

To: Collins, NRR
G20030048

CLIFFORD, LYONS & GARDE
LAW OFFICE

1620 L STREET, N.W., SUITE 625
WASHINGTON, D.C. 20036-5631
TELEPHONE: (202) 289-8990
FACSIMILE: (202) 289-8992

FAX COVER

cys:
BDC
BDDM
DEDR
BDDM
AO
Rll
GIG
OGC
OE
OI
Skay, NRR
Goldberg

To: **Dr. William Travers**
Executive Director for Operations
U.S. Nuclear Regulatory Commission

Fax Number: **301-415-2700**

Number of Pages Including This Page: **30**

From: **Billie P. Garde**
by Sandy Shepherd

Date: **June 6, 2003**

Message: **Re: Response to Davis-Besse 2.206 Petition**

See attached.

This telecopy document is for the use of the individual named above. If the reader of this message is not the intended recipient, or is the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this document is strictly prohibited. If you have received this telecopy in error, please notify us by telephone and return the original document to us by mail at the above address. Thank you.

LAW OFFICE
CLIFFORD & GARDE

1620 L STREET, N.W.
SUITE 625
WASHINGTON, D.C. 20036
(202) 289-8990
FAX (202) 289-8992

JOHN M. CLIFFORD*
BILLIE FIRNER GARDE**

*ALSO ADMITTED IN MD
**ALSO ADMITTED IN TX, WI

June 6, 2003

(By Fax: 301-415-2700
and Regular U.S. Mail)

William Travers, Ph.D.
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: *Response to Davis-Besse 2.206 Petition*

Dear Dr. Travers:

Pending before the Commission is a Petition filed on February 2, 2003, amended on March 27, 2003, pursuant to 10 CFR §2.206 from the Honorable Dennis J. Kucinich, Congressman from Ohio, seeking revocation of FirstEnergy Nuclear Operation Company's ("FENOC") license to operate the Davis-Besse nuclear power plant in order to ensure that all issues of safety significance have been identified and rectified. Mr. Robert F. Saunders, President of FirstEnergy, filed a response to the Supplemental Petition on April 11, 2003. The Office of Nuclear Reactor Regulation has, today, issued a proposed decision to deny Congressman Kucinich's petition and provides the parties until July 7, 2003 to review the proposed decision and provide any additional facts for their consideration.

Both the supplemental petition and the response incorporate information from or about my client, Andrew Siemaszko, and his activities as the system engineer with direct knowledge of the events leading to the discovery of the hole in the reactor head in February, 2002. The Proposed Decision states that the:

NRC will not authorize restart of the Davis-Besse plant unless the NRC Davis-Besse Oversight Panel is satisfied that FENOC has effectively implemented corrective actions to foster a safety-conscious work environment in which employees are encouraged to raise concerns and a culture where plant safety issues receive appropriate management attention based on safety significance.

William Travers, Ph.D.

June 6, 2003

Page 2

Please consider this information in that context.¹ I submit to you that FENOC is an "old school" Licensee whose approach to employee concerns, disputes and disagreements will continue the "chilling effect" in existence at Davis Besse.²

This letter also raises a concern about the 0350 panel's potentially improper involvement in influencing FENOC's actions leading to Mr. Siemaszko's termination, and requests a review of this concern by the Office of the Inspector General as part of their ongoing review of the Davis-Besse matters.

The Siemaszko Allegations

FENOC's April 11, 2003 letter devotes three pages to an untrue, misleading and defamatory attack on Mr. Siemaszko. While I agree with the Staff's statement that the NRC's 2.206 process is not an appropriate forum to address wrongful termination claims, it is the forum to whether the Licensee has established a safety culture that supports plant restart. In making that determination I urge you to consider the handling of Mr. Siemaszko's allegations, both before and after he was terminated, as an indicator of FENOC's current approach to employee concerns.

I have not repeated FENOC's arguments regarding Mr. Siemaszko here, nor attempted to include all of the issues in dispute between FENOC and my client. I have summarized FENOC's principal arguments, along with a brief rebuttal to its position. In some cases, I have provided and attached supporting documents.

1) Mr. Siemaszko did not have "performance" problems at Davis-Besse

Mr. Siemaszko was never advised that his performance was unsatisfactory until the day he was terminated. FENOC asserts that its termination of Mr. Siemaszko demonstrates that "it is willing to hold people accountable for poor performance." (April 11, 2003 Letter, at 9 and 11.) It supports this assertion by further explaining that Mr. Siemaszko failed to perform his assigned job responsibilities "to even minimal company standards..." (*id.*) and that his failure to do so, "contributed to the failure to identify earlier degradation of the RPV head at Davis-Besse." (*Id.*)

¹ I have not responded before now to the April 11, 2003 FENOC response because of the ongoing Department of Labor investigation into Mr. Siemaszko's complaint. It is my understanding that investigation has been completed and a decision will be issued in the immediate future.

² See, generally, the report of Dr. Sonja Haber on the question of the willingness of employees to raise concerns. *Safety Culture Evaluation of the Davis-Besse Nuclear Power Station* by Performance, Safety, and Health Associates, Inc. (April 14, 2003).

William Travers, Ph.D.

June 6, 2003

Page 3

There is absolutely no contemporaneous proof for this serious attack on Mr. Siemaszko's professionalism.

The Licensee's attempt to put the blame on Mr. Siemaszko indicates a total lack of accountability. Mr. Siemaszko was hired in July, 1999. At the time he was hired, the following problems were already in existence:

- the reactor head was already covered with boric acid,
- the nozzle cracks had gone through wall sometime between 1994 and 1996,
- the CRDM nozzles were still leaking,
- there had been unexplained boric acid in the containment air coolers,
- there was unexplained boric acid in the radiation monitor filters,
- there was iron oxide identified in the radiation monitor filters,
- there was boric acid accumulations on the air coolers, and
- there was boric acid on the RPV flange.

All of these issues had been observed, noted and ignored by plant management.³ As also acknowledged by FENOC's March 22, 2002 Probable Cause Summary Report (Probable Cause Report), and the April 18, 2002 final Davis-Besse Confirmatory Action Letter Response Root Cause Analysis Report (Root Cause Report),⁴ several significant PCAQR's had also been issued, ignored, deferred or postponed.⁵

³ See, FENOC Probable Cause Summary Report for CR 2002-0891, *Significant Degradation of the Reactor Vessel Head Pressure Boundary*, March 22, 2002.

⁴ According to FENOC's own March 22, 2002, Probable Cause Report: "Deferral of the modifications to the service structure for improved access when the modification was first considered resulted in the continued limited ability to prevent significant boric acid accumulations and allow for better visual determination of leakage sources." *Id.*, at 1.

⁵ See, FENOC's April 18, 2002 Root Cause Report, Section 3.0, for a discussion of the mishandling of PCQAR 95-0551, that addressed boric acid in several areas on the RPV head, and noted that all of the steps for the Boric Acid Corrosion Control program procedure in effect at the time (NG-EN 00324 Rev.1) may not have been followed. Interestingly, the PCQAR response endorsed implementing a modification (MOD 94-0025) to increase the inspection holes for Service Structure, which, as of March, 2002 was still outstanding! See, also, discussion of CR 1999-1300, regarding finding of iron oxide deposits, CR 2000-0782, addressing the boric acid build up of the RPV head, characterizing the leak as "heavy, red/brown deposits, new leakage not seen during 11 RFO, and recommended a detailed inspection," and CR 2000-1037, which again identified the boric acid accumulations, but did not discuss the boric acid remaining on the head or the plans to remove it. The two 2000 Condition Reports were categorized as "Routine," by the

William Travers, Ph.D.

