

February 11, 2000

MEMORANDUM TO: William D. Travers  
Executive Director for Operations

FROM: Annette Vietti-Cook, Secretary /s/

SUBJECT: STAFF REQUIREMENTS - SECY-00-0003 - REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FOR FISCAL YEAR 1999

The Commission has approved submittal of the abnormal occurrences report to Congress subject to incorporation of the changes and comments provided below.

(EDO) (SECY Suspense: 2/25/00)

1. On page vii, last paragraph: 1<sup>st</sup> sentence - replace "... events for Appendix C to this report." with "...Other Events of Interest.". Delete the last sentence and revise the 3<sup>rd</sup> sentence to read "... on events **that are not reportable as AOs but are reportable as "Other Events of Interest"** based on ..."
2. On page viii, paragraph 2, revise the last sentence to read "The **NRC is seeking to make the** regulatory system risk-informed and ...."
3. With respect to AO 99-1, Fire Breaches Containment and Requires Shutdown of a Portion of the Cascade at the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio, the following comments should be clarified and resolved prior to issuance of this report.
  - A. In the Nature and Probable Consequences section, first paragraph, fourth sentence, "Subsequent heat and pressure increases within the side purge cascade resulted in (1)..., (2) the automatic shutdown of the side purge cascade, (3)..., (4)..., and (5).". In the Actions Taken to Prevent Recurrence section, under Certificate Holder, last sentence, "The long-term corrective actions included the following: ", "adding an alarm and automatic shutdowns on the side purge cascade compressors for compressor high-process gas temperature ". It appears that the automatic shutdown for the side purge cascade operated as designed and intended, therefore, it is unclear as to why additional automatic shutdowns located on the compressors are necessary. Additionally, If the proposed automatic shutdowns are critical safety features, why are they considered a long-term corrective action item and what equivalent compensatory measures are being utilized until these controls are implemented.

NOTE - Additional information further describing the existing versus proposed safety features would help clarify why the suggested corrective action improves safety.

- B. In the Actions Taken to Prevent Recurrence section, under Certificate Holder, (4) development of a revised nuclear criticality safety basis for Cell 25-7-2. The AO did not at anytime reference criticality concerns as a result of this event. It is unclear as to why a revised nuclear criticality safety basis for Cell 25-7-2 is necessary. This corrective action will draw people's attention.

NOTE - Data and/or information supporting why a revised nuclear criticality safety basis is needed for Cell 25-7-2 would be very helpful. No where in the report was criticality mentioned or referenced as an issue.

- C. In the Actions Taken to Prevent Recurrence section, under NRC. As a result of the December 9, 1998 Augmented Inspection and the March 9, 1999 follow-up inspection, the paragraph describes no problems with the adequacy of the Certificate Holders corrective actions. It then makes reference to procedural and reporting violations and goes on to identify that a \$55,000 fine was assessed for failure to identify and declare an Alert. As identified in the Nature and Probable Consequences section, second paragraph, "The radiological and chemical consequences of the event on plant staff were minor and well within NRC requirements. The general public experienced no measurable radiological or chemical consequences from this event." The fine itself may not draw questions, however, it is unclear as to why such a large fine was assessed. The staff should be more specific as to the consequences of the event on plant staff. Additionally, it appears as if the classification of this incident may more appropriately be identified as an Unusual Event instead of an Alert, according to the definitions provided in NRC Response Technical Manual-96.

NOTE - Additional information as to the categorization (Alert) of this event and why a \$55,000 fine was assessed would be helpful, especially, when plant staff experienced minor radiological and chemical consequences (within NRC requirements) and the general public experienced no measurable radiological or chemical consequences from the event.

