

November 23, 1999

FOR: The Commissioners

FROM: William D. Travers /s/  
Executive Director for Operations

SUBJECT: IMPACT OF CHANGES TO THE INSPECTION PROGRAM FOR REACTORS ON IMPLEMENTING THE ALLEGATION PROGRAM

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#### PURPOSE:

To inform the Commission of the impact the changes to the inspection program for reactors will have on implementing the allegation program, present options for implementing the allegation program under the baseline inspection program, and seek Commission guidance on whether to seek stakeholder input before choosing an option.

#### BACKGROUND:

The allegation program was established to provide a mechanism for individuals to identify safety and regulatory issues directly to the NRC. To encourage individuals to identify such issues, the allegation program includes provisions to protect the identity of the individual, to provide timely resolution of the issue(s), and to communicate the staff's understanding of the issue(s), status of the staff's review, and ultimate resolution of the issue(s) in a timely manner. For individuals who do not want the licensee or employer to know they raised an issue to the NRC, the agency's policy is to take all reasonable measures to protect the identity of the individual.

Under the current program, an allegation is defined as "A declaration, statement, or assertion of impropriety or inadequacy associated with NRC-regulated activities, the validity of which has not been established." Historically, the staff has interpreted this definition very broadly and not set a threshold for placing issues in the allegation program, as long as the issues involve an area regulated by the NRC, were not already known by the staff to be true or valid, and were not covered by another process, e.g., petitions processed under Section 2.206 of Title 10 of the Code of Federal Regulations (2.206 petitions).

Neither the definition nor staff practice currently considers the safety or risk significance of the issue in determining whether the staff will review and resolve an issue. All issues determined to be allegations are reviewed. However, safety and risk significance have been and are considered in determining how quickly the staff reviews and resolves an issue. For example, issues involving the fitness for duty of an individual with unescorted access at a nuclear reactor will normally be referred to the licensee for follow-up within 24 hours because of the potential for harming public health and safety or the health and safety of fellow workers. On the other hand, an issue concerning whether a maintenance technician used the correct lubricant may not be reviewed until the next scheduled inspection, if the component involved or its operation is known to have low risk significance.

While the timeliness of follow-up of safety or risk significant issues is driven by the potential risk to workers or the public, the timeliness of follow-up for less significant issues is driven by the agency's goal to be responsive to the allegor.<sup>(1)</sup> The performance goal is to complete resolution of technical issues within 180 days, on average. The staff normally uses one of three methods in reviewing and resolving an allegation: (1) refer the allegation to the licensee or employer for evaluation and response; (2) refer the allegation to another agency for evaluation and response (e.g., off-site emergency preparedness issues are referred to the Federal Emergency Management Agency); or (3) conduct an inspection, investigation, or an evaluation. It is agency policy to refer allegations as appropriate to the licensee or employer for evaluation and response, provided the allegor has no objection to the referral or sufficient information can be provided to permit the licensee or employer to evaluate the issue(s) without identifying the allegor. In FY 1998, the staff received 1577 reactor related issues. The staff referred 21 percent of the technical issues received to reactor licensees for evaluation and response. One percent of the issues were referred to other agencies and the staff independently reviewed and resolved 78 percent of the issues received. In FY 1999, the staff received 1171 reactor related issues. The staff referred 22 percent of the technical issues received to reactor licensees for evaluation and response. Two percent of the issues were referred to other agencies and the staff independently reviewed and resolved 76 percent of the issues received.<sup>(2)</sup>

## DISCUSSION:

In [SECY-99-007](#), "Recommendations for Reactor Oversight Process Improvements," dated January 8, 1999, and [SECY-99-007A](#), "Recommendations for Reactor Oversight Process Improvements (Follow-up to SECY-99-007)," dated March 22, 1999, the staff proposed a revised reactor oversight process that focuses inspection, assessment, and enforcement on risk-significant areas, findings, and events. Because a high percentage of the allegations received are currently resolved through NRC staff evaluations and inspections, the changes in the inspection program that result from the revised reactor oversight process will impact aspects of the allegation program, as discussed below.

