

April 25, 2012

NOTE TO COMMISSIONERS' ASSISTANTS

OCM/GBJ

cc Angela Coggins
cc Anna Bradford
X Laura Pearson
 Lisa Clark
X Tom Hipschman
X Nathan Sanfilippo
 Neha Dhir
 Melody Fopma
 Susan Loyd
 Richard Barkley
X Andy Imboden
 Patti Pace
 Herald Speiser
 Catina Gibbs

OCM/KLS

X Jeffry Sharkey
 Darani Reddick
X Patrick Castleman
X Alan Frazier
 Janet Lepre
 Nicole Riddick

OCM/WDM

X Patrice Bubar
X Bill Orders
X Rebecca Tadesse
 Margaret Bupp
 Carrie Crawford

OCM/GEA

X Belkys Sosa
 Roger Davis
X Nanette Gilles
X Steve Baggett
 Kathleen Blake
 Carmel Savoy

OCM/WCO

X John Tappert
X Michael Franovich
X Andrea Kock
 Kimberly Sexton
 Linda Herr
X Sunny Bozin

FROM: Nader L. Mamish /RA/
Assistant for Operations, OEDO

SUBJECT: ECONOMIC CONSEQUENCES/LAND CONTAMINATION ONGOING
ACTIVITIES

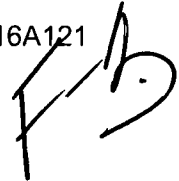
The purpose of this Commissioner's Assistants (CA) note is to provide awareness of current staff activities that may relate to the consideration of economic consequences/land contamination (EC/LC) (e.g., offsite property damage) in making licensing or regulatory decisions.

Since the Fukushima accident, the staff has been engaged in increased internal and external¹ dialogue regarding how EC/LC is considered in our regulatory framework, specifically within the Regulatory Analysis Guidelines that can be included in the bases for regulatory decision-making. As this dialogue broadened, it became evident that EC/LC considerations were already present in a number of different staff, industry, and international activities and that there was value in describing all of these activities in a single document to better understand the relationships between them and whether changes in existing processes were warranted.

Therefore, the staff intends to provide a Commission paper in July 2012, which will describe the staff's current practices for considering EC/LC issues. The July timeframe is considered

¹ External communications include briefings to staff from the House Committee on Energy and Commerce on possible land contamination and economic consequences following a severe accident.

ML12116A121



LIST OF STAFF ACTIVITIES INVOLVING ECONOMIC CONSEQUENCES/LAND CONTAMINATION

Activities related to Regulatory Analysis Guidelines:

- In February 2013, the staff will provide a notation vote paper to the Commission, as required by SRM for SECY-11-0093, including a staff recommendation to implement the Near-Term Task Force (NTTF) Recommendation 1. Pending Commission direction on this paper, the staff may revise the Regulatory Analysis Guidelines (NUREG/BR-0058) if the Commission determines the treatment of economic consequences should be changed.
- The staff initiated the development of internal guidance to address updated onsite values pertaining to the cost to replace energy from an outage which had not been updated in over 10 years.
- The staff initiated a revision of the dollar value of a person-rem averted, which is based on a Value of a Statistical Life and cancer risk factor, which had not been updated since 1995.
- The staff initiated a review of the Regulatory Analysis Guidelines and the Regulatory Analysis Handbook that may include an update to several attribute values as well as incorporate any new guidance in relation to EC/LC considerations.

Activities related to NTTF Recommendations:

- In July 2012, the staff will provide a notation vote paper to the Commission presenting the technical and policy issues that need to be considered before any regulatory action can be taken to require licensees to (a) install filtered vents on BWR Mark I and Mark II containments and (b) make any modifications required to ensure operability of the hardened reliable vents during severe accident conditions. Should the staff recommend that filters or severe accident operability be required on hardened vents for Mark I and Mark II containments, then the staff would include a recommendation on the appropriate regulatory vehicle for implementing the requirement(s), which could include consideration of averted offsite costs.
- In July 2012, as committed in SECY-11-0137, the staff will provide a notation vote paper to the Commission with the staff's assessment of recommendations that were identified as Tier 3 actions. If Tier 3 project plans describe an approach that ultimately leads to regulatory action, the staff will complete a regulatory analysis and backfit analysis, as appropriate, which would include a cost-benefit analysis that would consider averted offsite costs (e.g., land contamination) resulting from the proposed regulatory action.
- The staff initiated a research study (spent fuel pool scoping study) of public health effects and land contamination of large seismic scenarios for high-density and low-density spent fuel pool cases. This activity will feed into the staff's analysis of the Tier 3 issue related to the transfer of spent fuel dry cask storage. This study is planned to be available in July 2012.

