

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of) Docket No. 50-367
)
NORTHERN INDIANA PUBLIC) (Construction Permit
SERVICE COMPANY) Extension)
)
(Bailly Generating Station,) July 8, 1981
Nuclear-1))

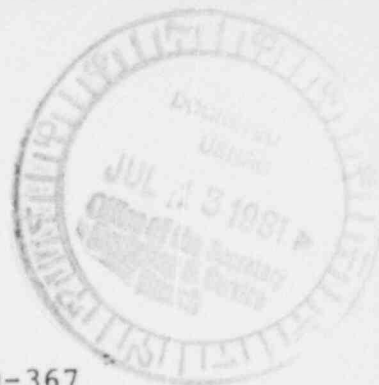
NORTHERN INDIANA PUBLIC SERVICE COMPANY'S RESPONSE
TO THE PEOPLE OF THE STATE OF ILLINOIS'
FIRST SET OF INTERROGATORIES TO NIPSCO

For answer to the People of the State of Illinois'
(Illinois) First Set of Interrogatories, Northern Indiana
Public Service Company (NIPSCO) states as follows:

1. (a) Did the NRC Staff review of the NIPSCO short pilings
proposal delay construction of Bailly.
(b) If the answer to Interrogatory 1(a) is yes, how
many months' delay does NIPSCO attribute to the
Staff review.

ANSWER:

- (a) Yes.
 - (b) 37 months plus an additional period of time required
to revise pile installation procedures which is
estimated to be approximately six months.
2. (a) Is it NIPSCO's position that NIPSCO was legally
prevented from proceeding with construction of
Bailly during the Staff review of the NIPSCO short
pilings proposal.



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- (b) If the answer to Interrogatory 2(a) is yes, explain the legal reason NIPSCO was prevented from proceeding with construction of Bailly.
- (c) If the answer to Interrogatory 2(a) is no, explain why NIPSCO did not continue with construction after September 28, 1977.

ANSWER:

- (a) In practical effect, yes. Given the factual context referred to in the response to Interrogatory 2(c), it was unnecessary for NIPSCO to conclude that it was "legally prevented from proceeding with construction."
 - (b) Not applicable.
 - (c) The AEC Safety Evaluation Report stated that the Staff intended to follow development of foundation design for the Bailly plant after issuance of the construction permit. When the Staff advised NIPSCO that pile placement should not proceed pending Staff review of NIPSCO's "short pilings" proposal, NIPSCO complied with that position. It was clear that, if pile placement continued, the Staff would take legally enforceable action, such as a stop work order, to prevent construction.
3. (a) Was NIPSCO or any of its contractors ever informed verbally or in writing by the Staff or the NRC that construction of Bailly should not proceed pending consideration by the Staff of the NIPSCO short pilings proposal.

- (b) If the answer to Interrogatory 3(a) is yes:
- (1) Identify the type(s) of communication(s) (e.g., letter, phone call, memo, conversation, etc.) by which NIPSCO or any of its contractors was so informed;
 - (2) Identify the date of such communication(s);
 - (3) Identify the parties to such communication(s);
 - (4) Identify the person initiating such communication(s); and
 - (5) State the substance of such communication(s).

ANSWER:

- (a) NIPSCO was informed that pile placement should not proceed pending Staff consideration of NIPSCO's "short pilings" proposal. Pile placement was the next step in the construction process and inability to proceed with placement effectively halted all construction.
- (b) Letter dated February 11, 1978 to Mr. R. J. Bohn from Roger S. Boyd, Director, Division of Project Management, Office of Nuclear Reactor Regulation. The letter stated in effect that placement of shorter piles under safety-related structures was unacceptable until completion of Staff review of the proposal.

4. On what date was groundwater first exposed at the Bailly site due to construction activity.

ANSWER:

Groundwater was first "exposed" at the Bailly site on October 7, 1974.

5. Identify the person at Sargent & Lundy, at Dames & Moore, and at Groundwater Technology, Inc., who supervised or was primarily responsible for the preparation of the August 27, 1979 report entitled "Supplementary Information, Hydrogeologic Evaluation of Construction Dewatering, Bailly Generating Station Nuclear 1."

