February 17, 1998

FOR: The Commissioners

FROM: L. Joseph Callan /s/
Executive Director for Operations

SUBJECT: REVISED SCHEDULE FOR GUIDANCE IN SUPPORT OF FINAL RULE ON RADIOLOGICAL CRITERIA FOR LICENSE TERMINATION

PURPOSE:

On December 11, 1997, the Commission sent a staff requirements memorandum (SRM) (Enclosure 1) in response to SECY-97-242, "Update on the Site Decommissioning Management Plan (SDMP)." In that SRM, the Commission directed the staff to provide the current schedule for developing the regulatory guidance for implementing the final rule on radiological criteria for license termination which the Commission issued on July 21, 1997. The purpose of this memorandum is to respond to that request by providing a discussion of the actions underway to prepare the regulatory guide, the current status of the guide, and a revised schedule.

BACKGROUND:

On December 9, 1996, the Commission directed the staff to provide it with a final rule package on radiological criteria for license termination by the end of February 1997, and to provide it with regulatory guidance documents within 1 year of submitting the final rule to the Commission. In response, on February 21, 1997, the staff sent to the Commission SECY-97-046, "Final Rule on Radiological Criteria for License Termination" (subsequently resubmitted on March 28, 1997, as SECY-97-046A).

Based on its review of SECY-97-46A, the Commission approved, in an SRM dated May 21, 1997, the final rule revising 10 CFR Part 20 to include specific radiological criteria for license termination, subject to incorporation of several specific comments. The Commission also directed the staff to arrange for publication of the rule in the Federal Register. The final rule was published in the Federal Register on July 21, 1997. One of the comments in the May 21, 1997, SRM directed the staff to submit guidance documents to the Commission for review and approval by February 21, 1998.

DISCUSSION:

Activities Undertaken To Develop Guidance

To meet the February 21, 1998, due date, the staff decided to prepare the regulatory guide in four principal modules as follows:

(1) Module 1 provides guidance on converting radionuclide concentrations to dose both for generic screening of simple sites with little contamination and for performing site-specific analysis at sites with intermediate levels or complex types of contamination;

(2) Module 2 provides guidance on area classification, survey units, reference areas, tests for the survey unit as a whole and for areas of elevated activity, instrument selection and calibration, sampling, etc;

(3) Module 3 provides guidance on demonstrating that certain actions are ALARA, cause net public or environmental harm, are not technically achievable, or are prohibitively expensive.

(4) Module 4 provides guidance on institutional controls, financial assurance, methods for seeking public advice on the restrictions (including forming a site specific advisory board);

In addition, the staff has sought, and is continuing to seek input from the public and other Federal agencies on each of the modules as it is developed. Specifically, the following activities have been carried out to date in development of the guide:

(1)	Module 1 - A draft of the module was placed on the web (at http://techconf.llnl.gov/cgi-bin/topics) on February 6, 1998. A public workshop on module 1 is scheduled for February 19, 1998.
	A public workshop on existing dose modeling software currently used by EPA, DOE, and NRC was held on November 13 and 14, 1997.
	The original basis document for the modeling parameters used to convert radionuclide concentrations to dose was published in October 1992, as NUREG/CR-5512, "Residual Radioactive Contamination from Decommissioning." Subsequent to publication, the staff decided that improvements in the models used in NUREG/CR-5512 were warranted and undertook a review of the assumptions used in the model. Sandia National Laboratory and NRC staff have revised the bases for the selection of parameters that can be used with an updated dose assessment methodology to produce consistent results that are not overly conservative.
(2)	Module 2 - A draft of the module was placed on the web (at http://techconf.llnl.gov/cgi-bin/topics) on January 26, 1998. A public workshop on module 2 is scheduled for February 18, 1998.
	An interagency group made up of representatives from NRC, the Environmental Protection Agency (EPA), the Department of Energy (DOE), and the Department of Defense (DOD) developed a survey manual for demonstrating compliance with decommissioning criteria. A draft of the survey manual was issued for public

	comment in December 1996, under the title of "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)." The MARSSIM document forms the principal basis for Module 1 of the regulatory guide. Public comments on the MARSSIM were incorporated into the document in the fall of 1997 and the document was issued February 2, 1998.
(3)	Module 3 - A draft of the module was placed on the web (at http://techconf.llnl.gov/cgi-bin/topics) and public comments requested on December 30, 1997. A public workshop on Module 3 was held on January 26, 1998.
(4)	Module 4 - A draft of the module was placed on the web (at http://techconf.llnl.gov/cgi-bin/topics) and public comments requested on September 15, 1997. The comment period on Module 4 closed on November 30, 1997, and comments received are being incorporated into the guide.
	Module 4 was discussed with the Interagency Steering Committee on Radiation Standards (ISCORS) Cleanup Sub-committee, which includes representatives from DOE, EPA, and DOD on October 5,1997. Comments provided in that meeting are also being addressed in revisions to the guide.
	A public workshop on Module 4 was held on October 15, 1997, attended by representatives from industry, the general public, and other government agencies. Reaction to the overall content of the guide and the holding of the workshop was generally favorable. Comments from the workshop are being incorporated into the guide.

