

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

**REPLY OF THE BELLEFONTE EFFICIENCY & SUSTAINABILITY TEAM/
MOTHERS AGAINST TENNESSEE RIVER RADIATION TO ANSWERS OF
THE NUCLEAR REGULATORY COMMISSION STAFF AND TENNESSEE
VALLEY AUTHORITY ON THE LICENSE AMENDMENT REQUEST FOR
EXTENDED POWER UPRATES FOR BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3**

In their October 4, 2016 answers, both the NRC staff and TVA assert that the contentions raised by BEST/MATRr are inadmissible because the contentions challenge an NRC regulation: 10 C.F.R. 50 Appendix K, I.A.5.¹ Furthermore, both the NRC staff and TVA point out that Mark Leyse, BEST/MATRr's technical expert, submitted a rulemaking petition, PRM-50-93, requesting revisions to 10 C.F.R. 50

¹ NRC, “NRC Staff Answer to BEST/MATRR Petition to Intervene and Hearing Request,” September 4, 2016, (ADAMS Accession No: ML16278A529), pp. 2, 6-9. TVA, “Tennessee Valley Authority’s Answer Opposing Petition for Leave to Intervene and Request for Hearing,” September 4, 2016, (ADAMS Accession No: ML16278A536), pp. 1, 8-9, 10-11.

Appendix K, I.A.5.² The NRC staff (on page 2) states: “As acknowledged by the Petitioner, the issues raised in their proposed contentions are currently the subject of an on-going rulemaking petition, PRM-50-93. Long-standing Commission precedent precludes challenging an issue subject to a rulemaking petition in an individual licensing proceeding; therefore the proposed contentions are not admissible in this proceeding.”³

In Apparent Violation of Administrative Procedure Act, the NRC Staff Has Been Reviewing a Rulemaking Petition, PRM-50-93, for Nearly Seven Years

As BEST/MATRR pointed out in their hearing request and petition to intervene: on November 17, 2009, Mark Leyse submitted a 10 C.F.R. § 2.802 petition for rulemaking, PRM-50-93,⁴ which addresses issues similar to those raised by BEST/MATRR in its hearing request. However, after more than six years, the NRC is still reviewing PRM-50-93.

A regulation of the Administrative Procedure Act (“APA”), 5 U.S.C. § 555(b) states: “With due regard for the convenience and necessity of the parties or their representatives and *within a reasonable time*, each agency shall proceed to conclude a matter presented to it” [emphasis added].

And another regulation of the APA, 5 U.S.C. § 706 states: “To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall— (1) compel agency action unlawfully withheld *or unreasonably delayed*” [emphasis added].

A couple of rulings on the unreasonable delay of reviewing and issuing final decisions on rulemaking petitions (or similar kinds of petitions) judged under the standard of 5 U.S.C. § 555(b) condemns agencies for taking longer than five years.

² NRC, “NRC Staff Answer to BEST/MATRR Petition to Intervene and Hearing Request,” pp. 2, 9-10. TVA, “Tennessee Valley Authority’s Answer Opposing Petition for Leave to Intervene and Request for Hearing,” p. 7.

³ NRC, “NRC Staff Answer to BEST/MATRR Petition to Intervene and Hearing Request,” p. 2.

⁴ Mark Leyse, PRM-50-93, November 17, 2009, (ADAMS Accession No. ML093290250).

A five year delay “ ‘smacks of unreasonableness on its face,’ according to D.C. Circuit district court. The agency’s claims of continuing research, complexity, and competing priorities ‘are not without merit,’ but ultimately do not balance out the failure to respond to ‘pressing’ health and environmental concerns or to live up to the statutory mandate for conservation.”⁵ (*The Fund for Animals v. Norton*, 294 F. Supp. 2d 92, 113 (D.D.C. 2003) motion for relief from judgment granted *Fund for Animals v. Norton*, 323 F. Supp. 2d 7 (D.D.C. 2004) and enforcement denied, 390 F. Supp. 2d 12 (D.D.C. 2005).⁶)

