

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8506050006 DOC. DATE: 85/05/22 NOTARIZED: NO DOCKET #  
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylvania 05000387  
 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylvania 05000388  
 AUTH. NAME: ELAWAR, Z. AUTHOR AFFILIATION: Affiliation Not Assigned  
 RECIP. NAME: SCHWENCER, A. RECIPIENT AFFILIATION: Licensing Branch 2

SUBJECT: Discusses staff assessment of concerns re chugging loads at plants. Assessment inadequate due to misleading input from Bechtel.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL  $\emptyset$  SIZE: 4  
 TITLE: OR Submittal: General Distribution

NOTES: 1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000387  
 OL: 07/17/82  
 1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000388  
 OL: 03/23/84

|           | RECIPIENT<br>ID CODE/NAME |    | COPIES<br>LTTR ENCL |  | RECIPIENT<br>ID CODE/NAME |    | COPIES<br>LTTR ENCL |
|-----------|---------------------------|----|---------------------|--|---------------------------|----|---------------------|
|           | NRR LB2 BC                | 01 | 7                   |  |                           |    |                     |
| INTERNAL: | ACRS                      | 09 | 6                   |  | ADM/LFMB                  |    | 1                   |
|           | ELD/HDS4                  |    | 1                   |  | NRR/DE/MTEB               |    | 1                   |
|           | NRR/DL DIR                |    | 1                   |  | NRR/DL/ORAB               |    | 1                   |
|           | NRR/DL/TSRG               |    | 1                   |  | NRR/DSI/METB              |    | 1                   |
|           | NRR/DSI/RAB               |    | 1                   |  | <u>REG FILE</u>           | 04 | 1                   |
|           | RGN1                      |    | 1                   |  |                           |    |                     |
| EXTERNAL: | 24X                       |    | 1                   |  | EG&G BRUSKE, S            |    | 1                   |
|           | LPDR                      | 03 | 2                   |  | NRC PDR                   | 02 | 1                   |
|           | NSIC                      | 05 | 1                   |  |                           |    |                     |
| NOTES:    |                           |    | 3                   |  |                           |    | 3                   |

TOTAL NUMBER OF COPIES REQUIRED: LTTR 32 ENCL  $\emptyset$  29

FEDERAL BUREAU OF INVESTIGATION  
 DEPARTMENT OF JUSTICE  
 WASHINGTON, D. C. 20535

MEMORANDUM FOR THE DIRECTOR  
 FROM: SAC, [REDACTED] (NY 100-100000)

SUBJECT: [REDACTED]

This memorandum reports on the results of a search of the files of the [REDACTED] office. The search was conducted on [REDACTED] and [REDACTED]. The results of the search are as follows:

| DATE    | INITIALS   | DESCRIPTION | FILE NO.   | STATUS     |
|---------|------------|-------------|------------|------------|
| 1/15/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/16/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/17/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/18/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/19/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/20/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/21/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/22/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/23/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/24/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/25/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/26/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/27/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/28/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/29/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/30/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |
| 1/31/68 | [REDACTED] | [REDACTED]  | [REDACTED] | [REDACTED] |

May 22, 1985.

To: Mr. A. Schwencer, Chief,  
Licencing Branch No 2  
USNRC, WASH D.C. 20555

From: Zouhair Elawar,  
Professional Engineer  
P.O. Box 6086 Stanford,  
2015 W. Cactus Rd, #216  
Phoenix, AZ 85029

Subject: Staff Assessment of Concerns Regarding  
Chugging Loads at Susquehanna plant (SSES)

Reference: Letter to Mr. A. Schwencer, dated July 12, 1984,  
Docket Nos 50-387/388.

Dear Mr. Schwencer:

Thankyou for your response to my concerns about  
the chugging loads at SSES. The staff's last  
assessment of my concerns is inadequate due to  
misleading input from Bechtel power corporation.

I have previously stated that the verification of the  
KWU 300 chugging source series is inadequate. These  
sources were generated from the measured pressure  
response at a given location in a simulated containment  
and then, the results were verified by predicting back  
the same starting pressure used to generate the KWU 300  
series. This method of verification produces, by  
definition, perfect results; it is not a valid verification.

8506050006 850522  
PDR ADDCK 05000387  
PDR  
H

1001  
/10



A series of horizontal lines spanning the width of the page, typical of a ruled notebook or ledger page. The lines are evenly spaced and extend from the left margin to the right edge of the page.

The verification would have been adequate if the KWU 300 series is used to successfully predict a pressure-time history for a point location away from the location used to generate itself. In July 1983, during an SSES meeting, Mr Ashley of Bechtel Corp deliberately blocked my attempt to request a set of pressure data that would provide adequate verification.

