

Decision # NL 993540120 Orlis  
Template = EDO -004  
PDR



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 21, 1999

MEMORANDUM TO: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield

FROM: William D. Travers *William Travers*  
Executive Director for Operations

SUBJECT: FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL

The Pilot Program Evaluation Panel (PPEP) has completed its evaluation of the results of the NRC's revised reactor oversight process pilot program effort. The panel's final report is attached. The report contains the panel's recommendations and provides the overall conclusion that the program should proceed to initial implementation industry-wide. This report will be made available in the PDR and subsequently published on the NRC web site.

The recommendations in this report will be considered by the staff and integrated into the forthcoming Commission paper on the revised reactor oversight process.

Attachment: As stated

- cc: James T. Wiggins
- Bruce Mallett
- Geoffrey E. Grant
- Kenneth E. Brockman
- James Lieberman
- Steve Floyd
- David Garchow
- Masoud Bajestani
- George Barnes
- James Chase
- Gary Wright
- David Lochbaum
- SECY
- OCA
- OGC
- OPA
- CFO
- CIO

DEC 21 1999

*DFOS*  
*Add: H. Enel*  
*August Spectator*



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 17, 1999

MEMORANDUM TO: Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

FROM: Frank P. Gillespie, Deputy Director  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation

A handwritten signature in black ink, appearing to read "Frank P. Gillespie".

SUBJECT: FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL

The Pilot Program Evaluation Panel (PPEP) has completed its evaluation of the results of the NRC's revised reactor oversight process pilot program effort. The panel's final report is attached.

In its report, the panel provides an overall conclusion that the program should proceed to initial implementation. The panel recommends that the staff should consider taking certain actions prior to initial implementation, and consider other actions based on the experience gained during the first year of implementation. I have listed below, for your information, examples of actions that the panel has cited in the report.

Prior to Initial Implementation

- Develop processes for handling inaccuracies in performance indicator data reported by the industry. Focus on how 10 CFR 50.9 should be used with respect to industry's reports of performance indicators.
- Develop SDP processes for remaining reactor issues. Define clearly the process for interaction between the NRC and the industry including the use of PRAs on Phase 3 of the SDP process. Ensure thresholds selected for different SDP's and Indicators are consistent in safety impact.
- For rare circumstances where deviations from the actions specified in the agency action matrix are warranted, the procedures should be clearly and formally documented and process made available for public inspection.
- Improve the process for providing data to the public within the required time.
- Update the plain language summary document.

### After Initial Implementation

- Conduct required verification inspections early for the performance indicator data provided by non-pilot plants.
- Resolve the outstanding issues surrounding emergency preparedness response training and drill participation, security equipment performance, containment integrity, and siren notification systems.
- Ensure that the program effectiveness is not measured solely based on the increase or decrease of resource utilization.
- Significant events should be evaluated from a program perspective as related to the effectiveness of performance indicators and risk informed baseline inspection results.
- Update the program basis document and make it publicly available as soon as possible.
- Set up a process for ongoing confirmation of assumptions underlying the process.

The panel consisted of members with diverse interests. The report reflects those major points where a consensus was achievable. Some minority views were necessary to achieve a consensus on the overall recommendation. The exchange of individual perspectives by panel members brought out a number of strongly held divergent opinions. This difference in views was particularly strong in lengthy discussion of how cross-cutting issues should be addressed. While agreement was achieved on many conclusions and recommendations, the individual basis for the members reaching consensus was many times different. This makes this report difficult to follow in that it lacks a match up between a conclusion followed by a technical basis. In order to capture these opinions and the rationale behind them, the individual member inputs have been forwarded to the staff to be considered as input from the public comment process ending December 31, 1999.

As per the work scope described in the PPEP Charter presented to the Congress, the panel's work is complete.