ANSWER:

Annette Brewster, formerly with S&L, now:
Senior Geologist/Geohydrologist
Environmental Systems Division
209 E. Washington Avenue
Commonwealth Associates, Inc.
Jackson, Michigan 49201

Michael L. Keifer, Partner
Dames & Moore
1550 N.W. Highway
Park Ridge, Illinois 60068

William H. McTigue
Executive Vice President
Ground/Water Technology
40 Ford Road
P.O. Box 99
Denville, New Jersey 07834

6. Identify the person at D'Appolonia who supervised or was primarily responsible for the preparation of the November 1980 report entitled "Assessment of the Influence of Dewatering at Bailly N-1."

ANSWER:

Mr. Richard F. Brissette, formerly with D'Appolonia, now:
President

Canonie Environmental Services Corporation

1408 N. Tremont Road

Chesterton, Indiana 46304

7. (a) Will dewatering of the Bailly site continue after construction of Bailly is completed.
- (b) If the answer to Interrogatory 7(a) is yes:
- (1) For how long after construction is completed will dewatering of the Bailly site continue.
 - (2) Why will dewatering continue after construction of Bailly is completed.
 - (3) Identify the person(s) who determined that dewatering will continue after construction of Bailly was completed.
 - (4) State the date or the approximate date on which it was determined that dewatering of Bailly will continue after construction was completed.

ANSWER:

- (a) No.
- (b) (1) Not applicable.
- (2) Not applicable.
- (3) Not applicable.
- (4) Not applicable.

8. (a) For what period of time prior to completion of the construction of Bailly does NIPSCO plan to dewater at the Bailly site.
- (b) Identify the person who determined the period of time identified in the answer to Interrogatory 8(a).
- (c) How many gallons of water per day will be removed from the Bailly site before construction of Bailly is completed.

ANSWER:

- (a) General construction dewatering is now being conducted and will be required for the period of time necessary to bring the facility foundations to grade level. This is estimated to be between 18 to 30 months after construction resumes. Other localized dewatering will be required for short periods of time in small areas, e.g., for installation of the pump house.
- (b) Joe Zydel of C. F. Braun and T. A. McKenna of Sargent & Lundy.
- (c) Approximately 1,872,000 gallons per day is estimated to be the maximum amount of groundwater removed from the excavation during peak periods of dewatering.

9. As of the date of service of these Interrogatories, how much water has been removed by dewatering from the Bailly site since the groundwater was first exposed.

ANSWER:

Approximately 500,000,000 gallons.

10. At the time CPPR-104 was issued, how much water did NIPSCO estimate would be removed from the Bailly site by dewatering due to construction and operation of Bailly.

ANSWER:

It was estimated then that approximately 2,000 gallons per minute would be removed from the excavation during the dewatering phase of construction (the time required to bring the foundations up to grade level). The period of dewatering was estimated to be approximately 20 months. No dewatering was anticipated during operation of Bailly.

11. How has NIPSCO disposed of the water which has been removed by dewatering from the Bailly site thus far.

ANSWER:

Water that is removed from the excavation is pumped to Lake Michigan.

12. (a) What is the lowest elevation the groundwater has reached at the Bailly site thus far due to construction dewatering.
- (b) What is the lowest elevation which the groundwater will reach at the Bailly site due to construction dewatering.

ANSWER:

- (a) During a one month pump test (October 17, 1978 to November 13, 1978) water in the unconfined aquifer within the excavation was lowered to 0 feet NIPSCO datum. However groundwater has been maintained at elevation +6 feet or above at all other times since commencement of construction dewatering.
 - (b) The lowest elevation the unconfined aquifer will reach at the Bailly site due to the general construction dewatering will be approximately -4 feet NIPSCO datum except in localized areas enclosed by sheet piling which will be lower.
13. (a) Please specify the greatest depth of drawdown of the groundwater levels which will occur if the Bailly site is dewatered to the elevation specified in the answer to Interrogatory 12(b) during construction of Bailly:
- (1) at 700 feet east of the Bailly site;
 - (2) at 1/2 mile east of the Bailly site;
 - (3) at 1 mile east of the Bailly site; and
 - (4) at 2 miles east of the Bailly site.
- (b) Identify the persons providing the information on which the answer to Interrogatory 13(a) is based and identify any studies, reports, or other information relied on in answering Interrogatory 13(a).

