June 18, 1999

COMMISSION VOTING RECORD

DECISION ITEM: SECY-99-007A

TITLE: RECOMMENDATIONS FOR REACTOR OVERSIGHT PROCESS IMPROVEMENTS (FOLLOW-UP TO SECY-99-007)

The Commission (with Chairman Jackson and Commissioners Diaz, McGaffigan, and Merrifield agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of June 18, 1999. Commissioner Dicus approved in part and disapproved in part.
This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commissioners, 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

VOTING SUMMARY - SECY-99-007A

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACKSON	X				X	4/18/99
COMR. DICUS	X	X			X	4/19/99
COMR. DIAZ	X				X	3/31/99
COMR. McGAFFIGAN	X				X	4/29/99
COMR. MERRIFIELD	X				X	4/6/99

COMMENT RESOLUTION

In their vote sheets, Chairman Jackson and Commissioners Diaz, McGaffigan, and Merrifield approved the subject paper. Commissioner Dicus approved in part and disapproved in part. All Commissioners provided additional comments. In addition, Chairman Jackson and Commissioner McGaffigan preferred to continue to evaluate the feasibility of designing a system to analyze the risk significance of numerous problems lower safety significance which in the aggregate could be indicative of programmatic breakdowns and subsequent safety issues. Commissioners Dicus, Diaz, and Merrifield approved the

language as shown in the SRM, item 2. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on June 18, 1999.

Commissioner Comments on SECY-99-007A

Chairman Jackson

I again congratulate the staff for the progress made to date in the development of a new reactor oversight program. I approve of the scope and concepts of the recommended changes to the process and its continued development. In addition to the comments I provided in my vote on SECY-99-007 , I would offer the following comments on the staff proposal for a new reactor oversight program:

- I share the concerns expressed by Commissioner McGaffigan at the March 26, 1999, Commission briefing on this subject regarding the amount of time which may be required for a satisfactory pilot program to be completed. While it is important that the staff meet the milestones established for the development of this key program, timeliness can not be more important than ensuring that the proposed program has been properly evaluated. Therefore, the staff should notify the Commission if it is determined that additional time is required to execute the pilot program.
- While the Significance Determination Process (SDP) developed by the staff represents a laudable first attempt to incorporate risk into the assessment of inspection findings, it is clearly limited in utility due to the failure of the process to consider the deterministic component of a risk-informed regulatory approach (evidenced amply by the numbers of inspection findings which were not amenable to the SDP in the feasibility study described by the staff). Other limitations include:
    - The process can only assess hardware issues or, possibly, issues which impact hardware. Issues such as sleeping or inattentive operators, programmatic breakdowns, and corrective actions do not appear to be covered by this methodology.
    - The risk tables included in the paper appear to be generic in nature. Actual plant-specific risk does not appear to be addressed.
- It is unclear to me from a reading of SECY-99-007A and its predecessor SECY-99-007 how a particular inspection finding will impact the NRC assessment of licensee performance under a particular cornerstone. While the feasibility study results demonstrated recommended agency actions for a number of significant inspection findings, the paper did not explain how a single inspection finding impacted the overall rating for a particular cornerstone or how long the impact of the particular finding would impact the overall assessment (e.g. would a single "red" inspection finding only impact the assessment for a particular cornerstone until the condition was corrected, until the next assessment, until the end of the assessment cycle, or for some other period?). The staff should continue the development of the assessment process and inform the Commission on how this aspect of the process will be treated.
- The proposed changes to the enforcement policy appear to lack an ability to address programmatic breakdowns (e.g. breakdown of a corrective actions program or aspects of a particular quality assurance program). As such problems could occur exclusive of performance indicator declines, the staff should consider ways to address these breakdowns in both the assessment and enforcement programs. I view these issues as different from issues involving many minor findings. For example, identifying design errors which indicate a lack of proper configuration management on a broad scale may demand agency actions before performance indicator data reflect this condition. The assessment and enforcement programs must be sufficiently robust to address these issues.
- The proposed treatment of violations involving "actions that may impact the NRC's ability for oversight of licensee activities" (defined as reporting issues, failures under 50.59, 50.54(a), 50.54(p), and failure to provide NRC with complete and accurate information or to maintain accurate records) appears sound. However, a potential exists that this class of violations may become the "regulatory significance" category of the new process. To ensure predictability, objectivity, and scrutability, the staff should ensure that violations included under this provision are defined explicitly.
- The staff states that, while there will be a significant reduction in the number of civil penalties issued under the proposed plan, the staff may wish to issue civil penalties for "particularly significant violations." The staff should provide explicit criteria for determining what falls into this category.
- In my view, the staff proposals on changes to the enforcement process relating to the significance of a particular violation complicates, rather than simplifies, the process. Instead of having four levels of significance for violations of agency requirements (five if non-cited violations are considered), the staff essentially proposes six categories, depending upon how significance is established. If the SDP process is utilized, the staff describes "significant violations" (which may actually have four, color coded, subcategories), "violations," and "non-cited violations." If the traditional approach is utilized (for issues not amenable to the SDP process), the staff proposes violations involving the traditional severity levels and non-cited violations. While I do not dispute the staff contention that ascribing significance to issues such as willful violations will, necessarily, be different from ascribing significance to violations which can be considered in a risk-informed analysis, I do not see the need for characterizing the ultimate agency action differently for the two cases. If a willful violation is characterized as being significant *by whatever means of significance determination the staff applies*, there appears to be no reason why it can not be formally characterized as a "significant violation" in a manner similar to that offered for SDP-related violations. The staff should reconsider the proposed violation categories with the goal of making the ultimate statement of significance for a particular violation consistent and understandable to all of our stakeholders and address this issue when changes to the enforcement policy are submitted to the Commission.
- While the staff has provided assurances that the appropriate agency-level action meetings will be conducted on an as-needed basis for significant performance declines which are identified within an assessment cycle, such an explanation begs the question of why a scheduled meeting is necessary at all. This practice (annual meetings) 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. Because this meeting is focused on 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 as a practice, rather than conducting the meeting on a regular periodicity. Such a meeting could be part of, or in addition to, an annual meeting which could accomplish additional management and coordination objectives.
- With respect to the noteworthy changes to SECY-99-007:

