



May 13, 2005

(By e-mail to hearingdocket@nrc.gov and regular U.S. Mail)

Annette Vietti-Cook, Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SUBJECT: REQUEST FOR HEARING IN RESPONSE TO ORDER (IA-05-021) BANNING
ANDREW J. SIEMASZKO FROM INVOLVEMENT IN NRC-LICENSED ACTIVITIES**

Dear Ms. Vietti-Cook:

On behalf of Ohio Citizen Action and the Union of Concerned Scientists and pursuant to 10 CFR 2.202, I hereby request a hearing on the individual enforcement action proposed on April 21, 2005, by the NRC against Mr. Andrew J. Siemaszko. Page 11 of the subject order specified that anyone other than Mr. Siemaszko requesting a hearing shall set forth with particularity the manner in which his interest is adversely affected by this order and shall address the criteria set forth in 10 CFR §2.309. I shall endeavor to do so in the following two sections.

Manner in which our interests are adversely affected by this order

Ohio Citizen Action is the state's largest environmental with 100,000 dues-paying members. Ohio Citizen Action combines original, newsmaking research, an extraordinary ability to stay in touch with members door-to-door and on the phone, and community 'good neighbor' campaigns. Ohio Citizen Action was heavily engaged over the past three years with the Davis-Besse problems as indicated by the materials posted on that portion of the website, <http://www.ohiocitizen.org/campaigns/electric/nucfront.html>. Ohio Citizen Action has invested considerable effort seeking correction of and accountability for the problems plaguing Davis-Besse.

The Union of Concerned Scientists is a nonprofit partnership of scientists and citizens combining rigorous scientific analysis, innovative policy development, and effective citizen advocacy to achieve practical environmental solutions. UCS has long sought consistent enforcement of the Commission's regulations. UCS has formally petitioned the NRC seeking enforcement actions against both companies for violations of NRC's regulations when that consistency was lacking. For example:

1. By letters dated September 25, 1998, and November 9, 1998, UCS petitioned the NRC for enforcement actions against the River Bend and Perry licensees for operating their reactors with known fuel damage. (Director's Decision DD-99-08 dated April 19, 1999)
2. By letter dated November 24, 1998, UCS petitioned the NRC for enforcement action against the Diablo Canyon licensee to remedy identified safety culture problems. (Director's Decision DD-99-05 dated March 12, 1999)
3. By letter dated October 9, 1997, UCS petitioned the NRC for enforcement action against the D. C. Cook licensee for unresolved problems with the ice condenser containment and process problems. (Director's Decision DD-99-03 dated February 11, 1999)

4. By letter dated March 14, 2000, UCS petitioned the NRC for enforcement action against the Indian Point Unit 2 licensee regarding the impaired condition of steam generator tubes. (Director's Decision DD-00-04 dated October 6, 2000)

UCS has also, albeit less frequently, engaged the NRC about enforcement actions (or lack thereof) against individuals who violated NRC's regulations. For example:

1. By letter dated May 25, 1999, UCS petitioned the NRC to take enforcement action against the Radiation Protection Manager at the Perry nuclear plant whose violation of 10 CFR 50.7 caused the NRC to propose a \$110,000 civil penalty against his company, FirstEnergy (EA 99-012). The NRC denied the petition on June 23, 1999 on the basis "that the Manager was not familiar with the requirements of 10 CFR 50.7."
2. By letter dated April 2, 2001, UCS provided Mr. Frank Congel, then Director of the NRC's Office of Enforcement, with a 40-plus page report on the inconsistencies between sanctions imposed by NRC against individuals versus sanctions imposed and not imposed on companies. In that report, UCS documented a very clear pattern where NRC "throws the book" at working level employees and "pulls its punches" against upper level workers for similar or worse violations.

UCS's perspectives on its enforcement policy and implementation have been formally solicited by the NRC. For example:

1. On March 14, 2001, UCS was invited by the NRC's Office of Nuclear Reactor Regulation to be a panelist at a Regulatory Information Conference session on the agency's allegation process. UCS made a presentation which concluded that the NRC's enforcement policy is NOT meeting its objective (NUREG-1649) of "Responding to violations of regulations in a predictable and consistent manner that reflects the potential safety impact of the violations."
2. In December 2003 or thereabouts, UCS was invited by the NRC's Office of Enforcement to be a panelist at a workshop on its pilot Alternate Dispute Resolution process.

In the specific matter of problems at Davis-Besse that the NRC now seeks to exclusively blame on Mr. Siemaszko,* UCS retained counsel in the person of Diane Curran to review the available documentation and prepare a legal memo for UCS outlining the potential violations. Ms. Curran and I met with Mr. Guy Caputo, Director of the NRC's Office of Investigations, in his office on April 10, 2003, to inform him about our legal memo, summarize its findings, and explain our intention to submit the legal memo to Mr. Gregory White, the United States Attorney for the Northern District of Ohio. We provided the NRC with a courtesy copy of this legal memo either at that time or shortly thereafter. We submitted the legal memo to Mr. White in April 2003 with a request that the Department of Justice look into apparent violations of federal regulations involving FirstEnergy Nuclear Operating Company providing incomplete and inaccurate information to the NRC in fall 2001.

Appendix B to UCS's legal memo identified individuals at Davis-Besse who may have played a role in the incomplete and inaccurate information provided to the NRC. Mr. Siemaszko's name appears on that list as do the names of nine other individuals, most of whom are senior to Mr. Siemaszko and none of whom have been sanctioned by the NRC.

* UCS understands that other individuals may yet be sanctioned by the U.S. Department of Justice and/or the U.S. Nuclear Regulatory Commission at some future date. However, it was a miscarriage of justice for the NRC to single out Mr. Siemaszko. Crafted and announced as such, the NRC provides the public with the totally false perception that Mr. Siemaszko and Mr. Siemaszko alone caused Davis-Besse. Nothing could be farther from the truth and this travesty will in all likelihood be remedied in the future. But the perception damaged Mr. Siemaszko's reputation and will likely make it harder for this poor man to find employment even outside the reaches of the NRC.

Enforcement is a vital component of the NRC's oversight process. Inconsistent and/or inappropriate enforcement actions undermine the effectiveness of the NRC's oversight process. Ohio Citizen Action and UCS believe that an effective NRC oversight process is the best protection the American public has against the inherent hazards from nuclear power plant operation. Ohio Citizen Action is a public interest group with a long-standing advocacy position on issues in Ohio, including safety at Davis-Besse. UCS is a public interest group with a long-standing advocacy position on nuclear plant safety. The inappropriate enforcement action proposed by the NRC against Mr. Siemaszko reflects an ineffective enforcement policy that undermines the NRC's oversight process. Ohio Citizen Action and UCS seek a hearing to prevent lessening of the public's protection.

Ohio Citizen Action and UCS additionally seek this hearing because several of our contentions have broader implications than correcting injustice to a single individual, which would likely be the narrower scope of the proceeding if we were excluded. Contention 1 as described in the next section has broader implications because we examine flaws in the NRC's safety decision-making process that, left uncorrected, could play a role in the next "Davis-Besse." Contention 3 as described in the next section has broader implications because we examine the application of how the agency determines deliberate misconduct under 10 CFR 50.5. Mr. Andrew Siemaszko has but his own experience to pursue during the proceeding whereas we have many other cases that, in our view, conclusively show the NRC's approach to deliberate misconduct determinations is inconsistent. Contention 4 as described in the next section has broader implications because we examine the important legal aspect of what constitutes a "legally enforceable requirement." The NRC's position on regulatory commitments is mushy at best. And Contention 5 as described in the next section has broader implications because the NRC's enforcement action against Mr. Andrew J. Siemaszko is but another example in a pattern we have identified and documented of bias within the agency's enforcement program.

