

Response

Evacuation time estimates were obtained by adding the estimated notification, mobilization, and evacuation travel times. Notification times and mobilization times are the same in both best estimate and adverse weather conditions; evacuation travel times for the zone consisting of Sector I were estimated by using a travel distance of twice the distance along the major evacuation route from its innermost start to the edge of the evacuation zone. A distance of 2.1 miles maximum was found to be the greatest distance to be traveled in Sector I. Twice this distance is 4.2 miles. An average vehicle speed of 25 mph was assumed for best estimate calculations; half that for adverse weather. Travel times were then calculated as follows:

Best estimate:	4.2 miles/25 mph	= 0.2 hours
Adverse estimate:	4.2 miles/12.5 mph	= 0.3 hours

Since notification times and mobilization times are the same, the 0.1 hour difference in travel time is also the difference between best estimate and adverse weather estimates. The 0.1 hour is 10% of the 1 hour best estimate evacuation time for the zone consisting of Sector I.

Interrogatory #11

Identify, zone by zone, in detail all physical and demographic differences among the zones which caused the adverse weather general population evacuation to vary from a 10% increase in Zone I for adverse weather as opposed to best estimate, to a 34% increase in Zones I, III, VII for adverse weather as opposed to best estimate, and identify the specific contribution of each identified difference to the increase in evacuation time among all of the adverse weather general population evacuation time estimates in Figure 3-1.

Response

Evacuation time estimates were obtained by adding the estimated notification, mobilization, and evacuation travel times. For each zone, the evacuation travel time bears a different relationship to the estimated notification and mobilization time. Thus, when the evacuation travel time is increased by 100% to account for adverse weather, the resulting percentage increase will be different for each evacuated area. The population distribution in each zone, evacuation routes, and highway capacities were used in determining evacuation travel times. Other than these factors, no specific physical differences in the zones were considered in determining the evacuation time estimates.

Interrogatory #12

Define and quantify "Particularly severe winter weather conditions or severe flooding" as those terms are used on lines 39 and 40, page 1-2 S&W Study and quantitatively identify the differences between the terms quoted above and "adverse weather" as used in Figure 3-1.

Response

The Nuclear Regulatory Commission letter to Applicants for Construction Permits and Licensees of Plants Under Construction dated December 26, 1979 utilized but did not attempt to give any definition of the term "adverse weather." The S&W Study accounts for "adverse weather" by reducing highway capacities or average vehicle speeds. Page 5-7, lines 39 through 42 of the S&W Study state that:

"Highway capacities and average vehicle speeds for adverse weather are considered to be reduced by one-half. This...accounts for usual adverse weather delays due to rain, light snow, icing, and minor flooding."

Therefore, as used in the S&W Study, "Particularly severe winter weather conditions or severe flooding" refers to conditions which cause greater reductions than one-half in either highway capacities or average vehicle speeds. The treatment of "adverse weather" in the S&W Study is in accordance with "An Evacuation Time Assessment of Nine Nuclear Power Plants Emergency Planning Zones, Volume 1, Program Report, Prepared for Federal Emergency Management Agency, Wilbur Smith and Associates, June 1980." Regarding particularly severe winter weather, the report states on page 24 lines 20 through 25, that in some emergency planning zones:

"...disabling weather conditions occur every five to six years when traffic may not move for several days. These occurrences were considered as exceptions to the evacuation time assessment, because of the very small and almost insignificant probability of the simultaneous occurrence of both an evacuation warning and a snowfall occurring during the same days."

Interrogatory #13

Set forth the criteria and parameters which define "adverse weather" as those terms are used in Figure 3-1 S&W Study.

Response

See response to Interrogatory #12.

Interrogatory #14

Identify by route number and number of persons the routes and population referred to in lines 41 and 42 on page 1-2 S&W Study.

Response

Table 5-1 presents designated major evacuation routes. In each zone, a number of alternative routes are given by the table. The "part of the affected population (that) may already have been evacuated" refers generally to those who may have been affected by flooding and have departed the area, but no attempt to specifically identify such persons had been made as part of the S&W Study.

Interrogatory #15

Describe the methodology, calculations and analysis which are the basis of the S&W Study statement that "a number of alternative evacuation routes are generally available and a part of the affected population may already have been evacuated" (S&W Study, page 1-2, lines 39-43).

Response

See response to Interrogatory #14.

Interrogatory #16

Zone by zone - identify all physical and demographic features which cause adverse weather evacuation times to be 5 to 25% higher without a prompt notification system while 10 to 35% higher (S&W Study, pp. 1.2 and 3.1) with a prompt notification. Your answer should account for the differences in the increased evacuation time.