A delay of more than six years was “found to be ‘nothing less than egregious’ by the D.C. Circuit; this case concerned a petition for the Federal Electricity Regulatory Commission to consult with environmental agencies under the Endangered Species Act, but the court was still interpreting the relevant standard for prompt consideration of all petitions under 5 U.S.C. § 555(b).”⁷ (*In re Am. Rivers & Idaho Rivers United*, 372 F.3d 413, 419 (D.C. Cir. 2004). *See also In re ICWU*, 958 F.2d 1144 (D.C. Cir. 1992) (finding that a 6 year delay likely would have been unreasonable but for the fact that the court accepted the agency’s proposed 5-month timeline to resolve the petition).⁸)

The Atomic Safety and Licensing Board should also consider that (as discussed extensively in BEST/MATRR’s hearing request on pages 10-23) in the 1971 Indian Point Nuclear Plant Unit 2 licensing hearings, the Union of Concerned Scientists (“UCS”) alleged that the Baker-Just correlation is inadequate for use in computer safety models that simulate loss-of-coolant accidents. This is similar to issues raised in PRM-50-93. PRM-50-93 also alleges that the Baker-Just correlation (required by 10 C.F.R. 50 Appendix K, I.A.5) is inadequate for use in computer safety models that simulate loss-of-coolant accidents. **So an issue raised in PRM-50-93 was raised over 40 years ago by UCS and the NRC staff still has not resolved it.**

⁵ Jason A. Schwartz and Richard L. Revesz, NYU School of Law, “Petitions for Rulemaking,” September 25, 2014, p. 16.

⁶ Jason A. Schwartz and Richard L. Revesz, NYU School of Law, “Petitions for Rulemaking,” September 25, 2014, p. 16, Note 77.

⁷ Jason A. Schwartz and Richard L. Revesz, NYU School of Law, “Petitions for Rulemaking,” September 25, 2014, p. 16.

⁸ Jason A. Schwartz and Richard L. Revesz, NYU School of Law, “Petitions for Rulemaking,” September 25, 2014, p. 16, Note 78.

The NRC staff (on page 10) states: “While the Petitioner and their proffered expert may be unsatisfied by the pace of the PRM-50-93, their concern does not transform an inadmissible contention into issue within the scope of this license amendment proceeding.”⁹ But why should the NRC be allowed to continue delaying its resolution of PRM-50-93? And why should members of BEST/MATRR and others be made vulnerable to *irreparable injury* by the TVA’s license amendment request (“LAR”) for extended power uprates (“EPU”) for Browns Ferry Nuclear Plant (“BFN”) Units 1, 2, and 3 when the EPU has been qualified by the type of loss-of-coolant accident simulation that PRM-50-93 alleges is non-conservative? Over 40 years ago, UCS also alleged that this type of loss-of-coolant accident simulation is non-conservative.

In its hearing request, BEST/MATRR (on page 35) stated: “By definition, a non-conservative model does not ensure an adequate margin of safety. And, if a reactor’s power level is set too high after being “qualified” by LOCA [loss-of-coolant accident] analyses that do not ensure an adequate margin of safety, a real-life LOCA would have a PCT [peak cladding temperature] that exceeded the 10 C.F.R. § 50.46(b)(1) PCT limit of 2200°F.”

The NRC Staff Has Engaged in Bad Faith Behavior or Improper Behavior in Its Review of a 10 C.F.R. § 2.802 Petition for Rulemaking, PRM-50-93

In its hearing request, BEST/MATRR (on pages 10-27) discussed a Westinghouse experiment called FLECHT Run 9573.

In a press release, issued on August 25, 2011, the NRC announced that it would release preliminary evaluations of a 10 C.F.R. § 2.802 petition for rulemaking, PRM-50-93, that Mark Leyse submitted on November 17, 2009. The NRC’s press release stated: “To increase transparency and meet public interest, the NRC will soon begin posting preliminary conclusions and other material related to a petition about NRC regulations for reactor core emergency cooling systems. In the course of reviewing

⁹ NRC, “NRC Staff Answer to BEST/MATRR Petition to Intervene and Hearing Request,” p. 10.