    - The alignment of performance goals to industry performance goals (described in the context of green-white thresholds for the BWR RHR and the PWR HPSI systems) does not appear risk-informed. NRC should develop its own performance goals based on risk information.
    - The change in the green-white threshold for emergency ac power due to the granting of limited two-week allowed outage times (AOTs) by the NRC fails to recognize that not all licensees have justified such AOTs. This performance threshold should be risk-informed and made plant-specific.
    - The performance indicator table remains generic in nature. The significance of the safety systems chosen for monitoring and the thresholds established do not necessarily reflect the reality found in the field. Staff should consider, as part of the pilot, the need for developing plant-specific performance indicator tables, taking into account plant-specific vulnerabilities. Other applicable aspects of the proposed oversight program should similarly be made plant-specific (e.g., SDP tables).
- With respect to success criteria associated with pilot programs:
    - Resource expenditures are to be within a 25% spread at 8 of the 9 sites selected to indicate one aspect of program success. The staff should ensure that inspectors (who may be well-acquainted with hourly goals for a given inspection procedure) do not create a self-fulfilling prophesy by limiting their efforts to the target hours for a given procedure. The ultimate goal of the risk-informed baseline inspection program must be the acquisition of sufficient licensee performance information (both in terms of indicators and inspection findings) for the NRC to conclude independently that reasonable assurance of safety exists for a particular site. Therefore, it is the attainment of this objective, and not meeting resource goals, that will define success.
    - A criterion is established for resources expended with success defined as a 15% reduction in expenditures over the core program. This presupposes that a reduction in resources is a goal of the program. An original goal in the development of this program was that resource demands would be defined by a risk-informed baseline program. Establishing resource demands artificially is inconsistent with this goal. If a risk-informed approach is to be employed, the staff should be as willing to accept, for example, a 15% increase in resources as it is to accept a 15% decrease.
    - The staff has prepared an impressive plan to communicate with both internal and external stakeholders. In addition to the plans documented in the subject paper, the staff should consider involving citizens local to the pilot program plant as a test of whether the staff communication efforts are having their intended effects. Specifically, the staff should consider involving representatives of local governments or emergency planning agencies to ensure that the NRC is communicating effectively with these important stakeholders. It may be desirable to conduct facilitated information exchange (e.g., round table meetings) with local stakeholders to solicit, in a consistent manner, structured feedback on the pilot.

Commissioner Dicus

I approve the staff moving forward on the scope and concepts of the recommended changes, but defer my final approval of full implementation of the revised oversight and assessment program until part of the pilot program is completed and the staff is able to factor the lessons learned into the final implementation process. I commend the staff for its hard work. This new process is changing the fundamental way we've done business for 30 years and change is not always easy or quick.

I would like to stress the importance of continued communication internally as well as externally so that some of the misconceptions that may be out there are cleared up. As discussed at the Commission meeting, I recommend public meetings near all the pilot sites either before or during the pilot to inform the public of the new process and what they should expect out of us.

The staff should continue to consider the policy and organizational issues associated with full implementation as identified in SECY-99-007, during the Commission meeting, and during the pilots, and provide a discussion and resolution of these issues to the Commission prior to full implementation.