Response

Estimated evacuation travel times are unaffected by whether a prompt notification system is in place. This is readily apparent in Table 3-1. For example, for the zone composed of Sectors II, VI, and X, the adverse weather evacuation time without a prompt notification system, 4.4 hours, is 0.8 hours above the best estimate time of 3.6 hours just as for that same zone the adverse weather time with a prompt notification system, 3.4 hours, is also 0.8 hours above the 2.6 hour best estimate. The difference in percentage increase is due to the lower best estimate evacuation time with a prompt notification system considered, which gives the increased percentages when compared in the manner used.

Interrogatory #17

Identify in detail the parameters of adverse weather assumed by the State and local planners listed in the S&W Study (bottom of p. 3-1) and contrast them with the parameters assumed in the S&W Study (S&W Study, p. 3-2, lines 9 and 10).

Response

As noted in lines 11 and 12 of page 3-2 of the S&W Study, "The assumptions of State and local planners were not included with their results." Some idea of their considerations is, however, available in the results forwarded by CG&E's submittal of August 1, 1980 of the evacuation time estimates prepared by Kentucky Disaster and Emergency Services, the Clermont County Disaster Service Agency (CCDSA), and Ohio Disaster Services Agency (ODSA).

For ODSA estimates for Clermont County, the submittal refers to adverse conditions as "poor weather" in line 23 of page 2 of the enclosure to their March 21, 1980 forwarding letter. On page 3 of the enclosure, under a "Special Problems" category, some further elaboration is provided:

"Flooding along the Ohio River occurs annually to some degree but usually every 3 to 5 years it rises high enough to obstruct traffic along U.S. Route 52 and requires some evacuation of New Richmond and areas directly adjacent to the River.

"If evacuation should be required during a time of flooding, then the only routes open would be toward the west, thus, greatly hampering and slowing the evacuation process as shown by some of our estimates for adverse conditions."

The Kentucky Disaster and Emergency Services time estimates for Bracken, Pendleton, and Campbell counties refer to an "adverse estimate" on the bar graph provided. No specific definition is provided for this estimate. A reference to "severe winter weather" is provided on page 2, line 4 of the enclosure to their forwarding letter to CG&E of March 21, 1980. The enclosure states on page 2, lines 4, 5, 11, 12 and 13: "most routes would be impassable. ... icy conditions would prevent many vehicles from traversing the evacuation routes." For Campbell County on page 3, lines 8 and 9 states: "In several places, high water (58 feet) along the Ohio River floods KY8." Also, lines 10 and 11 state "Several creeks flood in the Gubser Mill area which could cause the use of alternate routes." The statement of methodology in the Kentucky Disaster and Emergency Services letter provides no information on how adverse weather was considered in that document.

The CCDSA letter of April 1, 1980 refers to "adverse poor weather" in the table provided for presentation of estimates. No further elaboration is provided. As noted in the S&W Study, on page 3-2, lines 13 through 17: "From inquiry with CCDSA, it was determined that their assumption for adverse weather included a 6 inch snowfall with flooding. Severe conditions such as these would likely result in greater reductions in road capacities and average vehicle speeds than were assumed in this study."

Interrogatory #18

The S&W Study assumed adverse weather would reduce road capacity and speeds by 50% (S&W Study, p. 3-2, line 11) yet evacuation time was increased 10 to 35% (S&W Study, p. 3-2, line 20). Explain the rationale for your conclusion.

Response

See response to Interrogatory #10.

Interrogatory #19

Have the Applicants or any one on their behalf prior to August 1980 empirically verified that adverse weather would reduce road speeds and capacity by 50% (S&W Study, p. 3-2).

Response

No. See the response to Interrogatory #12.

Interrogatory #20

Do the Applicants know of any empirical verification of the 50% reduction in road speed and capacity assumed to occur in adverse weather?

Response

See response to Interrogatory #19.

Interrogatory #21

If the response to Interrogatories 19 and/or 20 is affirmative, fully set forth that empirical verification in detail.

Response

See response to Interrogatory #19.

Interrogatory #22

Have the Applicants or any one on their behalf empirically verified that evacuation times would increase 10 to 35% in adverse weather (S&W Study, p. 3-1).

Response

No. See responses to Interrogatories #10 and #19,

Interrogatory #23

Do the Applicants know of any empirical verification of the asserted 10 to 35% increase in evacuation time during adverse weather (S&W Study, p. 3-1).