We seek a hearing in this individual enforcement action to correct an injustice to Mr. Siemaszko. But we also seek a hearing to correct programmatic problems with the NRC's enforcement policy and its implementation.

Criteria in 10 CFR § 2.309

Paragraph (a) of 10 CFR §2.309 requires any person desiring to participate to file a written request for a hearing with a specification of the contentions to be litigated. Paragraph (a) explains that participating will generally be granted if the requestor meets the requirements in paragraph (d) of the section for standing and has at least one contention that meets the admissibility criteria specified in paragraph (f).

With respect to standing, paragraph (d) subparagraph (1) requires that the hearing requestor provide:

- (i) Name, address, and telephone number:

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Suite 1200, Cleveland, OH 44113, (216) 861-5200

David Lochbaum, Union of Concerned Scientists, 1707 H Street NW, Suite 600,
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- (ii) Nature of requestor's right to be made a party to the proceeding: As described in the section above entitled "Manner in which our interests are adversely affected by this Order."
- (iii) Nature and extent of the requestor's property, financial or other interest in this proceeding: The aforementioned retention by UCS of attorney Diane Curran to craft a legal memo about apparent violations at Davis-Besse marks the only occasion

during my eight-plus year tenure at the Union of Concerned Scientists that we obtained counsel regarding a nuclear safety issue. The cost of this effort exceeded UCS's annual budget for our nuclear safety project by over a factor of three, but we re-allocated resources from other areas to fund it. This is a very clear indication of the value placed on the matter of accountability for the Davis-Besse problems by UCS and its commitment to it.

Ohio Citizen Action has devoted considerable time and effort to the matter of safety at Davis-Besse. Indications of this effort and its results are reflected in the fact that, as of July 2004, approximately 19,000 neighbors had sent handwritten letters and petitions pressing the NRC not to let Davis-Besse restart and 27,834 neighbors had sent letters or postcards or had signed onto sign-on letters to FirstEnergy urging it not to restart Davis-Besse.

Ohio Citizen Action and UCS have simply invested too much time and money in this effort to see it squandered by this ill-advised, misguided NRC enforcement action.

- (iv) Possible effect of any decision or order that may be issued in the proceeding on the requestor's interest: This misguided enforcement action has a very real potential for undermining worker and public confidence in the NRC's oversight capability. Davis-Besse seriously eroded public confidence in the NRC's ability to protect the public. This misguided NRC enforcement action further erodes public confidence in the NRC. In addition, the NRC's confinement of accountability for the problems at Davis-Besse to Mr. Siemaszko means that other individuals with far greater responsibility for said problems remain employed in the nuclear industry where they are free to repeat the behavior that produced the Davis-Besse near-miss.

Pursuant to paragraph (f) subparagraph (1) of 10 CFR §2.309, I submit the following contentions:

Contention No. 1:

Specific statement of the issue of law or fact to be raised

The NRC would not have shut down Davis-Besse had it known with completeness and accuracy the scope and results of the reactor vessel head cleaning performed for and under Condition Report No. 2000-1037 and Work Order No. 00-001846-000 during the 12th refueling outage (12RFO).

Brief explanation of the basis for the contention

The record is quite clear that Mr. Andrew Siemaszko did not possess any information related to the subject condition report and work order that the NRC was not only aware of but had actually considered in its deliberations to permit Davis-Besse to continue operating past December 31, 2001.

Demonstrate that the issue raised in the contention is within the scope of the proceeding

On page 7 of the April 21, 2005, order issued to Mr. Andrew J. Siemaszko, the NRC staff reported:

Had the NRC been aware of this incomplete and inaccurate information, the NRC would likely have taken immediate regulatory action to shut down the plant and require the licensee to implement appropriate corrective actions.

The content of "this incomplete and inaccurate information" is described elsewhere in the order as being Mr. Siemaszko's entries on Condition Report No. 2000-1037 and Work Order No. 00-001846-000.

Thus, the NRC's order to Mr. Siemaszko is based in large part on the agency's belief (albeit mistaken, as shown in Contention No. 2 below) that his recordkeeping on a condition report and work order caused the

NRC to form the wrong conclusion about the condition of the reactor vessel head at Davis-Besse and but for his recordkeeping, the agency would have taken action to shut down the reactor. The record directly and repeatedly contradicts this NRC position. This proceeding is needed to correct the mistaken order.

Demonstrate that the issue raised in the contention is material to the NRC's findings

On page 6 of the April 21, 2005, order to Mr. Andrew Siemaszko the NRC staff stated:

Based on the above information, the NRC concludes that Mr. Siemaszko provided materially incomplete and inaccurate information in CR No. 2000-1037 and Work Order No. 00-001846-000, that are records the NRC requires the Licensee to maintain.

It is the information provided by Mr. Siemaszko on the condition report and on the work order that NRC falsely believes – at least in context of the order – prevented the agency from shutting down Davis-Besse. This belief is related to this contention in that it signifies the rationale applied by NRC in determining the severity of the enforcement action taken against Mr. Siemaszko.

Concise statement of the alleged facts or expert opinions supporting the requestor's position

The record is abundantly clear that the NRC (a) was informed several times by FirstEnergy that the reactor vessel head had not been completely cleaned during 12RFO, (b) fully understood that boric acid remained on the reactor vessel head after 10RFO, 11RFO, and 12RFO, and (c) did not base its decisions in any way, shape, or form on the belief that the reactor vessel head had been completely cleaned and inspected during 12RFO. Thus, there is no information recorded on or withheld from Condition Report No. 2000-1037 and Work Order No. 00-008146-000 by Mr. Siemaszko that could possibly have altered the NRC's decision-making. The NRC made the wrong decision to allow Davis-Besse to continue operating past December 31, 2001, on its own – unaided and unhindered by Mr. Siemaszko's recordkeeping.

Information to show that a genuine dispute exists on a material issue of law or fact

The record clearly shows that FirstEnergy formally and repeatedly told the NRC that the reactor vessel head had not been completely inspected and cleaned during 12RFO. For example, on page 2 of Attachment 1 to a letter dated October 17, 2001, FirstEnergy told the NRC:

*The inspections performed during the 10th, 11th, and 12th Refueling Outage (10RFO, conducted April 8 to June 2, 1996; 11RFO, conducted April 10, to May 23, 1998; and, 12RFO, conducted April 1 to May 18, 2000) consisted of a whole head visual inspection of the RPV head in accordance with the DBNPS Boric Acid Control Program pursuant to Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants." ... During 10RFO, 65 of 69 nozzles were viewed, during 11RFO, 50 of 69 nozzles were viewed, and **during 12RFO, 45 of 69 nozzles were viewed**. It should be noted that 19 of the obscured nozzles in 12RFO were also those obscured in 11RFO. Following 11RFO, the RPV head was mechanically cleaned in localized areas as limited by the service structure design. **Following 12RFO, the RPV head was cleaned with demineralized water to the extent possible to provide a clean head for evaluating future inspection results.** [emphasis added]*

On page 2 of its letter dated October 30, 2001, FirstEnergy informed the NRC of the following:

*During 10RFO, 65 of 69 nozzles were reviewed, during 11RFO, 50 of 69 nozzles were viewed, and **during 12RFO, 45 of 69 nozzles were viewed**. It should be noted that 19 of the obscured nozzles in 12RFO were also those obscured in 11RFO. Following 11RFO, the RPV head was mechanically cleaned in localized areas as limited by the service structure design. **Following 12RFO, the RPV head was cleaned with demineralized water to the extent possible to provide a clean head for evaluating future inspection results.** [emphasis added]*

In addition, page 2 of Attachment 3 to this October 17, 2001, letter provided the NRC with a map of the reactor vessel head clearly showing the CRDM nozzles that could not be inspected during 12RFO. In fact, this map also showed the size of the boric acid blanket atop the reactor vessel head at Davis-Besse. This is, in fact, the information the NRC in its order falsely charged Mr. Siemaszko with concealing.