Attachment: As stated

cc: James T. Wiggins  
Bruce Mallett  
Geoffrey E. Grant  
Kenneth E. Brockman  
James Lieberman  
Steve Floyd  
David Garchow  
Masoud Bajestani  
George Barnes  
James Chase  
Gary Wright  
David Lochbaum

## **FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL**

In SECY-99-007, "Recommendations for Reactor Oversight Process Improvements," and SECY-99-007A, "Recommendations for Reactor Oversight Process Improvements (Follow-up to SECY-99-007)," the NRC staff proposed a new risk informed regulatory oversight process for commercial nuclear power plant licensees. In SECY-99-007A, the staff also described a pilot effort for testing the new oversight at selected commercial nuclear power plants, and stated that it would establish a Pilot Program Evaluation Panel (PPEP) to independently evaluate the pilot program results, and advise on the success of the pilot effort and lessons learned. The Director, Office of Nuclear Reactor Regulation established PPEP by charter under the rules of the Federal Advisory Committees Act (FACA). A charter governing the PPEP functions under FACA was filed with Congress on June 30, 1999. The PPEP has completed its review of the criteria for evaluating the pilot program results. This report provides the panel's conclusions and recommendations. The report is prepared as an independent advisory committee's advice to the Director, Office of Nuclear Reactor Regulation.

**Mr. Frank Gillespie, PPEP Chairman,  
Nuclear Regulatory Commission**

**Mr. Masoud Bajestani, Tennessee Valley Authority**

**Mr. George Barnes, Commonwealth Edison Company**

**Mr. Kenneth Brockman, Nuclear Regulatory Commission**

**Mr. James Chase, Omaha Public Power District**

**Mr. Stephen Floyd, Nuclear Energy Institute**

**Mr. David Garchow, PSEG Nuclear**

**Mr. Geoffrey Grant, Nuclear Regulatory Commission**

**Mr. James Lieberman, Nuclear Regulatory Commission**

**Mr. David Lochbaum, Union of Concerned Scientists**

**Mr. Bruce Mallett, Nuclear Regulatory Commission**

**Mr. James Wiggins, Nuclear Regulatory Commission**

**Mr. Gary Wright, Illinois Department of Nuclear Safety**

**Mr. Mohan Thadani, Designated Federal Official,  
Nuclear Regulatory Commission**

## **FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL**

### **INTRODUCTION**

In SECY-99-007 the NRC staff outlined a detailed framework of a new regulatory oversight process.

The objectives of the new process are to:

- Improve the objectivity of the oversight so subjective decisions and judgments are not central features.
- Improve the scrutability of the oversight so NRC actions have a clear tie to licensee performance.
- Risk-inform the oversight process to focus NRC and licensee resources on performance having the greatest impact on plant safety.

The NRC tested the new program at nine pilot nuclear sites. To evaluate whether the NRC can effectively carry out the new oversight program, the NRC staff developed 19 evaluation criteria. The NRC staff applied the criteria to the results of the pilot program to find out whether the new oversight meets the overall objectives of the pilot program. Specifically, the NRC will determine from the industry-wide implementation whether the new oversight process:

- Maintains the current level of safety and public protection related to the operation of nuclear power plants.
- Improves public confidence by increasing predictability, consistency, transparency, and objectivity of the oversight.
- Improves the efficiency and effectiveness of regulatory oversight by focusing agency and licensee efforts on those issues with the most safety significance.
- Reduces unnecessary regulatory burden, as the oversight program becomes more efficient and effective.

The staff set the criteria up with thresholds to help decide if the new regulatory oversight and procedures are fundamentally sound and the NRC and the industry should proceed to industry-wide implementation. Failure to meet a criterion shows a potential problem that needs to be addressed before industry-wide implementation. The NRC will decide the overall success of the program from the cumulative assessment of the pilot and evaluation of the results of the first year of the initial industry-wide implementation.

The NRC established the Pilot Program Evaluation Panel (PPEP) as an advisory committee under the Federal Advisory Committees Act (FACA). The NRC chartered the PPEP to evaluate the pilot program results against the staff evaluation criteria. The charter asked that the PPEP to review and report on each of the evaluation criteria and recommend refinements which are

needed to effectively meet program expectation. For those criteria that measure the effectiveness of the oversight program, but do not have quantifiable performance measures, the PPEP depended on its member's expertise to review the results of the pilot effort and evaluate how well the pilot effort meets underlying objectives. The PPEP worked as a management level cross-disciplinary oversight group of experts to evaluate whether the new regulatory oversight can be successfully and effectively carried out and how the pilot program compares in its execution to its overall objectives.

The NRC selected the members of the PPEP to represent the views of diverse groups that had an expressed interest in the changes to the reactor oversight program. The members included NRC and industry managers directly involved in the development and pilot testing, a knowledgeable state representative, and a public interest group.

The PPEP met periodically during the implementation of the pilot program to review the criteria and program status. All meetings were open to the public with all meeting material being placed in the NRC public document room (PDR). Additionally, the transcripts, proceedings or reports of the meetings were placed on NRC web page.

