



# STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

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Mr. J. G. Keppler  
 Administrator, Region III  
 U. S. Nuclear Regulatory Commission  
 799 Roosevelt Road  
 Glen Ellyn, IL 60137

March 15, 1983  
 J.O. No. 14358  
 MPS- 12

Re: DOCKET NO. 50-329-330  
 MIDLAND PLANT - UNITS 1 AND 2  
 INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING  
 UNDERPINNING  
AFFIDAVITS AND RESUMES FOR ADDITIONAL TEAM MEMBERS

With the extension of the duration of the independent assessment of the underpinning work at the Midland Plant, Stone & Webster feels that it may be necessary to supplement the existing assessment team. In this regard, affidavits and resumes for additional team members that may become involved in the assessment are enclosed with this letter:

- P. J. Majeski - Geotechnical Engineer
- R. J. Henry - Construction
- R. J. Beaudet - Quality Assurance

Stone & Webster has determined that these individuals meet the independence requirements for this work.

If you have any questions, please contact me at (617) 589-2067.

*ASL*  
 A. S. Lucks  
 Project Manager

ASL:PJC

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of  
CONSUMERS POWER COMPANY  
(Midland Plant, Units 1 and 2

Docket No. 50-329 OM  
50-330 OM  
Docket No. 50-329 OL  
50-330 OL

February 14, 1983

AFFIDAVIT OF P. J. Majeski

My name is P.J. Majeski. I am employed by Stone & Webster Engineering Corporation as Senior Geotechnical Engineer.

I am currently assigned to the team which is conducting an independent assessment of soils work at the Midland Nuclear Plant site. Prior to being given this assignment, I have never worked on any job or task associated with the Midland Project, or any job or task for or on behalf of Consumers Power Company, Bechtel, or the Mergentime Company relating to soils of underpinning. I have never been employed by Consumers Power Company, Bechtel, or Mergentime Company. I do not own any shares of Consumers Power Company, Bechtel, or Mergentime stock. Mutual funds or other funds in which I may have a beneficial interest, but over which I have no control, may own shares of Consumers Power Company, Bechtel, or Mergentime stock, of which I am unaware. A list of such funds in which I have an interest are attached. I have no relatives which are or have been employed by Consumers Power Company, Bechtel, or Mergentime Company.

Sworn and Subscribed Before Me This 14th Day of <sup>March</sup> February 1983

Catherine A. Trabucco

Notary Public  
Suffolk County, Massachusetts

My Commission Expires November 8, 1985

February 1983

MAJESKI, PETER J.

SENIOR SOILS ENGINEER  
GEOTECHNICAL DIVISION

#### EDUCATION

Northeastern University - B.S. in Civil Engineering 1966

Northeastern University - M.S. in Civil Engineering 1970

Harvard University - Special Soil Mechanics Program for Practicing Engineers and Teachers 1968

Northeastern University - Additional Studies in Engineering Geology and Rock Mechanics 1973-1974

Northeastern University - Studies in Business Administration 1979-1981

Specialty Conferences - Lateral Stresses in the Ground, Performance of Earth and Earth-Supported Structures, 19th U.S. Symposium on Rock Mechanics, Ports

Lecture Series - Engineering Geology and Groundwater, Deep Foundations, Lateral Earth Pressure, and Welding

#### LICENSES AND REGISTRATIONS

Professional Engineer - Alaska, Indiana, Massachusetts

#### EXPERIENCE SUMMARY

Mr. Majeski, a Senior Soils Engineer, has 17 years of experience in geotechnical engineering, including 12 years experience as Lead Geotechnical Engineer on 12 power projects in the United States. His primary areas of expertise are foundation design and construction, site preparation, waterfront structures including bulkheads, cofferdams and offshore pipelines, shore and erosion protection, rock anchors, dewatering, and special testing.

As Lead Geotechnical Engineer, he has administrative and technical responsibilities for all geotechnical aspects of a project throughout the exploratory, engineering, design, and construction phases. This includes cost and feasibility studies to support conceptual design, preparation of licensing documents, preparation of foundation reports, setting design criteria, and developing specifications and drawings.