The record also clearly shows that the NRC was fully cognizant of this information in fall 2001. For example, the NRC's Office of Nuclear Reactor Regulation was issuing periodic (approximately weekly) internal status reports at this time on the status of reactors deemed highly susceptible to the CRDM nozzle cracking problem that prompted the agency to issue Bulletin 2001-01 earlier in the year. Quoting from one such NRC status report from November 2001 about Davis-Besse:

In addition, the scope of the prior visual inspection only covered 65% of the VHP nozzles due to boric acid deposits from other sources (e.g., canopy seal and Conoseal leaks).

Thus, the NRC knew during its decision-making process that the 12RFO reactor vessel head inspection had not examined all of the CRDM nozzles due to boric acid deposits. The NRC also knew that not all of the boric acid deposits had been removed from the reactor vessel head prior to Davis-Besse restarting from 12RFO. The NRC was not misled by Mr. Siemaszko's recordkeeping on Condition Report No. 2000-1037 and Work Order No. 00-001846-000.

Nearly nine months after the gaping hole in the reactor vessel head had been discovered and reported to the NRC, the agency went on the record with its rationale for allowing Davis-Besse to continue operating past December 31, 2001. In a letter dated December 3, 2002, the NRC provided FirstEnergy with the NRC Staff Evaluation upon which the agency's decision was based. Page 6 of this Staff Evaluation stated:

The licensee provided information regarding visual inspections performed in 1996 and 1998. These inspections were performed under the installation installed on the RPV head and, therefore, exceeded the requirements of the ASME Code. Their inspectors attested to the completeness and effectiveness of the inspections. In each of those two outages and in an inspection in 2000, a large fraction of the VHP nozzles were inspected, but no single inspection looked at all of the VHP nozzles. The licensee stated that results showed no evidence attributable to CRDM nozzle leakage. The licensee did not report any other degraded condition of the RPV head, and stated that the RPV head had been cleaned during previous outages. ... Upon review of the licensee's presentations, and after viewing videotapes provided by the licensee from prior inspections in 1996 and 1998, the NRC staff concluded that, while the 1996 inspection was a fairly complete visual inspection of the RPV head, the inspection conducted in 1998 was more limited in scope and quality because of the presence of boric acid deposits. The licensee stated that these deposits were due to CRDM flange leaks and not through-wall leakage of the CRDM nozzles.

It is clear from this discussion that the NRC staff was not laboring under the false impression that the reactor vessel head had been completely inspected and cleaned during 12RFO in 2000. The discussion about and examination of visual inspections conducted in 1996 and 1998 would have been irrelevant had a full and complete inspection been performed during 2000.

The record is also very clear that the NRC staff was applying the wrong yardstick in the fall of 2001 when deciding Davis-Besse's fate and this wrong yardstick discounted the value of any information Mr. Siemaszko could have provided on Condition Report No. 2000-1037 and Work Order 00-001846-000. At that time, the NRC had already formed the assumption that one or more CRDM nozzles at Davis-Besse was leaking. For example, on November 30, 2001, the NRC staff briefed the Commissioners' Technical Assistants on their decision not to order Davis-Besse to be shut down. On the sixth and final slide of this presentation, the NRC staff reported:

It is likely that, if inspections were performed today, the current regulations would not be met (TS requirements and GDC)

and

It is likely that one of 3 barriers is degraded

Thus, the NRC staff during its decision-making process formed the conclusion that Davis-Besse was likely operating in violation of federal regulations (i.e., one or more of the CRDM nozzles had a through-wall leak of reactor coolant) and that said violation resulted in one of three defense-in-depth barriers being degraded, but had intentionally NOT shut down the reactor. As the NRC reported on page 2 of its December 3, 2002, Staff Evaluation on Davis-Besse:

10 CFR 50.55a, through its reference to the ASME Code, does not permit through-wall cracking of VHP nozzles.

The record is abundantly clear that the NRC staff had rejected compliance/conformance with federal regulations in its decision-making process and had instead cobbled together some informal, not publicly reviewed, not formally promulgated substitute for the regulations. The NRC staff described its unapproved surrogate for compliance with formally promulgated federal regulations on page 5 of its December 3, 2002, Staff Evaluation:

In evaluating the licensee's justification for continued operation through March 31, 2002, the NRC staff considered that the important technical parameter was the likelihood that one of the CRDMs would have a circumferential crack resulting in failure and CRDM ejection.

The NRC staff intentionally considered and rejected compliance with regulations during its decision-making process. The NRC's Office of the Inspector General (OIG) conducted an inquiry during 2002 regarding the NRC staff's handling of Davis-Besse. During this inquiry, investigators from OIG interviewed a staffer in the NRC's Office of Enforcement who had participated in an NRC meeting about Davis-Besse. Other participants in that meeting presented estimates that at least 1.9 CRDM nozzles were leaking at Davis-Besse. Aware of the Technical Specification requirement to shut down within six (6) hours of any reactor coolant system pressure boundary leakage, such as that from a cracked and leaking CRDM nozzle, this staffer told OIG what happened next in the meeting (June 3, 2002, transcript of OIG interview, page 12 line 23 to page 14 line 6):

I said, "Okay, let me understand this. What you're saying is that whenever you shut down, on your proposed date in February, when you shut down you expect to find as many as 1.9 leaks."

And I can't remember exactly what they said, but that basically, this is what they were presenting.

And then I said, "Okay, well, how many do you have today?"

And that's when others in the room, most of whom were all these risk people and managers, basically reacted to my question as – and the way I received their reaction was that, well, you know, that's – that's not a pertinent question because this is just a statistical analysis. This is all part of doing a risk analysis. And several of the managers looked me straight in the eye, just shook their head, telling me, the way I received that was "don't go there."

My personal view is that there wasn't a single person in that room that didn't think that they probably did [have CRDM nozzle leak(s)]. [emphasis added]

The OIG investigators queried this Office of Enforcement staffer on who had stifled the line of questioning (June 3, 2002, transcript, page 15, lines 18 to 22):

OIG: “Okay, who were the NRC managers that discouraged your line of questioning?”

Staffer: “I remember that Sam [Collins] looked me straight in the eye and just shook his head.”

Mr. Samuel J. Collins, then Director of the NRC’s Office of Nuclear Reactor Regulation, made the decision for the agency to allow FirstEnergy to continue operating Davis-Besse past the December 31, 2001, deadline for conducting CRDM nozzle inspections mandated in Bulletin 2001-01.

