

April 11, 2012

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

SUBJECT: STAFF REQUIREMENTS – SECY-12-0032 – REPORT TO
CONGRESS ON ABNORMAL OCCURRENCES: FISCAL YEAR
2011

The Commission has approved the publication and transmittal of the FY 2011 Abnormal Occurrence Report to Congress, subject to incorporation of the changes and comments noted below.

1. Page iii, 2nd paragraph, 3rd sentence, revise to read: "...occurred at ~~NRC-licensed or NRC-regulated~~ medical institutions..."
2. Page vii, 4th paragraph, 2nd sentence, revise to read: "Stakeholders are informed and involved, ~~as appropriate,~~ to ensure openness ... NRC's Strategic Plan for FY 2008-2013 **(Updated)**" (NUREG-1614, Volume **45**, issued February ~~2008~~**2012**)."
3. Page vii, 4th paragraph, 4th sentence, revise to read: "The NRC ~~also maintains programs to establish standards and issue~~ **conducts** technical reviews and studies."
4. Page viii, 1st sentence under "Agreement States," revise to read: "...States assume regulatory authority over byproduct, source, and **certain quantities of** special nuclear materials ~~in quantities not sufficient to form a critical mass.~~"
5. Page xi, include **uCi** in the "Abbreviations" list.
6. Page 1, 1st paragraph, lines 9-10, revise to read: "...Category III **contains** addresses ~~s~~Subelements **labeled A, B, and C.**"
7. Page 1, 1st sentence under "All Licensees," revise to read: "...one event at **an** ~~NRC-licensed or NRC-regulated facilities~~ **facility.**"
8. Page 2, line 7, delete the sentence: "~~The pregnancy progressed normally and both the mother and child are doing well.~~"
9. Page 3, 4th paragraph, 3rd sentence, delete the acronym: ~~(OB/GYN)~~. Delete the last sentence: "~~The licensee reported that the child, now 5 years old, is normal and meeting all developmental milestones.~~"
10. Page 4, 4th paragraph, 3rd sentence, revise to read: "...Radiation Emergency Assistance Center/Training Site **in Oak Ridge, TN...**"

11. Page 5, 3rd paragraph, last sentence, delete the acronym: (APD/6CST)
12. Page 6, 1st sentence, revise to read: "...one event at a commercial nuclear power plants..."
13. Page 7, 3rd sentence from the bottom of page, delete the acronym: (HP)
14. Page 8, 4th paragraph under "AS11-04," 1st sentence, revise to read: "...the medical staff licensee performed a check..."
15. Page 10, 4th paragraph, 1st sentence, add a comma after "January 21, 2010,"
16. Page 10, 7th paragraph, last sentence, revise to read: "...has not yet recommenced resumed prostate..."
17. Page 11, 3rd paragraph, 2nd sentence, revise to read: "...The An actual average...of the breast, and in which some parts..."
18. Page 11, 4th paragraph, 1st sentence, revise to read: "...noted that the source within the mammosite catheter..."
19. Page 12, 3rd paragraph, 1st sentence, revise to read: "...carcinoma of the ear; the treatment consisted of 210.9 GBq (5.7 Ci) of iridium 192."
20. Page 12, 4th paragraph, 1st sentence, revise to read: "On March 11, 2010, the patient being treated for basal cell carcinoma of the ear was to receive the second fractioned dose 2.5 Gy (250 rad); however, W while starting..."
21. Page 12, 5th paragraph, revise to read: "...human error in that the radiation therapist licensee failed to push..."
22. Page 13, 4th paragraph, 1st sentence, revise to read: "...faxed an incorrect order to the hospital..."
23. Page 13, 8th paragraph, 1st sentence, revise to read: "...issued a Notice of Violation (NOV) to the licensee."
24. Page 15, 4th paragraph, 1st and 2nd sentences, replace "licensee" with "medical staff."
25. Page 16, 3rd paragraph, 1st sentence, revise to read: "...associated with an HDR manual brachytherapy treatment..."
26. Page 17, 4th paragraph, 1st sentence, revise to read: "In September 2010, the licensee medical center staff completed..."
27. Page 17, 8th paragraph, 1st sentence, revise to read: "...analysis of several events associated with the licensee's brachytherapy implant program."
28. Page 19, 4th paragraph, 4th sentence, revise to read: "... resulted in the licensee medical staff performing..."
29. Page 19, 5th paragraph, 1st sentence, revise to read: "The licensee believes reported that..."