ANSWER:

- (a) NIPSCO assumes that distances from the "Bailly site" are measured from the NIPSCO/National Park Service property line.
- (1) No drawdown of groundwater levels 700 feet east of the property line is expected as a result of dewatering activities for Bailly N-1 construction.
 - (2) No drawdown of groundwater levels 1/2 mile east of the property line is expected as a result of dewatering activities for Bailly N-1 construction.
 - (3) No drawdown of groundwater levels 1 mile east of the property line is expected as a result of dewatering activities for Bailly N-1 construction.
 - (4) No drawdown of groundwater levels 2 miles east of the property line is expected as a result of dewatering activities for Bailly N-1 construction.
- (b) The following reports were relied upon in answering Interrogatory 13(a):
- Hydrogeologic Evaluation of Construction Dewatering, Bailly Generating Station Nuclear-1. March 30, 1978. Sargent & Lundy Engineers, Chicago, Illinois. Prepared by Annette L. Brewster, approved by David L. Siefken. Pp. 12-13.

Attachment to letter dated July 20, 1978 from R. J. Bohn to Ronald L. Ballard, Environmental Projects Branch No. 1, Division of Site Safety and Environmental Analysis, NRC.

Assessment of the Influence of Dewatering at Bailly N-1. D'Appolonia, Nov. 1980. Messrs. Stevo Dobrijevic and Richard F. Brisette, now with Canonic Environmental Services Corp., 1408 N. Tremont Road, Chesterton, Indiana 46304. Page 35.

14. (a) Will the method, rate, or effects of dewatering of the Bailly site after September 1, 1979 be different in any respect from dewatering which occurred prior to September 1, 1979.
- (b) If the answer to Interrogatory 14(a) is yes:
- (1) How will dewatering differ after September 1, 1979.
- (2) Why will dewatering differ after September 1, 1979.

ANSWER:

- (a) No. Dewatering will not change until construction resumes.
- (b) (1) When construction is resumed, the depth of drawdown will be increased from that prior to September 1, 1979 and a deep well point system will be installed. The rate of dewatering

will increase, eventually reaching the rate described in the answer to Interrogatory 8(c).

- (2) As the depths of various areas of the excavation are increased, dewatering to lower elevations will be required to maintain the water level below the base of those areas. The deep well point system will reduce hydrostatic pressures in the confined aquifer such that the uplift pressure is less than the overburden pressure.

15. (a) Will dewatering of the Bailly site affect in any way:

- (1) Flora or fauna in the Indiana Dunes National Lakeshore.
- (2) Flora or fauna in Cowles Bog.
- (3) Bog indicator plants in Cowles Bog.

(b) If the answer to Interrogatory 15(a)(1), (2), or (3) is yes:

- (1) Identify the flora, fauna or bog indicator plants which will be affected;
- (2) Identify any studies, reports or other information relied on in answering Interrogatory 15(a)(1), (2), (3) and (b)(1); and
- (3) Identify the person(s) providing the information on which the answer to Interrogatory 15(b)(2) is based.

ANSWER:

- (a) (1) Construction dewatering will not have any detectable effect on the flora and fauna in the Indiana Dunes National Lakeshore.

- (2) Construction dewatering will not affect flora and fauna in Cowles Bog.
 - (3) NIPSCO does not know which plants are referred to by the term "bog indicator plants". However, construction dewatering will not affect Cowles Bog or any of its vegetation.
- (b)
- (1) Not applicable.
 - (2) Not applicable.
 - (3) Not applicable.
16. (a) How does NIPSCO plan to mitigate effects on the Indiana Dunes National Lakeshore of pumping from Unit 3.
- (b)
- (1) Identify the studies, reports or other information relied on in answering Interrogatory 16(a); and
 - (2) Identify the person who supervised or was primarily responsible for preparing or providing such studies, reports or other information.

ANSWER:

- (a) We assume the term "Unit 3" as used in these Interrogatories refers to the confined aquifer. Pumping from Unit 3 will not have any adverse effects on the Indiana Dunes National Lakeshore and, therefore, no mitigation is required.
- (b)
- (1) D'Appolonia Report titled: "Assessment of the Influence of Dewatering of Bailly N-1", November, 1980 at page 35.

(2) Richard F. Brissette, President
Canonie Environmental Services Corp.
1408 N. Tremont Road
Chesterton, Indiana 46304.