In addition to his experience in the power industry, Mr. Majeski has been involved in civil, structural, and foundation engineering for highways, waterworks, sanitation facilities, airfields, port facilities, and urban redevelopment.

#### PROFESSIONAL AFFILIATIONS

Boston Society of Civil Engineers Section/American Society of Civil Engineering - Member

Geotechnical Group Forum Committee - Member 1972-1974, 1977-1979

Waterways, Port, Coastal and Ocean Group - Vice Chairman 1982-1983

PJM

American Society of Civil Engineers - Member

Geotechnical Engineering Division - Improvement and Placement of  
Soils - Committee Member, 1982-1983

Energy Division - Energy Resources Management - Committee Control Group  
Member, 1982-1983

PUBLICATIONS

Rock Anchor Support of Marine Bulkhead - Senior Author with P. K. Taylor and  
J. A. DiVito. Presented at ASCE Convention and Exposition, Boston, 1979

DETAILED EXPERIENCE RECORD  
MAJESKI, PETER J. 55838

STONE & WEBSTER ENGINEERING CORPORATION, BOSTON, MA (Apr 1971 to Present)

Appointments:

Senior Soils Engineer - Mar 1975  
Soils Engineer - Apr 1973  
Engineer (Soils) - Apr 1971

Solar Repowering, Newman Station, El Paso Electric Company (Oct 1982 to Present)

As LEAD GEOTECHNICAL ENGINEER, was responsible for determination and implementation of all phases of the geotechnical investigations and analyses for preliminary design of the heliostat and central receiver foundations. The scope included development of the field exploratory and laboratory testing programs, analysis and design of foundations and preparation of a geotechnical report.

Rio Penstock Replacement, Orange and Rockland Utilities, Inc.  
(July 1982-Nov 1982)

Developed the subsurface exploratory program, directed foundation analysis, and prepared foundation design criteria for replacement of an above ground penstock in a potential landslide area. This work included an analysis of an existing earth dam which has excessive hydrostatic pressures in the underlying rock foundation. This work also involved preparation of contract documents for the penstock replacement which included installation of the instrumentation for monitoring an existing slope for future movement.

Patriot Generating Station, Indianapolis Power and Light Company  
(Aug 1976 to Present)

As LEAD GEOTECHNICAL ENGINEER, has been in responsible charge of the subsurface investigations and analysis and foundation recommendations for the main powerhouse and adjacent structures.

This included preparation of a Geotechnical Report which presents the subsurface conditions and foundation recommendations.

Also is in responsible charge of the design of the waterfront cellular structures, pump house cofferdam and dewatering methods. Supervised preparation of a site evaluation for the proposed coal-fired power plant including preparation of a summary report. This evaluation included studies for siting and licensing of the power plant, coal unloading and handling facilities, cooling towers, and other auxiliary structures.

Other responsibilities included supervision of geotechnical studies for determination of groundwater parameters for use in studying the feasibility of obtaining cooling water makeup from the groundwater.

PJM

PFB Pilot Plant - Curtiss Wright Corporation (Mar 1976 to Present)

As LEAD GEOTECHNICAL ENGINEER, supervised the studies necessary for a foundation report for an experimental power plant project at the Curtiss-Wright facilities in Wood-Ridge, New Jersey.

In addition, has made analyses, set design criteria, prepared contract documents, and monitored construction activities for the foundations of the plant and appurtenant structures.

Sears Island Station, Central Maine Power Company (July 1978-Feb 1980)

As LEAD GEOTECHNICAL ENGINEER, involved in the planning of the geotechnical effort to support site layout, licensing, and design of a large coal-fired power plant near Searsport, Maine.

Ethylene Complex No. 1 - Libya, Azzawiya Oil Refining Company, Inc. (July 1978-Dec 1980)

Provided geotechnical services for conceptual and final design of foundations for power generation and desalination facilities. Work included the study of cofferdams and dewatering schemes for a large desilting basin founded in porous limestone. Schemes involving cutoff walls and grout curtains were investigated.