Clearly, the NRC’s decision-making process had intentionally abandoned compliance with its regulations (i.e. 10 CFR 50.55a’s prohibitions against through-wall leaks) as the yardstick and had replaced it with a risk analysis for the perceived odds of a CRDM ejection. The NRC had not developed this unapproved yardstick on its own – it latched onto the notion supplied to it by FirstEnergy. On the third page of Attachment 1 to FirstEnergy’s docketed letter dated October 17, 2001, the licensee presented its justification for continuing to operate Davis-Besse with leaking CRDM nozzle(s):

Using the Framatome ANP assessment, the DBNPS feels assured in operating until the next scheduled refueling outage. This is based on the worst cast scenario that a visible nozzle axial crack leak developed immediately after start-up from 10RFO in May 1996, and was from one of the 19 drives that could not be inspected in 1998 (11RFO) or the 24 drives that could not be inspected in 2000 (12RFO). The Framatome ANP assessment concluded that such a crack would take 3.5 to 10 years to grow circumferentially through wall. The DBNPS has assumed the 3.5 year value since 3.5 years is based upon multiple crack sites merging together consistent with that which was observed at Oconee 3. This results in the development of a worst case through wall circumferential crack development by November 1999 (May 1996 plus 3.5 years). The Framatome ANP assessment further concluded that this crack would be expected to take an additional 4 years to grow to maximum ASME Code allowable crack size of 270 degrees. Continuing to apply this to the DBNPS’s worst case scenario results in the potential to reach a maximum allowable crack size on one of the obscured CRDM nozzles (from 1998 and 2000 inspections) by November 2003. Because this date is beyond the date for the planned March 2002 refueling outage, the DBNPS has concluded that there is reasonable assurance that DBNPS will continue to operate safely to the start of 13RFO, scheduled for March 2002. [emphasis added]

It could not be clearer that the yardstick applied by FirstEnergy here and endorsed by NRC as stated above is NOT the legal one of when the first CRDM nozzle cracks penetrates through-wall but rather the illegal one of when the first CRDM nozzle crack propagates to the point of causing structural failure (i.e., CRDM nozzle ejection). It is also clear from this analysis that both FirstEnergy and the NRC fully understood that Mr. Andrew Siemaszko had not completely cleaned and inspected the reactor head during 12RFO. This is evident because the analysis assumed the visual nozzle axial crack leak developed in May 1996. No shut down resulted from this assumed reactor coolant system leak, contrary to federal regulations. The analysis assumed that this leak was not detected during the inspection in 11RFO (1998) and could have propagated to a through-wall circumferential crack by November 1999. No shut down resulted from this assumed reactor coolant system leak, contrary to federal regulations. The analysis assumed the circumferential crack propagated to 270 degrees around the nozzle by November 2003. Thus FirstEnergy proposed and NRC accepted the concept of operating Davis-Besse with CRDM nozzle(s) leaking for years as long as the size of the leaking cracks remained less than 270 degrees of the nozzle’s circumference. This inappropriate and illegal yardstick trumped any of the information Mr. Siemaszko could possibly have provided on Condition Report No. 2000-1037 and Work Order No. 00-001846-000. When the gaping hole in the reactor vessel head at Davis-Besse was discovered in March 2002, the size of

the circumferential crack in CRDM Nozzle #3 was significantly less than 270 degrees. The NRC had applied the wrong yardstick.

The record clearly shows that the NRC would not have shut down Davis-Besse regardless of the information Mr. Siemaszko provided in Condition Report 2000-1037 and Work Order No. 00-001846-000. The NRC's decision-making process was not based on compliance with federal regulations but on an unapproved, non-promulgated analysis that totally eliminated any and all information from 12RFO.

What "inaccurate and incomplete information" could Mr. Andrew Siemaszko have provided on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 that would have enabled the NRC to make the right decision? At most, Mr. Siemaszko could have annotated his entry on Work Order No. 00-001846-000 from "work performed without deviation" to something like "work performed without deviation such that cleaning of boric acid deposits from the reactor vessel head was terminated prior to removal of all such deposits and some of the remaining boric acid deposits surround CRDM nozzles that were not inspected in 12RFO, not inspected in 11RFO, and haven't been inspected since 10RFO."

But the record is extremely clear that the NRC knew all of this annotated information and applied this knowledge en route to its wrong decision.

Contention No. 2:

Specific statement of the issue of law or fact to be raised

The facts do not support the NRC's conclusion that Mr. Andrew J. Siemaszko provided incomplete and inaccurate information in Condition Report No. 2000-1037 and Work Order No. 00-001846-000.

Brief explanation of the basis for the contention

The NRC improperly believed that information provided by Mr. Andrew Siemaszko on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 indicated that the reactor vessel head had been completely cleaned of all boric acid deposits during 12RFO. The record is quite clear that FirstEnergy understood the actual condition of the reactor vessel head following the cleaning efforts prior to restart from 12RFO and that both FirstEnergy and the NRC understood the known condition of the reactor vessel head in fall 2001.

Demonstrate that the issue raised in the contention is within the scope of the proceeding

On page 6 of the Order issued on April 21, 2005, by the NRC to Mr. Andrew Siemaszko, the NRC staff stated:

Review of documents and videotapes concerning the inspection of the RPV head during 12RFO, that ended on May 18, 2000, and the inspections of the RPV head during Refueling Outage 13, that began on February 12, 2002, indicated that boric acid deposits remained on the RPV head following 12RFO. This is contrary to information Mr. Siemaszko documented in: (1) Work Order No. 00-001846-000 that work was performed without deviation; and (2) CR No. 2000-1037 that the accumulated boron deposited between the reactor head and the thermal insulation was removed during the cleaning process performed and no boric acid induced damage to the head surface was noted during the subsequent inspection.

and

Based on the above information, the NRC concludes that Mr. Siemaszko provided materially incomplete and inaccurate information in CR No. 2000-1037 and Work Order No. 00-001846-000, that are records the NRC requires the Licensee to maintain.

Thus, the completeness and accuracy of information recorded by Mr. Siemaszko in Condition Report No. 2000-1037 and Work Order No. 00-001846-000 is clearly within the scope of the proceeding.

Demonstrate that the issue raised in the contention is material to the NRC's findings

On page 6 of the Order issued on April 21, 2005, by the NRC to Mr. Siemaszko, the NRC staff explained:

The information provided by Mr. Siemaszko in CR No. 2000-1037 and Work Order No. 00-001846-000 was material to the NRC because the presence of boric acid deposits on the RPV head is a significant condition adverse to quality that went uncorrected, in part, due to Mr. Siemaszko's incomplete and inaccurate description of the work activities and corrective actions.

The perception that Mr. Siemaszko provided incomplete and inaccurate information on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 was material to the NRC's findings.

Concise statement of the alleged facts or expert opinions supporting the requestor's position

The NRC order to Mr. Andrew Siemaszko is based on the agency's mistaken belief that the subject work order required all boric acid to be removed from the reactor vessel head. However, the work order itself allowed cleaning to be terminated prior to removal of all the boric acid. The steps and provisions of the work order were in fact followed without deviation, including the provision to terminate cleaning with boric acid still remaining on the head. Thus, the paperwork accurately reflects both the work required and the work performed.

Furthermore, the record clearly shows that FirstEnergy and the NRC were aware that the reactor vessel head was not completely cleaned of boric acid during 12RFO. Thus, neither entity was misled about the condition of the reactor vessel head cleaning effort.

Information to show that a genuine dispute exists on a material issue of law or fact

The NRC described its problem with the information provided by Mr. Andrew Siemaszko on Condition Report No. 2000-1037 on page 4 of its April 21, 2005, order. The NRC stated that Mr. Siemaszko wrote :

Accumulated boron deposited between the reactor head and the thermal insulation was removed during the cleaning process performed under W.O. (Word Order) 00-001846-000. No boric acid induced damage to the head surface was noted during the subsequent inspection.