Status of Regulatory Guide and Basis for the Current Schedule

Each of the guide sections described above presents complexities regarding the implementation of the rule requirements ranging from providing guidance on acceptable deed restrictions for institutional controls to selecting parameters to describe the behavior of an average member of the critical group for dose calculations. Specific information on the development of each module is described below:

(1)	Module 1 - Dose modeling - This module is the most complex. The dose modeling considers two principal scenarios for exposure after license termination: building occupancy and residential use of the site. It provides guidance for using site specific information and data, as appropriate. The staff has developed interim generic screening values for licensees to use in demonstrating compliance with the 25 mrem dose criterion.
	Complexity in the development of generic screening values comes from: (a) the fact that over 90 different parameters are used in the dose analysis, (b) the need to determine what behavior parameters should be used for an average member of the critical group, (c) the wide variability in the distribution of values for the some parameters from site to site, and (d) the desire to make the process of license termination simple for the majority of licensees with little contamination.
	To provide a tool that can be used in generic screening, RES and its contractor have reviewed recent information on the distribution of parameters across the United States. Radionuclide specific generic screening concentrations were developed based on the revised parameter distributions.
	A staff developed NUREG will provide useful information to those licensees with levels of contamination beyond the screening levels on how to convert concentrations to dose. It will address the selection of site specific parameters, including information on locations where regional data can be found and on how to minimize the cost of obtaining site-specific data, as well as the criteria for selecting dose modeling techniques for complex contamination.
(2)	Module 2 - Methods to Conduct a Final Status Survey - In support of this module, the MARSSIM has been prepared and was recently issued. Also in support of this module, NRC contractors have revised NUREG-1505 and NUREG-1507, which contain information on the methodology for designing final status surveys and for determining the minimum detectable concentrations that can be measured with various survey instruments and field conditions. These NUREGs were put on the web in January 1998.
(3)	Module 3 - ALARA and other analyses - As noted above, this section was put on the web in December 1997, and a public workshop was held on January 26, 1998.
(4)	Module 4 - Restricted use and public participation - As noted above, this section was put on the web in September 1997, and a public workshop was held in October 1997.

As discussed above, significant progress has been made, and we estimate that the following schedule can be met:

Send draft sections of regulatory guide and supporting NUREGs for interoffice review	Complete
Send regulatory guide and accompanying NUREGs to EDO	March 9, 1998
Send package to Commission	March 16, 1998

To accelerate development of the interim guidance, a concurrent review by all offices will be undertaken. It is expected that several meetings will be held with NMSS and OGC staff during February and March to discuss the guide and to facilitate incorporation of NMSS and OGC comments, as well as those

comments received at the public workshops of January 26, February 18, and February 19, 1998. NMSS will review the documents to confirm their utility and clarity. The staff notes that, while this review is sufficient, in the past, NMSS has, on occasion, also reviewed the models themselves. However, resource constraints prevent this detailed review for this product.

This schedule allows for incorporation and inclusion of public input in an interactive manner by holding public workshops and placing the draft guide on the web during development of the guidance (a process that was not envisioned in the original February 1998 schedule). To gain a better understanding of the impact that the guidance may have on licensees, the staff intends to publish these documents as interim guidance, and to specifically request comment from licensees and the public as they begin to implement the rule. This comment period would be for up to 1 year following publication, at which point, we would make any necessary revisions and publish the guidance in final form.

L. Joseph Callan
Executive Director for Operations

Enclosure: As stated

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IN RESPONSE, PLEASE
REFER TO M971029B

December 11, 1997

MEMORANDUM TO: L. Joseph Callan
Executive Director for Operations

FROM: John C. Hoyle, Secretary /s/

SUBJECT: STAFF REQUIREMENTS - SECY-97-242 - UPDATE ON THE SITE DECOMMISSIONING MANAGEMENT PLAN
and
BRIEFING ON SITE DECOMMISSIONING MANAGEMENT PLAN (SDMP), 2:00 P.M. WEDNESDAY, OCTOBER 29, 1997, COMMISSION CONFERENCE ROOM, ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

This is to advise you that the Commission has not approved the staff's proposal to phase out use of the SDMP terminology. The staff should continue to issue the SDMP report. If the staff would like to transition the SDMP program into a comprehensive decommissioning management program to encompass all sites, a detailed transition plan should be provided for Commission approval. The information should include the status of the guidance documents that would be needed after the transition. The staff should also address how the concerns identified in the May 1989 General Accounting Office report entitled, "NRC's Decommissioning Procedures and Criteria Need to Be Strengthened," and those identified during the August 3, 1989, Congressional hearing were resolved.

The staff's description should include, but not be limited to, the following information:

- the impact of the License Termination Rule on the branch technical position that the staff has been developing to screen SDMP sites
- the status of existing guidance and documents, such as the preliminary hazards analysis, Reg. Guide 1.86, and other documents (see for example Attachment 2 to SECY-97-242) when the transition from SDMP to the License Termination Rule is complete
- how sites for which the screening process had already begun will be handled under the License Termination Rule and how sites already released from the SDMP list will measure up to the new criteria contained in the rule in view of the grandfather provisions of the License Termination Rule
- an evaluation of whether the issues identified by the Congress in hearings on site decommissioning which the SDMP was intended to address have been satisfactorily resolved

(EDO) (SECY Suspense:6/30/98)

- the current schedule for developing the associated regulatory guidance for the License Termination Rule
- the resource savings achieved by consolidating the various radiological laboratories in the Regions

(EDO) (SECY Suspense:1/30/98)

The staff should continue to consult with the Commission in cases where a license issued to an SDMP site is proposed to be terminated for unrestricted use and the site does not comply with the release standards identified in the license termination rule.

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

SECY NOTE: THIS SRM WILL BE MADE PUBLICLY AVAILABLE UPON ISSUANCE. SECY-97-242 WAS RELEASED TO THE PUBLIC AT A COMMISSION BRIEFING ON OCTOBER 29, 1997.