



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

MAY 02 1979

ADVISORY COMMITTEE ON
REACTOR SAFEGUARDS U.S. NRC

MAY 2 1979
1 Copy

MW Carbon

RS

MEMORANDUM FOR: James G. Keppler, Director, RIII
FROM: Dudley Thompson, Executive Officer for Operations Support, IE
SUBJECT: APPARENT FALSE STATEMENTS BY APPLICANT AT ZIMMER ACRS SUBCOMMITTEE MEETING (AITS F30488H6)

In your memorandum of April 10, 1979, (enclosed) you advised IE:HQ that the Zimmer station superintendent had apparently provided false or erroneous information to the NRC - initially to an ACRS Subcommittee meeting on February 27, 1979, and subsequently to an ACRS Full Committee meeting on March 9, 1979. We understand that an NRC inspector was present during both ACRS meetings and that transcripts of both proceedings are available to you. We also understand that the station superintendent, Zimmer Nuclear Power Station, when interviewed during an inspection in early March 1979, admitted that the information provided the ACRS Subcommittee was untrue, indicated that it would be corrected at the Full Committee meeting, but failed to do so.

The foregoing was discussed with Mr. Charles A. Barth, Attorney, Hearing Division, ELD on April 30, 1979 who has been involved with the licensing hearings regarding Zimmer. Mr. Barth feels that an investigation of this matter is clearly warranted. Barth pointed out that not only does it raise some question regarding the accuracy of information provided NRC by the applicant, but that the issue involved - the general topic of operator qualification - is of particular interest to the NRC. He further recommended that ASLB, ACRS and NRR be advised both of the content of your memorandum and receive copies of your report of investigation. This matter was also discussed with Mr. Roger Fortuna, OIA, on April 30, 1979, who indicated that his Office would review your report for possible evidence of criminality such as violation of 18 USC 1001.

We share Mr. Barth's opinion and recommend that RIII conduct a full investigation of this matter. Signed statements should be obtained from the NRC inspectors who attended the ACRS meetings and those who interviewed the station superintendent during the inspection where his ACRS testimony was discussed. The interview of the station superintendent should, if possible, result in a written statement from him describing both his reason and motivation for making the

62
0612162

A-15

1623 192 / 0

1623 225

James G. Keppler

-2-

MAY 02 1979

statement. Upon completion of your investigation, we will take care of providing copies of your report to interested offices at Headquarters.

The above information was discussed with Chuck Norelius on May 1, 1979. Please feel free to contact either Bill Ward or Pete Baci of my staff if you need any additional information.


Dudley Thompson
Executive Officer for
Operations Support, IE

Enclosure:
Memo JGKeppler to DThompson
dtd 4/10/79

cc w/enclosure:
C. A. Barth, ELD
R. A. Fortuna, OIA
G. R. Klingler, ROI
N. C. Moseley, ROI
H. D. Thornburg, RCI
J. R. Yore, ASLB
M. W. Carbon, ACRS
H. R. Denton, NRR

193
1623 161

1623 ~~220~~

A-16

EXCERPT FROM 227th ACRS MEETING

3

J18

bw . advantage of the statistical nature of the load.

2 MR. CATTON: That was my earlier understanding.
3 I was just confused momentarily.

4 MR. BENDER: Fine.

5 I think we have probably gotten about as far as
6 we can.

7 Are there other questions on the Mark II that
8 anyone wants to raise?

9 Milt?

10 DR. PLESSET: No.

11 MR. BENDER: For the purpose, Jim, of getting
12 through the agenda and being sure some points are covered
13 that we are interested in, could we get you to respond
14 briefly to the times that are listed as general discussion
15 to be included in Presentations A through F, on page 2 of
16 the agenda?

17 MR. FLYNN: Yes, sir. The first item is
18 arrangements for firefighting personnel. We will address
19 this with Mr. Jim Schott.

20 MR. SCHOTT: James Schott, Cincinnati Gas &
21 Electric.

22 We have included in our emergency planning
23 provisions, arrangements with, first of all, the Washington
24 Township Volunteer Fire Department, as the primary
2 responding group who would come to the plant, if requested,

194
1623 462

1623 ~~227~~

A-17

b1 1 for any particular fire that we would not have on-site
2 capability.

3 As I point out, this is a volunteer fire group,
4 and they are approximately no more than five minutes from
5 the plant.

6 They could respond in five minutes or less with at
7 least five people. And they are adequately equipped and
8 we have personally investigated and found that they are an
9 adequately equipped volunteer fire group to respond in case
10 of a contingency.