Additional views were sought by the panel to supplement the members' personal insights from representatives of nine states, Public Citizen, and a representative of non-pilot plant licensees. NRC obtained written views of selected journalists. The NRC and NEI staffs directly involved in the program development provided the status of the pilot effort and responded to questions and comments.

The report provides the consensus views of the members. Where minority views remained, this report documents them. The conclusions and recommendations documented by the panel highlight issues for the NRC staff to consider. The PPEP may supplement this report in a subsequent letter to the Staff for its consideration after the NRC workshop in January 2000. This would be based on information obtained which would significantly affect the report's overall conclusions.

*The overall conclusion of the panel is that the framework provides a more objective, clear, and risk-informed approach to the oversight of nuclear reactors. The program should proceed to industry-wide implementation. The panel has identified several areas that need refinement before industry-wide implementation. In addition, industry-wide implementation will be needed to gather data to judge the effectiveness of the program and to allow for further improvements.*

## **PILOT PROGRAM EVALUATION PANEL COMMENTS AND CONCERNS**

The following section provides the consensus conclusions and recommendations of the PPEP with respect to the pilot program evaluation criteria. Minority views, where they exist, are indicated. Working comments from every panelist are available in the PDR.

### **Performance Indicators (PIs) and PI Reporting**

The performance indicators are monitored to provide information regarding certain licensee performance. To be meaningful, the PIs have to be readily available, be accurate, and be submitted to the NRC in a timely manner. Two criteria were utilized as a measure of the efficiency and effectiveness of PI reporting during the pilot program. The criteria and the conclusions from the panel are discussed below:

#### **Criterion 1: Accuracy of Reporting**

Can PI data be reported accurately by the industry, in accordance with the reporting guidelines? They can, if, by the end of the pilot program each PI is being reported accurately for at least 8 out of the 9 pilot sites.

**Conclusion:** This evaluation criterion was not met. In the pilot program there were inaccuracies in the data reported by the pilot plants. Accurate data reporting required additional utility attention and training over that originally anticipated. Errors declined throughout the pilot and only a small number of these errors resulted in crossed thresholds which would have changed the NRC response. Therefore, it is the panel's view that PI data can be reported accurately once there is a clear understanding as to what needs to be reported and appropriate procedures are in place to provide sufficient quality of data.

**Recommendations:** Because errors may occur in PI data reporting, the inspection or verification of the indicators must remain as an integral part of the baseline inspection program. Additional verification of PI data submitted for non-pilot plants should be performed shortly after industry-wide implementation.

#### **Criterion 2: Timeliness of Reporting**

Can PI data results be submitted by the industry in a timely manner? They can, if, by the end of the pilot program all PI data is submitted by each pilot plant within one business day of the due date.

**Conclusion:** This criterion was met.

**Recommendations:** While pilot plants have met the timeliness criterion, there should be some relaxation of the time constraints for PI reporting. This would allow licensees more time to assure the quality of the data, which would help address the issues raised under criterion 1 above.

## General Recommendations on PIs

- Prior to industry-wide implementation, processes for handling inaccuracies in data reporting must be developed. Particular attention should be focused on how 10 CFR 50.9 should be used with respect to data reporting.
- During the evaluation of the pilot plants, questions were raised regarding the appropriateness and threshold values of some indicators. Examples include emergency preparedness response training and drill participation, security equipment performance, containment integrity, and sirens and notification systems. These issues should be resolved during the first year of industry-wide implementation and included as part of the report requested by the Commission in June 2001.

## Baseline Inspection Program

The risk-informed, baseline inspection program utilizes a set of inspections to monitor each licensee's performance. Each individual inspection uses risk information to focus on risk significant activities or systems. The goal is to determine whether licensee performance in each of 7 cornerstones is satisfying the cornerstone objectives. The inspection program also utilizes a review of the licensee's problem identification and resolution program as a precursor of performance problems. Five criteria were used to measure the efficiency and effectiveness of the baseline inspection program during the pilot. The criteria and conclusions from the panel are discussed below:

### Criterion 1: Timeliness of Inspection Planning

Can the inspection planning process be performed in a timely manner to support the assessment cycle? It can, if the planning process supports the scheduling of all required inspections for the upcoming period and the issuance of a 6-month inspection look-ahead letter within 4 weeks from the end of an assessment cycle for at least 8 out of the 9 pilot sites.