June 6, 2003

Page 4

When Mr. Siemaszko arrived in mid-1999, he was not told of these problems, was not advised of any of the indicators of significant degradation of the head, was not provided any information about the findings of boric acid or iron oxide in the various filters. He was not provided timely, adequate or complete training on the Boric Acid Control procedure, nor was he provided an adequate turnover providing him knowledge or background about these conditions.

According to FENOC's April 18, 2002, Root Cause Report:

On March 13, 1994, the RCS System Engineer initiated PCQAR 94-0295 regarding a commitment in the Commitment Management System that was closed (complete) and not converted to an ongoing commitment. The commitment required a visual inspection of the RVP head every refueling to determine the potential for CRDM nozzle cracking in support of a B&W safety evaluation to the NRC. The PCQAR evaluation identifies the inspection is covered in the existing program as outlined in NG-ED-00324, Boric Acid Corrosion Control. The commitment was closed based on the NG-EN-inspections and the fact that the NRC saw enhanced inspections as being "prudent" but not necessary were [sic] to be put in the next outage contract.

Id., at Section 3.0.

Thus, as evidenced by the company's own studies, it was not Mr. Siemaszko that failed to notify management of sufficient information to have prevented this event, but management itself that failed to comply with the basic fundamentals of prudent safety management and its own post-1996 commitments regarding maintenance and operations.

Nonetheless, by February 2000, six months after arriving on the job, and even before he had completed all site training, Mr. Siemaszko undertook an activity outside the scope of his formal responsibilities, without much support or resources -- the challenge of getting the reactor head cleaned and finding the source of the boric acid. He was first alerted to the seriousness of the issue by a Design Engineer, who was also concerned about the situation and had been since initiating the attempts to clean the head in 1996. Mr. Siemaszko did what no one else had been able to get done since at least 1996, when the first Work Order request was written to attempt to address the boric acid problem.

That he was the person who initiated and drove the clean-up activities cannot be credibly disputed. In April 2000 the company wrote a site-wide newsletter in which he is credited with being the first person ever to attempt to clean the head:

Prioritization Committee (PRC), not Mr. Siemaszko, and dispositioned in a manner that did not interfere with restart operations after 12 RFO.

William Travers, Ph.D.

June 6, 2003

Page 5

Due to a history of leaking Control Rod Drive Mechanism (CRDM) flanges on the Reactor Head, boric acid has built up in the area. Access to this area is very difficult due to the construction of the Service Structure surrounding the area. The Reactor Head is carbon steel, and boric acid can be corrosive to carbon steel....

After reviewing industry experience and videotapes of the boric acid build up, Andrew Siemaszko, Plant Engineering, set a personal goal to resolve this dilemma.... He realized that it would be difficult to properly assess the condition of the reactor Head each outage if we were not able to remove any residual boric acid prior to the start up of a new operating cycle. Cleaning of the reactor Head had been considered in past outages, but resolution addressing all concerns was not achieved....

...The Reactor Head was successfully cleaned yesterday, thanks to Andrew's efforts, as well as those of the Radiation Protection Technicians. This is the first time in Davis-Besse's history that the Reactor head has been cleaned. Andrew was a salesman to management, Radiation Protection, and Outage Management because he felt so strongly about the need to successfully clean the Reactor Head. Congratulations, Andrew on your perseverance, and willingness to effectively deal with the challenges that were presented.

(Emphasis added, *Outage Insider*, April 29, 2000.)(Attachment 1)

After the outage was over, Mr. Siemaszko received the following accolades from his supervisor, Glenn McIntyre:

Thanks for the detailed write up of 12 RFO issues...You are aggressive, confident of your abilities and always want to do the right and proper thing.

Another peer sent him an e-mail stating:

You are an inspiring example to all of us at DB as your have shown us how you get things done pro-expeditiously, when it seems there was no precedent (plant hasn't cleaned the RX head before) and there was always "big organizational static inertia" which is very challenging to overcome.

At the end of 2000, Mr. Siemaszko, along with others who worked on 12 RFO were given an extra bonus in December 2002 with special commendation for a job well done.⁶ Several

⁶ In retrospect, the issuance of the 12 RFO outage "bonus" has the appearance of a reward to employees involved in the 12 RFO activities for completing the outage – regardless of the boric acid remaining on the head – within the time frame that was financially beneficial to the

William Travers, Ph.D.

June 6, 2003

Page 6

months later, in February 2001, Mr. Siemaszko received his first performance review. He received an excellent rating from his management. Everything about his performance and activities during 12 RFO was known to his supervisors and managers. They were aware of his findings of boric acid accumulation and his attempts to clean it. They had granted him his requests to plan for a much more aggressive cleaning during 13 RFO, because they knew of the remaining boric acid left on the head of the reactor.⁷ Yet, the remaining boric acid did not impact Mr. Siemaszko's February 2001 performance review in any negative way.

Mr. Siemaszko continued to perform in a highly commendable manner during 2001. A substantial part of his time was spent preparing for 13 RFO so he could complete the task he had started during 12 RFP, i.e., cleaning the head of the reactor. In February, 2002, he received his second annual performance review, a raise, and later a promotion from Lead Nuclear Engineer to Senior Nuclear Engineer. His 2002 performance review specifically addressed all of the alleged performance issues that FENOC is now claiming were deficient. I have included the 2002 performance evaluation as an exhibit to this letter so you and your staff can review it in its entirety. (Attachment 3) The facts are that Mr. Siemaszko was given the highest possible rating, i.e., "Highly Effective," in the following categories:

- Demonstrates Honesty, Integrity and Trust
- Demonstrates Safety Consciousness
- Promotes Continuous Improvement

company regardless of the safety implications. This implication also appears within the comments on Mr. Siemaszko's performance evaluation discussed, *supra*.

⁷ It is important to note that, although Mr. Siemaszko took it upon himself to attempt to clean the boric acid that had accumulated on the RPV, it was not Mr. Siemaszko's functional responsibility. According to Boric Acid Control Procedure NG-EN-00324, Rev 2, Section 6.5.7:

If the magnitude of the leak or the extent of the component corrosion is deemed substantial, Design Engineering shall perform an evaluation to identify extent of damage and any corrective maintenance that will repair the deficiency shall be performed.

Since Mr. Siemaszko was not qualified in the Boric Acid Control Procedure at the time he did not recognize that Design Engineering should be doing the work. No one in his line management or Design Engineering stopped his activities, or assumed responsibility for it. Even after the Decontamination Group in Health Physics formally assumed responsibility for the task of cleaning the head, Mr. Siemaszko remained intimately involved in the project.

William Travers, Ph.D.
June 6, 2003
Page 7

A review of the performance evaluation demonstrates better than any other evidence the status of management's mind set about Mr. Siemaszko only days before finding the hole in the reactor head. The performance review states that

Andrew's support of the team assigned to develop plans for resolving this issue [potential CRDM Nozzle J groove cracking] in 13 RFO has been favorably recognized by management.

