

NRC's Minor Comments on Draft GAO-06-1029

- (1) The NRC staff suggests the following changes to provide more recent status information on the safety culture changes to the Reactor Oversight Process (ROP).

Page 7: Last paragraph before **Background**. Add the following before the current 1st sentence of the paragraph:

The NRC issued a Regulatory Issue Summary entitled "Information on the Changes Made to the Reactor Oversight Process to More Fully Address Safety Culture," dated July 31, 2006, which states that NRC implemented its revised ROP on July 1, 2006, and will assess the changes to the ROP consistent with the current ROP assessment process. The assessment will determine whether the revisions have met the intended objectives and outcomes. The NRC staff will seek opportunities for stakeholders to provide feedback on the implementation of the changes to the ROP through various forums.

- (2) The NRC staff suggests the following changes to the terminology for specific elements of the ROP:

Page 15, 2nd paragraph, starting with "As part of its inspection..." Make the following changes:

2nd line, "...referred to as cross-cutting ~~issues~~ **aspects**..."

3rd and 4th lines, "Cross-cutting ~~issues~~ **areas** represent ~~aspects~~ of licensee performance **attributes** that extend..."

5th and 6th lines, "(3) ~~a~~ safety conscious work environment."

9th line, "...human performance cross-cutting ~~issue~~ **area**."

11th line, "...than three findings have ~~similar causes~~ **a cross-cutting theme** within a cross-cutting ~~issue~~ **area** and if..."

Page 22, top paragraph, lines 9-12: "NRC program officials stated that...green findings are assessed for the presence of cross-cutting ~~issues~~ **aspects** and provide useful information on plant performance."

Page 23-24, below Figure 3: "Only in the area of ~~cross-cutting issues~~ or inspection findings for which one or more cross-cutting ~~issues~~ **aspects** was associated...According to NRC, the increase in findings with cross-cutting ~~issues~~ **aspects** is due in part to the recent development...documentation of cross-cutting ~~issues~~ **aspects**. The number of plants where the existence of cross-cutting ~~issues~~ **aspects** resulted in NRC opening a substantive cross-cutting issue..."

Page 24, Figure 4: Revise the title, "Total Number of Inspection Findings.....with Cross-Cutting ~~issues~~ **Aspects** at all Plants..." and note, "^aAlmost all inspection findings with cross-cutting ~~issues~~ **aspects** were in the areas...safety conscious work environment cross-cutting ~~issue~~ **area**."

Enclosure

Page 37, last paragraph:

4th line, "...additional guidance for.....cross-cutting ~~issues~~ **aspects**, and second,..."

8th line, "...While the three cross-cutting ~~issues~~ **areas** (problem ...and a safety conscious work environment)..."

Page 38, top:

4th, 5th, 8th, and 11th lines, replace the word "issues" with "areas"

9th line, "...existence of cross-cutting **aspects** and..."

Page 39, 2nd paragraph:

6th line, "...not always clear why a cross-cutting ~~issue~~ **aspect** is associated with..."

9th line, "...findings that have cross-cutting ~~issues~~ **aspects** associated with..."

(3) The NRC staff suggests the following additional minor changes:

- a. On the **Highlights** page, 2nd paragraph in **What GAO Found** and on page 4, last line, the 4000 inspection findings were associated with broader issues than "...failure to fully comply with safe operating procedures." Suggest replacing this statement with "...failure to comply with NRC regulations and industry standards for safe plant operation."
- b. Page 4, 4th and 5th lines, the draft report states that the NRC "...uses a process to assign the inspection finding one of four colors to reflect the finding's **risk** significance..." (emphasis added). Suggest that the word "risk" be removed or replaced with "safety" because in some cornerstones, the thresholds are not directly based on risk, but more on a comparable level of regulatory response based on their safety significance. Similarly, in the following sentence (lines 6-8), the word "risk" should be removed or replaced with "safety" in two places.
- c. Page 8, Figure 1 showing the four regions has the state of Mississippi still in Region II. The figure should be updated to show that Mississippi is now in Region IV.
- d. Page 14, suggest moving footnote 6 forward to page 4. Also suggest changes to footnote 6 to indicate that NRC considers the increase in CDF and LERF as a result of a performance deficiency. Also, it could add perspective to note that the greater than green threshold is an increase in CDF of 1E-6 per year or an increased chance that a core damage accident will occur once in 1,000,000 years of operation.
- e. Page 16, in the 1st full sentence, the draft report states, "...it is their policy to increase the frequency of certain baseline inspections that focus on the licensee's problem identification and resolution processes." Suggest that this be replaced with "...it is their policy to focus future baseline inspections on the licensee's problem identification and resolution processes." The frequency of inspections will not change.
- f. Page 25, in Figure 5 with the number of plants with substantive crosscutting issues, it is not clear whether the numbers refer to the number of sites or the number of individual units.

- g. Page 31, relative to the use of licensee-provided information, please note that the NRC may use it to clarify the risk significance; it does not have to be used. For the sentence in lines 14-15, "NRC must then incorporate this information into its own analysis," recommend revising it to state, "NRC then considers this information in its own analysis."
- h. Page 33, 1st bullet, 2nd to last sentence, the draft report states that the mitigating systems performance index was implemented in April 2006 with the first plant reports due in July 2006. Suggest changing this to read, "...April 2006 with **and** the first plant reports ~~due~~ **were submitted** in July 2006" because the first reports have been received by the NRC.
- i. Page 34, in the paragraph pertaining to groundwater contamination, recommend two changes for accuracy:

Lines 8-10, "At one of the plants we reviewed, for instance, elevated levels of tritium in the ~~surrounding area's~~ **onsite** groundwater were discovered during the licensee's testing of ~~one of~~ its monitoring wells."

Lines 10-12, "NRC reports suggest that this radioactive release was most likely due to ~~a crack in one of~~ **leakage from** the spent fuel pool's ~~concrete support walls~~ **structures**."
- j. Page 36, 3rd line, 1st full paragraph, add "performance" after "deteriorating safety" for consistency with the discussion in the remainder of the paragraph.
- k. Page 51, 2nd to last line, change the typo "EPC" to "ECP."
- l. Page 57, 1st line, revise to read "...located **near** Newport News,..."
- m. Pages 61-62, in Table 2, Total Number of Green Inspection Findings, the NRC staff notes very minor discrepancies when we attempted to confirm the numbers in the table. The discrepancies are likely due to the GAO's use of mid-FY 2006 data. While these minor discrepancies have no impact on the statements and conclusions in the report, we suggest changing the title of the table to indicate the time frame of the data used, e.g., "Total Number of Green Inspection Findings (**as of Mid-Fiscal Year 2006**)."