

June 18, 1999

COMMISSION VOTING RECORD

DECISION ITEM: SECY-99-007

TITLE: RECOMMENDATIONS FOR REACTOR OVERSIGHT PROCESS IMPROVEMENTS

The Commission (with all Commissioners agreeing) approved the subject paper. The staff then submitted [SECY-99-007A](#) . The Commission subsequently voted on SECY-99-007A and the resulting Staff Requirements Memorandum (SRM) of June 18, 1999 addresses both papers.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commissioners on [SECY-99-007](#) , and the [SRM](#) of June 18, 1999.

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Annette Vietti-Cook  
Secretary of the Commission

Attachments: 1. Voting Summary  
2. Commissioner Vote Sheets  
3. Final SRM

cc: Chairman Jackson  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
OGC  
EDO  
PDR  
DCS

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VOTING SUMMARY - SECY-99-007

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACKSON	X				X	1/29/99
COMR. DICUS	X				X	2/16/99
COMR. DIAZ	X				X	2/3/99
COMR. McGAFFIGAN	X				X	3/15/99
COMR. MERRIFIELD	X				X	1/22/99

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequent to voting on this paper, the staff submitted SECY-99-007A and the Commission voted on that paper. The resulting SRM addressed both papers and was issued on June 18, 1999.

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Commissioner Comments on SECY-99-007

Chairman Jackson

I acknowledge and approve of the staff concepts and scope of the changes presented in the subject paper. The staff, along with our internal and external stakeholders, are to be congratulated for an outstanding cooperative effort, which has resulted in proposed changes to the power reactor oversight process of very real significance in a relatively short period of time. I believe the level of stakeholder/NRC interaction on this issue represents the very best of what we can hope to achieve in terms of openness (one of our principles of good regulation).

It is clear to me that the staff has organized its program logically and has provided improved clarity of purpose over the existing NRC programs for assessment and inspection. The establishment of a system of risk-informed performance thresholds and cornerstones of safety to tie operational concerns to the NRC mission are features which, in my estimation, significantly aid in properly focusing our attention. Taken in conjunction with risk-informed inspection and assessment guidance (including the approaches to defining informational needs and integrating performance indicators with inspection findings as defined in the subject paper), we stand to gain a much stronger footing as we attempt to maximize the efficient use of our resources. I similarly approve of the development of an assessment matrix which predefines the level of agency response as a function of licensee performance. In approving this concept, I would caution the staff that, while some flexibility in the application of such a matrix will be required, such flexibility should be very carefully managed to prevent a loss of predictability and scrutability. I approve of the staff proposal for the transition from the current inspection and assessment process to the new process, including the approach to pilot applications, and to the staff position on continuing the suspension of the SALP process.

With respect to specific aspects of the paper, I would encourage the staff to consider the following:

- With respect to Risk-Informed Matrix Number 1, the staff should continue to enhance individual inspection activity descriptions to include not just the number of hours required to perform an individual inspection, but the number of samples, observations, or other activities which result in the documented number of hours. The staff should also ensure that the program is capable of accepting inspector feedback on the time required to perform a particular activity, to ensure that realistic resource estimates result from inspection planning.
- With respect to the proposed concept of an Action Matrix, the staff should consider adjusting the elements of the matrix to include Commission involvement earlier in the NRC response scheme. The goal of doing so would be to ensure that the agency has exhausted all possible avenues of regulator/licensee communication prior to licensee performance falling to an unacceptable level and to ensure that the Commission is made aware of significantly declining licensee performance and proposed and ongoing staff activities in a timely manner.
- The staff should consider employing language in performance thresholds that will accurately describe the gradations of licensee performance in a given area (as opposed to using the term "acceptable" until performance becomes "unacceptable").
- The scheduling of the Agency Action Review meeting (annually) appears to presuppose that no plant will require agency-level action at any other time. This seems analogous to the placement of a plant on the Watch List - by the time the plant is on the list, the level of NRC activity has already escalated to the point that the Watch List designator adds little to the overall agency response. Since this meeting is described as being for plants with severely degraded performance (indicating that only a few plants, if any, would be considered), the staff should consider an approach which would convene such a meeting whenever needed to affirm an intended agency-level action.
- The enforcement portion of this paper is not integrated well with the balance of the paper. It does not discuss the advisability of pursuing enforcement actions as a *result* of the assessment process, and the separate portion dealing with enforcement does not discuss a proposal made in the assessment portion of the paper, which proposes an entirely new approach to violations of regulatory requirements. The staff should ensure that full integration is achieved in its final proposal to the Commission.