The performance review explains that this contributed to the organization because:

[t]he team efforts in addressing the CRDM nozzle J groove cracking concern ensured nuclear safety and minimized the negative financial impact that has resulted from the need to pull up the start date of the 13 RFO.

(*Id.*)

It is critical to note that this evaluation was given AFTER the company's efforts in the fall of 2001 to obtain an extension from the NRC in connection with Generic Letter 88-05 and IB 2001-01!

Less than a month after signing this performance evaluation, Mr. Siemaszko's crew identified the hole in the reactor head. After the discovery, everyone involved in any aspect of the Reactor Head issues, including Mr. Siemaszko, was involved in multiple investigations. Mr. Siemaszko was interviewed numerous times by every investigative team that came to speak to him; which, at last count was over twenty different interviews. He fully cooperated with each investigation. He was never told by anyone that his performance was unacceptable, or that there were any concerns about his performance. In fact, a review of the independent investigation into the cause of the degradation of the head⁸ does not indicate that the company had any findings of performance issues with respect to Mr. Siemaszko. It states:

Analysis identified that several opportunities for identification of and scoping the significance of field conditions were missed when reviewed collectively. The relating of independent but common-causal data was missed at all levels of the organization.
(emphasis added)

⁸ See, *Davis-Besse Confirmatory Action Letter - Root Cause Analysis Report*, April 18, 2002. The report was done by an independent team of investigators, i.e., no Davis-Besse managers. Davis-Besse management was not added to the team until after the root cause determination was completed. It should be noted that the attempt at "finger pointing" to Mr. Siemaszko by Davis-Besse management did not happen until well after the independent Root Cause inquiry was completed.

William Travers, Ph.D.

June 6, 2003

Page 8

Id., at Section 3.5 Management Issues.

Similarly, in August 2002, Lew Myers himself stated openly:

[w]e had lost our professionalism. All at DBNPS are accountable; we had become arrogant, worked in isolation, and exhibited a lack of professionalism. There was a lack of ownership/rigor/questioning attitude at time.

See, DRAFT, of Exit Meeting Notes AIT Follow Up Inspection issue, August 9, 2002.
(Attachment 4)

Regarding Mr. Siemaszko specifically, the independent root cause investigators made the following specific finding regarding his activities during 12 RFO:

During 12 RFO, the Reactor Coolant System engineer was relatively new and was left to manage the problem of boron on the head. He was successful in getting the head partially cleaned, but management did not recognize that the cleaning performed was inadequate to perform a comprehensive inspection. The formal reviews performed by the engineers were documented using the corrective action process. The condition report was reviewed by supervision and signed off even though it did not satisfactorily address the issues. Closer supervision of the head inspection and rigorous adherence to the corrective action process would have provided an opportunity to address head leakage at an earlier time.

Id., at 3.0.

This root cause finding accurately delineates exactly what Mr. Siemaszko has always said -- that he did the best he could within the limitations that had been imposed on him by management during 12 RFO. This included working with the decision, which had no technical basis, to continue to defer a modification to open the inspection "mouse" holes and the reinstallation of the reactor head on the vessel without a complete cleaning. There is not a single statement or inference in the 300 plus page Root Cause report that Mr. Siemaszko's performance was deemed to be at the bottom of the decade long system and management failures contributing to the hole in the reactor head.

It was not until July, 2002 when Mr. Jack Grobe, NRC Region III and head of the NRC's 0350 Task Force told FENOC that it was not satisfied with the company's failure to take personnel actions toward individuals that FENOC began a "witchhunt." In this case that is precisely what happened. Mr. Grobe stated publicly at the 0350 meeting, and was quoted locally and within the company, that he was not satisfied with the FENOC personnel decisions to address the incident. Shortly after these discussions between Grobe and FENOC, FENOC brought in outside counsel to conduct yet another "investigation" of the same facts and

William Travers, Ph.D.

June 6, 2003

Page 9

circumstances that had already been subjected to substantial scrutiny and resulted in no adverse action towards Mr. Siemaszko.

It is my assertion that this last investigation was orchestrated to find individual employees to "scapegoat" to appease the regulator. I have not seen any evidence that the company intended to take any personnel action against Mr. Siemaszko before NRC intervention on this subject.

Mr. Siemaszko had been assigned significant work on the Latent Issue Review Team (LIRT) in Spring, 2002. He received no notice of performance issues or complaints, no notices that he needed to improve performance or upgrade his skills. There was no indication to Mr. Siemaszko that the company was dissatisfied with him at all. In August 2002 he was removed, without any explanation from the LIRT and then called in and terminated in mid-September. Indeed, at the September 18, 2002 termination meeting Mr. Jim Powers could not provide any details or explain the "performance" problems that were allegedly the basis of his termination. In fact, until Mr. Siemaszko received the September 24, 2002 termination letter he had no idea what the alleged "performance issues" were that he was terminated for. If these performance issues were so significant, it is unlikely that they would have gone unnoticed or unaddressed by Mr. Siemaszko's chain of command, or unarticulated by the persons terminating him.

I am, by copy of this letter to the Inspector General's office, formally requesting a review of the facts and circumstances to determine what Mr. Grobe actually told FENOC on this subject in general, or specifically about Mr. Siemaszko that resulted in yet another investigation and ultimately his termination. It is my concern that Mr. Grobe and the 0350 team may have exceeded the proper regulatory authority of the Agency.

2) Mr. Siemaszko's Attempts to Remove Boric Acid on the Davis-Besse Reactor Head

FENOC asserts that Mr. Siemaszko was the Systems Engineer "responsible for the reactor coolant system and the RPV head inspection during the twelfth refueling outage" ("12 RFO") (*Id.*, at 9) In connection with 12 RFO, FENOC's letter states that it provided Mr. Siemaszko with the tools and authority he requested, inferring that management did everything that Mr. Siemaszko asked of it to accomplish the task. This statement totally twists the facts.

Without Mr. Siemaszko's initiative, there was no company plan to do anything about the existing deposits of boric acid. There was no outage budget assigned for cleaning. There was no CR Action Item issued to clean the head as had been committed to in the closure of PCQAR 1998-0649. There was no plan to clean the head in the outage plan or scope at all. Mr. Siemaszko advocated the use of water to clean the head of the reactor during 12 RFO because the head had never been cleaned before and there was no procedure for cleaning the type of boric

William Travers, Ph.D.

June 6, 2003

Page 10

acid build up that existed on the head. The fact is there was no precedent, anywhere in the industry, for the type of cleaning that needed to be done at Davis-Besse.⁹

It is important to know the dates of certain relevant events to understand the context in which things occurred. Mr. Siemaszko began working for Davis-Besse on July 6, 1999. 12 RFO began less than eight months later, running from April 6 to May 1, 2000. During 12 RFO he requested, suggested, and demonstrated through a bench-mark trip to Arkansas Nuclear One ("ANO") that water could be used to remove boric acid from the reactor head. During 12 RFO it became clear that the water cleaning method that was being used could not dislodge the mountains of lava like boric acid that had accumulated out of reach of the water nozzle. He then requested additional time, tools and resources to finish the job. He was told by Messrs. Eshelman, Geisen, McIntyre, Moffitt, Coakley, and others that he had done all that there was time to do during 12 RFO and that he would have to wait until 13 RFO to complete the job.

