

May 7, 2003

MEMORANDUM TO: William D. Travers  
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA by Andrew L. Bates  
Acting For/**

SUBJECT: STAFF REQUIREMENTS - SECY-02-0204 - UPDATE OF  
URANIUM RECOVERY GUIDANCE DOCUMENTS

The Commission has approved the staff's recommendation to publish both NUREG-1569 and NUREG-1620, Revision 1, subject to the following comments and changes:

Changes to the *Federal Register* Notice (FRN) announcing availability of NUREG-1569  
(Attachment 1 to SECY-02-024)

In both FRNs, the "ADDRESSES" section of each should be revised to discuss the appropriate single NUREG for each FRN, not "NUREGs 1569 and 1620" as is now described.

On page 2, paragraph 2, include a very brief description of the uranium recovery issues addressed in Regulatory Issue Summary 2000-23 so the reader is aware of the major policy decisions that have required changes in the earlier (1997) draft Standard Review Plan (SRP).

On page 7, Response (to first issue addressed under item 2 beginning on page 6), sentence 3, modify the phrase "... and taking into account the economic status of the uranium extraction industry ..." to state "... and taking into account the economic status of the uranium extraction industry which would have to bear the cost of the rulemaking ...".

On page 13, paragraph 1, revise line 1 to read '... Section 5.7.8.3 in the draft of NUREG-1569 was revised ....'

On page 14, paragraph 1, revise line 1 to read '... Section 6.1.3 in the draft standard review ....'  
Revise line 6 to read '... restoration of water quality within the production zone to pre-operational conditions ....'

On page 16, paragraph 1, revise line 3 to read '... of the draft plan were rewritten ....'

On page 16, last paragraph, revise line to read 'NUREG/CR-6733 ....'

On page 17, the staff should clarify the response to the health physics issue. The response states that the staff agrees that certain information on radiation safety programs at *in situ* leach uranium extraction facilities is not necessary to fulfill the agency mission of protecting the public health and safety and the environment from the effects of radiation. This response requires a more thorough explanation of why the staff agrees with the comments on this issue.

On page 19, paragraph 2, revise line 1 to read 'Many of commenters expressed ....'

On page 19, Item 7 (Comments related to NEPA), Response, sentence 5 should be modified to delete the specific reference to environmental justice and should read "Areas of potential environmental impact that are investigated include water availability and quality, air quality, historical and cultural resources, ecology, aesthetic resources, and socioeconomic effects."

On page 20, paragraph 2, revise line 2 to read '... financial data as part of the review of ....'

On page 22, paragraph 2, revise line 10 to read '... directs the staff is to evaluate the ....'

#### Changes to the FRN announcing availability of NUREG-1620 (Attachment 2 to SECY-02-0204)

Attachment 2 needs to be revised in several places to make clear that this document is actually Revision 1 to a NUREG that was finalized in June 2000.

The Summary should briefly state why the NUREG was revised.

On page 1, paragraph 1, revise lines 1 and 2 to read '... (NRC) has revised developed a the Standard Review Plan (NUREG-1620) that was developed to provided guidance ....'

On page 2, paragraph 1, start a new paragraph after "June 2000". Revise the new paragraph to read 'On February 5, 2002 (FR5348), the NRC made the revised second draft of NUREG-1620, Revision 1, available for a 75-day public comment period. Attach the last paragraph on page 2 to the end of this new paragraph and revise its 1<sup>st</sup> line to read '... NUREG-1620, Revision 1, the NRC staff ....'

On page 4, paragraph 1, revise line 1 to read 'The draft standard review plan ....'

On page 4, paragraph 2, revise line 2 to read '... organization of the draft standard could ....'

On page 4, paragraph 3, revise line 1 to read 'NUREG-1620, Revision 1, is structured ....'

On page 5, paragraph 1, revise line 2 to read '... slopes steeper than 5 horizontal:1vertical (5h:1v) are proposed ....'

On page 7, paragraph 1, revise line 2 to read '... land transfer. The and the text on this issue has been clarified to avoid any potential misunderstanding.'

On page 9, paragraph 3, revise line 2 to read '... NUREG-1620, Revision 1 (e.g., Section 3.5.3) as long as ....'

On page 12, paragraph 1, revise line 4 to read '... recommended the use of a probabilistic ....'

#### Changes to NUREG-1569 (Attachment 3 to SECY-02-0204)

On page 2-25, remove Ra-228 from automatic sampling in Table 2.7.3-1. If the sampling of Ra-228 could be important under certain circumstances, the staff should revise this section of the SRP to include a more detailed discussion of Ra-228 and the procedures for the staff to

review the need for Ra-228 values on a case-by-case basis.

On page 3-4, revise the SRP to reduce the length of time specified for testing well integrity to be consistent with current testing intervals, and to include a more detailed discussion of these tests and the factors that the staff should consider when reviewing the time interval.

On page 5-1, section 5.1.1, eight line. Reference to the regulations should read, "10 CFR Part 20, Subpart M and 10 CFR 40.60", not 10 CFR 60.40.

On page 6-1, the staff should revise the SRP to include a statement to make it extremely clear that the staff will consider alternative proposals submitted by the licensees at the beginning of Section 6.1 which contains the guidance for reviewing groundwater restoration plans.

On page 6-2, section 6.1.1(8), under the heading "Areas of Review", lists the methods of effluent disposal as an area for review. However, section 6.1.2 "Review Procedures" does not include any procedures or information concerning this type of review.

On page 6-4, section 6.1.2, and page 6-11, section 6.1.3, revise sections (10) to (13) of the SRP to include direction to the staff on acceptable methods for reviewing effluent disposal applications, as recommended in staff's responses to the Commission's 2/26/03 questions.

On page 6-8, section 6.1.3(4)(a), revise line 5 to read "... restoration activities are not likely to return ground-water quality to exact water ...".

#### Changes to NUREG-1620 (Attachment 4 to SECY-02-0204)

On the title pages, remove the words, "FINAL REPORT".

On page 4-2, section 4.1.1.(1), remove the ">" from the end of the sentences.

On page 4-25, fix the pagination at the bottom of the page.

On page 4-31, section 4.3.3.2, add the following paragraph describing the acceptable lifetime risk for an alternate concentration limit review, as recommended in staff's responses to the Commission's 2/26/03 questions:

"Proposed human exposure levels should be reasonably conservative, defensible, and sufficiently protective to avoid a substantial present or potential hazard to people for the forecasted duration of the contamination. A proposed alternate concentration limit that does not exceed an excess lifetime risk of fatal cancer on the order of  $10^{-4}$  is acceptable for an average exposed individual at the point of exposure, when considering the potential for the health risks from human exposure to known or suspected carcinogens contained in untreated ground-water used for drinking water."

On page 4-50, section 4.4.3(6), remove the discussion of the need for a licensee to obtain an EPA NPDES permit for surface water discharge. This contradicts the Commission direction in SECY-99-0277, in which the Commission determined that the NRC has exclusive jurisdiction over 11e.(2) byproduct material.

On page 4-53, item 10 (Financial Surety is Provided), revise the last sentence to read: "The

financial surety review is acceptable if the applicant's assessment and any staff assessment of the surety amounts are reasonably consistent."

On page E-14, the reference to the SA-900 Procedure should be updated to reflect the final document recently issued by the Office of State and Tribal Programs.

On pages F-1 and F-2, revise the discussion of effluent releases in sections F1.3, F1.4 and F1.5 to be consistent with the corresponding revisions in section 6.1.3 described above.

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