30. Page 21, 3rd paragraph, 1st sentence, revise to read: "...occurrence of ~~two~~ **a** medical events..."
31. Page 21, 3rd paragraph, 1st sentence, revise to read: "...(ranging from 7.4 MBq (0.2mCi) ~~and to~~ **92.5 MBq (2.5 mCi)** of activity)..."
32. Page 24, paragraph 5, revise to read: "The licensee ~~believes~~ **reported** that..."
33. Page 25, paragraph 7, 1st sentence, revise to read: "...measurement wire ~~which~~ **that** has the same flexible tip..."
34. Page C-1, 2nd paragraph 1st sentence, revise to read: "...media coverage and was **perceived to be** of high health..."
35. Page C-1, 2nd paragraph last sentence, revise to read: "...displacing ~~many~~ tens of thousands of people, ..."
36. Page C-2, line 2, revise to read: "...experienced ~~severe~~ core..."
37. Page C-2, line 5, revise to read: "...hydrogen from ~~U~~unit 3. **The Unit 4 spent fuel remained intact and was covered with water during the entire accident, contrary to media reports that the spent fuel pool had gone dry.**"
38. Page C-2, line 5, add a comma after "December 16, 2011,"
39. Page C-2, 1st full paragraph, add new sentence after the 1st sentence that reads: "**Shortly after March 11, 2011, the NRC concluded that there was no significant risk to U.S. facilities and the U.S. was not expected to experience any harmful levels of radioactivity.**"
40. Page C-2, 1st full paragraph, last sentence, revise to read: "The NRC continued to provide a small technical staff to the U.S. Ambassador in Japan until February 2012; **In addition, the NRC as well as still** maintains a cadre of key technical ~~competent~~ staff members at NRC Headquarters to answer requests ~~from the onsite~~ **for** technical support **or information about actions in response to the Japan nuclear accident** staff (see <http://www.nrc.gov/japan/japan-info.html>)."
41. Page C-2, 1st full paragraph, last sentence, revise to read: "...until February 2012, as well as maintains a cadre of key technical ~~competent~~ staff members..."
42. Page C-2, 3rd full paragraph, 2nd sentence, revise to read: "addressed protecting **on** against accidents...mitigating **on of** the consequences..."
43. Page C-2, 3rd full paragraph, add new sentence after the 2nd sentence that reads: "**The Task Force ~~determined~~ found that the current regulatory approach, and more importantly, the resultant plant capabilities allow them to conclude** led to a conclusion that a sequence of events like the Fukushima accident is unlikely to occur in the United States and some appropriate mitigation measures have been implemented, reducing the likelihood of core damage and radiological releases."
44. Page C-2, 3rd full paragraph, 4th sentence, revise to read: "The Task Force **also** found that..."

45. Page C-2, 3rd full paragraph, 5th sentence, revise to read: “~~The result of t~~The Task Force’s work is a set of **provided** 12 **overarching** recommendations that take a balanced approach to defense in depth as applied to low-likelihood, high consequence events such as prolonged station blackout resulting from severe natural phenomena.”

46. Page C-3, add the following after the last paragraph.

On February 17, 2012, the NRC proposed orders and a request for information to the Commission in SECY-12-0025, “Proposed Orders and Requests for Information in Response to Lessons Learned from Japan’s March 11, 2011, Great Tohoku Earthquake and Tsunami” (ADMAS Accession No. ML 12039A103). SECY 12-0025 also discussed the disposition of recommendations from the Commission’s Advisory Committee on Reactor Safeguards (ACRS) as well as six additional recommendations identified after the Near Term Task for report was issued, that the NRC staff has determined may also warrant additional action.

On March 12, 2012, the NRC issued three immediately effective orders and a request for information. The first two orders were issued to all power reactor licensees, including holders of construction permits and combined licenses. The third order was issued to licensees operating boiling water reactors with Mark I and Mark II containment designs. The orders require licensees to: (1) develop strategies to mitigate the effect of multi unit beyond design basis events resulting from natural phenomena and protect the equipment identified to implement such strategies; (2) install enhanced spent fuel pool instrumentation; and (3) have reliable, hardened containment vents. The request for information asked licensees to reevaluate seismic and flooding hazards, perform seismic and flooding walkdowns, assess current communication systems and equipment under conditions of onsite and offsite damage and prolonged loss of power, and perform a staffing study to determine the number and qualifications of staff required to fill all necessary position to respond to a multiunit event. The NRC will evaluate each licensee’s response to the request for information and take additional regulatory action, if necessary.

For further information on the NRC actions in response to the Fukushima event, see the Commission’s March 12, 2012 report to Congress (ML12052A079).

47. Page C-4, 1st paragraph, 3rd sentence, revise to read: “...(FCS) did not directly impact **plant safety** ~~safety-related equipment~~.”

48. Page C-4, 3rd paragraph, 1st sentence, revise to read: “...(water berm) around the facility to **provide ease of access for site personnel and to** protect additional plant assets **beyond what was necessary for plant safety**.”

49. Page C-4, 3rd paragraph, 5th sentence, revise to read: “Reactor shutdown cooling, **and spent fuel pool cooling, and other plant safety systems** were unaffected...”

50. Page C-5, 1st full paragraph, 3rd sentence, revise to read: “...**safety**-related...”

51. Page C-5, 1st full paragraph, last sentence, revise to read: “...NRC decided to transition to FCS **to** oversight...”

52. Page C-5, 2nd full paragraph, last sentence, revise to read: “...the ASP Program ~~complements~~ **supplements** the inspection program.”

53. Page C-5 last sentence, revise to read: "...FCS results in a SDP finding....these events results in its identification..."
54. Page C-6, 4th paragraph, 2nd sentence, revise to read: "The licensee reported that the earthquake was beyond what the plant was designed for in certain earthquake vibration frequencies, but only minor damage was anticipated based on substantial safety margin in the plant's design operating basis earthquake and design basis earthquake criteria were exceeded; however, the cumulative absolute velocity, a concept used by the Electric Power Research Institute to address exceedance calculations for the operating basis earthquake, indicates that significant damage would not be expected."
55. Page C-6, 4th paragraph, line 7, revise to read: "...ensure that they are were..."
56. Page C-6, 4th paragraph, line 9, revise to read: "...has had been..."
57. Page C-6, 4th paragraph, line 16, revise to read: "...will would not enter Modes..."
58. Page C-6, 4th paragraph, line 17, revise to read: "...Commission has had completed..."
59. Page C-7, last paragraph, 2nd sentence, revise to read: "...and restored to full power operation..."

Changes to Congressional Letters:

1. Delete paragraph 2.
2. Paragraph 3, 1st sentence, revise to read: "...events at NRC-licensed regulated facilities..."
3. Paragraph 3, add new last sentence that reads: "Additionally, three events occurred at nuclear power plants that are not AOs but have received significant attention by Congress or the public. These events can be found in an Appendix C to the AO report."

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
OPA
Office Directors, Regions, ACRS, ASLBP (via E-Mail)
PDR