Petition for Rulemaking (PRM)-50-93/95 and releasing its preliminary findings, the NRC is departing from its usual petition review process.”¹⁰

As part of its technical analysis of PRM-50-93 the NRC staff did a computer simulation of what occurred in FLECHT Run 9573. They wanted to compare the results of their simulation to the data that Westinghouse reported on FLECHT Run 9573. However, there was a big problem with the NRC’s simulation. They did *not* simulate the section of the test bundle that incurred thermal runaway—the severe-damage zone (see Figure 1).¹¹ (Or if they did simulate that section, they decided not to release their findings.)

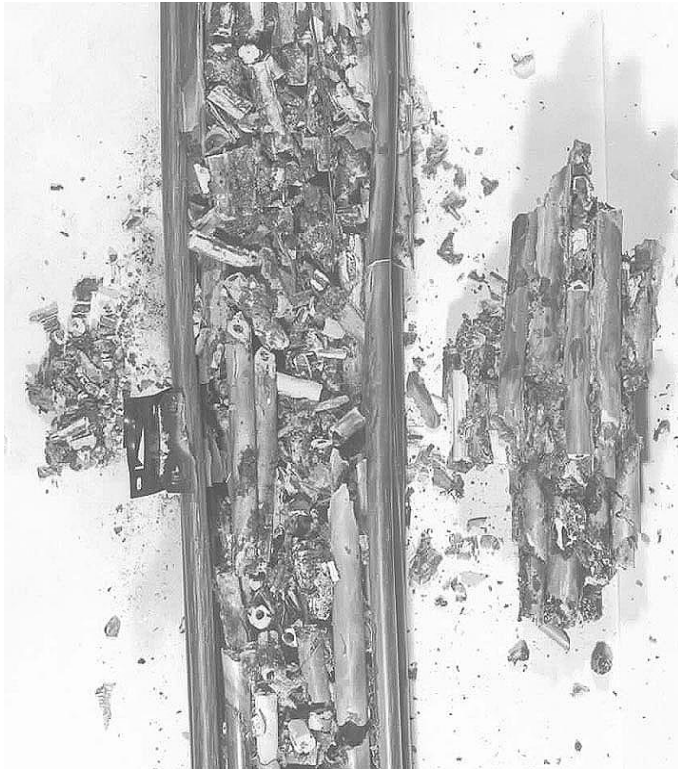


Figure 1. The severe-damage zone of the FLECHT test bundle from Run 9573

By way of an analogy: what the NRC did would be like simulating a forest fire and omitting trees reduced to ash and only simulating those that had been singed. After

¹⁰ NRC, “NRC to Release Preliminary Evaluations of Rulemaking Request Regarding Emergency Core Cooling Requirements,” Press Release No. 11-158, August 25, 2011 (ADAMS Accession No. ML11237A083).

¹¹ NRC, “Draft Interim Review of PRM-50-93/95 Issues Related to Conservatism of 2200 degrees F, Metal-Water Reaction Rate Correlations, and ‘The Impression Left from [FLECHT] Run 9573’ ,” October 16, 2012, (ADAMS Accession No. ML12265A277), pp. 7-9.

doing such a bogus simulation one might try to argue that trees actually do not burn down in forest fires. The NRC basically did just that. They used the results of their simulation to argue that the Baker-Just correlation is adequate for use in computer safety models that simulate loss-of-coolant accidents.¹²

On January 31, 2013, Mark Leyse gave a presentation to NRC Chairwoman Allison M. Macfarlane and the four NRC Commissioners. They invited Leyse to present his views on a panel addressing public participation in the NRC's rulemaking process.¹³ In his presentation, Leyse discussed the NRC's computer simulation of FLECHT Run 9573. He stated: "You cannot do legitimate computer simulations of an experiment that incurred runaway oxidation by not actually modeling the section of the test bundle that incurred runaway oxidation. So, the staff's...simulations were frankly a waste of money." Leyse offered to meet with the NRC staff members who were (and still are) reviewing PRM-50-93, to discuss it, "try to sort things out, expedite things."¹⁴

After everyone on the panel concluded their presentations, Chairwoman Macfarlane stated: "Let me first note that I think Mr. Leyse demonstrated and has been and is continuing to be in the process of demonstrating that the public actually has a lot of valuable input. The public actually knows things that people at government agencies don't know and may not be aware of, and actually, the social science literature is ripe with this information as well, confirming this is true."¹⁵ Later on, Commissioner William Magwood assured Leyse that he and the other Commissioners would instruct their staff "to follow up on" his criticism of the NRC's computer simulation of FLECHT Run 9573.¹⁶