11 Backing up the Washington Township group is
12 the New Richmond Fire Department, which is about, I'd say,
13 10 to 12 minutes away.

14 They have mutual aid agreements with the
15 Washington Township group that would provide the necessary
16 back-up capability in case additional manpower or equipment
17 was required, or if some other event would take place that
18 would require back-up capability in the Washington Township
19 jurisdiction.

20 MR. BENDER: New Richmond is also a volunteer
21 group?

22 MR. SCHOTT: That's correct, sir.

23 MR. BENDER: Thank you. Can we go to the next
24 item?

25 MR. FLYNN: Status of Applicant's requirements of

1623 ¹⁹⁵ 163

1623 ~~228~~

1 operating personnel is also Jim Schott.

2 MR. SCHOTT: I believe we touched on that this
3 morning briefly. We have a maintenance engineer reporting
4 March 5. We have secured the services of an additional man
5 with the necessary credentials to back up our reactor
6 engineer. He's been on-site now for four months.

7 We are in the process of recruiting several
8 additional staff members. But the basic staffing issues
9 we believe we have adequately addressed.

10 MR. BENDER: In the event, you should run into
11 the kind of circumstances that occurred recently, in which
12 you lost a man that you had on the payroll for several
13 months, it looks to me like you always have the prospect
14 that you may be without adequate supervision, because of
15 the lack of depth in the organization.

16 What contingency plans have you got?

17 MR. SCHOTT: At this point in time — I don't
18 think this thing is working.

19 MR. BENDER: Why don't you come up to the podium.
20 That will work.

21 MR. SCHOTT: We are addressing that situation
22 by designating alternate members of our technical staff to
23 act as back-up to maintenance, back up to operations or
24 back-up to whatever second line supervisory position you
25 might select in an effort to avoid a situation like we have

~~1625 229~~ 196
1623 164

bw 1 just experienced.

2 MR. BENDER: Will those people have the same
3 training as the person you have designated to be —

4 MR. SCHOTT: Yes, sir, that is a commitment we
5 have made. They will not have the immediate experience that
6 the primary people have, but they will be accumulating
7 experience such that if someone would resign, or other
8 reasons, we would be able to adequately staff the plant.

9 MR. BENDER: Can you rely on getting advice and
10 assistance from other organizations, if worse came to worst?

11 MR. SCHOTT: Well, we have to have that capability.
12 But we also have individuals on the plant staff that can
13 function adequately in more than one area of expertise.

14 MR. BENDER: I understand that kind of statement.
15 But my own observation is that the depth of knowledge that
16 a guy can have when he's not doing things every day is not
17 likely to be nearly enough to deal with the complexity of
18 the problems that you might have in a — when you really need
19 maintenance work done in large quantities and your maintenance
20 engineer was incapacitated for some reason or other. It
21 seems to me you ought to make arrangements to have access
22 to other resources in some way other than just to say you
23 will take some other member of the staff and have him take
24 over.

25 MR. SCHOTT: Well, what I mentioned before a few

197
1623-165
1623-230

1 moments ago was that we are now developing the back-up
2 capability within the staff. Those individuals on one-to-one
3 relationship as more or less second-line assistants to the
4 principals.

5 In that manner, we believe that there is sufficient
6 capability.

7 MR. BENDER: But that guy has another job as well
8 as being the backup; is that right?

9 MR. SCHOTT: No, sir. Not necessarily, no sir.
10 That isn't what we had in mind. In other words, if there is
11 a staff member who is assigned as assistant to the maintenance
12 supervisor, that is his function, and he would act as an
13 assistant maintenance supervisor.

14 MR. BENDER: Have you made that commitment to the
15 staff, that you will have a maintenance supervisor and an
16 assistant to the supervisor full time?

17 MR. SCHOTT: No, sir, we have not.

18 MR. BENDER: Well, what are you telling me, that
19 you are thinking about doing it, or that you are going
20 to do it?

21 MR. SCHOTT: We are going to do it, but we have not
22 made that commitment to the Regulatory Staff, because it is
23 a difficult situation you find yourself in sometimes.

24 If the backup leaves, then what do you do?
25 It's nothing different than we do in our fossil fuel plants.

1623 ~~231~~
198
1623 166

dw 1 MR. BENDER: I understand that, but you have a
2 number of fossil fuel plants.

3 You have got a lot o' experience. You have got one
4 nuclear plant with which you have limited experience. And
5 the back-up does seem to be a little weak.

6 That's all I am saying. All I am saying is that
7 if you can find other utilities that will be willing to
8 give you a helping hand, it seems to me that most of us
9 would feel a little bit more comfortable, even though we
10 know you are committed to doing the job right.

