

May 17, 2000

COMMISSION VOTING RECORD

DECISION ITEM: SECY-00-0049
TITLE: RESULTS OF THE REVISED REACTOR OVERSIGHT PROCESS PILOT PROGRAM

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memoranda (SRMs) of [March 28, 2000](#), and [May 17, 2000](#).

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette Vietti-Cook
Secretary of the Commission

Attachments: 1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
OGC
EDO
PDR

VOTING SUMMARY - SECY-00-0049

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	X				X	3/27/00
COMR. DICUS	X				X	3/28/00
COMR. DIAZ	X				X	3/28/00
COMR. MCGAFFIGAN	X				X	4/11/00
COMR. MERRIFIELD	X				X	3/22/00

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRMs issued on March 28, 2000, and May 17, 2000.

Commissioner Comments on SECY-00-0049

Chairman Meserve

Subject to the completion by the staff of the matters that must be resolved to support initial implementation, I approve the initial implementation of the revised reactor oversight process (RROP) at operating commercial nuclear power plants on April 2, 2000.⁽¹⁾ I also approve the termination of the SALP process.

I commend the staff for the creation of the RROP. The program was developed with extensive involvement of stakeholders -- both licensees and the interested public -- and has drawn near unanimous approval. The RROP reflects several important themes for all our activities -- a focus on safety, an effort to improve objectivity, a commitment to stakeholder involvement, and improved transparency of agency activities for both our licensees and the general public.

Nonetheless, despite the efforts that have gone into the present formulation of the RROP, the staff's work must continue. As discussed further below, the performance indicators (PIs) require further refinement. The thresholds for the PIs may require adjustment. Experience may show that the allocation of staff effort to the baseline inspection program should be modified. Some elements of the significance determination process are only now being developed and no doubt will need to be revised. Moreover, the full-scale initial implementation of the program will inevitably reveal issues that were not exposed in the pilot program. The staff should anticipate that adjustments - perhaps significant adjustments - will be necessary as the program unfolds. As a result, there should be a continuing open dialogue among our licensees, other stakeholders, and staff, as issues are encountered. The Commission should be kept informed and issues of policy significance should be brought promptly to the Commission for resolution.

I am mindful that both the GAO and the staff's surveys have shown that there are some misgivings among NRC employees, particularly among the inspection staff, as to whether the new program will allow prompt detection of the deterioration of safety performance. Some of these concerns may arise from the fact that the surveys were performed before the program was fully formulated and before thorough staff training had occurred. Nonetheless, NRC management should undertake continuing dialogue with the staff, including in particular the inspection staff, to assure that these concerns are thoroughly aired and addressed. Adjustments to the program with commensurate further training may be necessary.

In this connection, I am concerned about the matter raised in the letter submitted by the Nuclear Energy Institute on March 13, 2000, concerning the PI related to manual and automatic scrams. Although the matter was not mentioned by the NEI representative at our public meeting just a few days before, NEI now urges that the PI be modified so as not to count manual scrams and thereby to avoid creating a disincentive for an operator to scram a reactor. I understand, however, that this matter was discussed extensively over the period in which the PIs were being developed and the participants (both licensees and other stakeholders) were not concerned that the inclusion of this element in the PI would constitute a meaningful disincentive to appropriate operator action. In light of the extensive process in which the staff has engaged to develop the RROP and the apparent disagreement among even the licensee community as to whether the concern expressed in the NEI letter is of practical significance, I am reluctant to attempt to revise the PIs on the eve of the implementation of the program. All agree that scrams, whether automatic or manual, are an indicator of challenges to the safety systems and it would be difficult, at this late date, to adjust the thresholds to reflect a last-minute change. However, the staff has indicated that the PI that includes manual scrams was one of the PIs that would be subject to further review and refinement. I urge the staff to undertake a review of the PI relating to scrams on an expedited basis and to recommend appropriate modifications promptly.