Fuel Unloading Facilities - Salem Harbor Station (Apr 1976-June 1979)

Supervised the analysis, design, and preparation of contract documents for a sheet pile bulkhead with rock anchor support at Salem Harbor Station. Also served in a consulting capacity during construction. This project involved replacement of deteriorated structures, including the docking facilities, while maintaining the existing fuel unloading facilities.

Add-On Facility - Gas Diffusion Plant, Energy Research and Development Administration (Aug 1976-Apr 1977)

As LEAD GEOTECHNICAL ENGINEER, responsible for coordination of design of five large electrical switchyards near Portsmouth, Ohio.

River Bend Power Station, Gulf States Utilities Company (Apr 1976-Feb 1977)

As SPECIALIST for site preparation, had responsibility for the technical aspects of specifications for site preparation including placement of fill for support of structures.

Shoreham Nuclear Power Station, Long Island Lighting Company (Apr 1976-Sept 1976)

As SPECIALIST for installation of offshore pipelines, reviewed the design, specification preparation, and installation of the discharge pipe and diffuser system projecting approximately 1 mile offshore into Long Island Sound.



PJM

Charlestown, Rhode Island - Units 1 and 2, New England Power Company  
(Feb 1974-May 1976)

As LEAD GEOTECHNICAL ENGINEER, supervised geotechnical data acquisition and analysis necessary for preparation of the Preliminary Safety Analysis Report and the Environmental Report. The studies for these reports included liquefaction analysis, slope stability analysis under dynamic loading, groundwater analysis, measurement of the elastic properties of soil and rock, and geologic research investigations.

Was also involved with plant siting and conceptual design of the circulating water system and site layout.

Associated with the project was the preliminary evaluation and report for four alternate sites.

Canal Plant - Unit 2, NEGEA Service Corporation (Nov 1971-Jan 1976)

As LEAD GEOTECHNICAL ENGINEER, in responsible charge of all geotechnical work for design and construction of the second unit at this site.

Work included settlement analysis of powerhouse, preparation of Soils Report, and specifications for the excavation of unsuitable soils and replacement with compacted fill. Set foundation design criteria for the powerhouse, temporary and permanent braced sheet pile structures, fuel storage tanks, and other structures. Worked in cooperation with construction forces to ensure quality control during the performance of the work. A portion of this work included setting design criteria and preparing specifications for a large diameter concrete pipeline and diffuser to be installed underwater.

Newman Power Station - Unit 4, El Paso Electric Company (June 1973-Aug 1975)

As LEAD GEOTECHNICAL ENGINEER, prepared scope of exploratory program, analyzed data, and made foundation recommendations for all structures. Supervised preparation of specifications for excavation of unsuitable soils and backfill with compacted fill for several structures on site. In addition, supervised preparation of other site-related specifications, preparation of the Soils Report, and design of two lined wastewater ponds.

Presque Isle Station - Units 5 and 6, Upper Peninsula Generating Company  
(Sept 1971-Aug 1975)

As LEAD GEOTECHNICAL ENGINEER, during design and construction, reviewed earthwork specifications and provided assistance in the design of various structures including powerhouse, reclaim pit, and screenwells. Set design criteria and assisted in preparing drawings and specifications for the circulating water intake and discharge pipelines and related work. The pipelines are large diameter, filament-wound fiberglass installed in Lake Superior.

PJM

Lockhart Site - Unit 1, El Paso Electric Company (Apr 1972-July 1973)

As LEAD GEOTECHNICAL ENGINEER, prepared exploratory programs and specifications, wrote preliminary soils and foundation report. Prepared specification for an aerial topographic survey of the site.

Tracy Power Station - Unit 3, Sierra Pacific Power Company  
(Apr 1971-Mar 1973)

As LEAD GEOTECHNICAL ENGINEER, in responsible charge of all foundation engineering.

Prepared program and supervised foundation investigations and made feasibility, ease of construction, and cost studies for various structures required on site. Set foundation design criteria, prepared Soils Report, wrote portions of earthwork specifications, and provided assistance, as necessary, during construction. Supervised the preparation of drawings and specifications for a 4-acre, lined evaporative waste pond.

