U.S. NUCLEAR REGULATORY COMMISSION

DIRECTIVE TRANSMITTAL

TN: DT-02-12

To: NRC Management Directives Custodians

Subject: Transmittal of Management Directive 8.13, "Reactor Oversight Process"

Purpose: Directive and Handbook 8.13 are being revised in their entirety to reflect the revised Reactor Oversight Process (ROP) that replaced the NRC's previous oversight process for power reactor licensees ("Evaluating the Safety Performance of Nuclear Power Reactor Licensees"). The revised ROP was implemented on April 2, 2000.

The revised MD 8.13 documents the staff's new performance assessment process, which allows for elimination of MD 8.6, "Systematic Assessment of Licensee Performance (SALP)."

Office and Division of Origin: Office of Nuclear Reactor Regulation

Contact: Thomas Boyce, 415-1130

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Directive: 8.13 Reactor Oversight Process

Availability: Rules and Directives Branch
Office of Administration
Michael T. Lesar (301) 415-7163
Christy Moore (301) 415-7086

REACTOR OVERSIGHT PROCESS

Directive 8.13

Contents

Reactor Oversight Process
Directive 8.13

Policy
(8.13-01)

It is the policy of the Nuclear Regulatory Commission to provide oversight of nuclear power plant activities to verify that the plants are being operated in accordance with NRC rules and regulations. As stated in the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974, the mission of NRC is to ensure that commercial nuclear power plants are operated in a manner that provides adequate protection of public health and safety and the environment, and protection against radiological sabotage and the theft or diversion of special nuclear materials. NRC fulfills this mission by establishing regulatory requirements for the design, construction, and operation of plants; performing thorough plant licensing reviews; creating stringent standards for licensing of plant operators; and overseeing plant activities. Within this structure, NRC licensees have primary responsibility for operating their plants safely. The NRC expects that licensees will address performance issues of very low safety significance that may arise as a normal part of operating a facility without requiring additional NRC involvement. In providing its oversight, NRC strives to use an objective, understandable, and predictable process to ensure that licensees fulfill their responsibility for safe operation.

Objectives

(8.13-02)

- To obtain information about operations at reactor facilities, identify significant safety concerns and determine their generic applicability, and determine the causes of declining performance. (021)

- To evaluate the risk significance of issues to ensure the appropriate licensee and regulatory responses. (022)

- To assess licensee performance, provide a measured regulatory response, and communicate effectively the NRC's assessment of licensee performance to both internal and external stakeholders. (023)

- To take enforcement actions that deter noncompliance and foster resolution of risk-significant issues.(024)

- To ensure that licensees effectively identify problems and resolve issues. (025)

- To provide the appropriate regulatory response to operational events on the basis of their safety significance. (026)

- To ensure that licensees maintain a safety-conscious work environment. (027)

Organizational Responsibilities and Delegations of Authority

(8.13-03)

Executive Director for Operations (EDO)

(031)

Oversees the reactor oversight process.

Organizational Responsibilities and Delegations of Authority

(8.13-03) (continued)

Director, Office of Nuclear Reactor Regulation (NRR)

(032)

- Provides overall direction to the programs within the reactor oversight process. (a)
- Assesses the effectiveness, uniformity, and completeness of the programs within this process. (b)

Regional Administrators

(033)

- Manage the implementation of the oversight process elements performed by the regions. (a)
- Allocate regional inspection resources in support of the reactor oversight process. (b)

Director, Office of Enforcement (OE)

(034)

- Provides program direction for implementation of the NRC's Enforcement Policy. (a)
- Ensures appropriate enforcement action is taken for issues identified by the reactor oversight process. (b)

Organizational Responsibilities and Delegations of Authority

(8.13-03) (continued)

Director, Office of Nuclear Security and Incident Response (NSIR)

(035)

Provides program direction for implementation of safeguards and physical protection issues.

Director, Office of Public Affairs (OPA)

(036)

- Provides liaison with external stakeholders. (a)
- Issues press releases as appropriate. (b)

Applicability

(8.13-04)

The policy and guidance in this directive and handbook apply to all NRC employees.

Handbook

(8.13-05)

Handbook 8.13 addresses the major components of the reactor oversight process.

References

(8.13-06)

NRC Management Directives—

8.3, "NRC Incident Investigation Program."

References

(8.13-06) (continued)

8.8, "Management of Allegations."

8.9, "Accident Investigation."

8.14, "Agency Action Review Meeting."

NRC Inspection Manual Chapters—

0305, "Operating Reactor Assessment Program."

0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition With Performance Problems"

0608, "Performance Indicator Program."

