### **RESPONSE SHEET**

TO:	Annette Vietti-Cook, Secretary	
FROM:	CHAIRMAN KLEIN	
SUBJECT:	COMPL-08-0002/COMGBJ-08-0003 – ECONOMIC CONSEQUENCE MODEL	
ApprovedXX_	Disapproved <u>xx</u> Abstain	
Not Participatin	ng	
COMMENTS:	Below Attached xx None	
	Per telephone call with the Chairman, Samel L. Shaw for Dale E. Klein  SIGNATURE  8/19/08	
	DATE	
Entered on "STARS" Yes V No		

#### Chairman Klein's Comments on

#### COMPBL-08-0002/COMGBJ-08-0003

#### ECONOMIC CONSEQUENCE MODEL

l approve Commissioners Lyons' and Jaczko's COMPBL-08-0002/COMGBJ-08-0003 in part. I join the Commissioners in continued support of the SOARCA project and the staff's efforts to update the NRC's severe reactor accident consequence modeling methodology, which will enable the NRC to more accurately and efficiently predict severe reactor accident progression and potential offsite consequences. In addition, I agree with the Commissioners in their support of the continued maintenance and update of reactor accident consequence modeling computer codes such as MELCOR and MACCS2 which are fundamental to these efforts.

I believe that it is important that the NRC be prepared to realistically determine the consequences of other radiological events, including those caused by radiological dispersion devices (RDDs), in order to position the agency to support an integrated Federal response to a radiological event. It is my understanding that the MACCS2 code does not effectively deal with urban environment or with plume shape, size, buoyancy or momentum that may result from an RDD. The staff should consider other computer codes, such as ERAD, to determine if there is a better code to employ to assess the consequences of an RDD or if MACCS2 should be modified to address the characteristics of an RDD. The staff should inform these efforts with insights that could be gained from the ongoing work of organizations such as the multi-agency Radiation Source Protection and Security Task Force.

I also agree that it is important for the NRC to have the means to realistically determine the spectrum of radiological consequences that might result from a severe reactor accident, including the potential economic consequences. I understand the staff will be updating several models in the MACCS2 code, and it seems prudent to update the economic consequence models at the same time. The ability to estimate economic consequences could be beneficial in the unlikely event of a severe reactor accident. However, I do not agree that the staff should delay the SOARCA project in order to include an assessment of economic consequences at this phase of the project. The staff should complete the SOARCA project based on the Commission's prior direction to assess the offsite health consequences of probable severe reactor accidents. At the same time, the MACCS2 code should be updated such that the improved economic consequence model could be employed to update the SOARCA results once the NRC and its Federal partners have derived common accepted cleanup guidelines. This brings me to my final point.

I do not agree that the staff should provide policy papers to the Commission on appropriate clean-up standards to use to determine economic consequences at this time. I propose that the staff continue to coordinate with NRC's Federal partners, such as the Department of Homeland Security and the Environmental Protection Agency (EPA), and continue to participate in multi-agency organizations such as the Federal Radiological Preparedness Coordinating Committee (FRPCC) to assist in the development of evolving guidelines such as EPA's revision to its Protective Action Guides (PAG) manual. From these coordinated efforts. I believe that an integrated, informed Federal government position can be derived. Per telephone conversation.

David L Show for 8/14/08
Dale E. Klein Date

## **RESPONSE SHEET**

TO:	Annette Vietti-Cook, Secretary
FROM:	COMMISSIONER SVINICKI
SUBJECT:	COMPL-08-0002/COMGBJ-08-0003 — ECONOMIC CONSEQUENCE MODEL
Approved	Disapproved XX Abstain
Not Participati	ng
COMMENTS:	Below Attached XX None
	SIGNATURE
	09/ <i>≥</i> /08 DATE
Entered on "S	TARS" Yes No

# Commissioner Svinicki's Comments on COMPBL-08-0002/COMGBJ-08-0003 Economic Consequence Model

I have reviewed the thoughtful COMPBL-08-0002/COMGBJ-08-0003 put forward by Commissioners Lyons and Jaczko and regret that I disapprove the recommended alterations to SOARCA proposed therein. Although I am aware that staff originally proposed in SECY-05-0233, "Plan for Developing State-of-the-Art Reactor Consequence Analyses" (SOARCA), that staff would "provide, for Commission consideration, options on the extent to which land contamination and offsite economic consequences should be addressed" in SOARCA, staff subsequently reported to the Commission, via a memo from the Executive Director for Operations (EDO Memo, dated April 3, 2007) that the staff did not intend to include land contamination and economic costs as part of the SOARCA project. Staff provided the following rationale for this decision: "The staff recognizes that even though land contamination and economic consequences may be useful as alternate metrics to measure the severity of scenarios that have minimal health effects to the public due to effective evacuations, the economic models used to calculate the consequences are not useful for the purposes of this study" (emphasis added). The Commission, which included four of the five members who approved the original SOARCA project plan and three of the four members currently serving, did not object. Had I been a member of the Commission at that time, I would have joined the majority in not objecting to staff's decision. I have not been persuaded that the Commission's position on this matter should change.

I believe that the SOARCA project should and will provide a more realistic evaluation of severe accidents, and that the Commission specifically considered and rejected the inclusion of land contamination and economic costs in the scope of SOARCA. I support moving forward on SOARCA with the elements already underway and do not support modifying the current scope. I join Chairman Klein in disapproving the addition of land contamination and economic costs to the scope of the SOARCA project, and the tasking of the staff to provide policy papers to the Commission related to clean-up standards for economic consequence calculations.

I do believe, however, that staff should continue its ongoing efforts with NRC's Federal partners such as the Department of Homeland Security and the Environmental Protection Agency, under established interagency working groups, to assist in the development of guidelines such as EPA's revision to the Protective Action Guides manual. I believe that staff should be tasked to report back to the Commission on whether, as an outcome of participating with their Federal counterparts on issues such as the Federal response to a Radiological Dispersal Device attack, NRC staff would propose any specific analyses or evaluations that NRC should undertake or fund, which would further support the full participation of NRC in the interagency framework to address such threats. Other Federal agencies and departments have funded such studies, but I do not know whether NRC staff has had the opportunity to suggest to the Commission similar studies to be carried out by NRC, or whether they think such efforts would be useful. If the staff deems such expenditures necessary or appropriate to support our Federal partners, I would entertain their proposals.

Kristine L. Svinicki

09/ 5/08