I disapprove the staff's proposal regarding deletion of the exception to the enforcement program with regard to Severity Level IV repetitive violations identified by the NRC. The staff's basis for approval is that this type of violation would be captured under the new program by the performance assessment of the licensee's corrective action program, however, not all plants will be assessed under the new oversight and assessment program at this time. The staff should defer implementing this option industry wide until after the Office of Research provides their input on the possible safety significance of the cumulative effect of small non safety significant violations and the staff provides its report regarding the new treatment of SL IV violations as applied in the new assessment process, in response to the SRM on SECY-98-256, due to the Commission 9/1/99. However, I do not object to implementing this enforcement policy at the pilot plants.

Commissioner Diaz

I continue to be impressed by the staff's aggressive, forthright, and self-critical effort to improve the NRC's regulation of nuclear power plants. The staff is clearly on the right path to make NRC oversight more transparent and focused on protecting public health and safety, while providing for due process and not imposing unnecessary burdens. It is also apparent that much remains to be done; in fact, as the programs have been refined, the "holes" that need to be filled have become more clearly defined. Rather than having misgivings over the work yet to be done, I am encouraged by the better definition of the scope of both the remaining effort and the policy decisions still to be made. This is a clear sign that we are nearing our goal.

In addition to my comments on SECY-99-007, as the staff carries out the pilot program and develops and implements further refinements, we all should maintain a balanced perspective of the interplay between the technical, regulatory, and risk-informed bases for determining the significance of findings. Additionally:

- The staff should reformulate the success criteria of the pilot program to address the conflict between risk-informed methods and specific targets for reductions in inspection effort.
- From the points of view of some of our stakeholders, all activities that the NRC undertakes vis-a-vis its licensees represent a form of enforcement

of our regulations. However, in keeping with our agency's name, we view these activities as being regulatory, with Enforcement being a subset of regulation. To help provide for a common understanding of concepts and terminology as we change the way we do business, the staff should more clearly articulate the NRC's functions for regulating operating plants. Within the bounds of this regulatory function, the staff should specify the different, yet complementary, roles of Enforcement and the actions that are in the action matrix.

- In the next status report to the Commission, the staff should provide the results of its further research into criteria for evaluating findings associated with the containment barrier, fire protection, and shutdown operations.
- Finally, the process that is evolving appears to be sufficiently effective and robust to enable the NRC to fulfill its public health and safety mission. Therefore, in this light, I do not believe that it is necessary to do further research into the determination of whether a combination of "green" items can represent a significant pattern.

Commissioner McGaffigan

I join my fellow Commissioners in commending the staff and industry and public stakeholders for their efforts to flesh out the proposed new reactor oversight process. It has been and will continue to be an enormous task. I believe the concepts are now ready to be tested in the proposed pilot program. My approval to begin testing the proposed process at the pilot plants does not constitute an unreserved endorsement of the "scope and concepts of the recommended changes in the regulatory oversight process" nor is it an endorsement of the full implementation of the new process starting in January 2000.

I note that in a March 31 letter from the EDO to the Chairman of ACRS, the staff has stated that:

> "[T]he purpose of the six-month pilot program is to phase in the new process, evaluate its performance, and incorporate necessary changes resulting from the experience gained .... The pilot program is not intended to test the concept of the new inspection and assessment program. Rather it is to demonstrate that the PIs are viable and the new inspection and assessment procedures are implementable." (emphasis in original)

It may be a matter of semantics, but I believe that we are still testing the concept of the new oversight process in the pilot program and I do not rule out the possibility of more than minor course corrections as a result of the pilots. I certainly believe that January 2000 is a very optimistic date for full implementation of the new oversight process at all 103 plants.

There is much to be liked about the potential benefits of the new oversight process, if they are realized in practice. One of the benefits should be enhanced public understanding of plant performance. The improvements in the quality, quantity and timeliness of information, especially the performance indicators, that will be publicly available should prove very attractive. I suggested at the Commission briefing that this public communications aspect of the process be modeled at the pilot plants through a meeting with local stakeholders in November. Such meetings would constitute a real test as to whether the public is seeing a benefit in the new process.

I had not fully understood until the Commission briefing how few inspection findings (on the order of 10 per year) are likely to emerge from the significance determination process and have an effect on the assessment process (by changing the color classification of an inspection indicator in a cornerstone). This really is a performance indicator dominated process and we had better have pretty high confidence in those indicators by the time the process is fully implemented. Perhaps the multiplicity of indicators will help ensure that any effort to "manage indicators" will be unsuccessful.