In discussing options, this paper focuses on the performance goals of increasing the efficiency, effectiveness, and realism of key NRC processes and enhancing public confidence. The goals of maintaining safety and reducing unnecessary regulatory burden are not addressed in as much depth because all of the options maintain the current level of safety and any regulatory burden associated with an option would be classified as a necessary burden if the Commission chooses that option. Therefore, these performance goals are only addressed as necessary to differentiate the options. Additionally, the paper only addresses technical issues submitted to the allegation program, as those are the issues impacted by the revised reactor oversight process. The staff will continue the current allegation process for allegations involving vendors, materials licensees, and wrongdoing issues.

In developing the revised reactor oversight process, the staff integrated the use of performance indicators and inspections. Using a risk-informed approach, the staff was able to focus the baseline inspection program on inspecting risk-significant areas that are not adequately covered by performance indicators. The overall objective of the program is to assure licensee performance meets the objectives for each of the associated cornerstones of safety. Within the baseline inspection program there are three basic types of inspection. Inspections are (1) used to verify performance in areas that are not measured by a performance indicator, (2) augment the information provided by performance indicators that do not sufficiently measure performance in a cornerstone area, and (3) verify the accuracy and completeness of the data used as the basis for performance indicators used to fully measure performance of a cornerstone area. The end result is that the scope of activities being inspected is more clearly defined and risk informed. There is also less flexibility within the baseline inspection program to inspect issues that emerge from allegations if they do not relate to a stated inspectable area objective.

A consequence of implementing the revised reactor oversight process is that it causes the staff to review the priority the allegation program currently places on providing a comprehensive response to an alleged's concerns in a timely manner. As noted above, allegations involving high safety or risk significance are addressed in a time frame consistent with that significance. Conducting an inspection or an evaluation to quickly resolve this type of allegation is consistent with the risk informed approach of the revised reactor oversight process. However, the allegation program's emphasis on timely resolution places a similar, and only slightly lesser, burden on the staff for timely resolution of issues with less safety or risk significance. For these issues, staff resolution is driven by the timeliness goal, which was established to be responsive to the alleged, rather than being risk-informed. For those allegations requiring inspection, this often results in revising inspection schedules or scheduling additional inspections to meet the timeliness goal, when the safety or risk significance associated with the issue doesn't warrant that kind of response, even if the issue is assumed to be valid. For those allegations that are referred to other agencies or to licensees for evaluation and response back to the NRC, this may result in redirecting resources from work activities involving higher safety or risk significance in order to meet NRC's requested response date.

To date, responsiveness to the alleged has taken precedence over efficient use of staff resources in resolving allegations. The current inspection program accommodates that choice. However, the risk-informed approach of the new baseline inspection program emphasizes efficient use of inspection resources, focused on risk significant issues. Therefore, the staff is seeking Commission guidance in determining the future course of the allegation program and the proper balance between what may often be the competing goals of increasing the efficiency, effectiveness, and realism for the revised reactor oversight process and enhancing public confidence through continuing to be responsive to allegations. The section that follows presents options for implementing the allegation program based on which goal is emphasized .

Another consequence of implementing the baseline inspection program is that there is a greater potential the reactor licensees will know when an inspection is allegation-related. For allegations that involve issues outside the inspectable areas or are reviewed during inspections that were not on the inspection schedule, it is likely that the licensee or employer will question why the staff is conducting the inspection, unless there has been an event that warrants a reactive inspection. While the staff intends to continue its policy of not informing the licensee when inspections are allegation-related, it is likely the licensee or employer will be able to determine when that is the case. This may increase the potential that a licensee or employer will be able to identify who submitted an allegation to the NRC, based on the area being inspected and its similarity to issues previously raised within the licensee's organization. As a result, individuals may be less inclined to provide safety or regulatory issues to the NRC or they may provide issues to the NRC without first raising the issue internally. Neither of these outcomes is desirable.

## OPTIONS:

This section describes four options for implementing the allegation program under the revised reactor oversight process. The options range from continuing to implement the current program to establishing a threshold for initiating a review of allegations. The pros and cons for each option are discussed below and are summarized in a table following the options. The table displays the options with respect to the performance goals; maintain safety, enhance public confidence, increase efficiency, effectiveness, and realism of key NRC processes, and reduce unnecessary regulatory burden. In developing this paper the staff considered additional options. However, the options presented are those that were supported by the staff through the concurrence process.

