JAN 30 1985

Docket No: 50-412

APPLICANT: Duquesne Light Company (DLC)

FACILITY : Beaver Valley Power Station, Unit 2

SUBJECT : SUMMARY OF STRUCTURAL AND GEOTECHNICAL BRANCH (SGEB) MEETING

On November 30, 1984, NRC and applicant representatives met in Bethesda, Maryland to discuss the SGEB Structural Engineering Section's open and confirmatory items. A meeting notice and attendance roster are enclosed (Enclosures 1 and 2 respectively). A summary of the results of the discussion that occurred on each of the items are as follows:

SRP 3.7.1 (Structural Audit Action Item 1):

The SGEB made this a confirmatory item, pending GSB's approval of the site-specific response spectra. The seismic design response spectra issue will be discussed with the NRC Geosciences Branch in a meeting on December 7, 1984. SGEB will abide by the conclusion reached by the Geosciences Branch in resolving this issue. If there is significant change in the design response spectra as a result of GSB meeting, SSI analysis of Category I structures will be affected.

SRP 3.7.3 (Structural Audit Action Items 4, 7, and 23):

This item remains open. The SGEB stated that DLC has two options in providing adequate documentation to resolve the SSI issue. A simplified Whitman-spring approach or a frequency-dependent impedance approach can be used. For either approach, SGEB indicated that the earthquake input motion must be applied at the foundation level in the free field without kinemetic interaction.

To resolve this item, DLC will provide an analysis for the containment structure that uses the frequency-dependent impedance approach with the earthquake input motion applied at the foundation level. A discussion of the computer program (FRIDAY) used in this analysis will be provided along with verification examples. DLC will re-address action items 4, 7 and 23 using the data from the new SSI analysis as input. However, the Auxiliary Building needs not to be re-addressed, and the intake structure will be addressed separately below.

DLC reiterated its position on the intake structure which was previously stated in the Structural Design Audit. The DLC position is that this

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structure is BVPS-1/BVPS-2 shared facility that was previously addressed by DLC in a show cause order and reviewed and approved by the NRC under the BVPS-1 docket. DLC agreed to provide the NRC with the following:

> A copy of the BVPS-1 report that was submitted to the NRC in response to the NRC's 1979 Show Cause Order and which describes the SSI methodology used in the development of ARS for BVPS-1 structures.
>
> A statement that the original design of the intake structure and the 1979 Show Cause Order response included consideration of the future BVPS-2 intake structure loads.

In the meantime, the intake structure SSI is considered as confirmatory pending DLC's submittal of the above.

SRP 3.8.1 (Structural Audit Action Item 10):

This item remains confirmatory. DLC will formally submit the comparison tables for the lirer strain allowables and liner anchor allowables that were informally presented to the NRC at this meeting.

SRP 3.8.3 (Structural Audit Action Item 15):

This item remains confirmatory. DLC will provide the comparison of the governing load combination with those ACI-349 and RG 1.142. These were informally presented by SWEC at this meeting.

(Structural Audit Action Item 13):

This item remains confirmatory. DLC will provide a revised response to Structural Design Audit Action Item 13 which will summarize the results of the confirmation program with respect to verification of the design of the containment's internal structure (including steam generator cubicles) for final pressure loads.

(Structural Audit Action Item 28):

This item remains confirmatory. DLC will provide the results of a calculation to demonstrate that the relatively thin outer layer of concrete that is affected by the temperature term (Ta) will have negligible effect on the overall strength of the concrete section. This response was presented verbally by SWEC at this meeting.

(Structural Audit Action Item 27):

The SGEB made this a confirmatory item. DLC will provide a simplified calculation to show that the absolute sum of two seismic components is comparable to SRSS of three seismic components for the polar crane.

SRP 3.8.4 (Structural Au dit Action Item 19):

This item remains confirmatory. SWEC provided SGEB with a copy of the requested calculation for their review. The SGEB will review this calculation as an extension of the Structural Design Audit and this item will be closed upon SGEB approval of the calculation. SWEC informally requested that this calculation, and all other calculations provided by SWEC, be treated by the NRC as proprietary. NRC agreed to abide by this request.