Given how few inspection findings will be characterized as significant as a result of the significance determination process, I think it is only prudent to support the Office of Nuclear Regulatory Research's effort to evaluate the feasibility of designing a system to analyze the risk significance of numerous problems of lower safety significance, which in the aggregate could be significant. The significance determination process sets a fairly high threshold for safety significance. A licensee with numerous inspection findings just below that threshold may well have significant problems that we need to look at in the aggregate. I would not want to curtail that staff effort today even before we conduct the pilot program.

We should not underestimate the training requirements associated with the new oversight process for our inspectors. The changes in the enforcement policy that dovetail with the inspection and assessment process changes will doubtless further complicate their lives. Traditional enforcement with its Notices of Violation will still exist, but will now cover only a portion of the inspection scope. Findings in other areas, absent crossing a high threshold of significance, will be handed off to the licensees' corrective action programs which itself will be inspected in a different manner. Questions of how to apportion inspection time, which findings to track, which items to pursue, etc. will all need to be resolved by each individual in the field (and supervisor and management team) under the new system.

Finally, as we make our oversight process more risk-informed and more performance-based, we need to remember that our regulatory framework remains predominantly prescriptive and deterministic. If the new oversight process has the de facto effect of providing more flexibility in meeting a prescriptive requirement or of risk-informing a deterministic requirement, we would do well to go back and capture the de facto situation through changes to our rules and regulations as promptly as possible. Only then will we have a clear, consistent overall regulatory program for reactors.

Commissioner Merrifield

I commend the staff for their hard work associated with the reactor oversight process improvements. I was pleased by the staff's presentation at the March 26, 1999 Commission meeting because they demonstrated that they understood the magnitude of the challenges that remain, they were clearly committed to the task at hand, and they remained self-critical and open to suggestions from the Commission and the agency's stakeholders. The staff is clearly on the right track to make the NRC's reactor oversight process more risk-informed, less-subjective, and predictable. While a great deal has to be accomplished before this new process is ready for implementation on a broad scale, it is time to move forward with the pilot program. The insights we gain from the pilot program will be extremely important to the success of this effort.

Some of my comments on SECY-99-007 were not addressed in SECY-99-007A. As the staff proceeds with the pilot program, I ask that the staff consider those comments as well as the following comments on SECY-99-007A.

1. Based on the major transition milestones (slide 5) presented at the March 26, 1999 Commission meeting, the staff is scheduled to complete the pilot projects in November 1999 and implement the new process in January 2000. It is not clear how the staff plans to share the lessons learned from the pilot projects with the Commission. Furthermore, the milestones presented did not address whether the Commission, the industry, and the public would have an opportunity to weigh in on any process changes the staff deems appropriate based on the pilots. I believe it is imperative for the staff to develop lessons learned from the pilots and solicit feedback on process changes that are recommended as a result of these lessons prior to implementing the new process.
2. In the paper, the staff indicates that the Office of Nuclear Reactor Research is evaluating the feasibility of designing a system to analyze the risk significance of numerous small problems of low safety significance, which in aggregate could be significant. I have significant doubts as to whether this type of aggregation has a role in the new oversight process. I am concerned that our inspectors would spend a lot of time analyzing the aggregate significance of the small problems, and thus be distracted from their primary job of inspecting. The oversight process should be sufficiently robust to identify plant performance problems without the aggregation of small problems of low safety significance.
3. Regarding the process flow diagram associated with safeguards inspection findings, I have the same concerns that were expressed by NEI EXIT . As the staff develops this area further, they should clearly define what is meant by such terms as "low risk", "some risk", and "more than low risk" because how an issue is categorized ultimately drives the regulatory action associated with it.
4. The staff indicates that there may be particularly significant violations where it is appropriate to have a civil penalty for violations addressed in the action matrix. The staff should ensure that clear guidance is developed which provides discipline to the process associated with determining the amount of the civil penalty.
5. The staff indicates that **licensee-identified issues**, when reviewed by NRC inspectors, are candidates for the inspection finding risk characterization process. I understand that in a risk-informed regulatory environment, the risk associated with an issue is blind to whether it was identified by the NRC or licensee. However, I am concerned that the new oversight process may be reducing incentives for licensees to aggressively identify their own problems. History has shown that the best performers are those plants that are self-critical, identify their own problems, and maintain a robust corrective action program. The new oversight process clearly recognizes the importance of a sound corrective action program. As the staff proceeds with the pilot program, it should further consider how it will address licensee-identified issues so as to not discourage licensees from having an aggressive problem-identification process.
6. I commend the staff for developing a communication plan. The staff has clearly worked hard to ensure that the agency's internal and external stakeholders are informed of proposed changes and to solicit their feedback. I encourage the staff to continue with these efforts.
7. I commend the staff for forming the Transition Task Force and Pilot Program Evaluation Panel to support and critically evaluate the pilot effort. Critical feedback from the pilot process is crucial to the success of this effort.