The staff has requested the Commission's views on three particular issues (see SECY-00-0049 at 17-18, 3):

1. The staff has indicated that, for initial implementation, it will revise the process for documentation of inspector observations to allow qualitative discussion of programmatic deficiencies as an element of cross-cutting issues, even absent a PI that has crossed a threshold or a significant inspection finding. I recognize that the staff's proposed approach could diminish the objectivity of the inspection program and could compromise the focus on significant safety issues that is the hallmark of the new program. However, in light of the fact that the staff intends to continue to evaluate this matter as implementation proceeds, I find the staff's approach to be appropriate. The RROP is a work in progress and we do not want to impose restraints that could inhibit the detection and response to adverse trends that have a safety significance but that are not captured by the RROP as initially implemented. Some flexibility is a necessary ingredient of initial implementation. NRC management should take steps to assure, however, that any such observations are placed in an appropriate context and do not undermine the overall effort to put inspection and enforcement efforts on a more objective and consistent foundation.
2. The staff indicates that it has decided to eliminate the Containment Leakage PI because of the questions as to the meaningfulness of this indicator and that all the barrier integrity PIs require refinement. I concur with the staff's approach. The continuing work on PIs should include the development of more refined assessment tools. In particular, staff should endeavor to develop PIs that provide leading, rather than lagging, indications of deteriorating performance.
3. The staff indicates that it intends to use the Action Matrix in assessing the agency's response to declining performance, even if the finding does not indicate a violation of a licensing or design basis for the plant. The staff also indicates, however, that all requirements for backfitting a license must be met before imposing any new regulatory requirements. The staff's approach is acceptable and is consistent with the emphasis on risk that is the foundation for the program.

Commissioner Dicus

Subject to the completion by the staff of the issues that must be resolved prior to initial implementation, I approve the initial implementation of the revised reactor oversight process (RROP) at all commercial operating nuclear power plants (except for the D.C. Cook plant) on April 2, 2000. I also approve the termination of the SALP process.

I commend the staff for their efforts in the development of the RROP as well as their extensive inclusion of the stakeholders. I believe it is these efforts that have led to a process that provides a more objective, clear and risk-informed approach to the oversight of nuclear reactors.

I agree and concur with Chairman Meserve's comments on the issue of manual scrams, cross-cutting issues, barrier integrity performance indicators and inspection findings involving licensee performance issues that our outside the licensing and design basis of the plant.

In addition, I believe that the assessment provided by the Pilot Program Evaluation Panel (PPEP) under the rules of the Federal Advisory Committees Act (FACA) provided an appropriately independent review of the RROP through the use of objective assessment criteria. The members of the PPEP, as well as NRC staff and other stakeholders, have concluded that although the program should proceed to industry-wide initial implementation, there is still more work to be done. In fact, the PPEP was unable to draw conclusions on several assessment criteria, identifying a need to gather additional experience first. I believe it would be beneficial to convene another evaluation panel, although not necessarily under the rules of the FACA, during the first year of initial implementation in order to continue to gain an independent, objective, view of the RROP.

Commissioner Diaz

I approve the initial implementation of the Revised Reactor Oversight Program (RROP) at all operating commercial nuclear power plants (except for the D.C. Cook plant), effective April 2, 2000, as described in the staff's transition plan, and I approve termination of the SALP process.

Once more, I applaud the staff and the NRC's stakeholders for their significant accomplishment in developing the RROP. This new process will result in improved NRC oversight of nuclear power plant safety, which, in turn, should enhance reasonable assurance of adequate protection of public health and safety. As the staff correctly acknowledges, while there remains much work to improve the program, the RROP, as proposed, is as good as it can be today. In refining the program, the staff should consider the issues discussed below.

