

February 6, 1998

MEMORANDUM L. Joseph Callan  
TO: Executive Director for Operations  
FROM: John C. Hoyle, Secretary /s/  
SUBJECT: STAFF REQUIREMENTS - SECY-97-288 - REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FOR FISCAL YEAR 1997

The Commission has not approved the draft Report to Congress on Abnormal Occurrences for Fiscal Year 1997. As such, and based upon discussion with the staff, the staff should consider the following comments and resubmit the draft report for Commission approval.

The staff should clarify the reasoning for listing event AO 97-2 and explain how the lens of the left eye received a dose of 100 rads greater than it would have received under a successful treatment when the displacement caused the source to move away from, rather than towards the left eye. The staff should provide clarification of its interpretation regarding criteria IV(a)(1). That is, is the staff's interpretation of the criteria regarding the 100 rads delivered to the bone marrow, the lens of the eye, or to the gonads, a dose that is in addition to the dose these sites would have received in a successful treatment, or is this an absolute dose, regardless of the dose the site would have received in a successful treatment. If after review of the criteria and the facts related to this event, the staff determines that this event does not meet the AO criteria, this event should be removed from the revised AO report.

The staff should insert the following under Appendix C:

During FY 1997, a number of events occurred involving the loss of control of licensed materials resulting in the materials entering the public domain in an uncontrolled manner, in some cases causing radioactive contamination or radiation exposures. Some of these events received media coverage, and in the case of at least one event, the NRC's oversight of the licensed material was the subject of correspondence exchanged between the NRC and a State health agency. Although not meeting the AO criteria, the frequency of these types of events and the increased public interest and concern has caused the NRC to increase its attention on the issue of the loss of control of licensed materials. Therefore, this issue merits recognition in the report to Congress under Appendix C, "Other Events of Interest."

For illustration purposes, the following list includes some of the events involving loss of control of licensed materials that occurred in FY 1997. This list is not all inclusive nor is there any intention to routinely provide examples of these events in the future.

1. January 1997 - Melting of Am-241 source at White Salvage, Riply, TN. This event was responded to by the TN RCP.
2. March 1997 - Co-60 contaminated steel plate found in PA and traced to WCI, Inc steel mill in OH. See PNO-III-97-029 and EN 32021. Additional Co-60 contaminated steel plate was found in WV in September 1997 (see PNO-97-047) and traced to the same wholesale distributor that distributed the steel in PA.
3. May 1997 - Melting of Cs-137 source at Kentucky Electric Steel plant (see MR 2-97-0032).
4. May 1997 - Tritium exit signs at a demolition site removed to a private home. One sign was disassembled resulting in contamination and personnel exposure (see PNO-I-97-028).
5. August 1997 - Contamination of Royal Green metal recycling plant in PA as a result of damage to Am-241 source in a shredder (see EN 32859 & PNO-I-97-056).

In FY 1997, the Commission directed the staff to develop recommendations to address this problem. The staff's recommendations have been received by the Commission (SECY-97-273) and the Commission will provide direction to the staff on this matter in FY 1998.

The following changes should be made to both letters provided in attachment 1 to the SECY paper.

1. In paragraph 1, line 4, capitalize the 'A' in 'Act.'
2. In paragraph 2, line 3, insert 'of a worker' after 'overexposure' at the end of the second sentence.
3. In paragraph 2, line 3, replace 'Four AOs submitted by the Agreement States are include:' with the following:

The report also addresses four AOs at facilities licensed by the Agreement States. Agreement States are those States that have entered into a formal agreement with NRC pursuant to Section 274 of the Atomic Energy Act (AEA) to regulate certain quantities of AEA material at facilities located within their borders. Currently, there are thirty Agreement States. Regarding the Agreement State AOs,

4. In paragraph 2, line 4, insert 'of workers or a member of the public' after 'overexposures.'

The following changes should be incorporated in the draft AO report.

1. On page viii, paragraph 4, line 2, insert 'or an Agreement State' after 'NRC.' In line 5, insert 'also' after 'is.'
2. On page x, paragraph 1, add 'Currently there are thirty Agreement States.' at the end of the paragraph. In paragraph 2, line 8, insert 'and the Federal Register notice issued to provide wide dissemination of information to the public' after 'Congress.'
3. On page 5, paragraph 2, last line, replace 'that localized skin cancer may develop' with 'for skin cancer to develop in the exposed area of the thumb.'
4. On page 6, paragraph 5, insert at the end of the first sentence 'and was initially reported to NRC in January 1996.' At the end of the paragraph, add 'The State provided additional information on these events to NRC in 1997.'
5. On page 7, last line, insert commas after 'unfortunately' and 'off.'
6. On page 8, in the Date and Place section of AO 97-3, add at the end 'The State initially reported this event to NRC in December 1996.'
7. On page 14, in item IV.B., change the roman numeral in parentheses near the end of the line to lower case.
8. On page 16, paragraph 3 under AO 96-3, line 6, delete 'unprescribed' and insert 'in excess of the prescribed doses' at the end of the sentence after 'doses.' In line 11, insert a new sentence before 'However' which states 'The remaining 18 patients could not be located.' Also on page 16, last line, insert 'the' after 'in' and put an 's' on 'misadministrations.'
9. On page 17, paragraph 1, line 2, replace 'overdosing' with 'overdoses that met the definition of a.' In paragraph 2, line 1, replace 'that' with 'who' and replace 'overdosing' with 'a.' Also, in line 1, insert '(overdoses)' after 'misadministration.'

(EDO)

(SECY Suspense: 3/6/98)

The staff should provide a clearly defined set of criteria for events to be included in Appendix C to be used in next year's report.

(EDO)

(SECY Suspense: 6/1/98)

cc: Chairman Jackson  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
OGC  
CIO  
CFO  
OCA  
OIG  
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)  
PDR  
DCS

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SECY NOTE: THIS SRM, SECY-97-288, AND THE COMMISSION VOTING RECORD CONTAINING THE VOTE SHEETS OF ALL COMMISSIONERS WILL BE MADE PUBLICLY AVAILABLE 5 WORKING DAYS FROM THE DATE OF THIS SRM.