The NRC Commissioners seemed receptive to Leyse's allegation that the computer simulation of FLECHT Run 9573 was inadequate. However, a couple of months after the meeting on public participation, the NRC staff released yet more of its technical analysis of PRM-50-93, including a statement that their simulation of FLECHT

¹² NRC, "Draft Interim Review of PRM-50-93/95 Issues Related to Conservatism of 2200 degrees F, Metal-Water Reaction Rate Correlations, and 'The Impression Left from [FLECHT] Run 9573'," October 16, 2012, (ADAMS Accession No. ML12265A277), pp. 7-9.

¹³ NRC, Public Participation in NRC Regulatory Decision-Making, Transcript of Proceedings, January 31, 2013, (ADAMS Accession No. ML13036A057).

¹⁴ *Id.*, pp. 55-56.

¹⁵ *Id.*, pp. 65-66.

¹⁶ *Id.*, p. 83.

Run 9573 *over*-predicted the extent of the zirconium-steam reaction.¹⁷ The NRC staff simply reiterated their claim that the results of their simulation of FLECHT Run 9573 show that the Baker-Just correlation is adequate for use in computer safety models that simulate loss-of-coolant accidents.

In November 2015, after Leyse made a series of additional complaints, Aby Mohseni, Deputy Director of the NRC's Division of Policy and Rulemaking, finally disclosed the results of a computer simulation of FLECHT Run 9573 that included the section of the test bundle that incurred thermal runaway—the severe-damage zone. And the simulation *under-predicted* temperatures Westinghouse had reported for that section.¹⁸ In its hearing request, BEST/MATRR (on pages 26-28) discussed the results of the computer simulation of FLECHT Run 9573 that included the severe-damage zone. As stated on page 28, the results of that computer simulation are powerful evidence that the Baker-Just correlation is inadequate for use in computer safety models that simulate loss-of-coolant accidents. This also means that 10 C.F.R. 50 Appendix K, I.A.5 is non-conservative.

Further Evidence that the NRC Staff Has Engaged in Bad Faith Behavior or Improper Behavior in Its Review of PRM-50-93

Some of the information disclosed in response to a Freedom of Information Act (“FOIA”) request to the NRC reveals that in August 2015, the NRC staff had plans to deny PRM-50-93. An August 5, 2015 e-mail, sent by Daniel Doyle, an NRC Project Manager, states: “This meeting is intended to be like a petition review board (PRB) except that the *draft denial package* has not been developed yet and there will not be a vote at this meeting” [emphasis added]. Information regarding an August 6, 2015 “PRM-50-93/95 Division Director Alignment Meeting” states that the planned “path forward” was to publish the NRC's denial of PRM-50-93 by August 2016.¹⁹

¹⁷ NRC, “Draft Interim Review of PRM-50-93/95 Issues Related to Minimum Allowable Core Reflood Rate,” March 8, 2013, (ADAMS Accession No. ML13067A261), p. 4.

¹⁸ Aby Mohseni, Deputy Director of the NRC's Division of Policy and Rulemaking, e-mail to Mark Leyse, regarding the NRC's TRACE computer simulation of the FLECHT Run 9573 test bundle, November 24, 2015, (ADAMS Accession No: ML15341A160).

¹⁹ Daniel Doyle, Project Manager, e-mail (with attachment) regarding, “Division Director Alignment Meeting for PRM-50-93/95,” August 5, 2015. See pages 1249-1253 of the PDF file of

The NRC staff's plan to deny PRM-50-93 was largely "supported" by their illegitimate computer simulation of FLECHT Run 9573. It is possible that the NRC did not publically announce a denial of PRM-50-93 in August 2016, because in November 2015, Aby Mohseni, Deputy Director of the NRC's Division of Policy and Rulemaking, disclosed the results of a computer simulation of FLECHT Run 9573 that included the section of the test bundle that incurred thermal runaway. The simulation *under-predicted* temperatures Westinghouse had reported for that section.²⁰

Some of the information disclosed in response to the FOIA request to the NRC reveals that the NRC staff's plans to deny PRM-50-93 (as of August 2015) were supported by false conclusions. One could argue that the conclusions were made in bad faith or that they were the result of improper behavior.