- Robust licensee corrective action programs (CAPs) are more than just a cross-cutting issue: they are one of main pillars of the RROP. The CAP is the foundation of good safety performance. Up to now, the staff has only clearly publicized the performance indicators (PIs) and inspection program as essential elements of the RROP, and has not emphasized the importance of the CAP and the integral role that each licensee must play, i.e., that the new process places greater responsibility on the utilities that operate nuclear power plants. In fact, in my interactions with NRC staff, the ACRS, and external stakeholders, I have noted that there has generally been a lack of recognition of the fundamental nature of CAPs. Licensee CAPs, with self-assessment, are the beginning and the end of this process, and the staff should more clearly articulate this role.
- One key component of the RROP pilot was the Pilot Plant Evaluation Panel (PPEP). For the initial implementation phase of the RROP, the staff should continue the PPEP or institute a successor panel.
- I am supportive of the approach proposed by Commissioner Merrifield to consider manual scrams in the unplanned scram performance indicator. As I have been stating for several years, I believe that the staff should pay special attention not to unduly restrict operators' safety actions by just the counting of manual scrams. Rather, our emphasis should be placed on the causes that lead an operator to take an action such as manually tripping the reactor. The staff should make it clear to all licensees that, PIs or no PIs, theirs is the responsibility for safety actions. Operational safety actions, or lack thereof, will be one of the factors that the NRC will consider in its overall evaluation of plant performance.
- We are breaking new ground with the development of the significance determination processes (SDPs). I support the staff's efforts to refine the SDPs. Let me add a caution: one potential problem with using PRA is the tendency to take each numerical value literally. The staff should keep this in mind as it carefully refines the SDPs.
- In refining the PIs and establishing performance thresholds, the staff should remain cognizant of the concept of reasonable assurance of adequate protection. In particular, they should guard against imposing rising standards without ensuring there is a commensurate enhancement in adequate protection.
- The staff's comments on the use of positive findings in assessing plant performance are persuasive. However, I believe additional clarity is warranted. The concept of positive findings, in my view, is not limited to those things that a licensee does that are above and beyond minimum regulatory requirements. An inspection in which a licensee is found to meet all requirements without adverse findings is, in itself, an affirmation that reasonable assurance of adequate protection continues to exist, and is, therefore, positive. One example could be an NRC inspection of steam generator tube inservice inspection that finds the licensee meeting applicable requirements; another example could be a 100% pass rate on an operator licensing or requalification exam. In either case, the finding would be documented in an inspection report, and would be available for the staff to use in assessing licensee performance. The staff should use these sorts of positive findings in performance assessments to guide the formulation of a balanced regulatory response to the assessments' results.
- While the staff needs some flexibility in implementing the RROP, deviations from the action matrix should not be taken lightly. Therefore, to permit the necessary flexibility while maintaining accountability, action matrix deviations should be preapproved by the EDO, and a summary of all action matrix deviations should be reported annually to the Commission.

In addition to the above, SECY-00-0049 requested that the Commission consider three "Issues of Note".

1. Concerning the first issue, I approve the staff's proposal to continue to work with stakeholders to evaluate the appropriate means to address cross-cutting issues and programmatic breakdowns in the oversight process. I am somewhat concerned with the staff's plan to allow a qualitative discussion of distinct adverse trends in cross-cutting issues in assessments. Although increased NRC action will not be taken on these programmatic concerns absent any PIs that have crossed a threshold or significant inspection findings, this proposal should be clearly bounded. Otherwise, this might provide an opportunity for subjectivity to creep back into our oversight process, and could resurrect the concept of regulatory concern by allowing the aggregation of findings of little or no safety significance. Specifically, significant inspection findings or degraded PIs must be shown to have a clear and strong link to the cross-cutting issues in question before staff attempts to take action on programmatic concerns. Further, in its report to the Commission on the initial implementation phase of the RROP, the staff should discuss every case in which enhanced NRC action was taken on cross-cutting issues.
2. Regarding the second issue, I approve the staff's plan to address the barrier integrity PIs during the first year of RROP implementation.
3. For the final issue, I approve the staff's plans to process inspection findings that do not violate the licensing or design basis but nevertheless represent an unintended increase in plant risk resulting from deficient licensee performance. This proposal is consistent with the agency's move toward real safety and compliance. The staff should continue to work with our stakeholders to resolve this issue while maintaining its appropriate sensitivity to backfit implications, and specifically discuss this issue when they report to the Commission on the results of the first year of RROP implementation.

Commissioner McGaffigan

I approve the initial implementation of the revised reactor oversight process (RROP) at all operating commercial nuclear power plants (except for the D.C. Cook plant) and the termination of the SALP process. I consider this process to be a significant step forward in utilizing risk insights to yield timely, objective, and scrutable assessments of the performance of nuclear facilities.