17. (a) Describe the direction(s) of groundwater flow in the Indiana Dunes National Lakeshore.
- (b) Describe the rate(s) of groundwater flow in the Indiana Dunes National Lakeshore.
- (c) Describe the chemical and physical characteristics (including pH) of Units 1 and 3 in the Indiana Dunes National Lakeshore.
- (d) (1) Identify the studies, reports or other information relied on in answering Interrogatory 17(a); and
- (2) Identify the person who supervised or was primarily responsible for preparing or providing such studies, reports or other information.

ANSWER:

- (a) In the unconfined aquifer, the general direction of groundwater flow within the Indiana Dunes National Lakeshore is from south southeast to north northwest. NIPSCO does not know the direction of flow in the confined aquifer within the Indiana Dunes National Lakeshore. However, the USGS has estimated a general direction of flow in the confined aquifer from southeast to northwest.

- (b) NIPSCO has made no determination regarding the rate of groundwater flow within the Indiana Dunes National Lakeshore. Using USGS approximations, the coefficient of permeability would be 592×10^{-4} cm/sec. However, in pump tests conducted at the Bailly site and at the Bethlehem Steel site, the coefficient of permeability was determined to be 70×10^{-4} cm/sec. and 250×10^{-4} cm/sec., respectively.
- (c) NIPSCO has no data regarding the chemical and physical characteristics of Units 1 and 3 within the Indiana Dunes National Lakeshore.
- (d) S&L Report titled: "Groundwater Monitoring Program Following Sealing of Settling Basins at Bailly Generating Station", December 27, 1979, at Exhibit 3, prepared by Ms. Annette Brewster (formerly of Sargent & Lundy), Senior Geologist/Geohydrologist, Environmental Systems Division, Commonwealth Associates, Inc., 209 E. Washington Avenue, Jackson, Michigan 49201.

USGS Report 78-138 titled: "Effects of Seepage from Fly Ash Settling Ponds and Construction Dewatering on Ground Water Levels in the Cowles Unit, Indiana Dunes National Lakeshore, Indiana", at pages 31 through 34, prepared by Meyer & Tucci, U.S. Geological Survey, 1819 N. Meridian Street, Indianapolis, Indiana 46202.

18. (a) How many times did NIPSCO drive test piles at the Bailly site.
- (b) How many attempts were made by NIPSCO to insert piles by jetting.
- (c) (1) How many monitoring wells have been installed by NIPSCO in connection with construction of Bailly.
(2) How many such monitoring wells have penetrated Unit 2.
- (d) How many deep well points has NIPSCO installed at the Bailly site.
- (e) How many pressure relief wells and/or free flowing drains has NIPSCO installed at the Bailly site.
- (f) During pile-driving and/or jetting activities, did NIPSCO penetrate:
 - (1) Unit 2.
 - (2) The glacial lacustrine layer beneath Unit 3.
- (g) (1) Does NIPSCO know what materials underlie Unit 3 at the Bailly site.
(2) If yes, describe the materials underlying Unit 3 at the Bailly site.
- (h) How does NIPSCO plan to control the effects of any hydraulic interconnections created by virtue of pile-driving and jetting activities and installation of monitoring wells, deep well points, and pressure relief wells and/or free-flowing drains.

ANSWER:

- (a) NIPSCO has conducted 9 test programs during which a total of 251 piles have been utilized for testing purposes.
- (b) 25 piles were installed using some form of jetting, either in conjunction with vibratory installation, to assist in impact driving, or for preaugering.
- (c)
 - (1) 49 monitoring wells have been installed by NIPSCO including 6 pore pressure transducers.
 - (2) 24 of the above monitoring wells, including the 6 pore pressure transducers, have penetrated "Unit 2", which NIPSCO understands to be the clay layer separating the confined and unconfined aquifers.
- (d) No deep well points have been installed other than those included in the response to Interrogatory 18(c)(2).
- (e) One test well for pressure relief and two free flowing drains have been installed at the Bailly site.
- (f)
 - (1) Yes.
 - (2) Yes.
- (g)
 - (1) Yes.
 - (2) Unit 3 is generally underlain by a glacial-lacustrine clay consisting primarily of hard silty clay and clayey silt with layers and

lenses of very dense silt and sand. The glacial-lacustrine clay deposit is underlain by hard glacial till which extends to the bedrock surface.

