UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SECRETARY

May 6, 2010

COMMISSION VOTING RECORD

DECISION ITEM: SECY-10-0024

TITLE: REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FISCAL YEAR 2009

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 6, 2010.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:
1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
EDO
PDR

SECY Note: To be made publicly available 5 days after dispatch of the report to Congress

VOTING SUMMARY - SECY-10-0024

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X					3/18/10
COMR. SVINICKI	X				X	3/17/10
COMR. APOSTOLAKIS	X				X	4/2710
COMR. MAGWOOD	X				X	4/29/10
COMR. OSTENDORFF	X				X	4/20/10

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and Commissioners Svinicki, Apostolakis, Magwood and Ostendorff provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 6, 2010.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Chairman Jaczko

SUBJECT: SECY-10-0024 – REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FISCAL YEAR 2009

Approved __X__ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached ___ None _X_

SIGNATURE

3/18/10

DATE

Entered on "STARS" Yes _x_ No ___

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER SVINICKI

SUBJECT: SECY-10-0024 – REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FISCAL YEAR 2009

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached XX None ___

Approved subject to the attached edits.

SIGNATURE

03/17/10

DATE

Entered on "STARS" Yes X No ___

ABNORMAL OCCURRENCES IN FISCAL YEAR 2009

The following is a brief explanation of the outline numbering system used in this section of the report. Appendix A provides the specific criteria for determining when an event is an abnormal occurrence (AO) and provides the guidelines for reporting other events of interest which may not meet the AO criteria but which the Commission has determined should be in this report. Appendix A contains four major categories: I. For All Licensees, II. For Commercial Nuclear Power Plant Licensees, III. Events at Facilities Other Than Nuclear Power Plants and all Transportation Events, and IV. Other Events of Interest. Category IV events are discussed in Appendix C of the report and Categories I, II, and III are discussed in this section. Categories I and II contain significant subelements labeled A, B, C, and D and Category III goes to subelement C. This section of the report only discusses the specific subelement in Categories I, II, and III for which an AO was reported. The identification number for all Agreement State AO reports start with "AS." Similarly, the identification number for all Nuclear Regulatory Commission (NRC) AO reports start with "NRC." Medical terms have been defined in Appendix D, "Glossary."

I. FOR ALL LICENSEES

A. Human Exposure to Radiation from Licensed Material

{Comment for staff to resolve: Cases 1 and 2 are very similar. Case 2 states that since the fetus was only 2 to 3 weeks old the implications of the exposure should be minimal because the thyroid has not formed at that stage of development. Staff should consult with an appropriate physician and, if possible, add a similar statement to case 1 for consistency between the two discussions.}

During this reporting period, two events at Agreement State-licensed facilities were significant enough to be reported as abnormal occurrences, based on the criteria in Appendix A to this report.

AS09-01 Human Exposure to Radiation at Chester County Hospital in West Chester, Pennsylvania

Criterion I.A.2, "Human Exposure to Radiation from Licensed Material," of Appendix A to this report provide, in part, that any unintended radiation exposure to any minor (an individual less than 18 years of age) resulting in an annual total effective dose equivalent of 50 mSv (5 rem) or more, or to an embryo/fetus resulting in a dose equivalent of 50 mSv (5 rem) or more, shall be considered for reporting as an AO. Although both of these events occurred at medical facilities, they both involved unintended exposures to individuals who were not the patient. Therefore these events belong under the criteria for I.A in Appendix A, which is the "For All Licensees" category as opposed to item III.C, the "Medical Events" category.

Date and Place – March 30, 2009, West Chester, Pennsylvania

Nature and Probable Consequences – Chester County Hospital (the licensee) reported that a therapeutic dose of 2,001.7 MBq (54.1 mCi) of iodine-131 resulted in a dose to an embryo/fetus of 119 mSv (11.9 rem). On March 30, 2009, the patient was given a pregnancy test and it yielded a negative result. Based on the negative pregnancy test, the licensee administered the

APPENDIX C
OTHER EVENTS OF INTEREST

This appendix discusses "Other Events of Interest" that do not meet the AO criteria in Appendix A, but have been perceived by Congress or the public to be of high health and safety significance, have received significant media coverage, or have caused NRC to increase its attention to or oversight of a program area, including a group of similar events that have resulted in licensed materials entering the public domain in an uncontrolled manner.

During FY 2009, one item was identified as meeting the guidelines for inclusion in Appendix C, "Other Events of Interest."

The NRC is aware of significant media coverage of leaks in underground pipes at some nuclear power plants as well as information indicating that there may be perceptions that these underground pipe leaks have had high health and safety significance. ~~For these reasons the NRC is reporting this issue under events of other interest.~~ Tritium is a mildly radioactive isotope of hydrogen that occurs both naturally and during the operation of nuclear power plants. Nuclear plants normally release water containing tritium and other radioactive substances under controlled, monitored conditions that the NRC mandates to protect public health and safety. Although none of these releases meet the abnormal occurrence criteria, they are being included in this report because of the significant public, Congressional, and media interest.