While it is true that Mr. Siemaszko did not issue a "stop work order" upon receiving that information and forcibly extend 12 RFO, his failure to do so was based on his good faith belief that the boric acid accumulation was the effect of a small leak in a CRDM flange, not as a result of a cracked nozzle. His belief was based on the then state of the art knowledge of the impact of boric acid on the RPV. Likewise, the decision of his management about whether to permit Mr. Siemaszko to finish cleaning the reactor head during 12 RFO and postpone it to 13 RFO was also based on the state of knowledge of the impact of boric acid, along with full knowledge of the extent of the boric acid accumulation.¹⁰

Mr. Siemaszko's failure to stop work during 12 RFO did not mean he then ignored the boric acid build up. Mr. Siemaszko continued to raise his concerns about the boric acid on the

⁹ See, Davis-Besse Degradation of Reactor Pressure Vessel Head, Technical Sequence of Events, Attachment 1, 3.0 Evaluation.

¹⁰ According to the independent Root Cause Analysis, Mr. Siemaszko told management he was running out of time to clean the RPV head before the end of the outage, and that outage management decided that no additional time and dose should be spent "because further attempts would not produce successful results, and the results were believed to be acceptable." *Id.*, at Section 3.0. There is no indication in the report that outage management was unaware of the remaining boric acid, nor could they have been. The original estimate for time and dose for the cleaning effort was 30 man-hours and 100mRem dose. At the time the work was declared "finished" by outage management, there had been 282.31 man hours expended and 1611 mRem hours. All the outage managers were aware that the cleaning was not finished. To the best of our knowledge, none of those managers have been removed from company employment rosters. Yet it was their lack of judgment that actually put the public at risk, putting the outage schedule over the more prudent action of finishing the head cleaning efforts.

William Travers, Ph.D.
June 6, 2003
Page 11

head. Even your own staff confirmed this. During the January 14, 2003 Commission Briefing on *Lessons Learned: Davis-Besse Reactor Vessel Head (RVH) Degradation* in Rockville, MD, you reported to the Commission:

By the time of the 2000 refueling outage, staff engineers had vigorous discussions with senior management to convince them that additional head cleaning activities needed to be conducted before starting the facility up from the refueling outage. They had conducted other activities to clean the head, but they were not fully successful earlier in the outage. Nevertheless, the plant was restarted, even though these subsequent efforts were not fully effective in removing all the deposits. The task force identified that some of these individuals, both staff and managers, were aware that the head had not been completely cleaned....and also had seen videotapes of head inspections conducted at the onset of the outage which graphically depicted significant boric acid deposits on the head.

(Transcript of January 14, 2003 Commission briefing, p. 21) As you know, the staff engineer referred to was Mr. Siemaszko.

For Mr. Saunders to now assert that, if only Mr. Siemaszko had done more to make management listen to him, proves the entire point. Mr. Siemaszko did his job, followed the procedures, notified and argued with his management, made a record of the concerns, and insured that Condition Reports were written on the boric acid accumulation.¹¹ He failed to secure the funding or scheduling to do what he believed was the most prudent approach to the problem at the time. Moreover, after 12 RFO, Mr. Siemaszko continued to raise and pursue the head cleaning activities he had planned for 13 RFO. Inherent with these activities were numerous statements that addressed the condition of the boric acid accumulation.¹² His evaluations confirm

¹¹ Mr. Saunders asserts that Mr. Siemaszko did not write a CR either. This is a deceptive statement meant to confuse the reader. CR 2000-0782 was written on April 6, 2000 during 12 RFO, by Peter Mainhardt, who was providing Systems Engineering support during the night shift. It contained the following statement, "Inspection of the Reactor flange indicated Boric Acid leakage from the weep holes (see attached pictures and inspection record). The leakage is red/brown in color...the total estimated quantity of leakage through the weep holes and resting on the flange is approx. 15 gallons"and also attached a picture of the rust-laced boric acid streaming out of the weep holes on the reactor. Mr. Siemaszko himself wrote CR 2000-1037 and Work Order 1846 on April 18, 2000, documenting the presence of boric acid on the reactor head and to request use of water to clean it.

¹² Mr. Saunders' letter states that "at the close of 12 RFO" Mr. Siemaszko signed off a work order that the accumulated boric acid was removed. Mr. Saunders' statement is intended to mislead the reader, and is again, an indication of the willingness of FENOC to attempt to mislead the NRC in order to avoid accountability for what actually happened. In reality, during the

William Travers, Ph.D.

June 6, 2003

Page 12

that he was aggressively seeking answers to safety issues about the problem, including the issues about the reactor head leaks.

The implication that Mr. Siemaszko was an advocate of delaying the project of enlarging the weep holes into meaningful access holes is an unsupported and untruthful statement. Mr. Siemaszko, and Mr. Prason Goyal before him, advocated enlarging the access holes before, during and after 12 RFO. On August 30, 2001 Mr. Siemaszko issued Engineering Work Request 01-0378-00 to request three large holes in the Reactor Head Service structure after Modification 94-0025 had been issued in 1994 to provide such openings was canceled. In the justification for the request, Mr. Siemaszko states:

Large access holes needed to be provided to enable removal of the boric acid and inspection of the nozzles.

As to the robotic crawler, it was David Geisen's request to obtain a crawler, AFTER 12 RFO was completed and in preparation for 13 RFO. Mr. Siemaszko knew that a crawler would not be able to crawl over the mountains of boric acid, so although he did not object to the purchase of one, he knew it would be of no use to him in cleaning the boric acid build up, and of little use in filming it. The camera had to be purchased through Mr. Geisen's department budget, and he added the crawler at the request of Mr. Geisen. Nor did Mr. Siemaszko use the crawler for any of the reactor head work or at any other time that he can recall.

3) Mr. Siemaszko provided accurate information to his management for inclusion to the letter to the NRC

FENOC asserts that Mr. Siemaszko was "principally responsible for the technical input to portions of FENOC's responses to the NRC Bulletin 2001-01. It then states that his "inattention to detail and failure to inform FENOC managers...over the course of several months - significantly contributed to inaccurate and incomplete information being provided to the NRC." Specifically, FENOC accuses Mr. Siemaszko of failing to inform FENOC managers about deficiencies with the RPV head inspection in April, 2000, during 12 RFO, and "those previously conducted by others in 1996 and 1998." Apparently, as the letter asserts, FENOC is taking the official position that FENOC's "substantial misunderstanding" about the condition of the Davis-Besse RPV lies solely with Mr. Siemaszko. As described throughout this letter, and FENOC's own Root Cause Analysis this is, of course, not true.

outage, Mr. Siemaszko initiated a Work Order that addressed the construction of the scaffolding and other work necessary to prepare to job for cleaning the head. The actual cleaning of the reactor head was, of course, done pursuant to Radiological Work Permit (RWP) 5132 -- not a work order. Mr. Saunders, and everyone familiar with the facts, knows this.

William Travers, Ph.D.

June 6, 2003

Page 13

It is true is that Mr. Siemaszko, and other employees, were placed in an untenable position by management to produce information that could justify the desperate need of the company to establish that the RPV head was "clean" of boric acid in 1996. FENOC needed to make that representation to the NRC in order to justify the continued operation of the facility into February 2002. In order to do so, FENOC needed two things – a factual basis to represent to the NRC in the fall of 2001 in response to IB 2001-01 that the head was clean as of 1996, and an NRC unwilling to probe that representation.¹³ FENOC managed to achieve both.