**Conclusion:** For the parts of the inspection program tested during the pilot, this criterion was met.

**Recommendations:** Because there were areas of inspection, including supplemental inspection and inspections for event response, safety significant emergent issues, and allegations, that were not exercised in the pilot, the resource levels required to plan and implement the baseline inspection program must continue to be evaluated during industry-wide implementation.

### Criterion 2: Clarity of Inspection Procedures

Are the inspection procedures clearly written so that the inspectors can consistently conduct the inspections as intended? They are, if by the end of the pilot program, resources expended to perform each routinely performed (e.g., monthly) inspection procedure are within 25% of the average for at least 8 out of the 9 pilot sites. Similar data and analysis will be assessed for less frequently performed procedures (e.g., biennial safety system design inspection). Inspection procedure quality will also be determined by an analysis of the numerical rating factors and a review and evaluation of the comments received on the procedure feedback forms.



**Conclusion:** This criterion was not met because resource expenditures varied widely and some procedures were not clear. This conclusion should not, however, impede industry-wide implementation.

**Recommendations:** Continued feedback from inspectors and ongoing modification of procedures will be needed throughout industry-wide implementation to assure that the procedures are clear and appropriately address the cornerstones.

### Criterion 3: Reduction of Inspection Resource Requirements

Are less NRC resources required to provide adequate oversight of licensee activities through inspection? They are, if the direct inspection effort expended to perform baseline and regional initiative inspection activities are less than the resources that would have been expended under the current inspection program. Review will be based on a comparison of the pilot program direct inspection resources against the regional average during the pilot and the resources required for the same plant prior to the pilot.

**Conclusion:** The data is insufficient to indicate that less resources are required to perform the new inspection program. The comparison has too many variables to allow valid conclusions. This should not prevent industry-wide implementation provided the following recommendation is followed.

**Recommendations:** As industry-wide implementation progresses, it is recommended that program effectiveness not be measured solely based on increases or decreases in resource utilization.

### Criterion 4: Timeliness of Inspection Reports and the Plant Issues Matrix (PIM)

Can inspection reports be issued and the plant issues matrix (PIM) updated in a timely manner to support the assessment process? They can if by the end of the pilot, 90% of the pilot plant inspection reports (except those for major team inspections) were issued within 30 days of the end of the inspection period with the PIMs updated within 14 days of the issuance of the inspection reports.

**Conclusion:** By the end of the pilot program, the data suggested that this criterion is being met. Inspection reports were issued to the licensees in the required timeframe. By the end of the pilot, PIM updates were issued within the 14 day requirement.

### Criterion 5: Adequacy of Scope and Frequency of Baseline Inspections

Are the scope and frequencies of the baseline inspection procedures adequate to address their intended cornerstone attributes? They are, based on the evaluation of any specific examples of risk-significant aspects of licensee performance, which are not adequately covered by the baseline inspection program. These examples will be solicited from the NRC staff, the public, and the industry through the use of inspection procedure feedback forms and surveys.

**Majority Conclusion:** It is premature to make an overall conclusion relative to this criterion. There were no instances of risk-significant issues being identified at the sites during the pilot that were not addressed by the baseline inspection program. However, the panel does not believe that sufficient data have been collected to confirm some of the assumptions inherent in the program design. For example, the assumption that cross-cutting issues or issues involving the common-mode failures will manifest themselves in PIs or inspection results has not been tested sufficiently. Notwithstanding this concern, nothing observed in the pilot would preclude industry-wide implementation.

**Minority Conclusion:** First, the baseline inspection program did not explicitly cover topical areas such as motor-operated valves and breakers. Second, the baseline inspection program did not allow GREEN findings to be evaluated for potential cross-cutting implications. Finally, the short duration of the pilot program coupled with the lack of supplemental and event response inspections did not provide opportunities to independently assess the robustness of the baseline inspection program. Notwithstanding these indications, it is concluded that the scope and frequencies of the baseline inspection program procedures are sufficient to permit industry-wide implementation.

**Second Minority Comment:** In light of the above Minority Conclusion and the Minority Comment on Recommendations under the Assessment, Criterion 2, Appropriate Use of Action Matrix, the baseline inspection program is sufficient provided the override procedure to address cross-cutting issues described under the Minority Comment under Assessment is adopted before industry-wide implementation.