The same set of linked computer codes used in KWU 300 series was employed in the SRV load prediction (vs. SRI experimental data), the results showed the prediction method is not conservative (50% lower). Mr Bienkowski (NRC official) should concur with this response. The statement in your response letter dated April 1985; "The SRI work had to do with SRV loads and was entirely unrelated to the chugging loads" was made due to misleading input from Bechtel, since the same set of linked computer codes was used in both, SRV & Chugging loads. The failure in SRV load prediction should have alerted the Bechtel management to double check the chugging loads particularly after I have pointed out and corrected the errors in the set of computer codes.



A series of horizontal lines spanning the width of the page, resembling a ruled document. The lines are evenly spaced and extend across the entire width of the page.

Bechtel's statement (made by Mr Ashley) in response to item no 2 of my concerns is false. I was the responsible Senior Engineer who generated the KWU 400 series after correcting the algorithm used in KWU 300 series. If your honourable commission obtain a copy of these computer codes, I shall underline the errors and their corrections. In fact, during my employment at Bechtel, my former supervisor (Mr G.K. Ashley) and his supervisor (Mr B. F. Harper) agreed with the corrections and changes that I made:

a/ With the permission of my supervisors, I prepared a formal Bechtel report on the KWU 400 series without making any reference to KWU 300 series, whereas, when I prepared the report on the GE-source series, I've compiled all 10 GE-series in one report. At that time, my former supervisor (G.K. Ashley) and fellow engineer (T.S. Leong) agreed that KWU 300 series should not be documented and must be scrapped.

b/ When Engineer Barry Sheith (from the stress analysis group) needed to use the old computer code in his analysis, he was specifically directed by Mr Ashley to use the corrected algorithm having me to point out the corrections.



[The page contains approximately 25 horizontal lines, but they are extremely faint and illegible. No text is discernible.]



c/ when engineer Harry Cygcelman (from the thermal hydraulics group) needed to interpret his RELAP4 results, he was instructed by Mr B.E. Harper to use the corrected algorithm used in KWU 400.

In your response to item No 3 of my concerns, Mr Ashley of Bechtel corp. recognized some of the differences between the two chugging source series. The more important difference, not recognized yet by Mr Ashley, is the introduction of Hanning window to the KWU 400 PSD algorithm.

Respectfully

Zouhair Elanwar, PE

2015 W. Cactus Rd #216

Phoenix, AZ, 85029



May 8, 1985

DISTRIBUTION W/O ENCLOSURES  
Docket Files  
LB#2 READING  
MCampganone  
EHylton

DOCKET NO(S). 50-387/388

TO THOSE ON ATTACHED LIST

SUBJECT: MISCELLANEOUS REPORTS

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated \_\_\_\_\_.
- Draft/Final Environmental Statment, dated \_\_\_\_\_.
- Notice of Availability of Draft/Final Environmental Statement, dated \_\_\_\_\_.
- Safety Evaluation Report, or Supplement No. \_\_\_\_\_, dated \_\_\_\_\_.
- Notice of Hearing on Application for Construction Permit, dated \_\_\_\_\_.
- Notice of Consideration of Issuance of Facility Operating License, dated \_\_\_\_\_.
- Monthly Notice; Applications and Amendments to Operating Licenses Involving no Significant Hazards Considerations, dated \_\_\_\_\_.
- Application and Safety Analysis Report, Volume \_\_\_\_\_.
- Amendment No. \_\_\_\_\_ to Application/SAR dated \_\_\_\_\_.
- Construction Permit No. CPPR- \_\_\_\_\_, Amendment No. \_\_\_\_\_ dated \_\_\_\_\_.
- Facility Operating License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, dated \_\_\_\_\_.
- Order Extending Construction Completion Date, dated \_\_\_\_\_.
- Other (Specify) Miscellaneous reports

Office of Nuclear Reactor Regulation

Enclosures:  
As stated

cc:

|         |               |  |  |  |  |  |  |
|---------|---------------|--|--|--|--|--|--|
| OFFICE  | DL:LB#2       |  |  |  |  |  |  |
| SURNAME | E. Campganone |  |  |  |  |  |  |
| DATE    | 5/8/85        |  |  |  |  |  |  |



THE UNIVERSITY OF  
MICHIGAN LIBRARY  
ANN ARBOR, MICHIGAN

1963  
MAY 15 1963  
LIBRARY

UNIVERSITY OF MICHIGAN LIBRARY

1963  
MAY 15 1963  
LIBRARY

Susquehanna

Chief  
Division of Ecological Services  
Bureau of Sport Fisheries & Wildlife  
U. S. Department of the Interior  
Washington, D. C. 20240

Director  
National Oceanographic Data Center  
Environmental Data Service  
National Oceanic & Atmospheric Administration  
U. S. Department of Commerce  
Washington, D. C. 20235

Dr. William B. Stroube, Jr.  
FDA Research Chemist  
National Bureau of Standards  
Reactor Building 235, Room B108  
Washington, D. C. 20234

U. S. Environmental Protection Agency  
Region III Office  
ATTN: Regional Radiation Representative  
Curtis Bldg., 6th Floor  
6th and Walnut Streets  
Philadelphia, Pennsylvania 19106