With respect to the factual representations the company made to the NRC about the inspection results, Mr. Siemaszko provided the following information to the company in his draft for inclusion in the initial September 4, 2001 letter to the NRC about 12 RFO:

No visible evidence of nozzle leakage was detected. Majority of nozzles were inspected. The head cleaning was limited by the location and opening size of the weep holes. The head was cleaned with demineralized water as best it could be considering the dose and the method.

(Emphasis added)

The final letter to the NRC, September 4, 2001, Serial 2731, did not include these limitations, but instead stated:

No visible evidence of nozzle leakage was detected. The RPV head area was cleaned with demineralized water to the greatest extent possible while maintaining the principles of ALARA (As Low As Reasonably Achievable) regarding the dose.

The qualifiers were removed by the licensing department and/or FENOC managers, not Mr. Siemaszko. FENOC wrote, signed and verified the information in the responses to the NRC as true. The information in the final letter to the NRC was not accurate. This was not an oversight. When the final draft was circulated for review, management was specifically advised that the statement could be misleading. An August 27, 2001 e-mail from Prasoon K. Goyal to Rodney M. Cook observes that the statements in the draft about the 1998 and 2000 inspection results "...gives an impression to the reader that we were able to look at all the CRDMs. It is very difficult to look at the CRDMs when there is boric acid around it. Do we want to re-word this?"

¹³ See, generally, *Report of the Office of the Inspector General on NRC's Regulation of Davis-Besse Regarding Damage To The Reactor Vessel Head*, December 30, 2002, Case # 02-03S.

William Travers, Ph.D.
June 6, 2003
Page 14

(See, August 27, 2001 e-mail from Prason Goyal to Rodney M. Cook)¹⁴ (Attachment 5)

In retrospect he agrees that, although he was comfortable with the accuracy of the information he provided to management, the information as presented to the NRC by management was, at a minimum, misleading. Although difficult, embarrassing and painful, Mr. Siemaszko has told the company, the NRC, and the Department of Labor, and most importantly has admitted to himself that he allowed himself to be pressured into a situation that, in part, resulted in the NRC being provided misleading information. But acknowledgment that he might have been able to stop the September 4, 2001 letter from being issued, or should have done something about it once it had been issued, is to ignore the significant pressure that he and others were placed under by FENOC management during this time frame. By this time Mr. Siemaszko had been severely criticized for questioning management or expressing his own opinion about issues.¹⁵ He had been "schooled" in the Davis-Besse management style of compartmentalized information and deferral of analysis of that information to upper management. He accepted the "company" way of doing business by answering only the question asked. He cooperated with his management in their efforts to keep the plant running, and justified it by holding on to the accuracy of his slice of the data. He was an engineer, not a wordsmith and relied upon the corporate integrity of FENOC to ensure that the NRC was provided full, complete and accurate information. He was mistaken in that reliance.

The "Missed Opportunities"

Mr. Saunders asserts that Mr. Siemaszko was terminated for his involvement in the "missed opportunities to earlier prevent or detect" the hole in the reactor head. A review of the "missed opportunities" for this Licensee to have prevented this situation begins long before February 2002.

¹⁴ Mr. Siemaszko does not recall reviewing that e-mail, or any of the drafts after his initial input.

¹⁵ In one significant incident during the summer of 2001 Mr. Siemaszko made a statement to the Directors during a morning Management Communication meeting (MCTM). He expressed a complaint that "loss of generation," even when undertaken to determine the cause of a potentially serious problem, was considered a functional failure under the Maintenance Rule program. His concern, as the RCS Systems Engineer was that the criterion worked to discourage prudent safety and maintenance decisions because of the impact of a "functional failure" on the individual accountable for the system. His presentation was followed by an e-mail directive to every System Engineer imposing a new requirement that before presenting any information to the Directors each presentation had to be rehearsed with the section manager and executed without changes agreed upon during the rehearsal. Expression of personal opinions was strictly forbidden without prior approval.

William Travers, Ph.D.
June 6, 2003
Page 15

I have included this section because in your evaluation of the 2.206 request it is crucial for you to consider the entire performance history of this licensee.¹⁶ That history does not start with the issuance of IB 2001-01, as has been assumed in the Staff's consideration of this event, but must be evaluated against the entire history of this Licensee's performance.

In June 1985 Davis-Besse was on the troubled plant list as a result of a low rating under the Systematic Assessment of Licensee Performance ratings. As summarized in the NRC's Safety Evaluation Report Related To The Restart of Davis-Besse Nuclear Power Station (SER):

Over the past several years of operation at Davis-Besse, the staff has identified deficiencies through enforcement actions, a Performance Appraisal Team (PAT) inspection, and Systematic Appraisal of Licensee Performance (SALP) evaluations, as well as through more routine inspection and licensing contacts. In late 1983, Toledo Edison Company, in response to a request from the NRC Region III Administrator, initiated the Performance Enhancement Program (PEP) to improve regulatory performance. Modifications to this program were made in response to the latest SALP (January 1984) and, before the event on June 9, 1985, Toledo Edison had initiated efforts to strengthen the organization and improve performance.

Id., at 3-1.

In February, 1985 the licensee committed to a program to bring Davis-Besse to superior quality. Less than four months later the plant experienced the most serious accident since Three Mile Island.

A few months later, on June 9, 1985 a major safety significant incident occurred at Davis-Besse when, while operating at 90% power, one of the two main feedwater pumps tripped. This trip, in turn, led the reactor and turbine to trip, both main steam isolation valves spuriously closed, which resulted in a loss of steam to the second main feedwater pumps. Operators erred in responding to the events, malfunctions occurred in the two redundant valves in the auxiliary feedwater pumps, and there was a total loss of feedwater to the steam generators. The plant was within 13 minutes of a catastrophic event.¹⁷

According to the SER, the NRC's Incident Investigation Team identified eighteen principal findings and conclusions regarding the Loss of Feedwater accident (NUREG 1154). Most of these findings and conclusions related directly or indirectly to the weak performance of

¹⁶ Toledo Edison was the original license holder for the Davis-Besse facility.

¹⁷ See, NUREG-1154, "Loss of Main and Auxiliary Feedwater Event at the Davis-Besse Plant on June 9, 1985", p. 7-1.

William Travers, Ph.D.
June 6, 2003
Page 16

the nuclear mission management and to the overall quality of maintenance and training – some of the same programmatic aspects identified earlier by the SALP review, PAT, and other regulatory programs. (See, SER, at 3-1.) Ominously predicting the future, the NRC found in 1985, the roots of the 2003 debacle:

As a result of the NRC's analysis of the 1985 accident, it concluded that "the licensee's lack of attention to detail in the care of plant equipment was the underlying cause of the loss of both main and auxiliary feedwater. The team also concluded that the licensee has a history of performing troubleshooting, maintenance, and testing of equipment, and of evaluating operating experience related to equipment in a superficial manner and, as a result, the root cause of the problems are not always found and corrected.

(Emphasis added, Davis-Besse Restart SER Sec 3, at 3-5, and 8-1)

Less than three years later, the NRC issued Generic Letter 88-05 on March 17, 1988 and the same process started all over again.