**Recommendations:** The panel recommends that the staff continue to monitor industry-wide implementation such that when a risk-significant event occurs, the event-specific response requires reevaluation of the PIs and inspection results and ensures that a process for handling cross-cutting or common-mode failure issues exists. The appropriateness of the inspection frequency and scope needs to continue to be assessed during industry-wide implementation, including inspector feedback. In its June 2001 report to the Commission, the staff should provide these evaluations.

### **Significance Determination Process (SDP)**

The significance determination process screens for risk significance. It employs a risk informed approach relating inspection findings to plant risk context through a cause and effect relationship. The SDP uses realistic accident analyses and not the design basis accident analyses. It considers the functional capability and not the Operability as a basis for determining the significance of a finding.

### **Criterion 1: Timeliness of Categorization of Findings**

Can the SDP be used by inspectors and regional management to categorize inspection findings in a timely manner? It can, if the phase 2 evaluations can be completed within 30 days of the phase 1 evaluation, 90% of the phase 3 evaluations can be completed within 90 days of the phase 1 evaluation, and 100% of the phase 3 evaluations can be completed with 120 days of the phase 1 evaluation.

**Conclusion:** This criterion was not met because Phase 3 evaluations were not completed within 120 days of Phase 1 evaluations. At the beginning of the pilot, the plant specific SDP matrices for the reactor cornerstones were not available and some Phase 2 evaluations were not completed within the time required. Because of the lack of sufficient data, timeliness of SDP evaluations for non-reactor cornerstones could not be assessed. Further, the panel notes that SDPs do not exist for all applications, including those for fire protection and shutdown.

**Recommendations:** Plant specific mitigation cornerstone SDP matrices must be developed prior to industry-wide implementation. The SDPs for the remaining reactor and non-reactor cornerstones must also be developed prior to industry-wide implementation. The process for interactions between the licensee and the NRC including the use of PRAs on Phase 3 evaluations must be better defined. The staff needs to better align the timeliness of evaluations and safety significance by shortening the 120 day turnaround time on Phase 3 evaluations.

### Criterion 2: Accurate Assignment of Significance Rating

Can inspection findings be properly assigned a safety significance rating in accordance with established guidance? They can, if a review of inspection findings by the SDP operational support team, chosen for 95% assurance, demonstrates that at least 95% of the findings were properly categorized by the SDP. This review will also confirm that no risk-significant inspection findings were screened out. Additionally, by the end of the pilot, there should be no instances where the Significance Determination Process and Enforcement Review Panel changes an SDP determination performed by the regions.

**Conclusion:** This criterion was met.

**Recommendations:** Along with continued review and assessment of PI thresholds, the thresholds selected for the SDP warrant continued review to confirm that they were correctly chosen. A monitoring program that seeks to confirm the continued validity of the underlying assumptions regarding cross-cutting issues such as human performance is needed for the first year of implementation. The staff should clearly articulate in writing both the approach and the rationale for using core damage probability (CDP) not core damage frequency (CDF) for event response and enforcement, and CDF and not CDP for SDP and enforcement.

### General Recommendations on the SDP

The independent SDP review panel should be maintained during and following industry-wide implementation to continue to reinforce and ensure desired consistency as more inspectors are exposed to the process.

### Assessment

In Assessment, the PI data are integrated with the risk informed performance based inspection findings, and the results are characterized to determine the appropriate regulatory response as categorized in the performance assessment matrix. Two criteria were used to measure the efficiency and effectiveness of the new assessment process.

### Criterion 1: Timeliness

Can the assessment process be performed within the scheduled time? It can, if for at least 8 out of the 9 pilot plants, a mid-cycle assessment of the PIs and inspection findings can be completed, with a letter forwarding the results and a 6-month inspection look-ahead schedule, within 4 weeks of the end of the assessment cycle.

Conclusion: This criterion was met.

### Criterion 2: Appropriate Use of Action Matrix

Can the action matrix be used to take appropriate NRC actions in response to indications of licensee performance? It can, if there is no more than one instance (with a goal of zero) in which the action taken for a pilot plant is different from the range of actions specified by the action matrix.

Conclusion: The criterion was met, however, there was limited experience with exercising the action matrix outside columns 1 and 2.

