



NUCLEAR ENERGY INSTITUTE

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Mr. Bart Fu  
Office of Nuclear Reactor Regulation  
Mail stop: OWFN 7H2  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT:** Solicitation of Public Comments on the Implementation of the Reactor Oversight Process (ROP)

**PROJECT NUMBER: 689**

Dear Mr. Fu:

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI) is submitting the enclosed comments on the implementation of the ROP, as requested by the Nuclear Regulatory Commission in the *Federal Register* on October 10, 2006 (71 Fed. Reg. 59539). These comments are a compilation of comments NEI received from its member companies.

In general, we believe the ROP is meeting the established performance goals. We appreciate the opportunity to publicly meet with the NRC staff on a monthly basis to provide direct input to revisions and enhancements of the ROP, and we look forward to ongoing discussion in the coming year.

If you have any questions regarding these comments, please contact Julie Keys at (202) 739-8128; [jyk@nei.org](mailto:jyk@nei.org) or me.

Sincerely,

A handwritten signature in black ink, appearing to read "John C. Butler", is written over a white background.

John C. Butler

Enclosure

c: NRC Document Control Desk

## Summary of Industry Response to FRN on Reactor Oversight Process

- (1) The Performance Indicator Program provides useful insights to help ensure plant safety.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

### Additional Industry Comments:

The ROP strives to provide an objective assessment of licensee safety performance using, in part, the Performance Indicator Program. The Performance Indicator Program provides useful insights, identifies areas requiring increased focus and provides an objective assessment of licensee safety performance. The Performance Indicator Program, in conjunction with the Inspection Program, helps ensure plant safety.

- (2) Appropriate overlap exists between the Performance Indicator Program and the Inspection Program.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Disagree* (4)

### Additional Industry Comments:

Performance Indicators look at areas where clear performance thresholds can be developed. This allows the inspection program resources to be more appropriately allocated in areas that are best addressed through evaluation and inspection. While overlap exists, the overlap generally seems appropriate.

One area of note and possible attention is instances where inspection findings are documented for issues/items that are currently being addressed through performance indicators.

- (3) NEI 99-02, “*Regulatory Assessment Performance Indicator Guideline*” provides clear guidance regarding Performance Indicators.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Disagree* (4)

Additional Industry Comments:

Although NEI 99-02 questions do arise, the FAQ process is responsive in addressing those questions. In addition, the guidance is periodically updated to incorporate the FAQ answers. Efforts to incorporate FAQs into NEI 99-02 in a timely manner should continue.

- (4) The Performance Indicator Program, including the Mitigating Systems Performance Index, can effectively identify performance outliers based on risk-informed, objective and predictable indicators.

Median Industry Response – *Neutral* (3)

Industry Responses Ranged from *Agree* (2) to *Neutral* (3)

Additional Industry Comments:

The MSPI does identify conditions based on risk implications. While the other indicators have some limited risk insights they do not all identify conditions that are risk significant. The industry and NRC staff should endeavor to develop more risk-based indicators. A concern exists that the value of the MSPI could be undermined if the NRC continues to provide additional levels of review on equipment failures and/or unavailability even though performance is within the licensee response band.

- (5) The Inspection Program adequately covers areas important to safety, and is effective in identifying and ensuring the prompt correction of any performance deficiencies.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

While the inspection program adequately covers areas important to safety and identifies the issues that require prompt correction, the process also identifies issues that are not risk significant. Periodic reviews of the overall effectiveness of certain inspection modules should be performed. The reviews should consider the resources spent on the inspection against the numbers, and level of significance of, findings from the previous performances of the inspections covered under certain inspection modules. These reviews could be used to reallocate inspection resources to areas of greater risk significance.

- (6) The information contained in inspection reports is relevant, useful and written in plain English.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Strongly Disagree* (5)

Additional Industry Comments:

Inspection report information is generally useful and the organization helps to provide focus in problem areas. However, there is some disagreement about whether the reports are written in "plain English."

It is also noted that the link between an inspection finding and a cross-cutting aspect is not always clearly articulated in the inspection reports. Often, the inspection report language only states that the finding is related to the cross-cutting aspect with no explanation of how the cross-cutting aspect significantly contributed to the cause of the finding. The link between the cross-cutting aspect and the cause of the finding should be clear to the reader of the inspection report.

- (7) The Significance Determination Process yields an appropriate and consistent regulatory response across all ROP cornerstones.