Mr. Siemaszko has identified at least twenty-three separate "missed opportunities" that could have prevented the propagation of G9 nozzle crack during the 14 years prior to 12 RFO in the spring of 2000. Many, but not all of these have also been identified in the company's root cause analysis. I have not included those "missed opportunities" in this letter, but will provide that information in the continuing investigation into Mr. Siemaszko's concerns being conducted by the NRC.

Safety Conscious Work Environment Implications

The company has chosen its "new" management approach to deal with those who raise concerns or challenges – attack, humiliate, defame and try to destroy. The impact of that management decision and the behaviors being exhibited by the company are very serious to the restart of Davis-Besse.

I have not responded to the attacks against Mr. Siemaszko until now, after the completion of the DOL investigation into his complaint. Regardless of the ruling, the issue of Mr. Siemaszko's conduct and the basis for his termination will likely be the subject of intense, invasive, and disruptive litigation for some time to come. The fall out of such a "scorched earth" defense against an employee exercising his right under the law is never conducive to establishing a Safety Conscious Work Environment (SCWE) or improving the overall safety culture of a facility. It is reflective of a management style that does not appreciate or care about the impact of such litigation. I find that unfortunate and disappointing

William Travers, Ph.D.
June 6, 2003
Page 17

It is clear that a very deliberate and intentional plan was undertaken to distribute the 2.206 response to the media at the very time that the Department of Labor investigation was ongoing. FENOC's current activities to humiliate and defame Mr. Siemaszko across the site are being repeated, reported and discussed amongst plant employees and stake-holders. There is a difference between vigorous legal defense, which respects the parties and preserves SCWE, and a strategy that is totally oblivious to and does not care about the impact of such conduct on the wider employee audiences.

In this case the company has, in effect, pointed the finger at Andrew Siemaszko and attempted to blame him for not finding the hole in the reactor head sooner, for being the architect of the misleading information presented to the NRC, and for failing to prevent this entire debacle. The company's decision to do so speaks volumes about the character and competence of the present management team at First Energy and their commitment to establishing a credible safety-conscious work environment. One of the truisms I have found in twenty years of this work is that public humiliation of a single employee is never an effective or wise strategy; it is a sign of a corporate arrogance that has a devastating impact on employees' willingness to speak up or speak out about anything.

Conclusion

In January, 1986 two Morton Thiokol engineers, Roger Boisjoly and Allan McDonald tried, but failed, to convince their management to delay the launch of the Challenger. Two weeks before September 11, 2001, an FBI agent in Minnesota, tried, but failed, to access Zacarias Moussari's computer information in order to prevent him from flying planes into the World Trade Center. Later that fall, Sharron Watkins tried, and failed, to prevent the Enron financial debacle. In April, 2000 Andrew Siemaszko tried, but failed, to clean the head of the Davis-Besse reactor.

Had Mr. Siemaszko been permitted to do so he would have found the hole in April, 2000. He would have been a hero. Instead the outage management team ordered his scaffolding dismantled because the time was up – ready or not. Two years late when the hole in the reactor became a matter of public knowledge, he told everyone who would listen what had happened. He agreed to talk to the NRC Office of Investigations without a company lawyer present – he had nothing to hide about his work or the information he presented to his management.

Could Mr. Siemaszko have done more to prevent this situation – yes. Just like the Morton-Thiokol engineers, Enron's Watkins, FBI's Rowley, and others who have walked the plank of professional suicide. He could have done more, and now he wishes that he would have. He, like all employees tried to walk the thin line between cooperation and support of his employer, i.e., "team work" and resistance to decisions he was not empowered to make, but expected to carry out, i.e., "not being a team player." He does believe that he has some

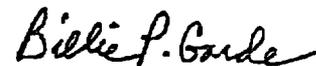
William Travers, Ph.D.
June 6, 2003
Page 18

responsibility for what occurred at Davis-Besse. He recognizes that he could have called the NRC or the newspaper or issued a 'stop work' order during 12 RFO, but at the time it didn't appear to him – or anyone else – that it was of immediate safety significance. Of course, neither he nor anyone else knew for sure the true extent of the condition of the head under the boric acid, and therefore assumed it was fine, just as FENOC management had assumed for the previous fourteen years. This lack of proof is what FENOC used to intimidate an entire agency into inaction. Is it surprising that the same approach silenced their own employees?

Mr. Siemaszko is willing to accept equitable accountability for his involvement, but he should not be the "scapegoat" for a decade of management and system failures simply because he was the one person who refused to resign for misconduct when presented the "option" to do so. He refused to quit because he believed then, and believes now, that –on balance – his actions did far more to bring the problem to light than to hide it. And any fair assessment of all the facts would prove that to be true.

I believe him, and am proud to represent him. He immigrated to this country from Europe to find a better life; he worked his way through school to become a professional nuclear engineer; he transferred to Davis-Besse on strong recommendations of years of good performance at another nuclear plant. And, in spite of the unjustified, inaccurate and mean spirited attack on his credibility by FENOC, Mr. Siemaszko is a good man.

Respectfully,


Billie Pirner Garde

cc: George A. Mulley, Jr.
Senior Level Assistant for
Investigative Operations
U.S. Nuclear Regulatory Commission
Office of the Inspector General
Mail Stop T5-D28
Washington, D.C. 20555
(By Fax: 301- 415-5091 and Regular U.S. Mail)

Samuel Collins, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
(By Fax: 301-415-8333 and Regular U.S. Mail)

William Travers, Ph.D.

June 6, 2003

Page 19

Congressman Edward J. Markey
United States House of Representatives
ATTN: Michal Ilana Freedhoff, Ph.D.
Senior Policy Associate
2108 Rayburn House Office Building
Washington, D.C. 20515

Congressman Dennis J. Kucinich
United States House of Representatives
ATTN: Auke Mahar-Piersma
Legislative Assistant
1730 Longworth Office Building
Washington, D.C. 20515

Congressman James Greenwood
United States House of Representatives
2436 Rayburn House Office Bldg.
Washington, D.C. 20515

Dave Lochbaum
Nuclear Engineer
Union of Concerned Scientists
1707 H Street, N.W., Suite 600
Washington, D.C. 20006-3962
(By Fax: 202-223-6162 and Regular U.S. Mail)



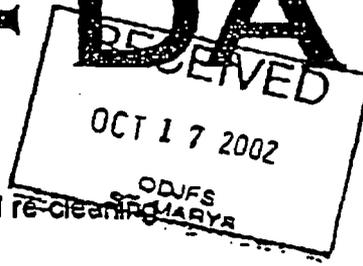
The Out in

Produced by:
Outage Communications

Davis-Besse's
Latest Update
12RFO

April 29, 2000

12RFO - DAY 29



Day 29 Activities

- ★ Decon of refueling canal
- ★ Preparations for stud hole caps inspection and re-cleaning
- ★ Plenum Installation
- ★ Preparations for Reactor Head move

Reactor Head Cleaning

Due to a history of leaking Control Rod Drive Mechanism (CRDM) flanges on the Reactor Head, boric acid has built up in this area. Access to this area is very difficult due to the construction of the Service Structure surrounding the area. The Reactor Head is carbon steel, and boric acid can be corrosive to carbon steel. Five CRDM flanges were identified as leakers and repaired this outage.

