

Dr. Mario V. Bonaca, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

April 29, 2003

SUBJECT: REACTOR OVERSIGHT PROCESS

Dear Dr. Bonaca:

The purpose of this letter is to provide the staff's response to the March 13, 2003, letter from the Advisory Committee on Reactor Safeguards (ACRS) clarifying the Committee's views on the Reactor Oversight Process (ROP). In addition, this letter provides a status of the staff's actions and plans to address the staff requirements memorandum (SRM), dated December 20, 2001, that stated "the staff, with ACRS input, should provide recommendations for resolving, in a transparent manner, apparent conflicts and discrepancies between aspects of the revised reactor oversight process that are risk-informed (e.g., the significance determination process) and those that are performance-based (e.g., the performance indicators)."

Most of the issues noted by the ACRS in the March 13 letter were discussed at the various briefings and in written correspondence that we provided to the Committee during the past year of ROP implementation. As you noted, however, there are still disagreements between the staff and the ACRS and further discussions are warranted. The staff informed the Commission of its position and plans to address the December 2001 SRM in SECY-03-0062, "Reactor Oversight Process Self-Assessment for Calendar Year 2002," dated April 21, 2003.

The staff agrees that the consolidated list of issues in the March 13 letter should serve as the basis for further discussion. The staff's responses to the specific comments in the March 13 letter are provided below to support these discussions.

1. *The purpose of the ROP is to assess safety performance so that the agency can take appropriate action.*

The staff agrees with this statement.

2. *The ROP is risk-informed because it focuses on performance areas and indicators that affect safety.*

The staff agrees that the ROP inspection and performance indicator programs are intended to focus on issues affecting safety. The ROP is also risk-informed because it incorporates risk information into the ROP decision-making process to the extent that the risk information is available and applicable.

3. *It is incorrect to base thresholds for PIs on risk metrics such as  $\Delta$ CDF (changes in core damage frequency) and  $\Delta$ LERF (changes in large early release frequency).*

See the response to comment 4.

4. *The thresholds separating all the performance levels (colors) should be performance-based and determined by expert judgement similar to the selection of the current green/white thresholds.*

The staff understands the Committee's view that PI color thresholds could have been based on the degree of deviation from average industry performance (without any connection to risk metrics). However, to establish a closer tie between agency action and public health and safety, the ROP was designed to be risk-informed whenever possible. In addition, performance indicators are not intended to be exact measures of risk or performance, but simply to be indicative of performance problems that warrant further attention to assess their root cause and extent of condition. The staff bases the thresholds for both the PIs and the significance determination processes (SDPs) on the best available information, including risk information if applicable. Based on experience to date, the staff believes that the PI thresholds are providing the necessary information to enable the staff to make informed decisions and take appropriate actions.

Therefore, the staff does not plan to make any near-term changes to the PI thresholds, but will continue to monitor and assess these thresholds as part of the ongoing self-assessment activities.

5. *The principal role for the SDP is to assign risk characterization to inspection findings - not to be an evaluation of performance.*

The staff agrees that the SDP assigns a significance characterization to inspection findings, but that not all SDP thresholds are based on risk metrics. A more precise statement is that the SDP incorporates risk insights to the extent they are available and applicable. In all cases, the thresholds should achieve a consistent regulatory response across all cornerstones. Every inspection finding represents deficient performance by definition; thus the SDP provides a significance evaluation of each performance deficiency identified.

6. *PIs are needed for the cross-cutting issues and their development should be pursued by the staff.*

The staff agrees that it should consider whether further actions are warranted when substantive cross-cutting issues are identified. Accordingly, the staff has begun to consider more precise methods for measuring and responding to cross-cutting issues. This concern was also identified by the Davis-Besse Lessons Learned Task Force and the SDP Task Group and is being tracked by the respective action plans.

7. *The Action Matrix should reflect the complementary results of the performance assessment and the SDP.*

The staff agrees with this statement. The Action Matrix does reflect the complementary results of the performance indicators and inspection findings (using the SDP), and determines the appropriate staff response based on this consolidation. In fact, an underlying principle of the ROP is that crossing a PI or inspection finding threshold will have similar meaning with respect to subsequent NRC action regardless of the cornerstone or whether it is a PI or an inspection finding.

8. *Lack of parity among the thresholds may result in suboptimal allocation of NRC and licensee resources.*

The staff agrees with this statement. The staff conducts mid-cycle reviews, end-of-cycle (EOC) reviews, EOC summary meetings, the Agency Action Review Meeting (AARM), and the annual Commission meeting to review agency actions and confirm that they represent a consistent and appropriate use of NRC resources. As part of the annual self-assessment and in preparation for the AARM, the staff considers the collection of greater-than-green findings and PIs and presents the data to the senior managers in order to reveal any obvious inconsistencies and a lack of parity. In addition, the staff continually reassesses the thresholds within cornerstones to determine if changes are warranted based on lessons learned. For instance, based on stakeholder feedback, the Public Radiation Safety SDP was revised to clarify the appropriate green/white threshold.

The staff will continue to interact with the ACRS on these issues as the ROP evolves.

Sincerely,

*/RA/*

William D. Travers  
Executive Director  
for Operations

cc: Chairman Diaz  
Commissioner Dicus  
Commissioner McGaffigan  
Commissioner Merrifield  
SECY

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Sincerely,  
**/RA/**  
 William D. Travers  
 Executive Director  
 for Operations

cc: Chairman Diaz  
 Commissioner Dicus  
 Commissioner McGaffigan  
 Commissioner Merrifield  
 SECY

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