I commend the NRC staff on their efforts in developing the RROP and readying it for implementation. Further, I commend all the participants in the pilot program, including NRC field inspectors and licensee plant staffs, for working together constructively to craft this product that almost all stakeholders agree represents an improvement, for all its status of a "work in progress," over the predecessor SALP process. In particular, the work of the Pilot Program Evaluation Panel (PPEP) deserves special mention. That group, operating under the Federal Advisory Committees Act (FACA) rules, was vital in assuring input and oversight on the part of all stakeholders, particularly regional staff, State, and public interest stakeholders. Indeed, I share Commissioner Merrifield's view that the panel was important in gaining the confidence of the Commission itself in the RROP.

Based on the strong role provided by the panel, I strongly recommend that a similar panel be created during the initial implementation of the RROP, perhaps the "Initial Implementation Evaluation Panel (I²MPEP)." Such a panel would be especially helpful as the Commission considers possible changes in PI's during this initial implementation phase and as it reviews the experience in using the significance determination processes.

Therefore, faced with the high likelihood that further RROP changes will be needed, keeping an independent stakeholder advisory panel in place throughout the first year of initial implementation would seem to be a critical element in maintaining the high level of stakeholder, public, and Commission confidence achieved during the pilot program. I am agnostic on whether this panel needs to be a FACA Committee or can be formed outside of FACA, and would defer to OGC on that. I would suggest that at least one resident inspector and one senior reactor analyst be placed on the I²MPEP.

I join with Chairman Meserve, Commissioner Dicus, Commissioner Diaz, and Commissioner Merrifield in supporting the inclusion of manual scram data in the PIs for initial implementation and encouraging the staff to work with stakeholders to consider the issue further.

I also join with David Lochbaum and others in urging that any departures from the Action Matrix framework truly be rare and very well-explained to all stakeholders. Presumably at the May 2001 presentation to the Commission the staff will lay out overall plant performance with particular attention to plants falling in columns 3, 4, or 5 of the Action Matrix. (Column 3 is essentially our current "regional focus" category and columns 4 and 5 are essentially our current "agency focus" category). Any departure from the Action Matrix would be identified to the Commission. Various other stakeholders, for example the I²MPEP, will presumably have the opportunity at the meeting to comment on whether plants have been assigned to the proper column because all of the performance indicators and inspection findings will be publicly available.

The staff requested the Commission to consider three "Issues of Note":

- 1) Concerning the treatment of "cross cutting issues and programmatic breakdowns," I am supportive of staff efforts to continue to work with stakeholders on how such issues could be factored into the overall assessment process. Given the importance of these issues, this should be a priority as we go forward. However, I share Commissioner Merrifield's concerns and do not support any method, qualitative or not, for factoring in such issues prior to Commission endorsement of a staff proposed treatment process for those issues. I also remain in agreement with Commissioner Diaz that positive inspection findings may have a place in the assessment process, and I find some similarities between such findings and those the staff

wants to continue to consider in this "Issue of Note." Both appear to have potential merit in any assessment process, but both are qualitative and difficult to incorporate into the RROP.

2) Concerning "barrier integrity PIs," I support the staff plan for the first year of RROP implementation.

3) I support the staff's proposal with regard to treating inspection findings that might involve risk increases that are outside the design and licensing scope of a plant. I agree with Chairman Meserve that the formal requirements and structure of the backfit regulations should ensure that any such items get full consideration within the regulatory process.

Finally, as initial implementation goes forward, the Commission and senior staff need to be kept abreast of concerns from our resident inspector corps and regional staffs about practical problems which they are encountering and their suggestions for addressing such problems. I know that some residents, for example, were concerned that control room observation per se is no longer a module in the revised inspection program. Instead, residents will need to use plant status time for such activities. Like everything else in RROP, the inspection program is a work in progress, and the more extensive experience over the next year will tell us how many changes need to be made.

Commissioner Merrifield

I approve the initial implementation of the revised reactor oversight process (RROP) at all operating commercial nuclear power plants (except for the D.C. Cook plant), as described in the staff's transition plan. I also approve the termination of the SALP process.

I commend the staff for the outstanding job they have done on the revised reactor oversight process, especially during the 6-month pilot program. Clearly, the lessons learned from the pilot effort were extremely valuable. The staff should be very proud of their accomplishments.