#### Commissioner Dicus

The staff has done an excellent job in developing the revised reactor oversight assessment program. This paper represents a significant expenditure of staff resources on an process that is paramount to ensuring protection of the environment and adequate public health and safety. The proposals have been well thought out, and are consistent with the development of a process that integrates the use of risk-insights, performance indicators and inspection. I agree with the staff's approaches as discussed in the paper.

Nevertheless, recognizing that the details of various aspects of this new process need to be aired for public comment and refined, I offer the following comments:

1. I am concerned that the threshold for unacceptable performance in any particular cornerstone is not necessarily well defined or realistic. As an example, unacceptable performance relative to unplanned scrams per 7000 hours is set at >25. Yet staff notes in Appendix H that such a high value is realistically unachievable. Irrespective of whether declines in performance in other areas are expected to be observed prior to this threshold being reached, the yellow-red threshold for this cornerstone, as well as others like it, should be able to stand alone. I urge staff to establish meaningful performance thresholds which define unacceptable performance.
2. Many performance indicators state that the threshold for unacceptable performance is "NA." Examples of such indicators include physical protection, public radiation safety and emergency preparedness. The lack of stated thresholds appear to imply that deficient performance, no matter how extreme, whether determined by performance indicators or inspection, will not be considered unacceptable. For areas where performance is to be derived from inspection results (such as those performed for physical security Access Control and response to Contingency Events [i.e., design basis threat assessments] as described in Appendix G), staff should develop clear meaningful thresholds and criteria which constitute unacceptable performance.

3. The commercial nuclear power industry reminds us that over the past ten years, the industry has matured considerably as evidenced by the significant improvements in plant operations and industry performance indicators. Yet, even though in most cases, plant performance as measured by indicator data ten years ago was considered acceptable, we do not consider those performance standards to be appropriate in all cases, in today's environment. By the same token, the performance standards and thresholds that are being established in this new reactor oversight assessment process may not be appropriate ten years hence for a nuclear industry that has gained that additional maturity. Staff should periodically evaluate the appropriateness of the performance band thresholds for the various cornerstones as future risk insights are developed.
4. As the agency moves towards implementation of a more performance-oriented assessment framework, the success of the process is dependent upon the licensees' implementation of its programs, and the staff's verification of the licensees' performance. It is imperative that staff utilize appropriate inspection and evaluation resources and expertise to properly verify and assess by independent means, the effectiveness of licensee performance.

#### **Commissioner Diaz**

I commend the staff for the effort that they have put into this significant upgrade of the NRC's inspection, assessment, and enforcement (IA&E) processes. The proposals contained in SECY-99-007 are sound, and, when implemented, will become a driving force in moving the NRC toward being a more risk-informed agency, recasting the regulatory environment into a more transparent, stable, and predictable construct providing due process. I approve the staff's proposal in SECY-99-007, and urge them to vigorously proceed with the program's implementation, including the pilots. As it further refines the IA&E processes, the staff should consider the following:

1. In implementing the program, the staff and stakeholders should remain cognizant of the potential conflict between the risk-informed and deterministic components of this proposal. The risk-informed component will, by its nature, be relatively predictable and self-limiting; in contrast, experience has shown that deterministic elements tend to grow beyond their original bounds. This conflict could establish conditions for deterministic drivers to eventually overwhelm the risk-informed base, to the detriment of the gains achieved by the staff and stakeholder efforts thus far. Everyone should recognize that this hybrid proposal is a good, solid and necessary step, but it is not the end of the evolution that is taking place. Only when risk-informed regulations are embedded in the regulatory fabric can stability be preserved. Therefore, the development of this process must be paired with that of making the regulatory structure for all reactor regulation (10 CFR Part 50) risk-informed; this way, we can ensure consistency between the regulations on the books and those we enforce. The staff and stakeholders must continue the effort along this path to ensure that, when we are finished, the restructured IA&E processes are based on a risk-informed Part 50; stability, balance and consistency will then be achieved.
2. As it refines the Conceptual Model for Evaluating Licensee Performance Indicators, the staff should define the terms "acceptable performance" and "unacceptable performance" with precision to ensure consistency with our regulatory mandate. Additionally, the fifth, and lowest, performance category ("unsafe") is not germane to IA&E, since the NRC will not permit unsafe plants to operate.
3. The staff should use the April, 1999 Senior Management Meeting as a pilot for the Agency Action Review proposed in SECY-99-007. This meeting will provide a significant opportunity to begin using the new approach at the highest levels without adverse impact on safety. Concurrently, the SALP program should be finally terminated, since this proposal, if approved by the Commission, no longer needs the SALP processes for assessing plant performance.
4. The current efforts to revise the enforcement policy, particularly regarding regulatory significance and minor violations, should be closely harmonized with the process changes that will be made as a result of SECY-99-007.