Some of the information disclosed in response to the FOIA request to the NRC is presented in a table titled "PRM-50-93/95 Issues and NRC Staff Positions" ("the Table"). The Table states that PRM-50-93 asserts that "[t]he current 10 CFR 50.46(b)(1) PCT [peak cladding temperature] limit of 2200°F is non-conservative. (Also stated as 'a necessary margin of safety' does not exist.)" The Table also states that the basis for this assertion is that "[r]unaway oxidation is indicated at temperatures below 2200°F" and that "Petitioner cites at least 11 experiments or references to support this claim."²¹

In response to PRM-50-93's assertions, the Table has the NRC staff's "counterpoints." In the Table, the NRC staff counters that "[d]ata does not show runaway oxidation at < 2200°F."²² That is, experimental data does not show that runaway

Interim response to a May 2016 Freedom of Information Act request by David Lochbaum of UCS for "All records not already publicly available in ADAMS related to the petition for rulemaking submitted by Mark Edward Leyse and designated as PRM-50-108 and NRC-2014-0171 by the staff," July 27, 2016, (ADAMS Accession No: ML16214A318).

²⁰ Aby Mohseni, Deputy Director of the NRC's Division of Policy and Rulemaking, e-mail to Mark Leyse, regarding the NRC's TRACE computer simulation of the FLECHT Run 9573 test bundle, November 24, 2015, (ADAMS Accession No: ML15341A160).

²¹ Daniel Doyle, Project Manager, e-mail (with attachment) regarding, "Division Director Alignment Meeting for PRM-50-93/95," August 5, 2015. See page 1252 of the PDF file of Interim response to a May 2016 Freedom of Information Act request by David Lochbaum of UCS for "All records not already publicly available in ADAMS related to the petition for rulemaking submitted by Mark Edward Leyse and designated as PRM-50-108 and NRC-2014-0171 by the staff," July 27, 2016, (ADAMS Accession No: ML16214A318).

²² *Id.*

oxidation (or thermal runaway) can occur when fuel cladding temperatures have been below 2200°F.

The NRC staff's statement (one of their reasons for "justifying" their intended denial of PRM-50-93) that data does not show that runaway oxidation can occur below 2200°F is false. The NRC staff has ignored experimental data. The NRC staff has also ignored instructions of Commissioner William Magwood, as will be explained below.

When, on January 31, 2013, Mark Leyse presented to NRC Chairwoman Allison M. Macfarlane and the four NRC Commissioners, he stated: "Right now, [NRC] technical staff are reviewing PRM-50-93, a petition I submitted in 2009, and the staff have overlooked a number of important points. They've released three interim reviews. In one review they concluded that runaway oxidation or thermal runaway of fuel-cladding temperatures has not commenced below 2,200 Fahrenheit. However, in a different review they actually reported data from the LOFT LP-FP-2 experiment, demonstrating that thermal runaway had commenced below 2,200 Fahrenheit in that experiment. And incidentally, there is a document for an NRC safety course which states that [in] a postulated station blackout scenario at Grand Gulf, runaway zirconium oxidation would commence at 1,832 degrees Fahrenheit."²³

This information (in text complete with references) was also presented to NRC Chairwoman Allison M. Macfarlane and the four NRC Commissioners. The text (with references) is copied just below.

Written Information that Accompanied Mark Leyse's January 31, 2013 Presentation to NRC Chairwoman Allison M. Macfarlane and the Four NRC Commissioners²⁴

Regarding the 2200°F 10 C.F.R. § 50.46(b)(1) fuel peak cladding temperature ("PCT") limit, in NRC's October 2012 Draft Interim Review of PRM-50-93/95, NRC concludes:

[A]utocatalytic reactions have not occurred at temperatures less than 2200 degrees F. Accordingly, the 2200 degree F regulatory limit is sufficient

²³ NRC, Public Participation in NRC Regulatory Decision-Making, Transcript of Proceedings, January 31, 2013, (ADAMS Accession No. ML13036A057), pp. 54-55.