Over the past year, instances of buried piping leaks have occurred in safety-related and nonsafety-related piping at nuclear power plants. Some of these leaks have caused inadvertent releases of low-level radioactive material. This has resulted in groundwater contamination at several plants. The pipe degradation leading to these leaks has not affected the operability of safety systems, and the type and amount of radioactive material released to the environment have been a small fraction of the regulatory limits, so the leaks do no present a public health and safety risk.

The NRC reviews affected plants' groundwater monitoring programs to confirm the leaks do not affect public health and safety and the environment. The NRC's oversight of the overarching buried pipe issue focuses on ensuring nuclear power plant operators properly monitor and when necessary repair the pipes, maintaining their ability to safely run the plants.

{Comment from Commissioner Svinicki: This insert is added directly from the Abnormal Occurrences Report for Fiscal Year 2006 to ensure consistency in our reports.}

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Commissioner Apostolakis

SUBJECT: SECY-10-0024 – REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FISCAL YEAR 2009

Approved X **Disapproved** _____ **Abstain** _____

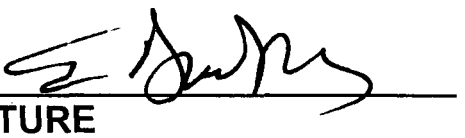
Not Participating _____

COMMENTS: **Below** X **Attached** ___ **None** ___

I approve the staff's recommendation that the report and the proposed letter be provided to Congress, subject to the following.

Staff should verify that the projected completion date of March 2010 is correct on page 18 of the report. The proposed congressional letter should be revised to reference the update of a previously reported Abnormal Occurrence and include the one other event of interest on leaks in underground pipes at some nuclear power plants.

I look forward to reviewing staff's proposed revisions to the Abnormal Occurrence criteria in a future Commission paper.



SIGNATURE

4/27/10

DATE

Entered on "STARS" Yes X No ___

AFFIRMATION ITEM

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MAGWOOD

SUBJECT: SECY-10-0024 – REPORT TO CONGRESS ON ABNORMAL OCCURRENCES FISCAL YEAR 2009

Approved _x_ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _x_ Attached ___ None ___

Approved as edited by Commissioners Svinicki and Ostendorff.

SIGNATURE

04/29/10

DATE

Entered on "STARS" Yes _X_ No ___

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER OSTENDORFF

SUBJECT: SECY-10-0024 – REPORT TO CONGRESS ON ABNORMAL OCCURANCES FISCAL YEAR 2009

Approved __X__ Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below _X__ Attached ___ None ____

Approved subject to the attached edit and in support of Commissioner Svinicki's comment on Page 19 of Appendix C, third paragraph.

SIGNATURE

4/20/10
DATE

Entered on "STARS" Yes _X__ No ___

Criterion III.C.1.b and III.C.2.b(iii), "For Medical Licensees," of Appendix A to this report provide, in part, that a medical event that results in a dose that is equal to or greater than 10 Gy (1,000 rad) to any organ or tissue (other than a major portion of the bone marrow, or the lens of the eye, or the gonads) and represents a prescribed dose or dosage that is delivered to the wrong treatment site, shall be considered for reporting as an AO.

Date and Place – December 2, 2008, Dallas, Texas

Nature and Probable Consequences – Presbytarian Hospital of Dallas (the licensee) reported that a medical event occurred associated with its gamma stereotactic radiosurgery unit (gamma knife) containing 125.8 TBq (3,400 Ci) of cobalt-60. A patient being treated for trigeminal neuralgia was prescribed to receive 80 Gy (8,000 rad) to the fifth intracranial nerve but received 14.95 Gy (1,495 rad) to the seventh intracranial nerve. The patient and the referring physician were informed of this event.

An error in entry of information into the treatment planning system caused the wrong nerve to receive treatment. The error was identified by the neurosurgeon 9 minutes into the 45-minute treatment. The licensee concluded that no significant adverse health effect to the patient is expected.

Cause(s) – The medical event was caused by the misidentification of the anatomical target site listed on the written directive.

Actions Taken to Prevent Recurrence

Licensee – The licensee modified its written procedure to include verification of the target site, by the neuroradiologist, for each treatment. In addition, an updated written directive will document the new procedure to ensure that the correct treatment site is targeted and treated in each procedure.

State – The State will conduct a review of at least 20 percent of the past treatment cases to ensure that this error had not previously occurred.

This event is closed for the purpose of this report.

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{Comment from Commissioner Svinicki: This insert is added directly from the Abnormal Occurrences Report for Fiscal Year 2006 to ensure consistency in our reports.}