The staff's intent is to continue to implement the current process (Option 1) until such time as the Commission provides additional guidance to the staff. If the Commission provides guidance before the revised reactor oversight process is implemented for all plants, the staff's intent is to implement the chosen option for those plants participating in the pilot program and review the lessons-learned prior to implementation of the revised reactor oversight process at all facilities. If the Commission provides guidance after the revised reactor oversight process is implemented for all plants, the staff will implement the chosen option for all reactors.

#### OPTION 1 - MAINTAIN THE EXISTING ALLEGATION PROGRAM

The staff will continue to review and resolve all issues that meet the current definition of an allegation and will continue to refer allegations as appropriate to licensees and other agencies. Licensees and other agencies will be requested to complete their review in a time frame consistent with the timeliness goal and inform the staff of the results of their review. The staff will continue to review the response for adequacy and inform the alleege of the results.

For issues requiring inspection, the staff will continue to use safety and risk significance in determining how quickly the issues will be reviewed and resolved, within the existing timeliness goals. Issues involving lower safety or risk significance will still be resolved consistent with achieving the timeliness goal of 180 days, on average. Individuals bringing issues to the NRC will be informed that if resolution of the issues requires inspection by someone other than the resident inspectors and an inspection in the appropriate area is not on the published schedule, there is an increased likelihood that the licensee will conclude the inspection is related to an allegation. Individuals will also be informed that this may increase the likelihood that the employer will be able to determine who provided the issue(s) to the NRC.

Findings resulting from the staff's review of allegations will be dispositioned using the enforcement process which uses the Significance Determination Process described in SECY-99-007A, if appropriate. The alleege will continue to be informed whether the issues were substantiated. However, if the findings identify Severity Level IV<sup>(3)</sup> or minor violations, the findings will be provided to the licensee for entry in the corrective action process and no other action will be taken by the staff. This is consistent with how NRC-identified violations will be treated under the revised reactor oversight process.

This option maintains the current level of public responsiveness and confidence and addresses the identity protection issue to the extent possible, while achieving timely resolution. However, this option also results in treating issues with the same risk significance differently, depending on whether they are raised as a result of an allegation, are licensee-identified, or identified as a result of an NRC inspection that is not related to an allegation. If the Commission chooses this option, agency management will have to ensure that the staff understands why issues with similar risk significance are being treated differently. Additionally, this option would cause licensees and the NRC to spend resources to resolve low or no-risk issues more quickly than warranted if only the risk significance were considered. Timely response to the alleege would still drive some NRC and licensee resources in resolving allegations.

#### OPTION 2 - TIMELINESS OF RESOLUTION BASED ON RISK SIGNIFICANCE

This option is a variation on Option 1, with the revisions intended to reduce the likelihood that the employer will conclude that an inspection is related to an allegation. Under this option, inspections to resolve issues within the inspectable areas will be conducted consistent with the risk significance of the issue and, to the extent possible, the schedule for the baseline inspection program. For issues involving low risk, the inspection schedule would dictate the timing of the staff follow-up rather than being bound by the timeliness goal. This would make it more difficult for the employer to determine that an inspection is related to an allegation. However, given the guidance in the inspection program to conduct inspections during periods of high activity in the inspectable area, it is likely that adopting this option would cause the allegation response timeliness goal to be exceeded on a regular basis. As a general or preferred approach, this option may have an adverse impact on public confidence in the allegation program if we cannot effectively explain the reason for the slower response or if the alleege is unwilling to accept the slower response. However, this option may be preferable for cases where the alleege is particularly concerned about being identified and is agreeable to delaying the inspection to coincide with a previously scheduled inspection.

This option may require additional NRC inspection resources on-site during periods of high activity. However, the inspection resources to implement this option would be the same as Option 1, the current program. To the extent that the follow-up inspections are within inspectable areas scheduled for inspection, there would be some savings in travel expenses.

#### OPTION 3 - RISK-INFORMED ALLEGATION PROGRAM

Under this option, all allegations provided to the NRC will be assumed to be valid and the Significance Determination Process will be used, as appropriate, to determine the risk significance of the allegation. For issues the staff determines have no risk significance, the alleege would be informed of the result of the determination and that no action is planned concerning the issue. Issues with little risk significance (Green) will be referred to the licensee for review and inclusion in the corrective action program, if appropriate. The alleege will be informed of the referral and that the issue will not receive any specific follow-up by the staff.<sup>(4)</sup> Issues of moderate or high risk significance (White, Yellow, or Red) would require a follow-up inspection or evaluation by the NRC staff. The alleege would be informed of the results following completion of staff action.