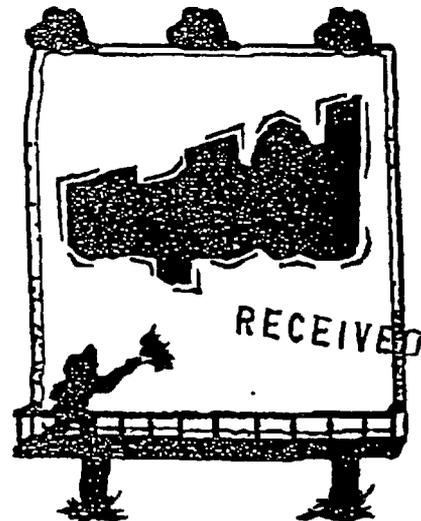
After reviewing industry experience and videotapes of the boric acid build-up, Andrew Siemaszko, Plant Engineering, set a personal goal to resolve this dilemma. Andrew joined the Davis-Besse team approximately one year ago, and is responsible for the Reactor Coolant System components.

He realized that it would be difficult to properly assess the condition of the Reactor Head each outage if we were not able to remove any residual boric acid prior to the start up of a new operating cycle. Cleaning of the Reactor Head had been considered in past outages, but resolution addressing all concerns was not achieved.

Andrew believed that cleaning the Reactor Head was the right thing to do. He was faced with convincing others that this could be done safely, and would assist future inspections of the Reactor Head. Andrew contacted ANO, when he learned that this plant had successfully cleaned their Reactor Head. He came up with a plan to use a hot water pressure washer, using a vacuum and rags to ensure that the water would not get on the flanges. Andrew successfully obtained the necessary concurrence and approvals to implement this plan.

The next challenge was to ensure that the work and workers above the "mouse holes" where the cleaning was to take place, and the work and workers below the "mouse holes" were not affected by this process. Andrew met with all interested parties and the Radiation Protection Technicians to proceed with the Reactor Head cleaning. The Reactor Head was successfully cleaned yesterday, thanks to Andrew's efforts, as well as those of the Radiation Protection Technicians. This is the first time in Davis-Besse history that the Reactor Head has been cleaned.

Andrew was a salesman to management, Radiation Protection, and Outage Management, because he felt so strongly about the need to successfully clean the Reactor Head. Congratulations, Andrew, on your perseverance, and willingness effectively deal with the challenges that were presented.



Glenn R. McIntyre

05/10/2000 12:28 AM

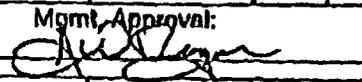
To: Andrew J. Siemaszko/FirstEnergy@FirstEnergy
cc:
Subject: RRR

Thanks for the detailed writeup of 12RFO issues.
It has been a pleasure having you working in our group.
You are aggressive, confident of your abilities, and always want to do the right and proper thing.
I look forward to a great operating cycle and working with you.
glenn

Attachment 2

RECEIVED
 OCT 17 2002
 ODU'S
 ATTORNEY

2001 Performance Appraisal

Level	Competencies	Behavior Effectiveness Ratings			Overall Results Achieved
		Ineffective	Effective	Highly Effective	
Individual Level	Demonstrates Technical Knowledge		X		Marginal
	Pursues Self-Development / Growth		X		Achieves X
	Demonstrates Personal Drive / Initiative		X		Exceeds
	Demonstrates Honesty, Integrity and Trust			X	[REDACTED]
	Fosters Teamwork / Collaboration		X		
	Demonstrates Safety Consciousness			X	
	Communicates Effectively		X		
	Promotes Continuous Improvement			X	
	Drives Customer Service		X		
Performance Rating: // 8, per FE Compensation System					
Employee's Name: Andrew J. Siemaszko		Mgmt. Approval: 			Date: 2-1-02

Attachment 3

RECEIVED

2001 Performance Appraisal

Andrew J. Siemaszko

No.	Commitments	How will we measure your results?	What interdependencies do you have with team member or other functional areas?	Rating
1	Actively communicate equipment challenges to supervision and aggressively seek resolution.	<ul style="list-style-type: none"> • Periodic "On Your Plate" review with Supervisor discussing open issues and timelines for resolution. • Quality and timeliness of CR evaluations. • Review of Operator Burdens/Workarounds on assigned systems. 	Entire Davis-Besse Team for aggressive resolution of equipment challenges.	2
2	Demonstrate long term focus to ensure high reliability for assigned systems.	<ul style="list-style-type: none"> • Review System Performance Books. • Review of Long Range Plans. • Review System Health Report 	System Team and PRC for approval of Long Range Plans.	2
3	Develop contingency plan for degraded reactor vessel Internal Vent Valve (for 13RFO).	<ul style="list-style-type: none"> • Review contingency plan 	Outage Management and FTI	2
4	Perform benchmarking to assist in resolution of RCS unidentified leakage issue.	<ul style="list-style-type: none"> • Review of CR responses • Review of 13RFO plans 	Operations, Chemistry, Maintenance, RP, Outage Management, SYME	2

RECEIVED
 OCT 17 2002
 ODUPS
 ST. MARYS

RECEIVED

2001 Performance Appraisal

No.	Year-End Review Results Achieved	Contribution to Organization (e.g. financial, etc.)
1	<p>Andrew's primary equipment challenge in 2001 was increases/fluctuations in RCS unidentified leakage. Andrew aggressively pursued efforts to improve station understanding of the causes of the variability of calculated leakage. Andrew also participated as a team member in a task force assigned to address this issue and determine corrective measures. Additional work is still needed in this area to formalize and improve the station's response to a change in calculated unidentified leakage.</p> <p>A second unproven but more potentially more significant equipment challenge in 2001 was the issue of potential CRDM nozzle J groove cracking. Andrew's support of the team assigned to develop plans for resolving this issue in 13RFO has been favorably recognized by Management.</p>	<p>Andrew's efforts in evaluating and explaining changes in RCS unidentified leakage have provided station management the information necessary to support continued operation. This prevented the need for an unscheduled maintenance outage.</p> <p>The team efforts in addressing the CRDM nozzle J groove cracking concern ensured nuclear safety and minimized the negative financial impact that has resulted from the need to pull up the start date of the 13RFO.</p>

OCT 17 2002

RECEIVED

RECEIVED

06/06/03 FRI 17:50 FAX 202 289 8982
 10-17-2002
 CL&G
 T-874 P. 011/013 F-909
 025

2001 Performance Appraisal

No.	Year-End Review Results Achieved	Contribution to Organization (e.g. financial, etc.)
2	<ul style="list-style-type: none"> Andrew's efforts were important in obtaining approval of the Reactor Service Structure replacement project. Andrew demonstrated a long term focus through his attempts to implement the Fatigue Pro monitoring system to more closely capture transients. Although this program was not implemented in 2001 the delay was due to resource issues outside Andrew's control. Andrew demonstrated a long term focus through initiation of efforts to replace the Bently Nevada monitoring system. This effort is incomplete as this modification has not been budgeted or scheduled. 	<ul style="list-style-type: none"> The replacement service structure will reduce dose and shorten the critical path of future outages.
3	Andrew developed a contingency plan to re-inspect the internal vent valve bushing with replacement of the internal vent valve only if needed.	This contingency plan will minimize the impact on the scope and duration of the outage.
4	Andrew's benchmarking and research resulted in an increased understanding of the factors affecting the variability of calculated RCS unidentified leakage. It also ensured that SYME is aware of industry practices in tracking and resolution of unidentified leakage.	Improved understanding on the causes of changes in reported unidentified leakage permit the organization to make informed decisions on appropriate actions.