Response

No. See responses to Interrogatories #10 and #19.

Interrogatory #24

If the response to Interrogatories 22 and 23 is affirmative, fully set forth, zone by zone, that empirical verification in detail.

Response

No response required.

Interrogatory #25

Footnote 3 to Table 5-1, page 5-11, S&W Study, indicates that evacuation route average capacity in vehicles per hour was derived from reference 3 and reference 5. Explain how the capacities in Table 5-1 were so derived; cite by page and line number the use made of reference 3 and reference 5; include your methodology; include your calculations; include your assumptions; and describe your field work.

Response

Table 5-1 of the S&W Study states that the Average Capacity for all of the two-lane roads is 1,000 vehicles per hour. This capacity was obtained from the Highway Capacity Manual (Reference 5) Table 10.7, Page 302-3. A level of service E was utilized to determine the capacity. That table lists a capacity of 2,000 vehicles per hour total in both directions for a two-lane, two-way road. For one lane in one direction, half of that capacity, or 1,000 vehicles per hour, was used. The Transportation and Traffic Engineering Handbook (Reference 3), Page 331, Table 8.1 provides the same information and references the Highway Capacity Manual.

The two four-lane highways listed in Table 5-1 of the S&W Study are indicated to have capacities of 1,500 vehicles per hour. This was a conservative estimate of the capacity of two lanes of a four-lane highway based on the 1,000 vehicles per hour per lane capacity referenced above. Twice the single lane capacity was reduced from 2,000 to 1,500 vehicles per hour to add conservatism to the capacity estimates.

Interrogatory #26

Provide a description, including all assumptions, calculations and field work, in detail of how the S&W Study concluded that CR743 and CR756 have an average capacity of 1,000 vehicles per hour under emergency evacuation circumstances. This interrogatory relates to the S&W Study conclusion set forth on Table 5-1, page 5-10, of the S&W Study.

Response

See response to Interrogatory #25.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Larry S. Weiss
Project Engineer
Stone & Webster Engineering Corporation

My name is Larry S. Weiss. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. I am Project Engineer responsible for all radiological emergency planning in Stone & Webster's New York office. This position involves the direction of emergency planning efforts for three states, seven counties and many municipalities, preparation of station emergency plans, including the emergency plan for the Zimmer Nuclear Power Station.

I graduated from Cooper Union with a B.E. in Mechanical Engineering and from Carnegie Mellon University with a M.S. in Mechanical Engineering. I also graduated from the Naval Reactor's Nuclear Power School which is equivalent to a M.S. in nuclear engineering.

Prior to my employment at Stone & Webster, I was affiliated with the Westinghouse-Bettis Atomic Power Laboratory as Supervisor of Plant Engineering. In that capacity, I was responsible for nuclear operating, maintenance and test procedures for a number of classes of submarine reactor plants. Additional responsibilities included development of emergency core cooling system operating procedures, resolution of operating problems and unusual occurrences and evaluation of the TMI accident. I also served as a Senior NSSS technical field representative. In this position I was responsible for the safe conduct of submarine nuclear power plant refuelings, overhauls and test programs. In this position I was a qualified radiation worker, participated in radiological emergency and nuclear accident casualty control drills. I joined Stone & Webster Engineering Corporation in March 1980 as a Consultant in the Power Division. I have attended a workshop on state and local government emergency response plans and preparedness for commercial fixed nuclear facilities. I have been extensively involved in emergency planning efforts for nuclear power facilities and related state and local emergency planning efforts and support thereof.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Edward J. Siskin
Engineering Manager
Stone & Webster Engineering Corporation

My name is Edward J. Siskin. I am Manager of the Engineering Department. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. In this position, one of my tasks is supervision of the emergency planning efforts for the Zimmer Nuclear Power Station.

I graduated from the University of Pennsylvania with a B.S. in Electrical Engineering in 1963. I completed the Westinghouse-Bettis Atomic Power Laboratory Reactor Engineering School with distinction in 1965. This course is equivalent to a M.S. in nuclear engineering. I completed training with the U.S. Atomic Energy Commission relating to the operation of a Naval nuclear propulsion plant and have taken graduate courses in electrical engineering and mathematics at George Washington University and the University of Pittsburgh.

Prior to joining Stone & Webster, I served 14 years with the Naval Reactors Division of the U.S. Atomic Energy Commission and its successor agencies. I have had experience in all aspects of design, construction and testing of the Navy's pressurized nuclear power plants. I have been involved with various facets of nuclear emergency planning for approximately 10 years. I was responsible for developing the emergency plan which was adopted as the Navy's standard. I was also extensively involved in the planning and conduct of drills conducted to verify the efficacy of these plans. I assisted in the review, for the Atomic Energy Commission, of the State of Connecticut's plan relating to General Dynamic's Electric Boat Division shipyard at Groton, Connecticut.