The NRC described its problem with the information provided by Mr. Andrew Siemaszko on Work Order No. 00-001846-000 on page 3 of its April 21, 2005, order. The NRC stated:

On April 25, 2000, in the "Failure Evaluation/Description of Work Performed" section of Work Order No. 00-001846-000, Mr. Siemaszko wrote "work performed without deviation"

The NRC described the perception it reached from the information provided by Mr. Andrew Siemaszko on these two documents on pages 4 and 5 of its April 21, 2005, order. The NRC stated:

Information that Mr. Siemaszko told OI during a sworn, transcribed interview indicated that Mr. Siemaszko knew at the completion of 12RFO that the RPV head had not been cleaned of all boric acid deposits, yet he provided information on Condition Report No. 2000-0137 and Work Order No. 00-001846-000 indicating that the RPV head was cleaned of boric acid deposits.

The NRC's perception conflicts with the facts. Pages 4 and 5 of Work Order No. 00-001846-000 contain a section entitled "Overview of the cleaning effort." This section ends with the following sentence:

Should additional cleaning be required the process will be repeated until most boric acid deposits are removed or as directed by HP.

Neither Work Order No. 00-001846-000 nor Condition Report No. 2000-1037 specify that the reactor vessel head cleaning shall continue until all boric acid deposits are removed. As point of fact, the work order explicitly states that cleaning may continue until “most boric acid deposits are removed.” Mr. Siemaszko wrote on Work Order No. 00-001846-000 “work performed without deviation.” The record is clear that the reactor vessel head at Davis-Besse was cleaned during 12RFO “until most boric acid deposits” were removed. Mr. Siemaszko did not omit any of the steps in the work order and faithfully executed the steps taken. Therefore, contrary to the NRC’s perception, Mr. Siemaszko did not provide incomplete and inaccurate information on Work Order No. 00-001846-000 and Condition Report No. 2000-1037.

UCS cannot envision how NRC reached its badly mistaken perception. It may be explained by the fact that while the NRC develops procedures to guide its efforts (e.g., Inspection Procedures, Management Directives, etc.), the agency seldom uses procedures to document completion of its efforts (i.e., paperwork comparable to Condition Report No. 2000-1037 and Work Order No. 00-001846-000 showing who did what work when). For example, page 92 of the NRC’s Davis-Besse Lessons Learned Task Force Report dated September 30, 2002, concluded:

The lack of a detailed documented basis to support the NRC’s decision in the December 4, 2001, letter contrasts with the processes and guidance applied to other safety-related decisions taken by the NRC.[emphasis added]

It is duplicitous and just plain bad taste for the NRC to fault Mr. Siemaszko for incomplete and inaccurate recordkeeping when the agency itself keeps no records for its work processes.

Furthermore, the record is equally clear that the NRC’s characterization of reliance of Mr. Siemaszko’s employer, FirstEnergy, on the information documented on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 also conflicts with the facts. On page 5 of its April 21, 2005, order to Mr. Siemaszko, the NRC wrote:

The Licensee removed the restraint to changing operations to Mode 4 on April 27, 2000, based, in part, on the information provided to the Licensee by Mr. Siemaszko that the reactor vessel had been cleaned of boric acid deposits, as documented on CR No. 2000-1037 and Work Order No. 00-001846-000.

On page 30 of FirstEnergy’s root cause report,* the company documented the information flow contributing to the decision-making process terminating the reactor vessel head cleaning during 12RFO:

The RCS engineer[Mr. Siemaszko] acknowledges that the cleaning was not 100% successful and some boric acid deposits were left behind on the PRV head. The engineer stated that he was running out of time to continue cleaning the RPV head (the RPV head was scheduled to return to the RPV during the next shift). Outage management concurred that no additional time and dose should be spent because further attempts would not produce successful results were believed to be acceptable. Radiation Work Permit (RWP) 2000-5132 package was written as a tool to control radiological exposure for cleaning boric acid from the RPV head on April 6, 2000. The RWP identified 30 man-hours and 1 100 mRem dose was estimated for the work. There were 282.31 man-hours and 1611 mRem expended for cleaning the RPV head.

It is abundantly clear that FirstEnergy’s outage management was aware that cleaning of the reactor vessel head had been terminated prior to all boric acid deposits being removed and concurred with this decision before the mode restraint was removed and Davis-Besse restarted from 12RFO.

* FirstEnergy Nuclear Operating Company, “Root Cause Analysis Report, Significant Degradation of the Reactor Vessel Head, CR 2002-0891,” April 15, 2002.

By letter dated October 30, 2001, FirstEnergy responded to the NRC regarding Bulletin 2001-01. On the second page of this letter, FirstEnergy informed the NRC that 45 of 69 CRDM nozzles were visually inspected during 12RFO. FirstEnergy informed the NRC:

Following 12RFO, the RPV head was cleaned with demineralized water to the extent possible to provide a clean head for evaluating future inspection results.

and

24 of the 69 nozzles were obscured by boric acid crystal deposits.

The NRC received and understood this information. Evidence exists in dozens of NRC documents, including the slides from the NRC's staff's briefing of the NRC Executive Director for Operations conducted on November 7, 2001. With respect to inspections conducted at Davis-Besse during 12RFO, the NRC staff told the EDO:

Visual Examination of 45 out of 69 CRDMs (65%)

24 Obscured by boric acid and Not Examined (includes 4 CRDMs with insufficient gap and 15 obscured in 1998)

The record is crystal clear that neither FirstEnergy nor the NRC were misled by the information provided by Mr. Siemaszko on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 into believing that the reactor vessel head was completely cleaned of boric acid deposits. Each understood that boric acid on the reactor vessel head prevented the inspection of all CRDM nozzles during 12RFO and that the reactor vessel head had subsequently been partially – not totally – cleaned of the boric acid deposits. In other words, both FirstEnergy and NRC understood what Mr. Siemaszko's efforts during 12RFO did and did not accomplish.

Contention No. 3:

Specific statement of the issue of law or fact to be raised

The NRC did not establish that Mr. Andrew J. Siemaszko deliberately violated 10 CFR 50.9.[#]

Brief explanation of the basis for the contention

It is the NRC's belief as articulated in its order that Mr. Siemaszko deliberately violated 10 CFR 50.9 because he recorded information on a condition report and a work order that he knew to be false. Contention No. 2 dispels that mistaken belief. But even if that belief had some footing in reality, the NRC staff failed to establish that Mr. Siemaszko knew the requirements of 10 CFR 50.9 and willfully violated those requirements.

Demonstrate that the issue raised in the contention is within the scope of the proceeding

On page 7 of its April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff stated:

Mr. Andrew Siemaszko, while employed by the Licensee, engaged in deliberate misconduct that has caused the Licensee to be in violation of 10 CFR 50.9 by deliberately providing to the Licensee information that he knew to be incomplete or inaccurate in a respect material to the NRC, in violation of 10 CFR 50.5.

[#] As proven in the material provided for Contention No. 2, Mr. Siemaszko did not provide incomplete and inaccurate information on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 and therefore did not violate 10 CFR 50.9. UCS submits Contention No. 3 to correct the misapplication of law that NRC would have made had the agency been correct about Mr. Siemaszko violating 10 CFR 50.9. There is a consistency of enforcement issue that needs to be addressed via Contention No. 3.

The record fails either to document a confession by Mr. Siemaszko that he knew the information was incomplete or inaccurate or to establish a determination by the NRC that Mr. Siemaszko knew he was legally obligated to provide accurate and complete information on in-house records not being submitted to the NRC on the docket.

Demonstrate that the issue raised in the contention is material to the NRC's findings

On page 6 of its April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff reported:

Based on the above information, the NRC concludes that Mr. Siemaszko provided materially incomplete and inaccurate information in CR No. 2000-1037 and Work Order No. 00-001846-000, that are records the NRC requires the Licensee to maintain.