RECEIVED
 FROM THE DIRECTOR'S OFFICE
 OCT 17 2002
 AT ODUFS
 AT MASTERS

RECEIVED

DRAFT**Exit Meeting Notes
AIT Followup Inspection
August 9, 2002**

The AIT Followup Inspection Exit was conducted at 1300 hours on August 9, 2002. Marty Farber, Region III, was the lead inspector. Jack Grobe and Scott Thomas were also present.

The results of this inspection will be presented in Inspection Report 50-346/2002-08, and will be issued by August 30, 2002.

Marty stated that he did not look at intent with respect to 10 CFR 50.5 (willful misconduct) when he was evaluating issues of completeness and accuracy (10CFR 50.9).

Apparent violations that Marty cited will be noted as "significance to be determined." The NRC's safety significance assessment is not expected to be completed until after this Inspection Report is issued. Therefore, the issues will be carried as "Unresolved Items."

With respect to Apparent Violation citations, Marty provided the following:

1. **TS Violations**
 - a. **Operability of the Reactor Vessel head:** there is no apparent violation; there is no unique TS requirement for operability of the RV head.
 - b. **Pressure boundary leakage:** this is an Apparent Violation of TS 3.4.6.2.a
2. **Corrective Action Process (Appendix B, Criterion 16)**
 - a. **RCS Unidentified Leakage:** the Mode 3 walkdown specified as corrective action to CR 01-2862 was not completed. This is an Apparent Violation.
 - b. **Boron Deposits on the head:** this was identified in several CRs but was never trended and cleaning was never performed. This is an Apparent Violation.
 - c. **Boron deposits on the CACs:** Four CRs were generated on this issue, but only 1 mentioned the possibility of a relationship to nozzle leakage. This is a failure to address recurrent deposits on the CACs. This is an Apparent Violation.
 - d. **Clogging of the Radiation Monitor Filters (CR 99-1300 and three other CRs):** Failure to address the recurrent clogging of the filters. This is an Apparent Violation.
 - e. **Service Structure modification cancellation:** There were delays in the implementation of this modification for economic reasons since 1990. Inspection of the head was a key input for the NRC acceptance of the GL 88-05 program. This is an Apparent Violation.
 - f. **Nozzle 31 flange leakage during 11 RFO:** Leakage was identified during 11RFO, and the issue of steam cutting of the flange face was also identified. However, the leakage was not corrected until 12RFO. This is an Apparent Violation.

DRAFT

3. **Procedural Adequacy/Adherence (Appendix B, Criterion 5)**
 - a. **Boric Acid Corrosion Control Program/Procedure:** weaknesses were identified that collectively contributed to the head corrosion. This procedural inadequacy is an **Apparent Violation**.
 - b. There was a failure to follow the Boric Acid Corrosion Control procedure in that boric acid was not removed and the condition of the head was not evaluated. This is an **Apparent Violation**.
 - c. CRs documenting collective significance and repetitive adverse trends for boric acid accumulation were classified as routine CRs versus significant, in **Apparent Violation of the Corrective Action Program**.
4. **Completeness and Accuracy of Information (10CFR 50.9):** Collectively the following represent an **Apparent Violation**.
 - a. Mod 90-0012 was voided based on "the reactor head being successfully cleaned." This is an inaccurate statement.
 - b. PCAQR 98-649 indicated complete cleaning and referenced a B&W report that stated that leaving boric acid on the head was acceptable. This was inaccurate in that the head was not cleaned, and the statement from the B&W report could not be found.
 - c. CR 2000-1037 and the associated Work Order 00-001846-00 stated that the head had been cleaned "without deviation." This was inaccurate.
 - d. QA Audit Report of 12RFO stated that the head was cleaned.
 - e. Serial 2472: Results were based on an integrated inspection schedule, yet the BAW-2301 only included 2 plants, with no real basis for acceptability and applicability to DBNPS.
 - f. Serial 2731: Several errors were cited:
 - i. The 2 inch gap at the top of the head did not provide impedance to inspection?
 - ii. Pre-existing Boric Acid deposits providing limitations to inspection of bare metal were not cited.
 - iii. Previous inspection cited "some accumulation of boron" which is a misstatement.
 - iv. Statement that leakage noted was downward flow and was clearly evident is not substantiated.
 - g. Serial 2735: Statements on head cleaning are misleading.
(The inspector stated he stopped looking after finding this many examples)

This was noted as a total of 11 **Apparent Violations**.

Jack Grobe stated that, with regard to the 10CFR50.9 violation, they would be interested in any further understanding of anything there were missing.

The issues will only be **Unresolved Issues** until significance is determined. The NRC is looking at this from the **Safety Significance Process** and from a **Risk Assessment**. The **Risk Assessment** will look at what could have happened if the **Bulletin** had not been

DRAFT

issued, Oconee had not seen cracks, and we had no prompting to look at the head this outage.

The 10CFR50.9 violation could be categorized as willful or careless disregard (per 10CFR50.5). This assessment will be made by the Office of Investigation, and may not be available for several more months.

Jack Grobe also stated that the 0350 process would not end upon restart. The process would continue until the NRC regained confidence in our operations.

Specifically, Jack mentioned that the Revised Oversight Process was based on several premises: 1) there is a mature industry, 2) there is a solid safety culture, 3) the industry is self critical, and 4) the people are exceptional people. From the NRC perspective, we had failed on several of these premises and the NRC has lost confidence in DBNPS.

Jack cited that a fairly strong management team had been put into place at the DBNPS, but that managers don't operate the plant. We needed to understand our responsibility to the surrounding community.

Lou Myers stated that we had lost our professionalism. All at DBNPS are accountable: we had become arrogant, worked in isolation, and exhibited a lack of professionalism. There was a lack of ownership/rigor/questioning attitude at times.

Jack Grobe stated we have the opportunity to restart the plant.

Following a discussion of the proprietary nature of documents that had been reviewed and how these may have to be dispositioned if requested under the Freedom of Information Act, the NRC concluded the exit.

Prasoon K. Goyal

08/27/01 11:41 AM

To: Rodney M. Cook/FirstEnergy@FirstEnergy
cc: Andrew J. Siemaszko/FirstEnergy@FirstEnergy, Dale L.
Miller/TE/FirstEnergy@FirstEnergy, Dale R.
Wuokko/TE/FirstEnergy@FirstEnergy, David H.
Lockwood/TE/FirstEnergy@FirstEnergy, Frank W.
Kennedy/TE/FirstEnergy@FirstEnergy, Mark A.
McLaughlin/TE/FirstEnergy@FirstEnergy
Subject: Re: Serial 2731 8-27-01 Version 1b 

I have following comments:

- 1) April 1998 inspection .Last sentence The head was videotaped after cleaning. We need to make sure that we have the tapes. It also applies to 2000 inspection also.
- 2) Subsequent review of 1998 and 2000 inspection videotape results. The discussion here gives an impression to the reader that we were able to look at all the CRDMs. It is very difficult to look at the CRDMs when there is boric acid around it. Do we want to reword this?.
- 3) Item 1.e requests a description of the cabling from the top of the RV head to the missile shield. We are silent on this subject.
- 4) Please delete the straight line shown on the right hand side of Figure 3 and page 19 of 19.