(Structural Audit Action Item 22):

The SGEB made this a confirmatory item. SWEC summarized the results of the tank wall flexibility analysis for the Refueling water Storage Tank and the Primary Demineralized Water Storage Tank. SWEC provided a copy of the final analysis calculation which addresses the tank wall flexibility question for SGEB's review as an extension of the Structural Design Audit. This item will be closed upon SGEB's approval of this calculation.

SRP 3.8.5 (Structural Audit Action Items 6 and 7):

This item remains open. DLC will provide the documentation which states and explains the derivation of the safety factors against sliding and overturning for the containment structure. This information was provided informally by SWEC at this meeting. Submittal of this information will make this a confirmatory item and it will be closed upon SGEB approval of DLC's response to Items 4, 7, and 23 (SRP 3.7.3).

DLC's position on the intake structure is as stated previously under the discussion of Items 4, 7, and 23.

DLC indicated that they would submit a response to Action Items 6 and 7 (SRP 3.8.5) in about one week. This submittal will also include a schedule for submitting the remaining responses.

ORIGINAL SIGNED BY

B. K. Singh, Project Manager
Licensing Branch No. 3
Division of Licensing

Enclosures:
As stated

cc: See next page

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DATE	1/10/85	1/24/85					

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JAN 30 1985

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-412
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PRC System
LB3 Reading
Attorney, OELD
GWKnighton
Project Manager B. K. Singh
JLee

NRC PARTICIPANTS

B. K. Singh
S. P. Chan
N. C. Chokshi
D. C. Jeng
G. Lear
K. C. Leu

bcc: Applicant & Service List

Enclosure 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NOV 27 1984

Docket No. 50-412

MEMORANDUM FOR: George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

FROM: B. K. Singh, Project Manager
Licensing Branch No. 3,
Division of Licensing

SUBJECT: FORTHCOMING MEETING BETWEEN THE NRC AND DUQUESNE LIGHT COMPANY

DATE & TIME: November 30, 1984
9:00 AM

LOCATION: AR-2242
Air Rights Building
Bethesda, Maryland

PURPOSE: To discuss unresolved issues associated with Structural Engineering Branch SER.

PARTICIPANTS*: NRC

B. Singh
G. Lear
D. Jeng
K. C. Leu
et. al.

Duquesne Light Company

J. O'Neil,
et. al.

B. K. Singh, Project Manager
Licensing Branch No. 3
Division of Licensing

cc: See next page

*Meetings between NRC technical staff and applicants for licenses are open for interested members of the public, petitioners, intervenors, or other parties to attend as observers pursuant to "Open Meeting Statement of NRC Staff Policy", 43 Federal Register 28058, 6/28/78. Those interested in attending this meeting should make their intentions known to the Project Manager, B. K. Singh, at (301) 492-8423, by no later than November 29, 1984.

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Enclosure 2

11/30/84

Attendance List

Beaver Valley, Unit 2

Meeting with SGEB

B. K. Singh	NRC/NRR/DL/LB#3	Project Manager
P. A. CADENA	DLC	SR. PROJ. ENG'R.
J. D. SUTTON	SWEC	ASST. PROJECT ENGINEER
R. S. ORR	W PED	ADVISORY ENGINGER
C.-W. Lin	W PED	Advisory Engineer
J. STABB	DLC	Licensing Engineer
J. D. O'Neil	DLC	Project Engineer
E. T. EILMANN	DLC	SR. PROJ. ENG/LIC.
S. P. CHAN	NRC/SGEB	Sr. Struct. Engr.
N. C. CHOKSHI	NRC/SGEB	Sr. Structural Engr
D. G. JENG	NRC/SGEB	Section A Leader
GEORGE LEAR	NRC/SGEB	Chief SGEB
K. C. LEE	NRC/SGEB	Sr. Structural Engr
D. J. CHAMBERLAIN	SWEC	LEAD LICENSING ENGR
S. P. SEKERAK	SWEC	MECH. ENGINEER
N. A. GOLDSTEIN	SWEC	CONSULTANT, EMD
J. A. CURTIN	SWEC	SUPERVISOR STRUCT ENG
G. R. Tilton	SWEC	Principal Structural Eng