Concise statement of the alleged facts or expert opinions supporting the requestor's position

Nuclear workers such as Mr. Andrew Siemaszko do not receive formal training on the requirements of 10 CFR 50.9. The NRC failed to establish that Mr. Siemaszko had been trained on 10 CFR 50.9 or was otherwise aware of the requirements of 10 CFR 50.9. Therefore, the NRC failed to establish a sound basis for determining that Mr. Siemaszko deliberately violated 10 CFR 50.9.

In several cases where the NRC has determined that a supervisor or manager retaliated against a worker who raised nuclear safety concerns, the NRC has taken enforcement action against the licensees but not taken action against the responsible supervisor or manager on the basis that the agency was unable to prove that said individuals knew their actions violated the requirements of 10 CFR 50.7. The NRC did not prove that Mr. Siemaszko knew his actions violated the requirements of 10 CFR 50.9, yet the agency arbitrarily and capriciously took enforcement action against him nonetheless. That's unfair.

Information to show that a genuine dispute exists on a material issue of law or fact

I worked for over seventeen years in the nuclear industry at and for nuclear power plants (Hatch, Browns Ferry, Grand Gulf, Hope Creek, Wolf Creek, Limerick, Salem, Susquehanna, and FitzPatrick) licensed by the NRC. During that period, I prepared literally thousands of records about NRC-licensed activities. Over that same period, I received many hours of training such as (a) General Employment Training to obtain unescorted access privileges, (b) Radiation Worker Training to gain authorization to work in radiologically contaminated areas, (c) Reactor Engineer Qualification to establish authority for making core maneuvering recommendations to the Operations shift, and (d) Shift Technical Advisor Training to become certified to stand shift as a source of technical assistance to the Operations shift. I do not recall a single moment of classroom training or a single paragraph of required reading about the requirements contained in 10 CFR 50.9. Having been trained and badged at several NRC-licensed facilities, I feel my experience is the rule and not its exception. Until I became aware of 10 CFR 50.9 via other means late in that period, I would have honestly – and incorrectly – sworn that I was under no federal requirement to provide accurate and complete information on records prepared for my employer but not submitted to the NRC, such as condition reports, work orders, and inter-office memoranda.

While working for the Union of Concerned Scientists, I have sought enforcement actions against individuals whose actions prompted the NRC to impose civil penalties on their employers. The best example began in May 1999 when the NRC proposed a \$110,000 civil penalty (EA 99-012) against FirstEnergy after determining that its Radiation Protection Manager at the Perry nuclear plant had retaliated against a Radiation Protection Supervisor. UCS engaged the NRC shortly thereafter for enforcement action against the Radiation Protection Manager on the basis that the NRC had already determined his actions to have violated 10 CFR 50.7. By letter dated January 14, 2000, Mr. R. W. Borchardt, then Director of the NRC's Office of Enforcement, explained why the NRC chose not to take enforcement action against this individual:

The NRC staff determined that an individual enforcement action was not warranted in this case because of the RPM's lack of experience in employee protection matters and the lack of training provided by the licensee in this area.

and

In order for the NRC staff to take enforcement action against an individual for a violation of the employee protection regulations (10 CFR 50.7), the staff must have sufficient evidence to conclude that the individual was aware of the employee protection requirements and that the discriminatory act was deliberate (in violation of 10 CFR 50.5). In the Perry case, the staff concluded that while the RPM took an action that was later found to be discriminatory, the violation was not deliberate within the meaning of 10 CFR 50.5

There are many similarities between the 1999 enforcement action at Perry and the 2005 enforcement action at Davis-Besse:

- Both involved the NRC's proposed imposition of a significant civil penalty on FirstEnergy.
- Both involved the NRC's determination that a worker's actions were responsible for the violation warranting the proposed civil penalty.
- Both involved workers lacking documented training in the area of the violation.

There was a major difference between these two cases. In the Perry case, the NRC accepted the excuse that the manager was clueless that his action violated federal regulations. In the Davis-Besse case, the NRC rejected that the worker may not have known that his action violated federal regulations.

I previously documented a distinct bias in the application of the NRC's enforcement actions against individuals in a report submitted on April 2, 2001, to Mr. Frank Congel, then Director of the NRC's Office of Enforcement. This report documented the results from my assessment of NRC enforcement actions spanning a two-year period that led to my conclusion that the NRC's enforcement policy was not achieving its stated goal of "responding to violations of regulations in a predictable and consistent manner that reflects the potential safety impact of the violations." I identified a discernible bias in the severity of NRC's enforcement actions against workers as opposed to enforcement actions taken (or not taken) against supervisors, managers, and senior managers. The severity of the NRC's enforcement sanctions had less to do with the associated risk or perceived egregiousness of the action than with the position of the individual on the organizational ladder – the lower the position, the greater the sanction.

The enforcement action taken by the NRC against Mr. Andrew Siemaszko continues this biased enforcement pattern. Mr. Siemaszko was a veteran nuclear industry worker, but he was a system engineer instead of a supervisor, manager, or senior manager. He was at the lower rungs of the ladder and therefore vulnerable under the NRC's perverse sanction scheme. This proceeding is needed to stop this unfair NRC enforcement bias.

Contention No. 4:

Specific statement of the issue of law or fact to be raised

FirstEnergy was under no legally enforceable obligation to completely clean boric acid from the reactor vessel head during the 12th refueling outage at Davis-Besse.

Brief explanation of the basis for the contention

The NRCs' order to Mr. Andrew Siemaszko makes much of his "work performed without deviation" entry on a work order to clean the reactor vessel head during the refueling outage in 2000. The order conveys the NRC's apparent belief that FirstEnergy was in some way legally obligated to completely clean the reactor vessel head. The record shows that (a) FirstEnergy was under no legally enforceable

requirement to completely clean boric acid from the reactor vessel head during 12RFO and (b) the NRC staff was fully cognizant of the fact the FirstEnergy had not fully cleaned the reactor vessel head during 12RFO or during 11RFO or during 10RFO.

Demonstrate that the issue raised in the contention is within the scope of the proceeding

On page 2 of the April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff stated:

The Licensee conducted limited cleaning and inspections of the RPV head during the Twelfth Refueling Outage (12RFO) that ended on May 18, 2000. However, neither the limited RPV head cleaning nor the resultant inspections during 12RFO were sufficient to ensure that the significant boric acid deposits on the RPV head were only a result of CRDM flange leakage as supposed and were not a result of RCS pressure boundary leakage.

The NRC's order made incomplete cleaning and inspection of the reactor vessel head during 12RFO fall within the scope of this proceeding.

Demonstrate that the issue raised in the contention is material to the NRC's findings

On page 7 of the April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff stated:

As a direct result of these violations, the NRC determined that FENOC started up and operated the plant, for the last operating cycle prior to the February 16, 2002, shutdown without: (1) fully understanding or characterizing the condition of the reactor pressure vessel head and the control rod drive penetrations; (2) determining the cause of significant boric acid build up on the reactor pressure vessel head, the control rod drive penetrations, and several other components in the reactor containment building; (3) properly identifying the presence of ongoing reactor coolant system pressure boundary leakage and taking appropriate corrective actions, and; (4) identifying a very significant ongoing degradation of the reactor pressure vessel head which required a number of years to reach the level of material wastage observed in March 2002.

Concise statement of the alleged facts or expert opinions supporting the requestor's position

The Davis-Besse licensee responded to NRC Generic Letter 88-05 with a letter and a supplement outlining commitments to develop and implement a boric acid corrosion control program. These commitments were not incorporated into the Technical Specifications, Updated Final Safety Analysis Report, or other formal change control process. The NRC has stated to UCS in writing that it does not consider such commitments to be "legally enforceable requirements."