Surry Power Station - Units 3 and 4, Virginia Electric and Power Company  
(Oct 1972-Dec 1972)

Assisted the Lead Geotechnical Engineer during acquisition of field data for Units 3 and 4. Duties included implementation of the exploratory program and reduction and analysis of data leading to foundation recommendations and preparation of the Preliminary Safety Analysis Report.

North Anna Power Station - Unit 3, Virginia Electric and Power Company  
(Nov 1972)

Assisted Lead Geotechnical Engineer by making preliminary settlement analyses of various tank structures.

Assisted in setting procedures for the installation of earth pressure cells for measurement of lateral pressures on the Unit 3 containment.

FAY, SPOFFORD & THORNDIKE, INC., BOSTON, MA (Dec 1968-Apr 1971)

Soils Engineer

Assignments as the only permanent Soil Engineer varied, frequently involving engineering and design in civil engineering fields other than the soil mechanics and foundations. This work included structural and hydraulic design, site layout, and grading and design of slope protection.

Responsible for the seepage and foundation studies for a small suburban reservoir comprised of approximately 6,000 ft of dike of varying heights up to approximately 20 ft. Duties included coordination of the various aspects of the project and preparation of the earthwork specifications.



PJM

Engaged in making seepage studies and recommendations regarding infiltration rate from sewage lagoons.

Work in highway engineering included numerous bridges and walls underlain by varied soil conditions including peat, rubbish fill, and clay. Studies and recommendations were made regarding preloading for construction of highway embankments over soft soils.

Designed various waterfront structures including cellular and sheet pile bulkheads. This work included design of a 600 ft cellular bulkhead for use as a wharf at Ogdensburg, New York.

HALEY & ALDRICH, INC., CAMBRIDGE, MA (May 1967-Dec 1968)

As ASSISTANT SOILS ENGINEER, assignments included design and economic studies, reports, and field work for shopping centers, waterfront structures, and building towers.

Other duties included construction supervision of pile installations and spread footing foundations on sensitive soils and data and soil sample acquisition on special exploratory projects.

Prior to receiving a B.S. Degree, worked part time with this firm as a Soil Technician performing laboratory and field tests, inspection of borings, test pits, Gow caissons, compacted fill placement, and piling.

C.A. PICKERING ASSOCIATES, WEST BRIDGEWATER, MA (May 1966-May 1967)

As JUNIOR CIVIL ENGINEER, designed sewer and storm drain systems, along with various structural components and foundations. Supervised a number of pile load tests for the NASA site in Cambridge, Massachusetts, and other sites in the Boston area.

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CONSUMERS POWER COMPANY  
(Midland Plant, Units 1 and 2

Docket No. 50-329 OM  
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50-330 OL

February 14, 1983

AFFIDAVIT OF R. J. Henry

My name is R. J. Henry. I am employed by Stone & Webster Engineering Corporation as Asst. Superintendent.

I am currently assigned to the team which is conducting an independent assessment of soils work at the Midland Nuclear Plant site. Prior to being given this assignment, I have never worked on any job or task associated with the Midland Project, or any job or task for or on behalf of Consumers Power Company, Bechtel, or the Mergentime Company relating to soils of underpinning. I have never been employed by Consumers Power Company, Bechtel, or Mergentime Company. I do not own any shares of Consumers Power Company, Bechtel, or Mergentime stock. Mutual funds or other funds in which I may have a beneficial interest, but over which I have no control, may own shares of Consumers Power Company, Bechtel, or Mergentime stock, of which I am unaware. A list of such funds in which I have an interest are attached. I have no relatives which are or have been employed by Consumers Power Company, Bechtel, or Mergentime Company.

Sworn and Subscribed Before Me This 14th Day of <sup>MARCH</sup> February 1983

Mary S. Reckler  
Notary Public  
Mobile County, Alabama

My Commission Expires 10/25/83

ROBERT J. HENRY

ASSISTANT SUPERINTENDENT  
OF CONSTRUCTION

EDUCATION

Marietta College - B.S. Geology

LICENSES AND REGISTRATIONS

California - Registered Professional Geologist  
Registered Professional Engineering Geologist

EXPERIENCE SUMMARY

Mr. Henry has over 20 years experience in heavy construction including dam and earthwork, nuclear power plant and process construction. Since joining SWEC in 1969, Mr. Henry has steadily progressed from Construction Engineer to his present assignment as Assistant Superintendent of Construction on a 100 MM/GPY Methanol project for Getty Refining & Marketing Company in Delaware, where he is responsible for all construction activities for the installation of this plant.