0609, "Significance Determination Process."

0612, "Power Reactor Inspection Reports."

2515, "Light-Water Reactor Inspection Program - Operations Phase."

NRC Regulatory Issue Summary 2001-25, "NEI 99-02, Revision 2, Voluntary Submission of Performance Indicator Data."

NUREG-1600, "NRC Enforcement Policy."

NUREG-1614, "U.S. Nuclear Regulatory Commission Strategic Plan."

NUREG/BR-0195, "NRC Enforcement Manual."

REACTOR OVERSIGHT PROCESS

Handbook 8.13

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Part I

Part II

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Part I
Regulatory Framework

Regulatory Framework (A)

The regulatory framework for reactor oversight (as shown in Exhibit 1 of this handbook) is a risk-informed, tiered approach to ensuring plant safety. There are three key strategic performance areas: reactor safety, radiation safety, and safeguards. Within each strategic performance area there are cornerstones that reflect the essential safety aspects of facility operation. Satisfactory licensee performance in the cornerstones provides reasonable assurance of safe facility operation and that the NRC's safety mission is being accomplished. (1)

Within this framework, the NRC's operating reactor oversight process provides a means of collecting information about licensee performance, assessing the information for its safety significance, taking appropriate NRC action, and ensuring that licensees take appropriate corrective actions. Because there are many aspects of facility operation and maintenance, the NRC inspects utility programs and processes on a risk-informed sampling basis to obtain representative information. (2)

Cornerstones (B)

The seven cornerstones (see Exhibit 1) within the three strategic performance areas are listed below. Regarding the first of the three strategic performance areas, for the reactor safety area to fail to meet the goal of adequate protection of public health and safety, an initiating event would have to occur, followed by failures in one or more mitigating systems, and ultimately failure of multiple barriers. At that stage, the emergency plan would be implemented as the last defense-in-depth for public protection.

Cornerstones (B) (continued)

Reactor Safety Strategic Performance Area (1)

Initiating Events. The NRC's objective is to limit the frequency of those events that upset plant stability and challenge critical safety functions, during shutdown as well as power operations. If an event is not properly mitigated and multiple barriers are breached, a reactor accident could compromise public health and safety. Licensees can reduce the likelihood of a reactor accident by maintaining a low frequency of initiating events, which include reactor trips due to turbine trips, loss of feedwater, loss of offsite power, and other significant reactor transients. (a)

Mitigating Systems. The NRC's objective is to ensure the availability, reliability, and capability of systems that are designed to mitigate the effects of initiating events to prevent reactor core damage. Licensees can reduce the likelihood of reactor core damage by enhancing the availability and reliability of mitigating systems. Mitigating systems include the primary systems associated with heat removal (safety injection and residual heat removal) and their support systems (e.g., emergency ac power). This cornerstone includes mitigating systems that respond to events during both operation at power and when the reactor is shut down. (b)

Barrier Integrity. The NRC's objective is to ensure that physical barriers protect the public from radionuclide releases caused by reactor core damage. Licensees can reduce the effects of reactor core damage or events if they do occur by maintaining the integrity of the barriers. The barriers are the fuel cladding, the reactor coolant system boundary, and the containment. (c)

Emergency Preparedness. The NRC's objective is to ensure that emergency plan actions provide adequate protection of public health and safety during a radiological emergency. Licensees ensure that the emergency plan will be implemented correctly by training and

Cornerstones (B) (continued)

Reactor Safety Strategic Performance Area (1) (continued)

conducting drills. This cornerstone does not include offsite actions that are under the cognizance of and evaluated by the Federal Emergency Management Agency (FEMA). (d)

Radiation Safety Strategic Performance Area (2)

Public Radiation Safety. The NRC's objective is to ensure adequate protection of public health and safety from exposure to radioactive material released into the public domain as a result of routine civilian nuclear reactor operations. These releases include routine discharges of low-level gaseous and liquid radioactive effluents, the inadvertent release of solid contaminated materials, and the offsite transport of radioactive materials and wastes. Licensees can maintain public protection by meeting the applicable regulatory limits and minimizing radioactive releases. (a)

Occupational Radiation Safety. The NRC's objective is to ensure adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. This exposure could come from radiation areas or radioactive material that exposes workers to radiation. Licensees can maintain worker protection by meeting applicable regulatory limits and as low as reasonably achievable (ALARA) guidelines. (b)

Safeguards Strategic Performance Area (3)

Physical Protection. The NRC's objective is to provide assurance that the physical protection system can protect against the design basis threat of radiological sabotage. The threat could come from either external or internal sources. Licensees can maintain adequate protection against threats of sabotage by maintaining an effective security program that relies on a defense-in-depth approach.