11 We are not questioning that aspect of it.

12 But circumstances sometimes can put you in a
13 situation where you don't have access to all the people you
14 like to have.

15 And an organization with limited depth always
16 has to keep that in mind.

17 MR. SCHOTT: We understand, sir.

18 MR. BENDER: Let's go to the next item.

19 MR. FLYNN: The next item is also a Jim Schott
20 item. Mechanisms established for obtaining information on
21 and utilizing industry experience.

22 MR. SCHOTT: There are several mechanisms that
23 we presently utilize.

24 First, not necessary in any priority order, but
25 we receive what is called service information letters from

A-22

1623 ~~232~~
199
1623 467

1 the vendor, General Electric, that addresses many items
2 that occur as a matter of experience from their operating
3 plants. And we incorporate those items as required either
4 in our procedures, or, if a plant modification is suggested,
5 why, appropriate engineering is given to that and a decision
6 is made as to whether it would be or not be incorporated
7 in our plant.

8 We receive information naturally from the
9 Enforcement and Inspection Branch of the NRC, and we, as a
10 matter of routine, incorporate those on our stationery
11 review board agenda for discussion and appropriate action.

12 We receive copies of all of the incident reports
13 from all utilities that are routinely filed with the
14 Edison Electric Institute, and we utilize the experience,
15 and sometimes the malfunctions or whatever cause the incident,
16 in making suggestions to our engineering group or
17 modifications to our procedural controls.

18 We also are members of the Edison Electric
19 Institute, where periodic meetings are held at the minimum
20 of three times per year.

21 And we are members of that group and actively
22 participate in information exchange.

23 Those are just four of the samples that we use
24 on a formal basis.

And then on a — I would consider it an informal

1623 ~~233~~

A-23

1623 ²⁰⁰
168

bw 1. basis, why, we are in communication with sister plants at
2 personnel levels. For example, maintenance engineers call
3 and talk to other maintenance engineers, and so forth.

4 MR. BENDER: Are you participating in the NPRDS
5 system?

6 MR. SCHOTT: Yes, sir, we are just about finished
7 now with the accumulation of all the NPRSD baseline
8 information. And we are about ready to submit that to
9 Southwest.

10 MR. BENDER: Okay.

11 MR. FLYNN: The next item, method for making
12 foundation settlement methods will be discussed by John
13 Herman.

14 MR. HERMAN: We have got 22 settlement points
15 at the Zimmer Station where we monitor the settlements.
16 These are monitored on a three-month basis, and they
17 started in October of 1975.

18 Now, the settlement of these 22 points are shown,
19 and the settlements, about 90 percent of what we predicted.

20 The settlement on most these points have just
21 about ceased.

22 The differential settlement, that is the settlement
23 across the reactor going between the two adjacent points that
24 we are measuring, is also within the limits of the
25 differential settlement that was predicted in the FSAR.



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

APPENDIX V
Bailly Generating Station: Proposed
June 8, 1979 Change in Design of Pilings

Dr. Max Carbon, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Carbon: *Max*

The Commission currently has before it petitions relating to the proposal of the Northern Indiana Public Service Company to use shorter pilings than originally contemplated for foundations of the Bailly Generating Station, Nuclear-1. The licensee proposes to drive the pilings into glacial lacustrine deposits underlying the site, rather than into bedrock or glacial till.

The Commission requests the Committee to identify and address the significance (if any) of the engineering and safety issues arising from use of the shorter pilings as opposed to the longer pilings. In particular: (1) is the use of shorter pilings a significant design change from the standpoint of engineering, and would it require significant alteration of other aspects of the design of the facility; (2) what difference, if any, would there be in the safety of the facility depending on whether longer or shorter pilings are used?

The Commission would appreciate receiving the Committee's views no later than June 30, 1979. The Commission, after receiving the Committee's views in writing, may request an oral briefing should that appear desirable. The Office of General Counsel will provide background information on this matter upon request.

Sincerely,

[Signature]
Joseph M. Hendrie

1623 ²⁰² 170

1623 ~~235~~

A-25

dup of

7907190068

(1p)

HIGHLIGHTS
TMI-2 SUBCOMMITTEE MEETING
PENN STATE UNIVERSITY STUDENT CENTER
HARRISBURG, PENNSYLVANIA
June 6, 7, 1979

Present

H. Etherington, Chairman	C. Michelson, Consultant
M. W. Carbon, Member	W. C. Lipinski, Consultant
S. Lawroski, Member	I. Catton, Consultant
M. S. Plesset, Member	
M. Bender, Member	
P. G. Shewmon, Member	R. Muller, SSE (DFE)
W. M. Mathis, Member	H. Alderman, ACRS Staff
H. W. Lewis, Member (June 6 only)	

Mr. Etherington opened the meeting at 1:30 P.M., 6 June.