I was pleased by the extent to which the staff solicited public participation and insights and the extent to which feedback was solicited from our internal stakeholders, our staff. Further, I believe the process by which an independent assessment was provided by the Pilot Program Evaluation Panel under the rules of the Federal Advisory Committees Act (FACA) was important to enhancing stakeholder, and quite frankly Commission, confidence. The new process successfully institutionalizes the objectivity, predictability, consistency, openness, and risk insights that were missing from our previous oversight process. While the new reactor oversight process is definitely a work in progress, few would disagree with the fact that it is far superior to the process we are leaving behind. I cannot stress enough the importance of moving forward with initial implementation and of not allowing the revised process to be held hostage by those who demand perfection at the expense of improvement.

Subject to completing the remaining work outlined in SECY-00-0049, I see no reason not to move forward with initial implementation. However, there are issues I believe should be addressed during the initial implementation period. Specifically, I believe the following matters must be addressed to ensure the long-term success and stability of the new process.

1. I am concerned about the staff's intention to deviate from the actions specified in the Action Matrix whenever it deems appropriate. I believe that this practice adds a level of subjectivity and unpredictability that not only threatens the integrity of the new oversight process, but also threatens to erode public confidence. Clearly, we cannot completely rule out the need for discretion; however, I believe the discretion itself must be institutionalized to the extent necessary to ensure that it is rarely used, applied with discipline, and soundly based. Until this is achieved, the process is vulnerable to rationalization. Thus, during the initial implementation period, I believe that the staff should inform the Commission whenever it intends to deviate from the Action Matrix, including the basis for the deviation. During this period, the staff should also assess the deviation process to ensure that rigor and discipline is adequately institutionalized in the process and to ensure that the need for such deviations is minimized.
2. I am also concerned about the staff's intention to document inspector observations associated with programmatic deficiencies and cross-cutting issues, even if they do not reveal themselves in performance indicators crossing thresholds or in significant inspection findings. I am not questioning the value of the insights provided by our inspectors. Clearly, the agency, the public, and our licensees benefit from inspector observations. My concern lies in the management of these observations. Specifically, NRR and regional management must ensure that the threshold for documenting observations is clearly understood and consistently applied, and that the observations are put in their proper context with their significance clearly and accurately conveyed. NRC management should also ensure that the practice of documenting inspector observations does not facilitate regulatory creep or provide an inappropriate forum for the bully pulpit.
3. I raised the issue of including manual scrams in the unplanned scram performance indicator about a year ago during the Commission meeting associated with SECY-99-007. During that meeting, it was clear to me that representatives from the NRC staff, NEI, and UCS shared the view that from a risk perspective, there is no difference between an automatic and a manual scram. Furthermore, none of these representatives expressed a concern regarding unintended consequences. I have also raised the manual scram issue with many licensee managers during my trips to nuclear power plants, and with representatives from public interest groups, and have not heard concerns regarding unintended consequences. Thus, I was surprised by NEI's letter of March 13, 2000 on this matter.

I have carefully considered the concerns raised in NEI's letter. From a safety perspective, while I understand and appreciate the concerns raised by NEI and some of its members, the numerous discussions that I have had on this issue over the last year leave me convinced that this is not a significant safety issue warranting immediate resolution. From a process

perspective, I do not believe the potential for unintended consequences warrants a delay in our initial implementation of the revised reactor oversight process, nor do I believe it warrants the NRC deviating from its formal performance indicator change process. Deviating from the formal change process will only serve to erode public confidence in the oversight process and the NRC's role as an independent, credible regulator. For this reason, I believe the staff should go forward with initial implementation as planned and should address the manual scram concern **expeditiously**, but in accordance with the formal performance indicator change process. I am confident that the staff and our stakeholders can resolve this matter in an expeditious manner which maintains the integrity, openness, and inclusiveness of the change process. The staff should provide the Commission with its plans and schedule for resolving this matter.

1. In light of the fact that the D.C. Cook plant has been shut down for an extended period, I concur in the staff's plan to allow the transition of that plant to the RROP at a later time.