- (h) We assume that the Interrogatory refers to any hydraulic interconnection between Units 1 and 3, the unconfined and confined aquifers, respectively. The effects of any hydraulic interconnections between Units 1 and 3 will be controlled by (1) depressurizing Unit 3, (2) installing densification piles, and (3) using filter material.
19. (a) Will dewatering at Bailly alter the subsoil structure at the Bailly site.
- (b) (1) Will dewatering at the Bailly site affect subsoil structure at any distance from the Bailly site.
 - (2) If the answer to Interrogatory 19(b)(1) is yes, at what distance from the Bailly site will the subsoil structure be altered.
- (c) Has dewatering of the Bailly site already affected the subsoil structure at the Bailly site.
- (d) Identify the person(s) providing the information on which the answer to Interrogatory 19(a), (b), and (c) is based.

ANSWER:

- (a) Dewatering at Bailly will not result in any detectable alteration of the subsoil structure at the Bailly site.

(b) (1) No detectable alteration of subsoil structure will occur at any distance from the Bailly site as a result of dewatering.

(2) Not applicable.

(c) Dewatering of the Bailly site has had no detectable effect on subsoil structure at the Bailly site.

(d) Richard F. Brissette, President
Canonie Environmental Services Corp.
1408 N. Belmont Road
Chesterton, Indiana 46304.

20. (a) Will dewatering at the Bailly site affect:

- (1) The vibratory ground movement in the event of a seismic occurrence.
- (2) The ability of Bailly to withstand loads induced by a seismic occurrence.
- (3) The response parameters and soil stability characteristics for an Operating Basis Earthquake.
- (4) The loads induced by a Safe Shutdown Earthquake.

(b) If the answer to Interrogatory 20(a)(1), (2), (3), or (4) is yes, identify the reports, studies or other information relied upon in answering that Interrogatory and the person who supervised or was primarily responsible for preparing or providing such reports, studies, or other information.

ANSWER:

- (a) (1) No.
 - (2) No.
 - (3) No.
 - (4) No.
 - (b) Not applicable.
21. (a) Has there been any communication(s) between the NRC and NIPSCO about the effect of construction dewatering at the Bailly site on the subsoil structure.
- (b) If the answer to Interrogatory 21(a) is yes:
- (1) Identify the type of communication(s) (e.g., letter, memo, phone call, conversation etc.);
 - (2) Identify the date of such communication(s);
 - (3) Identify the parties to such communication(s);
 - (4) Identify the person initiating such communication(s); and
 - (5) State the substance of such communication(s).

ANSWER:

- (a) Yes.
- (b) July 31, 1979 meeting between NRC representatives and representatives of NIPSCO and its consultants. Representatives of the Intervenors were also present. The discussion included dewatering of Unit 3 including the topic of sand boils. No memoranda or meeting notes were retained by NIPSCO which memorialize this meeting.

Letter dated August 27, 1979 from R. J. Bohn, Northern Indiana Public Service Company, R.R. 3, Box 501, Chesterton, Indiana 46304 to Mr. Ronald Ballard, Chief, Environmental Projects Branch No. 1, Office of Nuclear Regulatory Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20545, transmitting an S&L Report titled: "Supplementary Information, Hydrogeologic Evaluation of Construction Dewatering, Bailly Generating Station, Nuclear 1", containing proposed methods to prevent sand boils and removal of soil fines by dewatering (pages 21-24).

October 26, 1979 phone conference between A. P. Severance, Northern Indiana Public Service Company, and Robert Geckler, NRC Staff Project Manager, Environmental Branch, which included a discussion of sand boils.

November 8, 1979 phone conference between R. J. Bohn, and Robert Geckler which included discussion of sand boils.

November 16, 1979 phone conference between R. J. Bohn, and Robert Geckler which included a discussion of the topic of sand boils.

Letter dated November 21, 1979 from Ronald Ballard to Mr. R. J. Bohn, approving the report titled: "Supplementary Information, Hydrogeologic Evaluation of Construction Dewatering, Bailly Generating Station, Nuclear 1", in part and advising that review continues with respect to sand boils.

Letter dated March 5, 1981 from Mr. Darrell G. Eisenhut, Director, Division of Licensing, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, to Mr. E. M. Shorb, First Vice President, Northern Indiana Public Service Company, 5265 Hohman Avenue, Hammond, Indiana, 46325, transmitting "Safety Evaluation Report Related to the Pile Foundation Design and Installation for the Bailly Generating Station Nuclear-1", containing the NRC's evaluation and approval of the methods required to prevent sand boils and removal of soil fines (pages 26-27).