4. On pages 3 through 5 and 7 through 8, there are three events involving an unintended exposure to a fetus. All three events discuss possible medical effects on the fetus. However, only one event states that the pregnancy

was terminated. The other two events are silent on what happened next. For the event in West Virginia, the staff can state that at the time of the investigation the patient had decided to continue the pregnancy. For the Wichita, Kansas case, the staff can state that the pregnancy went to full term. These facts should be added to the report. The staff should not contact the licensee for additional follow-up information, but should simply state what is known about the case. Also, in all three cases, the report essentially concludes that no NRC procedures were violated but all three hospitals are considering requiring a pregnancy test be performed within 24 hours before receiving specific radiopharmaceuticals. Taken as written, it would not be unreasonable for a reader to conclude that a pregnancy test should be mandatory, which was specifically not the intent in the recent votes on 10 CFR Part 35. The staff should be more specific in the report and say that because the licensee made a reasonable effort to obtain verbal or written confirmation from the patient that she was not pregnant before beginning the testing, no NRC (or Agreement State) requirements were violated. As far as requiring a pregnancy test to be performed within 24 hours before administering the therapy, the report should clearly indicate that is a voluntary decision on the part of the licensee.

5. On pages 4 and 5, event 99-3; and on pages 7 and 8, event AS 99-1 (Medical Events Involving Administration of I-131 to Pregnant Patient) the staff should clarify in the section entitled "Cause or Causes" that the licensees' assumption that the patients were not pregnant was based on verbal statements made by the patient to the licensee staff.
6. On page 8, last paragraph, replace "... such as..." with "...including ..."
7. On page 25, in the Fire at FitzPatrick, paragraph 2, which discusses the location of the fire, should include a discussion of the distance and location of the hydrogen storage system from safety-related equipment and major plant structures at FitzPatrick. Without such a discussion, the linkage between the FitzPatrick fire and the staff's conclusion in Paragraph 6 that public health and safety was not threatened, is not clear.
8. On pages 26 and 27, Indian Point Unit 2 Scram, portions of paragraphs 2, 4 and 5 are overly technical for a report to Congress. The text should be revised to make the event more understandable to the general public.
9. On pages 25 and 26, In Appendix C of the report, the nuclear power plant events should include the following as the introductory sentence for the overall heading of Nuclear Power Plants: "These events did not meet the abnormal occurrence reporting criteria since it did not involve a major reduction in the degree of protection of public health or safety."
10. On page 26, revise line 1 to read ' ... typically placed with the long axis ~~perpendicular~~ **parallel** to building ....'
11. On page 27, in Appendix C, the NRC and Agreement State Materials Licensees section should be modified as follows. The first two paragraphs should be replaced with: "During FY 1999 there were 732 reported materials events. NRC and Agreement States have received 188 reports of events that resulted in licensed materials entering the public domain in an uncontrolled manner: 74 events reported by NRC licensees and 114 events reported to Agreement States licensees. In some cases, the material caused radioactive contamination or radiation exposures."
12. On page 27, last paragraph, insert "portable" before gauges in item (2).
13. On page 28, the 1<sup>st</sup> full sentence should be replaced with: "Of these events, **loss of** portable moisture density gauges were the most commonly reported events involving lost or stolen licensed devices."
14. On page 28, 1<sup>st</sup> full paragraph, replace the last sentence with: "The NRC and Agreement States have issued generic communications to inform licensees about these events and their consequences in order to prevent future incidents, in some cases have taken enforcement actions, and are in the process of making regulatory changes intended to increase licensees' accountability of generally licensed devices."
15. On page 28, the description for the lost source event in Florida ends in two sentences as follows: "After extensive searching for the missing source, DOE terminated its effort without recovering the camera. This event is closed for the purpose of this report." There is an event of sufficient magnitude to call out a special team from DOE and then conclude that nothing further will be done. This can raise many questions. The staff should add several sentences to this section of the report which provides a larger perspective of activities taken to recover the camera, factors that may eventually lead to the recovery of the camera, and the safety implications associated with not recovering the camera.
16. In the Congressional Letters, paragraph 2, revise lines 2 and 3 to read ' ... portion of the cascade at **the Portsmouth** ~~a~~ gaseous diffusion ....'
17. In the Congressional Letters, paragraph 2, revise line 12 to read ' ... and one involved **a** sodium ....'

cc: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
CIO  
CFO  
OCA  
OIG  
OPA  
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PDR  
DCS