Recommendations: Prior to industry-wide implementation, there should be clearly specified procedures to cover those rare circumstances where deviations from the specified action in the action matrix are clearly warranted. These procedures should provide a formalized process for the exercise of discretion to either increase or decrease the level of NRC involvement under the agency action matrix. This recommendation provides for a documented process that will be available for public inspection to treat issues that lend themselves to subjective rather than objective treatment.

Minority Comment on Recommendations: The above recommendation addresses the need for a formalized process for the exercise of discretion to both increase and decrease the level of NRC involvement under the agency action matrix. However, this process should specifically allow for the reduction of NRC-licensee interaction for isolated unforeseeable failures (not demonstrating a performance issue) and increase NRC-licensee interaction for substantive cross-cutting failures. This will provide a controlled method to treat cross-cutting issues (i.e., substantive corrective action failures, safety conscious-work environment issues, and other programmatic human performance issues with potential risk significance that are not being properly treated in a licensee's corrective action program) which would not otherwise be assessed at a white or yellow level. While deviations from the norm should be relatively rare, this recommendation should provide a documented process that will be available for public inspection to treat issues that lend themselves to subjective rather than objective treatment. It will also address the concern that the agency action matrix does not address the situation where the licensee is outside the presumption of the oversight program that the licensee has an effective corrective action program. Importantly, this recommendation only changes the degree of NRC-licensee interaction not the assigned color code based on risk.

In making this recommendation, it is recognized that it has the potential, if abused, to lead to a return to a subjective process similar to the former Senior Management Meeting process that the

new oversight process is intended to avoid. The intent of the recommendation is not to return to the past, but rather to provide a non-routine process to allow an override where the color categorization does not clearly reflect a licensee's performance. It is emphasized that it is expected that the need to use this override should be rare because the fundamental tenet of the revised oversight process is that cross cutting issues will manifest themselves in departures from expected norms of performance, thereby causing the established threshold for PI's and inspection findings to be exceeded. During the monitoring of the full-industry implementation of the oversight program, the staff will need to continue its efforts to validate this tenet. If this monitoring effort concludes that cross cutting issues need to be a more structured part of the overall process to meet the process objectives, formal changes to the process should be pursued to incorporate cross-cutting issues as an integral part of the program. The purpose of the recommendation is to provide for an escape mechanism to consider cross-cutting issues , if necessary, before the validation effort is completed.

Therefore notwithstanding the improvements in the oversight program in the areas of objectivity, scrutability, and risk considerations, a process for treatment of cross-cutting issues must be addressed prior to full industry implementation.

**Minority Comment on Recommendation:** A fundamental tenet of the revised reactor oversight process is that cross-cutting issues will manifest themselves in departures from expected norms of performance, thereby causing the established thresholds for PIs and inspection findings to be exceeded. While this tenet should be validated during industry-wide implementation, it is premature and inappropriate to incorporate subjective judgments into the process absent any performance issues. If the validation concludes that cross-cutting issues need to be a more structured part of the overall process to meet process objectives, formal changes to the process should be pursued to incorporate cross-cutting issues as an integral part of the program.

### Criterion 3: Consistency of Application Across Regions

Are assessments of licensee performance performed for the pilot plants in a manner that is consistent across the regions and that meets the objectives of the assessment program guidance? They are, as determined by a review and evaluation of the outputs of the assessment process generated by each region.

**Conclusion:** This criterion was met.

**Recommendations:** Continued oversight will be needed in industry-wide implementation to ensure ongoing consistency.

### General Recommendations on Assessment

- The staff's guidance should be clarified relative to the use of the action matrix when the significance of the inspection findings are under review at the time the assessment is published (mid-cycle or annual).

## **Enforcement**

### **Criterion: Consistency between Enforcement and Assessment Results**

Are enforcement actions taken in a manner consistent with the assessment of inspection findings that result from the SDP? They are, as determined by a review of the Office of Enforcement of the issues evaluated by the SDP operational support team.

**Conclusion:** Based on the data presented from the pilot, this criterion was met.

**Recommendations:** As stated in the general PI recommendations, resolution of the issue regarding application of 10 CFR 50.9 is necessary.

## **Information Management Systems**

Three criteria were used to determine whether the NRC information management systems are ready to support industry-wide implementation of the new regulatory oversight process.

### **Criterion 1: Public Availability of Assessment Data and Results**

Are the assessment data and results readily available to the public? They are, if by the end of the pilot program, the NRC information systems support receiving industry data, and if PIs and the current plant issues matrix are publicly available on the Internet within 30 days of the end of the data period (end of month for pilot) for at least 8 out of the 9 sites.