During my employment at Stone & Webster, I have had various assignments related to the design and construction of nuclear power stations. I have been involved in various facets of planning relating to a number of states and many local jurisdictions.

I am a member of the Institute of Electrical and Electronic Engineers and a member of the Atomic Industrial Forum. I have served as Chairman of the Subcommittee on engineering techniques for reducing occupational exposures for that occupation.

EDUCATIONAL AND PROFESSIONAL QUALIFICATION

John H. MacKinnon
Project Manager
Stone & Webster Engineering Corporation

My name is John H. MacKinnon. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. I am Project Manager responsible for Wm. H. Zimmer Nuclear Power Station radiological emergency planning in Stone & Webster's New York office. In this position, I participated in emergency planning efforts for the Zimmer Nuclear Power Station, including the development of the evacuation study.

I graduated from the U.S. Naval Academy with a B.S. in General Engineering. I attended Boston University's MBA program in 1979 and 1980. While in the U.S. Navy, I took courses in technical, operational and managerial areas including submarines and nuclear propulsion. From 1958 to 1978, I was an officer in the U.S. Navy assigned to various positions related to the operation, maintenance, construction, testing, and quality control of ships, conventional submarines and nuclear submarines. During my tenure in the U.S. Navy, I have been engineering officer of a nuclear powered submarine. I have been responsible for preparation of operators for reactor safeguards examination by the Atomic Energy Commission, was an Executive Officer of a nuclear attack submarine, was Commanding Officer of a nuclear-powered ballistic missile submarine and was a deputy squadron commander of a submarine squadron. In the last position, I was responsible for the establishment of Emergency Command Center at the U.S. Naval Submarine Base, New London, Connecticut, development of emergency operating procedures for that facility and conducted in-depth drills and exercises utilizing the Emergency Command Center.

I joined Stone & Webster Engineering Corporation in 1978 and have been responsible for various projects related to engineering and designs in upgrade of a nuclear power plant emergency response planning and industrial security for nuclear power plants. I was also responsible for quality assurance auditing of projects and construction sites.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Jean L. McCluskey
Technical Advisor
Stone & Webster Engineering Corporation

My name is Jean L. McCluskey. My business address is now Stone & Webster Engineering Corporation, 245 Summer Street, Boston, Massachusetts 02107. I am an environmental engineer in the Environmental Engineering Division of Stone & Webster. In this position I participated in the emergency planning efforts for the Zimmer Nuclear Power Station, including the development of the evacuation study.

I graduated from Northeastern University with a Bachelor of Science in Civil Engineering. I also obtained a Masters of Urban Affairs from Boston University and have taken various technical courses and seminars since that time, including a Federal Interagency Radiological Emergency Response Planning Course.

Prior to my association with Stone & Webster Engineering Corporation, I held the position of Project Planner/Engineer in the Enviro Energy Division of Metcalf & Eddy, Inc. and Senior Environmental Project Engineer for Exxon Company, U.S.A. My activities during these assignments included assignments related to civil engineering and analysis of environmental impacts associated with various projects.

During my employment with Stone & Webster Engineering Corporation, my responsibilities have included the administration and coordination of the efforts of teams of engineers, scientists and planners relating to comprehensive state radiological emergency response plans for two states and included development of site specific plans for four nuclear power plant sites and evacuation studies for five nuclear power plant sites.

I am a registered Professional Engineer in the States of Maine and New York.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Anthony M. Callendrello
Environmental Engineer
Stone & Webster Engineering Corporation

My name is Anthony M. Callendrello. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. As an environmental engineer, I participated in certain portions of the emergency planning efforts for the Zimmer Nuclear Power Station including calculations associated with the evacuation study.

I graduated with a Bachelor of Engineering from Stevens Institute of Technology. I also received a Master of Engineering degree from the same institution. Prior to joining Stone & Webster, I was employed by Lewis S. Goodfriend & Associates, and Donely, Miller & Nowikas, Inc. I was responsible for projects involving industrial noise control for a number of industries. During my employment with Stone & Webster, I have been responsible for the technical review and coordination and direction relating to the preparation of radiological emergency plans for the state and counties in the vicinity of a nuclear facility. I directed efforts relating to the preparation of implementing procedures and training materials for state and local organizations.