The NRC inspected the boric acid corrosion control program developed at Davis-Besse in response to Generic Letter 88-05 and rated it "unsatisfactory" in two of nine areas, including the procedure for evaluating damage caused by boric acid. There is no evidence that the licensee or the NRC followed up on these negative findings. This suggests that neither the licensee nor the NRC viewed such negative findings as warranting docketed resolution as happens when "legally enforceable requirements" are found to be violated.

The record shows that the NRC staff in the fall of 2001 was fully cognizant that Davis-Besse had restarted from refueling outages in 1996, 1998, and 2000 without having fully removed boric acid from the reactor vessel head. The boric acid corrosion control program specified that identified boric acid deposits be removed and exposed surfaces evaluated for damage. The NRC staff's acceptance of boric acid remaining on the reactor vessel head year after year after year strongly suggests that the agency did not consider its removal to be a "legally enforceable requirement." There's no evidence suggesting that the NRC even asked FirstEnergy why it had not removed all of the boric acid; at least, that is, until AFTER the gaping hole was found in the reactor vessel head.

Information to show that a genuine dispute exists on a material issue of law or fact

On March 17, 1988, the NRC issued Generic Letter 88-05 to licensees of operating pressurized water reactors, including Davis-Besse. FirstEnergy's predecessor, Toledo Edison, committed to NRC to develop and implement a boric acid corrosion control program in response to NRC Generic Letter 88-05. The licensee's responses were dated May 27, 1988, and June 26, 1989. This commitments were not incorporated into the Technical Specifications, Updated Final Safety Analysis Report, or other formal change control process.

The NRC audited the licensee's response and its boric acid corrosion control program as documented in inspection report dated February 8, 1990. The NRC's audits of the Generic Letter 88-05 responses from ten licensees, including that for Davis-Besse, was documented in NUREG/CR-5576 published June 1990. Davis-Besse is labeled Plant 9 in this report. According to Table 2 on page 29 of NUREG/CR-5576, the NRC rated the boric acid corrosion control program at Davis-Besse "Unsatisfactory" in two of the nine evaluated areas: "Procedure for Damage Evaluation" and "Training of Inspectors." Of the ten plants audited by the NRC, Davis-Besse's boric acid corrosion control program was scored worse than all but two plants.

The record does not reveal any follow-up activity by the NRC to its determination in 1990 that the boric acid corrosion control program at Davis-Besse was "unsatisfactory" in its ability to evaluate damage caused by boric acid. The record does not reveal any docketed information by the licensee about correction of or justification for the negative findings. Mr. Siemaszko did not start working at Davis-Besse until nearly a decade after this 1990 discovery by NRC that the boric acid corrosion control program at Davis-Besse was seriously flawed. The NRC did not seem to care about the known deficiencies in the boric acid corrosion control program until AFTER the gaping hole was found in the reactor vessel head.

On May 14, 2004, and supplemented on May 24, 2004, I petitioned the NRC on behalf of UCS, Greenpeace, and the Nuclear Information and Resource Service to have the NRC issue Confirmatory Orders for all regulatory commitments docketed between January 1, 2000, and June 30, 2004, inclusive. By letter dated June 25, 2004, the NRC informed me that our stated failure to understand the basis for the NRC's position that "failure to meet a commitment does not constitute a violation of a legally binding requirement" does not satisfy the criteria for petitions under 10 CFR 2.206.

The record is clear that the NRC neither made cleaning boric acid from the reactor vessel head at Davis-Besse a legally enforceable requirement nor took known impediments in the boric acid corrosion control program seriously.

Contention No. 5:

Specific statement of the issue of law or fact to be raised

The NRC cannot single out Mr. Andrew J. Siemaszko for enforcement action because his actions and his actions alone were not responsible for either the severity or longevity of the problems at Davis-Besse.

Brief explanation of the basis for the contention

The problems at Davis-Besse are so large that they are cannot be blamed on any one person. The root cause or blame for those problems cannot be traced to the moment when Mr. Andrew Siemaszko wrote "work performed without deviation" on a work order during the refueling outage in 2000. That moment followed years of what FirstEnergy itself has described as a "production over safety" approach at Davis-Besse. That approach established the behavior patterns that permitted degraded conditions to develop and deepen. It is a gross miscarriage of justice for the NRC to single Mr. Siemaszko out for blame. Mr. Siemaszko was but one of many passengers on the Davis-Besse bus as it sped along with an improper safety focus. The NRC should ticket the driver of the bus or the driver and all the passengers. The NRC cannot drag one passenger from the rear of the bus and persecute him alone.

Demonstrate that the issue raised in the contention is within the scope of the proceeding

On page 7 of its April 21, 2005, order to Mr. Andrew J. Siemaszko, the NRC stated:

As a direct result of these violations, the NRC determined that FENOC started up and operated the plant, for the last operating cycle prior to the February 16, 2002, shutdown without: (1) fully understanding or characterizing the condition of the reactor pressure vessel head and the control rod drive penetrations; (2) determining the cause of significant boric acid build up on the reactor pressure vessel head, the control rod drive penetrations, and several other components in the reactor containment building; (3) properly identifying the presence of ongoing reactor coolant system pressure boundary leakage and taking appropriate corrective actions, and; (4) identifying a very significant ongoing degradation of the reactor pressure vessel head which required a number of years to reach the level of material wastage observed in March 2002.

Thus, the NRC's order to Mr. Siemaszko is within the larger context of very serious and extensive problems at Davis-Besse. Yet the NRC has taken enforcement action against no individual other than Mr. Siemaszko for these broad and deep problems.

Demonstrate that the issue raised in the contention is material to the NRC's findings

On page 6 of the Order issued on April 21, 2005, by the NRC to Mr. Siemaszko, the NRC staff explained:

The information provided by Mr. Siemaszko in CR No. 2000-1037 and Work Order No. 00-001846-000 was material to the NRC because the presence of boric acid deposits on the RPV head is a significant condition adverse to quality that went uncorrected, in part, due to Mr. Siemaszko's incomplete and inaccurate description of the work activities and corrective actions.

The perception that Mr. Siemaszko provided incomplete and inaccurate information on Condition Report No. 2000-1037 and Work Order No. 00-001846-000 was material to the NRC's findings. The NRC has taken no enforcement action against any other individual for the Davis-Besse problems.

Concise statement of the alleged facts or expert opinions supporting the requestor's position

The record clearly shows that the efforts undertaken by Mr. Andrew Siemaszko to clean and inspect the reactor vessel head during the refueling outage at Davis-Besse in 2000 were consistent with if not more aggressive than the efforts undertaken by other individuals (Note: Mr. Siemaszko was not even employed at Davis-Besse until 1999) during refueling outages at Davis-Besse in 1998 and 1996. The record also shows that other factors outside the responsibility of Mr. Siemaszko contributed to the situation during the refueling outage and played a role in the plant's restart. It is unfair for the NRC to selectively take enforcement action against one person when so many people had larger roles in this matter.

Information to show that a genuine dispute exists on a material issue of law or fact

On page 2 of its April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff reported:

The Licensee had conducted a root cause evaluation and determined that the cavities were caused by boric acid from the RCS released through cracks in the CRDM penetration nozzles. The Licensee conducted limited cleaning and inspections of the RPV head during the Twelfth Refueling Outage (12RFO) that ended on May 18, 2000. However, neither the limited RPV head cleaning nor the resultant inspections during 12RFO were sufficient to ensure that the significant boric acid deposits on the RPV head were only a result of CRDM flange leakage as supposed and were not a result of RCS pressure boundary leakage.