**Conclusion:** The criterion was not met. Pilot plant reports were readily available to the staff and the industry but have not been available to the public either on the Internet or in the PDR in a timely manner.

**Recommendations:** Prior to industry-wide implementation, the process for providing data to the public within the required time must be improved.

### **Criterion 2: Capability of NRC Time Reporting and Budget Systems**

Are the time reporting and budget systems, such as the Regulatory Information Tracking System (RITS), ready to support the process changes? They are, if by the end of the pilot program, the new RITS codes are established and the new codes are being used properly.

**Conclusion:** The panel did not specifically evaluate this criterion. However, staff provided information to the panel indicating that there are no issues that would preclude industry-wide implementation.

### **Criterion 3: Capability of NRC Information Support Systems**

Are the information support systems, such as the Reactor Support System (RPS) and its associated modules, ready to support full implementation of the new oversight processes? They

are, as determined by the status of the systems identified as necessary to support the revised reactor oversight process.

**Conclusion:** The panel did not specifically evaluate this criterion. However, staff provided information to the panel indicating that there are no issues that would preclude industry-wide implementation.

## **Overall**

### **Criterion 1: Adequacy of PIs and Inspection Findings as Indicators of Licensee Performance**

Do the combination of PIs and inspection findings provide an adequate indication of licensee performance? Does the oversight process provide a reasonable assurance that the cornerstone objectives are being met and safe plant operation is maintained? It does, based on a review and evaluation of any specific examples of risk-significant aspects of licensee performance that are not adequately accounted for in the revised reactor oversight process. These examples were solicited from the NRC staff, the public, and the industry through public comment, feedback forms, and stakeholder surveys.

**Conclusion:** This criterion was met. Although there were issues that arose during the pilot, none of the issues were of such a magnitude to preclude industry-wide implementation, subject to satisfactory resolution of the issues raised in this report.

**Recommendations:** Ongoing confirmation of the assumptions underlying this program is needed in industry-wide implementation.

### **Criterion 2: Understandability, Predictability, Consistency, and Objectivity of NRC Actions**

Does the new oversight process result in NRC assessments of licensee performance and NRC actions that are more understandable, predictable, consistent, and objective as perceived by both the industry and the general public? They are, if the industry and public have a better understanding of the regulatory oversight process, the assessment of licensee performance, and the reasons for NRC actions taken. Comments were obtained through feedback forms and surveys of the industry and the public.

**Conclusion:** This criterion was met.

**Recommendations:** The program basis document should be updated and made available to the public as soon as possible but prior to the June 2001 Commission report. The plain language summary document should be updated prior to industry-wide implementation. In public communications, attention must be focused on explaining the basis for inspection findings and their SDP color assignment. Information must be made publicly available consistent with the timeliness goals stated in the information management systems criteria.

### Criterion 3: Efficiency of the Oversight Process

Are the regulatory oversight processes more efficient overall? They are, if by the end of the pilot program, the agency resources required to implement the inspection, assessment, and enforcement programs are projected to be less than currently required. Review was based on a comparison of the resources expended for DIE and non-DIE activities at each pilot plant to the regional average during the pilot, and the same plant for the six-month period prior to the pilot.

**Conclusion:** The data is insufficient to indicate that less resources are required to perform the new inspection program. The comparison has too many variables to allow valid conclusions. This should not prevent industry-wide implementation based on the following recommendation.

**Recommendations:** Program efficiency should not be measured based solely on increases or decreases in resource utilization.

### Criterion 4: Appropriateness of Licensee Burden

Is the burden on licensees associated with the implementation of the revised reactor oversight process appropriate? It is, based on feedback of how the regulatory burden associated with each of the revised oversight process has changed as compared to the current oversight processes. These comments were solicited from the NRC staff, the public, and the industry through the use of a public comment period, feedback forms, and surveys.

**Conclusion:** Due to the magnitude of the changes that evolved during the pilot program and the small amount of data, the data is not sufficient to assess the true burden on the licensee. Industry-wide implementation will provide the additional data needed to fully assess this criterion.



December 21, 1999

MEMORANDUM TO: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield

FROM: William D. Travers <sup>Original signed by</sup> William D. Travers  
Executive Director for Operations

SUBJECT: FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL

The Pilot Program Evaluation Panel (PPEP) has completed its evaluation of the results of the NRC's revised reactor oversight process pilot program effort. The panel's final report is attached. The report contains the panel's recommendations and provides the overall conclusion that the program should proceed to initial implementation industry-wide. This report will be made available in the PDR and subsequently published on the NRC web site.