Before this, he was assigned to a large nuclear power plant at St. Francisville, Louisiana. In this capacity, he is in direct charge of the offsites area including waterfront work.

Prior to this, Mr. Henry was assigned as Senior Construction Supervisor, then Assistant Superintendent of Construction for a large ethylene plant at Port Arthur, Texas. On this assignment Mr. Henry was initially in charge of all construction planning work. He finished the project in charge of all construction equipment and services.

Earlier, Mr. Henry was assigned as Construction Engineer, then Construction Supervisor on the construction of a large nuclear power plant at North Anna, Virginia. In these capacities, Mr. Henry was responsible for earthwork, excavation and backfill operations. He was further responsible for the scheduling and management of construction equipment.

Before joining SWEC, Mr. Henry held positions with the U.S. Army Corp. of Engineers and the Virginia Department of Highways engaged in earthwork and dam construction.

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50-330 OL

February 14, 1983

AFFIDAVIT OF

Roland J Beaudet Jr.

My name is Roland J Beaudet I am employed by Stone & Webster Engineering Corporation as Jr.  
Chief QC Insp Supervisor

I am currently assigned to the team which is conducting an independent assessment of soils work at the Midland Nuclear Plant site. Prior to being given this assignment, I have never worked on any job or task associated with the Midland Project, or any job or task for or on behalf of Consumers Power Company, Bechtel, or the Mergentime Company relating to soils of underpinning. I have never been employed by Consumers Power Company, Bechtel, or Mergentime Company. I do not own any shares of Consumers Power Company, Bechtel, or Mergentime stock. Mutual funds or other funds in which I may have a beneficial interest, but over which I have no control, may own shares of Consumers Power Company, Bechtel, or Mergentime stock, of which I am unaware. A list of such funds in which I have an interest are attached. I have no relatives which are or have been employed by Consumers Power Company, Bechtel, or Mergentime Company.

Sworn and Subscribed Before Me This 14th Day of <sup>March</sup>~~February~~ 1983

Jean M. Middlebrooks  
Notary Public  
West Feliciana, Louisiana

My Commission Expires at death

BEAUDET, JR. ROLAND J.

JANUARY 1983

April 12, 1939

FIELD QUALITY CONTROL

Married - Four Children

EDUCATION

Chicopee High School, Chicopee, Mass.

Apprentice Ship - Boilermaker, Graduate

Norfolk Naval Shipyard, Portsmouth, Virginia

REGISTRATIONS

None

TECHNICAL SOCIETIES

None

PATENTS

None

LANGUAGES

None

EXPERIENCE SUMMARY

Mr. Beaudet joined Stone & Webster Engineering, River Bend Power Station, St. Francisville, Louisiana in January 1980 as a QC Engineer on loan to Graver, subcontractor, to perform surveillance inspections of Welding, NDE, Document Control, QA Manual and Specification requirements. In April 1980 he supervised radiography, interpreting radiographic film, providing assistance in Pipe Installation, Welding Inspections, Documentation review and other Quality related activities. Since January 1981 Mr. Beaudet has been supervising the installation and testing of the HAVAC System, performing surveillance inspections of Graver activities including reviewing all RT film and providing technical assistance in the structural welding section.

Prior to River Bend Power Station Mr. Beaudet has been with Stone & Webster Engineering as a QC Engineer at the Nine Mile #2 Plant, J.A. Fitzpatrick, Shoreham and Surry Power Station in Piping, Welding, and NDE.

Prior to joining Stone & Webster Engineering Corporation, he was a Metal Lab Inspector performing non-destructive examinations on Nuclear Submarine Piping Systems. He also has had experience as a boiler inspector including repairs, hydrotest, tube replacement, and generator repairs. Prior to his nuclear experience, Mr. Beaudet was employed as a boilermaker for six years.