Median Industry Response – *Neutral* (3)

Industry Responses Ranged from *Strongly Agree* (1) to *Strongly Disagree* (5)

Additional Industry Comments:

The Significant Determination Process (SDP) does not yield equivalent results for issues of similar significance across all ROP cornerstones due to the limitations of current risk analysis methodologies. Specifically, issues and

events such as Security, Fire Protection, Emergency Preparedness and Public Radiation Safety are evaluated using processes that are more subjective or qualitative in nature and may result in exaggeration of actual risk. However, when the SDP does utilize a more detailed risk analysis, an environment of cooperation and mutual learning typically prevails between the utility and the NRC. This promotes the consistency and quality of the evaluation and produces appropriate risk oversight.

The SDP should have a graded approach to timeliness in that additional time should be provided to work with and respond to the NRC for findings with higher significance rather than the blanket 30 days.

For SDP results with elevated colors (particularly white), using Phase 2 notebooks to issue choice letters results in inaccurate determinations solely for the purpose of meeting NRC timeliness goals and results in a costly and resource-intensive risk analysis exercise that has little safety value for the licensee. In addition, the amount of credit the NRC staff permits for operator actions and engineering evaluations is inconsistent and arbitrary.

For SDP evaluations conducted for conditions for which specialized PRA results are needed and are not available in the Regions (e.g., Shutdown Conditions), communications between sites and Headquarters personnel (facilitated by Regional SRAs) has been inconsistent and not as constructive as similar communications with the Regions.

- (8) The NRC takes appropriate actions to address performance issues for those plants outside of the Licensee Response Column of the Action Matrix.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

Actions taken by the NRC to address performance issues for licensees in accordance with the Action Matrix is clear and consistent.

- (9) The information contained in assessment reports is relevant, useful, and written in plain English.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

The information contained in assessment reports is relevant and useful. However, there is some concern that the reports are not written in “plain English.” Recent work by the NRC staff to clarify the exit process for a Substantive Cross Cutting Issue has been very effective.

- (10) The ROP oversight activities are predictable (i.e., controlled by the process) and reasonably objective (i.e. based on supported facts, rather than relying on subjective judgment).

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Agree* (2) to *Disagree* (4)

Additional Industry Comments:

ROP oversight activities are generally predictable regarding the type of inspection a licensee can expect based on location in the Action Matrix and the determination of significance of inspection findings through the SDP. Subjectivity remains, however, in the FAQ process and in the recently implemented safety culture process.

The Triennial Fire Protection inspection is deemed very unpredictable. The inspectors attempt to hold licensees accountable to standards they are not committed to in their licensing basis and continue to write up issues that are being worked out between the industry and the NRC.

- (11) The ROP is risk-informed, in that the NRC’s actions and outcomes are appropriately graduated on the basis of increased significance.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Disagree* (4)

Additional Industry Comments:

The Initiating Events, Mitigating Systems and Barrier Integrity ROP cornerstones are risk-informed. However, other cornerstones are not risk-informed. This results in more subjective outcomes in these cornerstones.

- (12) The ROP is understandable and the processes, procedures and products are clear and written in plain English.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

In general the ROP is understandable and the processes, procedures and products are clear. However, there is some disagreement about being written in “plain English.” As an example, it was noted that some SDP documents can be difficult to follow without the appropriate technical background.

- (13) The ROP provides adequate regulatory assurance, when combined with other NRC regulatory processes, that plants are being operated and maintained safely.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

The ROP does provide adequate regulatory assurance that plants are being operated and maintained safely.

- (14) The ROP safety culture enhancements help identify licensee safety culture weaknesses and focus licensee and NRC attention appropriately.

Median Industry Response – *Neutral* (3)

Industry Responses Ranged from *Agree* (2) to *Disagree* (4)

Additional Industry Comments:

The ROP safety culture enhancements have only been recently implemented and it is too early to determine if they identify safety culture weaknesses and appropriately focus licensee and NRC attention.

Under the current safety culture program direction, the NRC staff identifies isolated, specific performance deficiencies and “bins” these to develop performance trends. The current program does not consider and evaluate all the licensee actions or lack thereof in response to the overall event. Ignoring the overall picture in favor of a small part of the issue is not representative of actual plant safety culture and can give skewed and erroneous conclusions. In addition, it is important that the NRC Staff ensure consistency across regions and from plant to plant within regions.