The NRC's order implies that everything was acceptable until Mr. Siemaszko's limited cleaning of the reactor vessel head during 12RFO. That implication is false. The licensee's limited cleaning and inspections during the Tenth Refueling Outage (10RFO) and the Eleventh Refueling Outage (11RFO)

also failed to ensure that the significant boric acid deposits on the RPV head were only a result of CRDM flange leakage and not the result of RCS pressure boundary leakage. Collectively, these failures have the result of making no one absolutely sure when the crack in CRDM Nozzle #3 actually went through-wall and began leaking reactor coolant that ultimately produced the hole in the reactor vessel head. It is conjecture that this event occurred after 11RFO and before 12RFO such that only Mr. Siemaszko had to distinguish between boric acid languishing on the reactor vessel head from chronic CRDM nozzle leakage and boric acid resting there from a new CRMD nozzle leak. It may have happened between 10RFO and 11RFO or even prior to 10RFO – no one knows for sure.

In fact, according to page 23 of FirstEnergy's April 15, 2002, root cause report:

First, based on the body of knowledge available, a crack initiated in nozzle 3 at around 1990 (± 3 years) [or six to nine years BEFORE Mr. Siemaszko was employed at Davis-Besse] due to PWSCC. The crack grew at a rate consistent with industry data, progressing to a through-wall crack that penetrated above the j-groove weld in the 1994 to 1996 time frame [or three to five years BEFORE Mr. Siemaszko was employed at Davis-Besse].

Further, evidence on page 29 of FirstEnergy's root cause report dated April 15, 2002, suggests that the through-wall leak was present prior to 11RFO (i.e., before Mr. Siemaszko even began working at Davis-Besse):

*The [Service Water System] engineer worked with a Framatome crew [during 11RFO in 1998] using a pole-mounted camera to inspect the RPV head for "cracks in nozzles and degradation adjacent to the nozzle." ... The engineer noted white streaks on the nozzles; however, there was no boron hanging from the insulation. **The engineer noted in a recent interview that some of the nozzles had indications of upward travel of the droplets as opposed to what would be expected (downward travel). The upward travel of the droplets was noted on several nozzles and attributed to ventilation flow. Boric acid was present in fist-sized clumps behind nozzles 9 and 13.** [emphasis added]*

The record shows that Davis-Besse restarted from 11RFO in 1998 with boric acid deposits remaining on the reactor vessel head. Failure to remove these boric acid deposits in 11RFO means that there is no assurance that these boric acid deposits were not the result of RCS pressure boundary leakage and that the observed upward travel of droplets on the nozzles was not the result of through-wall leaks in a CRDM nozzle. Yet the person or persons responsible for these failures have not been sanctioned by the NRC.

The NRC's Davis-Besse Lessons Learned Task Force (LLTF) documented on page 41 of its September 30, 2002, report that:

The licensee failed to establish and effectively implement a boric acid corrosion control program. The implementing procedure lacked adequate guidance, and procedural requirements were not implemented. Removing boric acid from the RPV head was considered a decontamination activity rather than an important-to-safety activity. Outage schedule consideration influenced decisions regarding the extent of RPV head cleaning activities during past refueling outages.

I call attention to the LLTF's description of "past refueling outages." 12RFO in 2000 was the first outage worked by Mr. Siemaszko at Davis-Besse, after the practice of having outage schedule considerations dictate the extent of reactor vessel head cleaning efforts. He cannot be blamed for being unable to break this established behavior pattern.

On page 2 of its April 21, 2005, order to Mr. Andrew Siemaszko, the NRC staff reported:

However, neither the limited RPV head cleaning nor the resultant inspections during 12RFO were sufficient to ensure that the significant boric acid deposits on the RPV head were only a result of CRDM flange leakage as supposed and were not a result of RCS pressure boundary leakage.

The boric acid deposits left on the reactor vessel head at Davis-Besse when the reactor restarted from refueling outages in 1996, 1998, and 2000 complicated the chore of distinguishing between deposits from CRDM flange leakage and deposits from CRDM nozzle leaks. According to page 50 of the NRC's LLTF report, this complication had the following cause:

The licensee failed to implement one of its GL 88-05 commitments to repair all CRDM flange leaks once identified.

This failure is described in greater detail on page 43 of the LLTF report:

Also, the licensee failed to repair all CRDM nozzle flange leaks identified during refueling outages. ... Some flange gasket leaks identified during refueling outages were not repaired prior to restart of the plant. A DBNPS staff member informed the task force that a limited amount of outage time was allotted for CRDM flange gasket replacement; therefore, only a limited number of flange gaskets were replaced each outage.

Again, the "production over safety" mentality at Davis-Besse created the conditions where identified leaking CRDM flanges were not repaired and known boric acid on the reactor vessel head was not removed. Mr. Siemaszko inherited this working environment – he did not create it. To focus the blame on him and exclude culpable individuals is a travesty.

But there's more. Page 42 of the NRC's LLTF report stated:

As symptoms of RCS leakage became more prevalent from 1998 to 2002, equipment required to be operable by the TS was affected. This equipment included the CACs and portions of the RCS leakage detection system (gaseous and particulate radiation monitors). ... However, all of the sources of the leakage which caused the system impacts were not corrected, including the VHP nozzle leaks.

And LLTF report page 48 added:

The next instance of CAC fouling was documented in PCAQ 98-1980 on November 12, 1998. ... A reactor building entry was made on November 14, 1998, for further inspection. Licensee personnel observed that a thin, loose powdery buildup of boric acid was present on all cooling coil surfaces of the operating CACs. ... From review of station log entries, the task force observed that personnel cleaned the CACs an additional 27 times from November 1998 through May 2001.

In its April 21, 2005, order, the NRC held Mr. Andrew Siemaszko accountable for not completely cleaning boric acid from the reactor vessel head during the refueling outage in 2000 and figuring out that a CRDM nozzle is leaking reactor coolant. But the NRC does not hold any individuals responsible for cleaning and cleaning and cleaning boric acid from the containment air coolers and not figuring out that all this boric acid was coming from a CRDM nozzle leaking reactor coolant. After all, Davis-Besse had operated for many years with many leaking CRDM flanges, and yet the boric acid from this source did not foul the containment air coolers.

Poor performance on the part of many people at Davis-Besse spanning many years produced the gaping hole in the reactor. The performance decline began long before Mr. Siemaszko arrived at Davis-Besse. He

neither initiated nor accelerated that performance decline. By taking enforcement action against Mr. Siemaszko and no other individual, the NRC is focusing the blame on this one poor man.

IT IS OUTRAGEOUSLY UNFAIR FOR THE NRC TO PLACE SUCH A MAJOR BURDEN ON SOMEONE WHO PLAYED SUCH A MINOR ROLE IN THE PERFORMANCE DECLINE AT DAVIS-BESSE AND ITS OUTCOME. IF MR. SIEMASZKO'S PERFORMANCE TRULY WARRANTS HIS REMOVAL FROM THE NUCLEAR GAME, HE SHOULD NOT BE THE ONLY PERSON SITTING ON THE BENCH.

Sincerely,

A handwritten signature in dark ink that reads "David O. Lochbaum". The signature is written in a cursive, flowing style.

David Lochbaum
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copies:

Mr. Andrew J. Siemaszko
[Home Address Deleted Not Under 10 CFR 2.390(a) But Under Reason that NRC's Order Did Not Specify a Home Address for Mr. Andrew Siemaszko] – if the NRC could please forward a copy along to Mr. Siemaszko, we'd appreciate it.

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