#### **Commissioner McGaffigan**

See comments attached to vote sheet dated March 15, 1999.

#### **Commissioner Merrifield**

I commend the staff for their significant efforts in developing this improved reactor oversight program and for actively seeking stakeholder input. While I have questions that I believe should be addressed prior to the staff seeking final Commission approval in March, I approve the staff's recommendations in SECY-99-007. Specifically, I acknowledge that the concepts and scope of the changes presented are consistent with the intent of the referenced SRMs. I agree with the staff's approach of establishing a system of risk-informed thresholds, its approach of integrating performance indicators with inspection areas, and its approaches taken to define informational needs. I encourage the staff to continue with developmental efforts as outlined in the transition plan.

As stated above, while I agree with the concepts and scope of the changes, I encourage the staff to carefully consider the comments and concerns raised at the January 20, 1999 Commission Meeting on Reactor Oversight Process Improvements and address them as appropriate prior to seeking final Commission approval in March. In addition, I have the following questions and comments that also I encourage the staff to address as appropriate prior to their March submittal.

1. The staff should provide the Commission with additional information regarding how Enforcement was integrated into this improvement process.
2. I remain concerned with the performance indicator "risk-significant scrams per 3 years" and its thresholds. The staff should better describe the term "risk-significant" as it applies to this indicator and the basis for why it takes 20 such "risk-significant" events before the NRC would view

performance as unacceptable. The staff should also address whether there is any significance to the fact that in Appendix A the staff changes the indicator title to "risk-important scrams".

3. The staff states that the Alert and Notification System (ANS) is a critical link for alerting and notifying the public as to the need to take protective actions. The staff should clarify why there isn't a level of performance associated with this indicator that the NRC would find "unacceptable".
4. The staff states that the decision to follow-up on nonroutine events would be made on a case-by-case basis by NRC regional management. The NRC has been criticized by stakeholders in the past regarding the inconsistency among regions in their response to events. The staff should address how this criticism is remedied in the new process.
5. The staff has identified "Operator Work-Arounds" as an inspectable area. In the description of this area, the staff uses such terms as "risk-significant deficiencies", "excessive number of operator work-arounds", and "functional capability of a system". The staff should address whether these terms are clearly defined and understood by the staff.
6. As part of the new assessment process, the EDO will give the Commission an annual briefing to convey the assessment results for all plants, with a focus on plants that require approval of agency-level actions, if any. As discussed at the Commission Meeting, I remain interested in what the staff means by the term "focus". Specifically, if the staff focuses on plants requiring agency-level actions, couldn't observers reasonably infer that such plants are "Watch List" plants? How will the staff ensure that this process does not evolve into a Watch List type process?
7. The staff states that "Although it is expected that regions will use the action matrix to guide their actions where crossing of a threshold is identified during quarterly and mid-cycle reviews of the data, formal application of the action matrix is required during the end-of-cycle review." The staff should clarify why the action matrix is being applied differently at different times in the cycle. Specifically, shouldn't the staff's actions be consistent when a threshold is crossed, regardless of when it is crossed?
8. The staff states, "When a plant is in an extended shutdown to address significant performance concerns, the plant will be removed from the normal performance assessment process. [NRC Inspection Manual Chapter 0350](#) will be used to monitor plant activities". The staff should address why such plants have to be removed from the agency's normal assessment process. Wouldn't this approach lead to inconsistent treatment of facilities and introduce additional subjectivity?