

April 8, 2004

MEMORANDUM TO: William D. Travers  
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA by J. Samuel Walker  
Acting For/**

SUBJECT: STAFF REQUIREMENTS - SECY-04-0046 - FISCAL YEAR 2003  
REPORT TO CONGRESS ON ABNORMAL OCCURRENCES

The Commission has approved the Abnormal Occurrences (AO) to Congress for FY 2003, the proposed AO criteria, and the letters forwarding the report to Congress, subject to the comments and changes noted below.

Comments and Changes to the AO Report

1. In Appendix B, Item 1 should be updated regarding the status of activities at Davis-Besse. The report currently reports information as of January 15, 2004 and considering the attention focused on this plant, the status should contain more current information.
2. The report should use a consistent method in reporting radioactive quantities. An example of the standard methodology used by the NRC is 1 gray (100 rads). The staff uses this standard methodology except for some medical applications. These medical applications use the centigray (cGy) or centisievert (cSv) terminology. With no explanation, the terminology changes to values such as 13 cGy (rads) or 31.4 cSv (rem). Unless one is technically aware that 1 cGy equals 1 rad or 1 cSv equals 1 rem, the change in terminology can be confusing. The staff should go through the report and use a consistent methodology throughout -- i.e. 13 cGy (13 rads) or 31.4 cSv (31.4 rem). Other than for particular aspects of the medical community, the terms cSv and cGy are not commonly used terms and we should not expect other disciplines to be familiar with the use of these terms.
3. The report should be consistent in nomenclature. For example, in AS 03-07 (page 16) staff writes "A patient received 85.1 MBq (2.3 mCi) of I-131 instead of the prescribed dosage of 11.1 MBq (300  $\mu$ Ci)." Consistent quantities should have been used -- either change 2.3 mCi to 2,300  $\mu$ Ci or the 300  $\mu$ Ci should have been changed to 0.3 mCi. The Commission does not really expect Congress to fully appreciate the difference between a mCi and a  $\mu$ Ci, but it is more understandable for them to read that the value should have been 0.3 mCi but it was 2.3 mCi. As another example, in AS-03-08, staff writes "A

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WORKING DAYS AFTER THE DISPATCH OF THE LETTERS TO  
CONGRESS.

patient was prescribed a therapeutic dose to the thyroid of I-131 with an activity of 296 MBq (8mCi) but was erroneously administered 3.7 GBq (100 mCi) of I-131 instead.” Congress may not appreciate the difference between a MBq ( $10^{+6}$  Bq) and a GBq ( $10^{+9}$  Bq), but they would better understand the sentence if it read the patient should have received a dose of 296 MBq but instead received a dose of 3,700 Mbq. The staff should go through the entire report and correct similar deficiencies.

4. On page iii, (Abstract), paragraph 2, revise line 8 to read ‘Seven **Agreement State** events were ....’
5. On page 3, paragraph 2, revise the last 3 lines to read ‘ ... 27,814 cGy (27,814 rads). ~~The NRC medical consultant, contracted to review this event, also anticipated that the fetal thyroid would be ablated.~~ The licensee anticipated that the fetal thyroid would be ablated. **The NRC medical consultant also anticipated that the fetal thyroid would be ablated.**’
6. On page 4, 2<sup>nd</sup> full paragraph, line 4, correct the spelling of “judgment”.
7. On page 4, 3<sup>rd</sup> full paragraph, revise the last line to read ‘ ... (mm) (1.6 in) **away from proximal** to the intended ....’
8. On page 7, revise line 1 from the top to read ‘ ... August 29, 2003, a **Notice of Violation (NOV)** was issued ....’
9. On page 27, paragraph 4, revise line 1 to read ‘ ... NRC issued a **Notice of Violation (NOV)** and Proposed ....’
10. On page 29, 2<sup>nd</sup> full paragraph, revise line 2 to read ‘ ... to reach a protective feature limits and actuate a plant shutdowns.’
11. On page 31, paragraph 3, revise line 1 to read ‘ ... issued a **Notice of Violation (NOV)** for a violation involving the failure ....’

#### Comments and Changes to the Congressional Letters

12. The letters forwarding the report to Congress should be updated to reflect the current status of activities at Davis-Besse.
13. In paragraph 2, revise line 5 to read ‘Seven **of these** events are ....’

cc: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
CFO  
OCA  
OIG  
OPA  
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)

PDR