22. (a) Has there been any communication(s) between NIPSCO and its contractors or between NIPSCO's contractors and subcontractors about the effect of construction dewatering at the Bailly site on the subsoil structure.
- (b) If the answer to Interrogatory 22(a) is yes:
- (1) Identify the type of communication(s) (e.g., letter, memo, phone call, conversation etc.);
 - (2) Identify the date of such communication(s);
 - (3) Identify the parties to such communication(s);

- (4) Identify the person initiating such communication(s); and
- (5) State the substance of such communication(s).

ANSWER:

- (a) Yes.
- (b) In addition to the documents listed in response to Interrogatory 21(b), the following communications between NIPSCO and its contractors have occurred relative to the potential effects of construction dewatering on subsoil structure.

Sargent & Lundy Specification T-2962, Dewatering and Pressure Relief System, 10/12/79 revised 1/15/80, prepared by Mr. R. J. Small, Sargent & Lundy Engineers, 55 East Monroe Street, Chicago, Illinois 60603.

November 6, 1979 telephone call from M. T. Maassel of NIPSCO (Civil/Structural Engineer, NIPSCO, R.R. 3, Box 501, Chesterton, Indiana 46304) to Ms. Annette Brewster of Sargent & Lundy (now at 209 E. Washington Avenue, Jackson, Michigan 49201) including a discussion regarding the sand trap efficiency.

November 28, 1979 letter from M. T. Maassel to D. L. Leone transmitting comments on Specification T-2962 including comments on sand boils and removal of soil fines.

December 19, 1979 telephone call from T. A. McKenna of Sargent & Lundy (Structural Project Engineer, Sargent & Lundy, Engineers, 55 East Monroe Street, Chicago, Illinois 60603) to Mr. M. T. Maassel of NIPSCO, including a discussion of grouting of wells to prevent sand boils.

December 21, 1979 telephone call from Stevo Dobrijevic of D'Appolonia (now Project Supervisor, Canonie Environmental Services Corp., 1408 N. Tremont Road, Chesterton, Indiana 46304) to M. T. Maassel regarding monitoring of soil fines removed by dewatering.

January 2, 1980 letter from E. E. Barnett (C. F. Braun) to R. J. Bohn transmitting comments on Specification T-2962 including soil fines monitoring program.

January 3, 1980 letter from M. T. Maassel to E. E. Barnett responding to above comments.

January 23, 1980 letter from T. A. McKenna to R. J. Bohn responding to above comments.

February 5, 1980 meeting attended by R. J. Bohn, C. A. Carlisle, E. Krüger, M. T. Maassel, all of Northern Indiana Public Service Company; E. E. Barnett, S. S. Bennett and D. K. Maxwell, all

of C. F. Braun; S. Dobrijevic of D'Appolonia; J. Barbato, A. Barbella, G. Chancellor, V. Cummings and R. H. Hockberger, all of Griffin Wellpoint; T. E. Friedman and J. P. Wyatt of Layne Northern Company; T. Gaulding and E. H. MacCabe of Moretrench-American Corporation; R. J. Williams of Peerless-Midwest, Inc.; and A. Brewster, T. A. McKenna and R. J. Small, all of Sargent & Lundy; which included a discussion on filter material and monitoring of pump discharge for soil fines.

February 15, 1980 letter from T. A. McKenna to R. J. Bohn transmitting notes on February 5, 1980 meeting on Specification T-2962 which includes discussion on filter material and monitoring of pump discharge for soil fines. (Meeting notes prepared by Annette Brewster)

February 22, 1980 letter from M. T. Maassel (NIPSCO) to D. L. Leone (S&L) transmitting comments on Specification T-2962 including monitoring for soil fines.

February 27, 1980 letter from M. T. Maassel to Mr. D. L. Leone of Sargent & Lundy (Project Director, Sargent & Lundy Engineers, 55 East Monroe Street, Fl. 23, Chicago, Illinois 60603) transmitting memo from C. A. Carlisle of NIPSCO (Manager,

Quality Assurance, Northern Indiana Public Service Company, 5265 Hohman Avenue, Hammond, Indiana 46325) which includes comments on Specification T-2962 with respect to potential alteration of subsoils.