²⁴ Mark Leyse's written statement for the NRC's January 31, 2013 Meeting on Public Participation in NRC Regulatory Decision-Making (ADAMS Accession No. ML13031A508). See pages 65-66 of the PDF file of the Meeting on Public Participation.

provided the correlations used to determine the metal-water reaction rate below 2200 degrees F are suitably conservative such that excessive reaction rates do not occur below that value.²⁵

In PRM-50-93/95 and in comments on PRM-50-93/95, Petitioner submitted information stating that runaway (autocatalytic) zirconium-steam reactions (“runaway oxidation”) have commenced when fuel-cladding temperatures were lower than the 2200°F PCT limit. For example, PRM-50-93 (pages 46-47) quotes an OECD Nuclear Energy Agency report, which states that runaway oxidation occurs at temperatures of 1050-1100°C (1922-2012°F) or greater.²⁶ In NRC’s October 2012 Draft Interim Review of PRM-50-93/95, NRC neither discusses nor mentions such information.

Interestingly, an NRC document, “Perspectives on Reactor Safety,” states that in a postulated station blackout scenario at Grand Gulf, runaway zirconium oxidation would commence at 1832°F.²⁷ (This information was neither provided in PRM-50-93/95 nor in comments on PRM-50-93/95.)

Furthermore, in NRC’s own September 2011 Draft Interim Review of PRM-50-93/95, NRC presented data demonstrating that runaway oxidation commenced in the LOFT LP-FP-2 experiment when fuel-cladding temperatures were lower than 2200°F. (In PRM-50-93 (pages 27, 33, 41, 42), Petitioner quoted a Pacific Northwest Laboratory paper, which states that “a rapid [cladding] temperature escalation, [greater than] 10 K/sec [18°F/sec], signal[s] the onset of an autocatalytic oxidation reaction.”²⁸

²⁵ NRC, “Draft Interim Review of PRM-50-93/95 Issues Related to Conservatism of 2200 degrees F, Metal-Water Reaction Rate Correlations, and ‘The Impression Left from [FLECHT] Run 9573’,” October 16, 2012, (ADAMS Accession No. ML12265A277), p. 2.

²⁶ T. J. Haste, K. Trambauer, OECD Nuclear Energy Agency, Committee on the Safety of Nuclear Installations, “Degraded Core Quench: Summary of Progress 1996-1999,” Executive Summary, February 2000, p. 9. (Regarding the statement that runaway (autocatalytic) oxidation occurs at temperatures of 1050-1100°C (1922-2012°F) or greater, “Degraded Core Quench: Summary of Progress 1996-1999” explicitly states that “[a] notable feature of the [QUENCH] experiments was the occurrence of temperature excursions starting in the unheated region at the top of the shroud, from temperatures of 750-800°C, which is more than 300 K lower than excursion temperatures associated with runaway oxidation by steam.”)

²⁷ NRC, “Perspectives on Reactor Safety,” NUREG/CR-6042, Rev. 2, March 2002, (ADAMS Accession No. ML021080117), pp. 3.7-4, 3.7-5, 3.7-29.

²⁸ F. E. Panisko, N. J. Lombardo, Pacific Northwest Laboratory, “Results from In-Reactor Severe Fuel Damage Tests that used Full-Length Fuel Rods and the Relevancy to LWR Severe Accident Melt Progression Safety Issues,” in “Proceedings of the U.S. Nuclear Regulatory Commission:

This is for cases in which there would be relatively low initial heatup rates—for example, 1.0 K/sec (1.8°F/sec)—followed by substantially higher heatup rates, caused by the contribution of heat generated by the exothermic oxidation reaction.) In NRC’s September 2011 Draft Interim Review of PRM-50-93/95, NRC presented data stating that in LOFT LP-FP-2, when local temperatures reached 1477 K (2199.2°F), the heatup rates at two fuel-cladding locations (TE-5C07-042 and TE-5D13-042) were 10.3 K/sec (18.5°F/sec) and 11.9 K/sec (21.4°F/sec), respectively.²⁹

Hence, NRC’s October 2012 Draft Interim Review of PRM-50-93/95 overlooks data that NRC provided in September 2011 demonstrating that runaway oxidation commenced in LOFT LP-FP-2 when fuel-cladding temperatures were lower than the 2200°F PCT limit. Clearly, NRC needs to correct its erroneous conclusion that runaway oxidation has not commenced when fuel-cladding temperatures were lower than the 2200°F PCT limit.