I am a member of the American Society of Mechanical Engineers and the National Society of Professional Engineers. I am a Professional Engineer in the State of New Jersey.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Theodore O. Leissing
Engineer - Environmental
Stone & Webster Engineering Corporation

My name is Theodore O. Leissing. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. As an environmental engineer, I participated in various aspects of the radiological emergency preparedness planning for the Zimmer Nuclear Power Station. I graduated from the New Jersey Institute of Technology with a B.S. in Environmental Engineering. Prior to joining Stone & Webster, I worked as a Graduate Research Assistant at the New Jersey Institute of Technology in air pollution research and air quality monitoring. In addition, I worked as a laboratory technician in water quality analysis.

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

Steven L. Willins
Engineer - Power
Stone & Webster Engineering Corporation

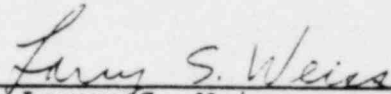
My name is Steven L. Willins. My business address is Stone & Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119. I am an Engineer in the Power Division with Stone & Webster. In this position I assisted in the emergency planning efforts for the Zimmer Nuclear Power Station.

I graduated from Columbia University School of Engineering and Applied Science with a B.S. in Mechanical Engineering. Prior to joining Stone & Webster, I was employed as a Summer Engineer Trainee with The Cincinnati Gas & Electric Company in the Mechanical Engineering Fossil Fuel Department.

VERIFICATION

STATE OF NEW YORK)
) SS
COUNTY OF NEW YORK)

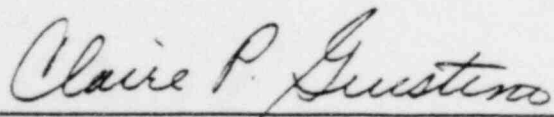
Larry S. Weiss, being first duly sworn, states that he is Project Engineer, Stone and Webster Engineering Corporation, 250 West 34th Street, New York, New York 10119, that he has read the contents of "Applicants' Response to NRC Staff's Second Interrogatories to Applicants"; and that the statements contained therein are true and correct to the best of his information, knowledge and belief.



Larry S. Weiss

STATE OF New York) SS:
COUNTY OF New York)

Subscribed and sworn to before
me on this 22nd day of
January 19 81.



CLAIRE P. GIUSTINO

NOTARY PUBLIC, State of New York
No. 30-4509709
Qualified in Nassau County
Cert. Filed in New York County
Commission Expires March 30, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
The Cincinnati Gas & Electric) Docket No. 50-358
Company, et al.)
)
(William H. Zimmer Nuclear Power)
Station))

CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Responses to 'NRC Staff Second Interrogatories to Applicants,'" dated January 23, 1981, in the captioned matter, were served upon the following by deposit in the United States mail this 23rd day of January, 1981:

Charles Bechhoefer, Esq.
Chairman, Atomic Safety
and Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Frank F. Hooper, Member
Atomic Safety and Licensing
Board
School of Natural Resources
University of Michigan
Ann Arbor, Michigan 48109

Mr. Glenn O. Bright, Member
Atomic Safety and Licensing
Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Richard S. Salzman, Esq.
Chairman, Atomic Safety and
Licensing Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Lawrence R. Quarles
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Michael C. Farrar, Esq.
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Chairman, Atomic Safety and
Licensing Appeal Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Chairman, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Charles A. Barth, Esq.
Counsel for the NRC Staff
Office of the Executive Legal
Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

William J. Moran, Esq.
General Counsel
Cincinnati Gas & Electric
Company
Post Office Box 960
Cincinnati, Ohio 45201

Mr. Chase R. Stephens
Docketing and Service Branch
Office of the Secretary
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

William Peter Heile, Esq.
Assistant City Solicitor
City of Cincinnati
Box 214
Cincinnati, Ohio 45202

Mrs. Mary Reder
Box 270
Route 2
California, Kentucky 41007

Andrew B. Dennison, Esq.
Attorney at Law
200 Main Street
Batavia, Ohio 45103

James H. Feldman, Jr., Esq.
216 East Ninth Street
Cincinnati, Ohio 45202

John D. Woliver, Esq.
Clermont County Community
Council
Box 181
Batavia, Ohio 45103

David K. Martin, Esq.
Assistant Attorney General
Acting Director
Division of Environmental Law
Office of Attorney General
209 St. Clair Street
Frankfort, Kentucky 40601

Robert A. Jones
Prosecuting Attorney of
Clermont County, Ohio
154 Main Street
Batavia Ohio 45103

Mark J. Wetterhahn