To assess the feasibility of this approach, the staff applied the Significance Determination Process to the 289 reactor concerns submitted to the NRC between January 1, 1999 and March 31, 1999. The staff took a very conservative approach in applying the Significance Determination Process. As noted above, the staff assumed that each concern was valid and assumed the worst case scenario for the concern. The staff determined that the Significance Determination Process was not applicable for 83 concerns that involved wrongdoing issues and there was not enough information provided by the alleege to classify an additional 63 concerns. Of the remaining 143 concerns, 114 were classified as low (Green) or no risk significance. Twenty-nine concerns, mostly in the radiological or safeguards cornerstone area, were classified as having potential risk significance, if they were true. It should be noted however, that the Significance Determination Processes for these cornerstone areas are based on a barrier or deterministic method, rather than risk informed. Additionally, the risk significance assigned many of these concerns was based on the concern postulating a complete failure of the radiological or safeguard's program to satisfy the cornerstone objective.

Based on this assessment, it appears that the existing Significance Determination Process could be applied to allegations. Under this option, 1) no action would be taken for the concerns that have no risk significance, 2) the concerns that were classified as having low risk significance would be referred to the licensee for review and inclusion in its corrective action program, if appropriate, and 3) the staff would follow-up on the 29 more risk significant concerns. The staff would also attempt to gather more information on the concerns that did not have sufficient information to use the Significance Determination Process. If sufficient information can be accumulated, the staff would use the Significance Determination Process. Otherwise, the staff would conduct inspections to resolve the concerns. If this approach were taken, the staff would save the technical resources that would be used to

evaluate the concerns with low or no risk significance. Based on the sample from one quarter, the projected savings for four quarters would be approximately 5 FTE of inspection resources. Implementing the Significance Determination Process for allegations requires 1 FTE<sup>(5)</sup> of additional resources, for a net savings of 4 FTE.

While this option treats risk in the same manner as the revised reactor oversight process, it does not effectively address the identity protection issue in instances in which the allegor had previously raised the same concerns with the licensee or in which the NRC chooses to perform an inspection for a concern outside the inspectable areas. However, this concern is reduced if the resident inspectors have the requisite technical background and can conduct the inspection within the baseline inspection program.

Additionally, this option may be perceived as unresponsive by the allegor and other external stakeholders with regard to issues with no or low risk significance. The lack of independent agency action for issues with no or low risk significance could adversely impact public confidence.

#### OPTION 4 - RISK-INFORMED ALLEGATION PROGRAM WITH ALLEGER INPUT

This option is a variation on Option 3, with an opportunity for the allegor to have input on the method for resolving his or her allegation. As in Option 3, all allegations provided to the NRC will be assumed to be valid and the Significance Determination Process will be used to determine the risk significance of the allegation. For issues that are categorized as no or low risk significance and the allegor is known (not anonymous), the staff would contact the allegor and (1) express appreciation for the allegor raising the issues and encourage the allegor to raise issues in the future, (2) explain the Significance Determination Process and the risk significance assigned to the issues raised by the allegor, and (3) explain the staff's intent to take no action for issues with no risk significance and to refer issues with low risk significance to the licensee for review and inclusion in the corrective action program, if appropriate. If the allegor is satisfied with the explanation and proposed action, the staff will send a letter to the allegor documenting the staff's intent and the allegor's agreement. The low risk significance issues would then be referred to the licensee.

If the allegor insists on independent staff follow-up, the staff will follow-up on the issues within the timeliness goals for the current allegation process. The follow-up could still involve a referral to the licensee if sufficient information could be provided without jeopardizing the identity of the allegor. However, in this circumstance, the licensee will be required to provide a response. The response will be reviewed by the staff for adequacy and the allegor will be informed of the result of the staff's review. If referral to the licensee is not appropriate, the staff will conduct an inspection or evaluation to resolve the issues. If the allegation is anonymous, the issues will be referred to the licensee for resolution and a response will not be required.

To the extent allegors accept the categorization of their issues under the Significance Determination Process and referral to the licensee corrective action program, as appropriate, this option addresses the potential adverse impact on public confidence inherent in Option 3. The staff cannot predict the extent to which this approach will be acceptable to allegors and, therefore, cannot estimate the potential resource savings. However, this option could be implemented within existing resources.