May 20, 1980 letter from Mr. T. A. McKenna of Sargent & Lundy to Mr. R. J. Bohn of NIPSCO responding to above comments.

23. (a) Will alteration of the subsoil structure due to construction dewatering at the Bailly site affect the susceptibility of the Bailly site to surface faulting.
- (b) If the answer to Interrogatory 23(a) is yes:
- (1) Identify the studies, reports or other information relied on in answering Interrogatory 23(a); and
- (2) Identify the person who supervised or was primarily responsible for preparing or providing such studies, reports or other information.

ANSWER:

- (a) No.
- (b) Not applicable.
24. (a) Will alteration of the subsoil structure due to construction dewatering at the Bailly site affect the magnitude of seismically induced floods and waves.
- (b) If the answer to Interrogatory 24(a) is yes:

- (1) Identify the studies, reports or other information relied on in answering Interrogatory 24(a);
and
- (2) Identify the person who supervised or was primarily responsible for preparing or providing such studies, reports or other information.

ANSWER:

- (a) No.
 - (b) Not applicable.
25. (a) Could dewatering at the Bailly site result in liquefaction of subsoil structures at Bailly during a seismic occurrence.
- (b) If yes, what will be the effect of the shortened pilings on the ability of Bailly to withstand loads induced by a seismic occurrence.

ANSWER:

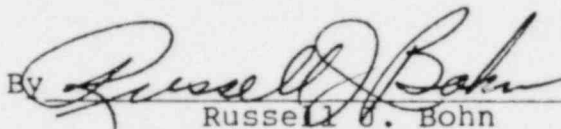
- (a) No.
 - (b) Not applicable.
26. (a) Could dewatering at the Bailly site result in subsidence of subsoil structures at Bailly.
- (b) If yes, what will be the effect of the shortened pilings on the ability of Bailly to withstand loads induced by a seismic occurrence.

ANSWER:

- (a) In theory yes, however, the proposed method of dewatering at the Bailly site is designed to preclude subsidence of subsoil structures at Bailly.

(b) None.

NORTHERN INDIANA PUBLIC SERVICE COMPANY

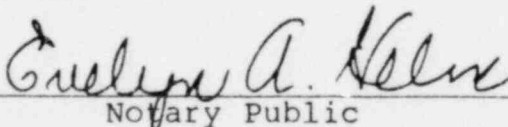
By 
Russell J. Bohn

STATE OF INDIANA)
) SS:
COUNTY OF LAKE)

The undersigned, Russell J. Bohn, being duly sworn upon his oath states that he is employed by Northern Indiana Public Service Company as Manager, Nuclear Staff, for the Baily Nuclear Plant; that he is informed on the matters of inquiry of Illinois' interrogatories; that in answering the above and foregoing interrogatories he has personally reviewed or caused others to review the files and records of Northern Indiana Public Service Company and has caused information to be gathered from employees and officers of Northern Indiana Public Service Company, its contractors and consultants; that the answers to the above and foregoing interrogatories are true and correct as he has been informed and verily believes.


Russell J. Bohn

Subscribed and sworn to before me, a Notary Public,
this 8 day of July, 1981.


Notary Public

My Commission expires:

2-6-82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket No. 50-367	2
)		
NORTHERN INDIANA PUBLIC)	(Construction Permit	
SERVICE COMPANY)	Extension)	
)		
(Bailly Generating Station,)	July 8, 1981	
Nuclear-1))		

CERTIFICATE OF SERVICE

I hereby certify that copies of the following documents:

Letter dated July 8, 1981, to the Atomic Safety
and Licensing Board from William H. Eichhorn

Letter dated July 8, 1981, to Robert J. Vollen
from William H. Eichhorn

Northern Indiana Public Service Company's Motion
for Protective Order dated July 8, 1981

Northern Indiana Public Service Company's Response
to the People of the State of Illinois' First
Set of Interrogatories to NIPSCO dated July 8, 1981

were served on the following by deposit in the United States
mail, postage prepaid, on this 8th day of July, 1981:

Herbert Grossman, Esquire, Chairman
Administrative Judge
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Robert L. Holton
Administrative Judge
School of Oceanography
Oregon State University
Corvallis, Oregon 97331

Dr. J. Venn Leeds
Administrative Judge
10807 Atwell
Houston, Texas 77096

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