(End of the text that accompanied Mark Leyse’s January 31, 2013 presentation.)

And Commissioner William Magwood assured Leyse that he and the other Commissioners would instruct their staff “to follow up on” his criticism of the NRC’s review of PRM-50-93. Commissioner Magwood stated: “And Mr. Lacey [Leyse], you provided some more technical comments today which my colleagues have already indicated we will ask the staff to follow up on.”³⁰

Clearly, the NRC staff did not follow up on Leyse’s complaints and technical comments. The NRC staff’s statement (one of their reasons for “justifying” their intended denial of PRM-50-93) that data does not show that runaway oxidation can occur below 2200°F is false. The NRC staff has ignored experimental data. The NRC staff has also ignored instructions of Commissioner Magwood. This is evidence that the NRC staff has engaged in bad faith behavior or improper behavior in its review of PRM-50-93.

Twentieth Water Reactor Safety Information Meeting,” NUREG/CP-0126, Vol. 2, 1992, (ADAMS Accession No. ML042230126), p. 282.

²⁹ NRC, “Draft Interim Review of PRM-50-93/95 Issues Related to the LOFT LP-FP-2 Test,” September 2011, (ADAMS Accession No. ML1 12650009), p. 4.

³⁰ NRC, Public Participation in NRC Regulatory Decision-Making, Transcript of Proceedings, January 31, 2013, (ADAMS Accession No. ML13036A057), p. 83.

Members of BEST/MATRR and others must not be made vulnerable to *irreparable injury* by the TVA's LAR for EPU's for BFN Units 1, 2, and 3 because the NRC staff has engaged in bad faith behavior or improper behavior in its review of PRM-50-93. The EPU has been qualified by the type of loss-of-coolant accident simulation that PRM-50-93 alleges is non-conservative.

The Administrative Procedure Act Provides a Legal Basis for Why BEST/MATRR's Contentions Are Admissible

A regulation of the APA, 5 U.S.C. § 705 states: "When an agency finds that justice so requires, it may postpone the effective date of action taken by it, pending judicial review. On such conditions as may be required and to the extent necessary to prevent irreparable injury, the reviewing court, including the court to which a case may be taken on appeal from or on application for certiorari or other writ to a reviewing court, may issue all necessary and appropriate process to postpone the effective date of an agency action or to preserve status or rights pending conclusion of the review proceedings."

In order to prevent *irreparable injury* TVA's LAR for EPU's for BFN Units 1, 2, and 3 should be denied or, at least, stayed. As demonstrated in BEST/MATRR hearing request and petition to intervene there is a scientific basis for denying TVA's LAR for EPU's for BFN Units 1, 2, and 3. In accordance with 10 C.F.R. § 2.309(f), in its hearing request, BEST/MATRR "provide[d] sufficient information to show that a genuine dispute exists with [TVA] on a material issue of law or fact."

Conclusion

For the forgoing reasons, BEST/MATRR's contentions are admissible and should be admitted for a hearing.

Respectfully submitted,

/s/

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October 14, 2016

In the Matter of: :

TENNESSEE VALLEY AUTHORITY :
(Browns Ferry Nuclear Plant Units 1, 2, and 3; :
Docket Nos. 50-259, 50-260, and 50-296; :
NRC-2016-0118) :

I hereby certify that on October 14, 2016, I posted the foregoing BELLEFONTE EFFICIENCY AND SUSTAINABILITY TEAM/ MOTHERS AGAINST TENNESSEE RIVER RADIATION'S HEARING REQUEST AND PETITION TO INTERVENE REGARDING TENNESSEE VALLEY AUTHORITY'S LICENSE AMENDMENT REQUEST FOR EXTENDED POWER UPRATES FOR BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3 This has been filed on the NRC's Electronic Information Exchange system. It is my understanding that as a result, the Commission, Atomic Safety and Licensing Board, and parties were served.

/s/

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