1. Dick Vollmer, NRC Staff (Director, TMI-2 Support) discussed current plant status:

Primary: Natural Circulation through A loop.

Secondary: Steaming on Steam Generator A through the condenser.

(a) $T_H = 161^\circ$, $T_C = 151^\circ$ ($10^\circ T$ across core)

(b) Core Flow 1 foot/min

(c) B Loop isolated (higher ΔT); $T_H = 163^\circ$, $T_C = 104^\circ$

(d) $P = 340$ lbs., system operating in solid mode. (to monitor water level by most satisfactory means)

(e) Leakage 25 gpm

(f) Water level about 7.5 feet above floor level ($\approx 500,000$ gal.)

(g) Activity: 10^{-3} $\mu\text{c/cc}$ Iodine, 10^{-1} μc Kr-85, Xe-133

(h) Modification: Addition of redundant HEPA and charcoal filter systems on aux. bldg. roof.

2. Vollmer also discussed current NRC-Met. Ed. interface.

He reported that Bethesda now has a 24-hour duty officer. There are dedicated phone lines in all plants to the Region offices. (Dr. Lewis noted that since the "dedicated" lines are through commercial channels they are jammable). Vollmer agreed to report to the full Committee whether NRC considers this the answer to the communications problem).

203
1623 171

3. Metropolitan Edison/General Public Utilities
R. C. Arnold, Vice President, Generation, GPU

Jack Thorpe - Mgr. Environmental Affairs, GPU
Jack Herbein - Met. Ed., V.P. Generation
Robert Keaten - V.P. Engrg. GPU Service Corp.,

Mr. Keaten opened with an explanation that the initiating event was not the trip of the condensate pump but that the operator was trying to clear a plug in the transfer line from the condensate polisher to the regeneration tank. This introduced water and air simultaneously causing the condensate outlet valves to close.

Mr. Keaten said there was no explanation for where the radioactivity was coming from long after the sump pumps were turned off

Core damage did not start until the 4 coolant pumps were turned off. The operators did not realize the PORV was stuck open (observed temperature decrease of 4 from maximum was not considered significant). They did not use HPI system correctly.

Press reports of Kemeny Commission testimony re uncertainty of how EFW valves were shut is essentially accurate.

Auxiliary operators take directions from the Control Room Operator. Aux. operators are grade C, B, and A depending on their experience. (C requires H. S. diploma and one year experience).

GPU analysis of the transient is continuing.

GPU feels training of their operators in heat transfer is deficient.

Shift Supervisor Zewe stated that there were 1200 alarms altogether.

The closed block valves were discovered and opened within 8 minutes, about 1 of which it took to reach the 30 inch water level in the Steam Generator.

Simplified diagrams of the Emergency FW System and the Fuel Pool Waste Storage Flow System were provided. (See Tab 1.2 in meeting folder). Also schematics for the Liquid Release Flowpath, (Epicor I and Epicor II systems for treating radioactive water) were provided (See Tab 1.2). Ben Rusche, Director South Carolina Energy Institute (formerly of NRR) is director of Met. Ed. waste management activities in the ultimate recovery plan. He reviewed his plan.

The Emergency Plan for TMI was discussed (See Tab. 1.2).

There is no formal requirement for a watch-relief check list. Operators and shift foremen determine its content.

There is no record of PORC (Plant Operations Review Committee) review of the PORV (Power Operated Relief Valve) sticking problem.

A computer listing of all TMI-2 procedures was provided.

4 lb. building pressure isolates containment. (Unit 1 has 48" containment purge valve, Unit 2 has smaller - 36"). Let down system does not isolate on radiation level.

Water hammer occurred at second closure of valves from condensate polisher. Pump tripped at 12 psig. About 15 seconds after the initial trip water hammer moved the line 2-3 feet. This resulted in leakage but no deformation or damage to the pipe. One instrument air line was disconnected as a result of the movement.

Met. Ed. discussed possible improvements in instrument and diagnostic capability (See Tab 1.2).

Mr. Arnold discussed how key decisions were made (Transcript p. 389-397 - See Tab 1.2).

The Subcommittee discussed additional questions to be addressed during the Full Committee meeting on June 15th and the tentative schedule for that discussion (See memo Muller, ACRS to Baer, NRC Staff dated June 13, 1979 - Handed out at meeting).

The meeting was adjourned at about 3:30 P. M., June 7.

205
1623-173
1623-230