

**From:** Donna Pirok *13*  
**To:** Brian Sheron; Cynthia Carpenter; DRPIII; DRSIII; Gary Shear; Geoffrey Grant; Guy Caputo; John Grobe; John Rutkowski; Kenneth O'Brien; Patricia Buckley; RidsNrrDirslhpb; Russell Gibbs; Scott Langan; Stephen Burns; Stephen Sands; Tamara Bloomer; Tammy Tomczak; Thomas Wengert; William Kane  
**Date:** 04/03/2007 9:21:47 AM  
**Subject:** Davis-Besse report by Exponent regarding reactor pressure vessel head wastage

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*F-92*

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April 2, 2007

Mr. Danny L. Pace  
Senior Vice President - Fleet Engineering  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

SUBJECT: REPORT PREPARED BY EXPONENT FAILURE ANALYSIS ASSOCIATION  
AND ALTRAN SOLUTIONS CORPORATION (EXPONENT) REGARDING  
REACTOR PRESSURE VESSEL HEAD WASTAGE AT THE DAVIS-BESSE  
NUCLEAR POWER PLANT

Dear Mr. Pace:

This acknowledges receipt of your letter dated March 20, 2007, which transmitted a report prepared by your contractors, Exponent Failure Analysis Association and Altran Solutions Corporation (Exponent), dated December 15, 2006, regarding head wastage at the Davis-Besse Nuclear Power Plant. We understand that this report was prepared in connection with a pending insurance claim.

We appreciate the information FENOC and Exponent provided during our conference calls on March 9, 2007; March 19, 2007; and March 22, 2007, regarding the report. FENOC and Exponent representatives advised us during these calls that, in their view, the report did not contain information that would constitute a current safety concern for the Davis-Besse facility or for other operating reactors. Additionally, Exponent stated that: (1) no new information was identified in their report that the NRC was not already aware of and was not already readily available; (2) the currently required NRC examinations would detect cracking before significant wastage occurs in a reactor vessel head or nozzle; and, (3) the critical aspect of nozzle failure identified in the report was the accelerated crack growth rate associated with a specific heat number of nozzle material, and the replacement Davis-Besse head nozzles are not made from that specific heat number of nozzle material.

In order to assist us in understanding this report, we request that you provide a written response within 30 days of the date of this letter that addresses the following (and confirm that the information Exponent provided during our previous conference calls with respect to each has not changed):

1. provide your perspective on the overall conclusions and assumptions in the Exponent Report, as well as any assessments or interpretations of the Exponent Report provided to you by others and your response(s) thereto;

2. discuss any differences between the Exponent Report information and conclusions drawn therein, and information previously provided in your Root Cause Analysis Report and Licensee Event Report for the Davis-Besse reactor pressure vessel head wastage event. Provide your evaluation of any differences, including which views you conclude are correct, and the rationale for your conclusions;
3. discuss any implications, or lack thereof, regarding the adequacy of both the specific and more broad-based corrective actions for the Davis-Besse reactor pressure vessel head wastage event, as well as for closure of the NRC's Confirmatory Action Letter (CAL) 3-02-001 items. Specifically provide the rationale for your conclusions regarding the adequacy of the corrective actions; and
4. discuss whether you intend to revise your Root Cause Analysis Report and Licensee Event Report, and the rationale for that decision. Also address actions, if any, you are taking to share and evaluate the information in the Exponent Report with other plants and industry groups.

We request that your response contain no personal privacy, proprietary, or safeguards information. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).



D. Pace

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We appreciate your cooperation and will gladly discuss any questions you may have concerning this request. Should you have questions, please contact Eric Duncan, Branch Chief, Region III, Reactor Projects Branch 6 at (630) 829-9628.

Sincerely,

**/RA/**

James L. Caldwell  
Regional Administrator

Docket No. 50-346  
License No. NPF-3

cc: The Honorable Dennis Kucinich  
J. Hagan, President and Chief  
Nuclear Officer - FENOC  
J. Lash, Senior Vice President of  
Operations and Chief Operating Officer  
Richard Anderson, Vice President, Nuclear Support  
Manager - Site Regulatory Compliance  
D. Pace, Senior Vice President of  
of Fleet Engineering  
J. Rinckel, Vice President, Fleet Oversight  
M. Bezilla, Davis-Besse Site Vice President  
D. Jenkins, Attorney, FirstEnergy  
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R. Owen, Administrator, Ohio Department of Health  
Public Utilities Commission of Ohio  
President, Lucas County Board of Commissioners  
President, Ottawa County Board of Commissioners

D. Pace

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Sincerely,

James L. Caldwell  
Regional Administrator

Docket No. 50-346  
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cc: The Honorable Dennis Kucinich  
J. Hagan, President and Chief  
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J. Lash, Senior Vice President of  
Operations and Chief Operating Officer  
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D. Pace, Senior Vice President of  
of Fleet Engineering  
J. Rinckel, Vice President, Fleet Oversight  
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D. Jenkins, Attorney, FirstEnergy  
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