Enclosure

Activities related to Security:

- SECY-12-0009 (Security of Spent Fuel Transportation) provided to the Commission in January 2012, proposed a change in the regulatory guidance to clarify the definition of radiological sabotage to recognize that, if the requirements for spent fuel transportation security are followed, economic consequences and the social disruption that might result from sabotage will likely be averted.
- CA Note (ML12101A429) issued on April 11, 2012, responded to Commission's direction in SRM for SECY-10-0080. In light of the NRC's limited role under the National Response Framework in responding to deliberate attacks involving nuclear/radiological facilities or materials, SRM-10-0080 directed the staff to limit the expenditure of resources for development of economic consequence modeling for postulated radiological events (e.g., radiological dispersion devices (RDDs)) other than those that support direct participation in the interagency working groups.
- Recommendation 2 of the 2010 Radiation Source Protection and Security Task Force report (Chairman's Task Force report) proposed that U.S. Government agencies should reevaluate their current protection and mitigation strategies to protect against a significant RDD or radiation exposure device attack including consideration of economic consequences. An informal working group was initiated on February 2012 to conduct a high level assessment of whether consideration of economic consequences has an impact on the current security measures in place. The Chairman's Task Force report is due to the President and Congress in August 2014.

Other ongoing activities include the following:

- As directed by the SRM for SECY-09-0051, the staff is developing an enhanced MACCS2 economic consequence model incorporating, as appropriate, insights that may be learned from the DHS Radiological and Nuclear Terrorism Risk Analysis (RNTRA) economic consequence model. The DHS RNTRA includes the DOE/NNSA economic consequences results and processes.
- SECY-11-0163 (Draft Regulatory Basis for Reprocessing), provided to the Commission in November 2011, presents preliminary considerations of potential criteria and consequence thresholds that could be used to identify very high consequence events and appropriate risk assessment approaches. The conceptual criteria and thresholds are predominately health and safety related, but do include insights from potential land contamination and economic consequences approaches.
- In June 2012, the staff will provide an information paper to the Commission on the results of the SOARCA project. SOARCA's scope, as described in SECY-05-0233, included calculating offsite consequences of severe accidents first in terms of health effects and then in terms of land contamination. However, in SRM-COMPBL-08-002/COMGBJ-08-0003, the Commission directed the staff to not delay the SOARCA project in order to include an assessment of land contamination. The methods and models developed and used for the severe accident analyses in the SOARCA program can be used for future analysis of EC/LC.

appropriate for the Commission paper because Fukushima-related issues involving EC/LC aspects were planned to be considered by the staff and Commission around that time (e.g. filtered containment vents and the results of the spent fuel pool scoping study). The paper will include a discussion of the framework within which the Commission has authority to modify existing practices and may identify specific alternatives to some of the staff's current practices.

The list of current staff activities involving EC/LC is enclosed.

Enclosure:

As stated

cc:	R. W. Borchardt, EDO	SECY
	M. Weber, DEDMRT	OGC
	M. Virgilio, DEDR	OCA
	D. Ash, DEDCM	OPA
	N. Mamish, AO	OIP
	K. Brock, OEDO	OIS
	Y. Chen, OEDO	CFO
	G. Bowman, OEDO	EDO R/F
	D. Marciano, RES	
	R. Correia, RES	
	B. Sheron, RES	
	E. Leeds, NRR	
	M. Johnson, NRO	
	C. Haney, NMSS	
	M. Satorius, FSME	
	J. Wiggins, NSIR	