#### SUMMARY COMPARISON OF OPTIONS

As noted in the table in [Attachment 1](#), each option involves trade offs between the performance goals. Given that the purpose of the allegation program is to provide a mechanism for members of the public and workers in the industry to raise safety and regulatory issues directly to the NRC and it is one of the few programs where the NRC interfaces directly with individuals from that stakeholder group, the Commission should consider whether extra weight should be given to the pros and cons concerning Public Confidence when considering the options presented in this paper.

#### ADDITIONAL CONSIDERATIONS:

Any changes made to the allegation program that involve using risk significance as a screening criteria, Options 3 and 4, may have an impact beyond the allegation program. Specifically, implementing the use of the Significance Determination Process to establish a risk threshold for independent review of allegations by the NRC staff may result in the workload shifting to another process that does not use a risk-informed screening criteria. For example, individuals may submit issues previously handled as allegations as 2.206 petitions or they may state the issues as questions that are subsequently handled as correspondence.

If the Commission decides it is appropriate to establish a risk threshold for independent review of allegations by the staff, the Commission should consider whether it is appropriate to establish such a threshold for other processes that respond to questions or requests from the public, as well.

#### RESOURCES:

All of the options can be accomplished within currently budgeted resources. Additionally, Option 3 may save as many as 4 FTE. While Option 4 may also result in resource savings, it is not possible at this time to predict the extent to which this process will be acceptable to allegors.

#### RECOMMENDATIONS:

The staff recommends that stakeholder input be sought before choosing an option. If the Commission accepts the staff's recommendation, the staff intends to discuss the subject of this paper at round table discussions currently planned to be held in the vicinity of the pilot plants. Additionally, the staff will publish the options and a request for comment in the *Federal Register* and seek stakeholder input from the allegor community on how best to solicit their input. Seeking input from this stakeholder group may involve one or more public meetings.

#### COORDINATION:

The Office of the General Counsel has no objection to this paper, and the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

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Attachment: As stated

ATTACHMENT

SUMMARY OF OPTIONS

	MAINTAIN SAFETY		ENHANCE PUBLIC CONFIDENCE		EFFICIENCY, EFFECTIVENESS, AND REALISM		REDUCE UNNECESSARY REGULATORY BURDEN	
	PRO	CON	PRO	CON	PRO	CON	PRO	CON
Option 1 Maintain the existing allegation program	Maintains level provided by current program	N/A	Maintains level provided by current program	Licensee more aware inspections involve allegations	N/A	Resources expended on issues with low risk significance, low risk issues treated differently depending on source	N/A	N/A
Option 2 Timeliness of resolution based on risk significance	Maintains level provided by current program	N/A	Improved identity protection for most alleged	May reduce public confidence, longer review time	N/A	Resources expended on issues with low risk significance	Fewer changes to inspection schedule	All concerns entered in licensee corrective action programs, regardless of risk significance
Option 3 Risk-Informed Allegation Program	Maintains level provided by current program	N/A	N/A	May reduce public confidence, review time longer, no independent review	Allegation Program focused on risk significant issues	N/A	Making the timing of follow-up actions for some concerns consistent with risk reduces reactive workload	N/A
Option 4 Risk-Informed Allegation Program with Allegor Input	Maintains level provided by current program	N/A	Allegor has input on resolution process, to the extent necessary review is independent	N/A	To the extent alleged accepts SDP output, Allegation Program focused on risk significant issues	To the extent alleged does not accept SDP output, NRC resources expended on follow-up of low risk issues	Making the timing of follow-up actions for some concerns consistent with risk reduces impact of reactive workload	N/A

1. Timeliness is measured from the time the issue is received until completion of the review and resolution of the issue and the alleged is informed of the results.
2. In FY 1998 the staff expended 41.9 technical FTE resolving reactor related allegations. In FY 1999 the staff expended 34.3 technical FTE resolving reactor related allegations.
3. Severity Level IV violations will be classified as Non-cited Violations in inspection reports.
4. The referral to the licensee would occur regardless of the wishes of the alleged.
5. The classification effort took an hour per concern, on average, or .25 FTE for the concerns received in one quarter.