The recommendations in this report will be considered by the staff and integrated into the forthcoming Commission paper on the revised reactor oversight process.

Attachment: As stated

cc: James T. Wiggins                    SECY  
Bruce Mallett                            OCA  
Geoffrey E. Grant                      OGC  
Kenneth E. Brockman                  OPA  
James Lieberman                        CFO  
Steve Floyd                              CIO  
David Garchow  
Masoud Bajestani  
George Barnes  
James Chase  
Gary Wright  
David Lochbaum

**Distribution:**

PPEP r/f                                    OPA (e-mail)                            J. Goldberg (OGC)                            Central Files  
B. Boger                                    J. Johnson                                W. Travers (EDO)                            OGC  
W. Dean                                    ACRS                                        H. Hahn (LANL)

\*See previous concurrences

DOCUMENT NAME: P:\PPEPCOMMISSION.WPD

OFC	NRR/DIPM	E	NRR/DIPM		ADIP*		D:NRR		EDC	
NAME	MThadani*		FGillespie*				SCollins*		W Travers	
DATE	12/17/99		12/17/99		12/17/99		12/17/99		12/21/99	

C = COVER

E = COVER & ENCLOSURE  
OFFICIAL RECORD COPY

N = NO COPY

MEMORANDUM TO: Chairman Meserve  
 Commissioner Dicus  
 Commissioner Diaz  
 Commissioner McGaffigan  
 Commissioner Merrifield

FROM: William D. Travers  
 Executive Director for Operations

SUBJECT: FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL

The Pilot Program Evaluation Panel (PPEP) has completed its evaluation of the results of the NRC's revised reactor oversight process pilot program effort. The panel's final report is attached. The report contains the panel's recommendations and provides the overall conclusion that the program should proceed to initial implementation industry-wide. This report will be available in the PDR by December 21, 1999, and subsequently published on the NRC web site.

The recommendations in this report will be considered by the staff and integrated into the forthcoming Commission paper on the revised reactor oversight process.

Attachment: As stated

cc: James T. Wiggins  
 Bruce Mallett  
 Geoffrey E. Grant  
 Kenneth E. Brockman  
 James Lieberman  
 Steve Floyd  
 David Garchow  
 Masoud Bajestani  
 George Barnes  
 James Chase  
 Gary Wright  
 David Lochbaum

Distribution:

PPEP r/f	OPA (e-mail)	J. Goldberg (OGC)	
B. Boger	J. Johnson	W. Travers (EDO)	OGC
W. Dean	ACRS	H. Hahn (LANL)	

DOCUMENT NAME: P:\PPEPCOMMISSION.WPD

OFC	NRR/DIPM	E	NRR/DIPM	ADIP	D:NRR	EDO
	MThadaji		FGillespie	for RPE	SCollins	WTravers
DATE	12/1/99		12/17/99	12/17/99	12/17/99	12/ /99

C = COVER

E = COVER & ENCLOSURE  
 OFFICIAL RECORD COPY

N = NO COPY

12/17/99



Accession # ML993540120  
Template = EDO-004  
O'Leary

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 21, 1999

**MEMORANDUM TO:** Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield

**FROM:** William D. Travers *William Travers*  
Executive Director for Operations

**SUBJECT:** FINAL REPORT OF THE PILOT PROGRAM EVALUATION PANEL

The Pilot Program Evaluation Panel (PPEP) has completed its evaluation of the results of the NRC's revised reactor oversight process pilot program effort. The panel's final report is attached. The report contains the panel's recommendations and provides the overall conclusion that the program should proceed to initial implementation industry-wide. This report will be made available in the PDR and subsequently published on the NRC web site.

The recommendations in this report will be considered by the staff and integrated into the forthcoming Commission paper on the revised reactor oversight process.

Attachment: As stated

cc: James T. Wiggins  
Bruce Mallett  
Geoffrey E. Grant  
Kenneth E. Brockman  
James Lieberman  
Steve Floyd  
David Garchow  
Masoud Bajestani  
George Barnes  
James Chase  
Gary Wright  
David Lochbaum  
SECY  
OCA  
OGC  
OPA  
CFO  
CIO