The cross-cutting aspects in MC 305 are somewhat ambiguous. Certain aspects are too broad to identify generic trends such as “work practices – procedure compliance (4b)” and “PI&R – problem evaluation (1c).”

- (15) The ROP is effective, efficient, realistic and timely.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Agree* (2) to *Neutral* (3)

Additional Industry Comments:

The ROP process is generally effective, efficient, realistic and timely with some exceptions. “Generic” inspection findings should be communicated to the industry by generic communications in a timely manner. The timeliness of the SDP process has improved.

- (16) The ROP ensures openness in the regulatory process.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

There is significant dialogue between the industry and the NRC at the ROP meetings with good discussion on both sides.

- (17) The public has been afforded adequate opportunity to participate in the ROP and to provide inputs and comments.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from Strongly Agree (1) to *Neutral* (3)

Additional Industry Comments:

The public has been afforded adequate opportunity to participate in the ROP and to provide inputs and comments. Monthly public ROP meetings are held to discuss improvements and FAQs. Members of the public are frequently present at these meetings.

- (18) The NRC has been responsive to public inputs and comments on the ROP.

Median Industry Response – *Neutral* (3)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

None

- (19) The NRC has implemented the ROP as defined by program documents.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Neutral* (3)

Additional Industry Comments:

None

- (20) The ROP minimized unintended consequences.

Median Industry Response – *Neutral* (3)

Industry Responses Ranged from *Agree* (2) to *Neutral* (3)

Additional Industry Comments:

The ROP does minimize unintended consequences. However, the policy on press releases causes unintended consequences because follow-up press releases for special inspections and SDP results are not routinely made. This policy can cause an incomplete and at times incorrect public perception of the issues.

- (21) You would support a change in frequency of the ROP external survey from annually to every other year, consistent with the internal survey, as proposed in SECY-06-0074.

Median Industry Response – *Agree* (2)

Industry Responses Ranged from *Strongly Agree* (1) to *Disagree* (4)

Additional Industry Comments:

While we agree in concept with changing the ROP external survey from annually to every other year we acknowledge that yearly does allow stakeholders to be involved in a timely manner. Also, if there are significant changes in the ROP we believe it would be prudent to solicit stakeholder responses in the year that they are made rather than waiting an extended period of time.

- (22) Please provide any additional information or comments related to the Reactor Oversight Process.

- Several plants commented that the inspectors are straying outside guidance and ignoring safety significance in raising issues.
- As with any new program, the NRC's oversight of safety culture will only be effective if the agency executes it in a disciplined and consistent manner. In addition, there are two potential impediments that could undermine the success of the NRC's efforts.

The first area of concern is the low threshold for triggering a substantive cross-cutting issue in the area of SCWE. Substantive cross cutting issues are not created equal. A substantive cross cutting issue in the area of SCWE carries with it much greater significance with our stakeholder community and the NRC oversight that follows is anything but measured.

Given that the stakes are high, the NRC must be disciplined in their oversight of SCWE because false positives in this area are unacceptable. Specifically, the NRC must consistently adhere to their guidance which states that if the impact of the finding on a plant's SCWE is isolated or if the licensee's response to the finding is appropriate and timely, a substantive cross-cutting issue does not exist.

The other area of concern pertains to the discipline in which the NRC will link inspection findings to cross-cutting aspects. If the NRC is undisciplined in this process and links every Green or greater inspection finding to a cross-cutting aspect or if the NRC links findings to multiple aspects, there could be an unwarranted escalation in plants with substantive cross-cutting issues.

These false positives will undermine the credibility of the ROP, will lead the NRC to dedicate resources to plants whose performance may not warrant greater oversight, may divert NRC resources from plants that actually warrant greater oversight, and lead licensees to dedicate resources to address issues that have no merit in actual risk significance. Such a scenario is unacceptable and would erode the confidence of our public, political and financial stakeholder communities.

- The NRC staff should develop a multi-year project plan to review the ROP with stakeholder input. This review should look at all areas and seek areas for improvement in resource utilization. Some specific areas to review should be:
  - 1 An effectiveness review of the Component Design Basis Inspection.
  - 2 A review of overall inspection hour utilization. An effectiveness review of each inspection area should be considered.
  - 3 A review of the deterministically based SDPs to make them more risk-informed.
  - 4 A review of current Performance Indicators for effectiveness and possible improvement or elimination.
  - 5 A review of crediting self assessments and external assessments instead of performing direct inspection.