

MAR 06 1980

REGULATORY DOCKET FILE COPY

MEMORANDUM FOR: Robert E. Jackson, Chief
Geosciences Branch, DSS

THRU: Lyman W. Heller, Leader
Geotechnical Engineering Section
Geosciences Branch, DSS

FROM: Owen O. Thompson, Geotechnical Engineer
Geotechnical Engineering Section
Geosciences Branch, DSS

SUBJECT: SITE VISIT TO BAILLY WITH COE DETROIT

PLANT NAME: Bailly Nuclear 1
 LICENSING STAGE: Post CP
 DOCKET NUMBER: 50-367
 TAC NUMBER: 4764
 MILESTONE NUMBER: R-18
 RESPONSIBLE BRANCH: LWR-4; M. D. Lynch, LPM
 REVIEW STATUS: Awaiting COE review comments

POOR ORIGINAL

On February 20 and 21, I visited the Bailly site with M. D. Lynch, Project Manager, DPM, and representatives from the Corps of Engineers (COE) Detroit District and North Central Division. The licensee and his consultants also were present. The attendance list is attached.

The purpose of the visit was to enable the COE staff to become familiar with the site since the COE has assigned different reviewers to the Bailly project since the site visit on November 26, 1979.

The licensee presented a summary of the design and construction history. We were conducted on a tour of the excavation and we viewed the present site conditions. The excavation was muddy and icy. The tops of piles were visible as follows:

- a) all production piles (numbering about 1000 piles) in the turbine building area
- b) the piles installed for the indicator pile program, numbering about 130 piles
- c) the 40-pile cluster for pile heave evaluations
- d) densification piles in the vicinity of test area E (where jetting was used).

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We inspected some of the piles which had been pulled after field testing. No visible damage was observed. The licensee pointed out the five general areas (Area A through E) where jetting had caused disturbance. Although the dewatering system has not operated for many months, there was no indication of failure of the excavation slopes.

The remainder of the meeting with the licensee was confined to technical questions from the NRC and COE staff clarifying factual information.

We held a caucus with the COE staff and discussed the review milestones and schedules. The COE reminded us that a reviewer from Waterways Experiment Station (WES) for seismic design had not yet been assigned to the project. We suggested that the COE start by reviewing the items outlined in "Index to Current Design Information" Attachment B to Nipsco letter dated October 16, 1979 (R. Bohn to W. Lawhead) except item 25 (Seismic Analysis and Soil Structure Interaction Analysis). Additional technical expertise needed for further review (such as item 25) could be obtained later if needed. A copy of the referenced items is attached to this memo.

The following subtasks and schedules were agreed to, contingent upon the impact of the review schedule for Midland:

1. (a) Review and evaluate geotechnical engineering items 1 through 29 of Attachment B (except item 25) regarding plant pile foundations in accordance with acceptance criteria outlined in the related Standard Review Plans. Summarize, in a draft list, those design and construction details which were reviewed, identifying each as acceptable or not acceptable. In the later case, identify the unresolved issues and either draft positions or draft questions which will lead to resolution of these issues. Completion date: March 7, 1980
- (b) Meet with the GSB and SEB staff and consultants (Newmark, Hall, Davisson Beachum, et al) and discuss the draft lists, positions and questions derived in subtask 1 (a). Completion date: As soon after March 7, 1980 as a meeting can be scheduled (now set for March 10, 1980 as indicated below).
- (c) Consolidate the results of subtasks 1(a) and 1(b) into a letter report identifying the items reviewed, COE staff positions, questions and recommendations on course(s) of action to be taken during construction to resolve any outstanding issues. Completion date: within 2 to 6 weeks of completion of subtask 1(b).

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(d) Meet with the NRC staff and the applicant to discuss the letter report from subtask 1(c), revise the letter report if necessary. Completion date: Not specified; however, the applicant was informed that within 4 to 8 weeks (March 21 to April 18, 1980) we would attempt to have subtask 1(d) complete; subsequent approval from the NRC for continuation of pile driving was estimated to require an additional 4 weeks.

- 2. Review and evaluate all geotechnical engineering aspects of the proposed plant as outlined in subtasks 0 through 5 of Interagency Agreement No. NRI-03-79-167, Task 2 - Bailly Generating Station Nuclear 1. Completion Dates: In accordance with the time allocations specified in the agreement; this incurs approximately 4 1/2 month slip in schedule.

We informed the COE that we would schedule a meeting with SEB and NRC consultants. This meeting has now been scheduled for March 10, 1980, at 9:00 a.m. in Urbana, Illinois.

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Owen O. Thompson, Geotechnical Engineer
Geotechnical Engineering Section
Geosciences Branch, DSS

Attachment:
As stated

- cc: w/attachment
- J. Knight
- L. Rubenstein
- D. Lynch
- L. Heller
- O. Thompson
- J. Kane
- N. Gehring, COE Detroit

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SEP MEETING
Attendance

T. A. Nelson	LLL
K. N. Jabbar	NRC/DOR, SEPB
M. E. Nitzel	EG&G Idaho
W. J. Hall	N. M. Newmark
R. P. Kennedy	Structural Mechanics Associates
R. C. Murray	LLL
C. H. Hofmayer	NRC/DOR/SEPB
F. J. Tokarz	LLL
Pei-Ying Chen	NRC/DOR/Seismic Review Group
S. M. Ma	EG&G San Ramon
Tom N. C. Tsai	NCT Engineering
D. A. Wesley	Structural Mechanics Assoc.
H. W. Lee	NRC/DOR/SEPB
J. T. Greeves	NRC/DSS/GSB
T. M. Cheng	NRC/DOR/SEPB
H. Levin	NRC/DOR/SEPB