Cross-Cutting Areas (C)

Certain aspects of licensee performance are common to all the cornerstones and are important to maintaining safe facility operation. These aspects are commonly referred to as cross-cutting areas and include human performance, the establishment of a safety-conscious work environment, and problem identification and resolution (PI&R). Licensee deficiencies in these cross-cutting areas manifest themselves as performance issues in the cornerstones and are often the root causes of the issues. The NRC reviews licensee PI&R programs as part of baseline inspections and during a biennial team inspection. The establishment of a safety-conscious work environment is monitored throughout the year by the NRC resident staff, through review of allegations, and as part of the PI&R biennial team inspection. While there is no specific NRC inspection for human performance, it is reviewed as part of a number of baseline inspections and is implicit in the data reported for many of the performance indicators.

Part II
Programs and Processes

General Description (A)

Within the regulatory framework, NRC's operating reactor oversight process collects information about licensee performance, assesses the information for its safety significance, provides for appropriate licensee and NRC response, and communicates the results of its assessment to licensee management, members of the public, and other Government agencies. The oversight process was founded on key principles that also establish the basis and relationship among the elements of the process. (1)

A diagram of the reactor oversight process is shown in Exhibit 2 of this handbook. For each cornerstone, NRC develops findings from inspections and evaluates performance indicator data collected by licensees. Inspection findings are evaluated for safety significance using a significance determination process, and performance indicator data are compared with prescribed risk-informed thresholds. The resulting information is then assessed and the appropriate NRC response is determined using the action matrix. This response includes supplemental inspections and a range of other actions, depending on the significance of the issues. Except for violations of very low safety significance, enforcement action is taken for findings that document violations of regulatory requirements. The specific enforcement action taken is based on the significance of the inspection finding. NRC communicates the results of its performance assessment and its inspection plans and other planned actions in publicly available correspondence, on its Web site, and through public meetings with each licensee. (2)

Principles (B)

The following principles form the basis of the reactor oversight process:

- Licensees routinely address performance issues of very low safety significance that may arise as a normal part of operating a facility without requiring additional NRC involvement. (1)

- Risk-informed thresholds for licensee safety performance establish whether only routine NRC interaction is warranted or increased NRC interaction (including enforcement) is warranted. (2)

- A risk-informed baseline inspection program establishes the routine level of NRC interaction with all licensees, provides a sufficient indication of licensee performance, and indicates when additional inspection activity is warranted. (3)

- Licensee performance in each cornerstone is assessed using objective performance indicators and a baseline inspection program. Adequate assurance of performance requires consideration of both performance indicator data and inspection results. (4)

- The baseline inspection program examines those risk-significant attributes of licensee performance that are not adequately covered by performance indicators. The baseline inspection program also verifies the accuracy of the performance indicators and provides for initial event followup. (5)

- Licensee performance issues that cross either performance indicator thresholds or inspection thresholds receive the same level of NRC response. (6)

- The significance of inspection findings is assessed using a significance determination process. (7)

Principles (B) (continued)

- Enforcement actions for inspection findings are commensurate with their safety significance, as determined using the significance determination process. (8)

- The enforcement actions taken (e.g., the number of cited or non-cited violations, the amount of a proposed civil penalty) are not inputs to the assessment process; however, the significance of the underlying issues that led to the enforcement actions is considered in the assessment of licensee performance. (9)

- Licensee deficiencies in cross-cutting areas manifest themselves as performance issues in the cornerstones. Licensee performance in cross-cutting areas is assessed using both performance indicators and inspection findings. (10)

- The enforcement actions taken for risk-significant inspection findings involving violations of regulatory requirements establish the basis for requiring licensees to take appropriate corrective actions and restore compliance. (11)

- Agency response to performance issues and degrading or unacceptable licensee performance is established in an action matrix. (12)

Performance Indicators (C)

Performance indicators provide an objective indication of key attributes of licensee performance in each of the cornerstones. However, these indicators cannot cover every aspect of plant design, operation, and maintenance. Instead, inspections are used to review those aspects that are not covered by the performance indicators. NRC inspects facilities to verify the accuracy of the performance indicator information and to assess performance that is not measured by performance indicators. Together with these inspections the

Performance Indicators (C) (continued)

performance indicators provide a broad sample of data in risk-significant aspects of each cornerstone that is used as an input to the assessment process. (1)

The performance indicators have objective, risk-informed thresholds that identify outliers from nominal industry performance so that deficiencies can be identified and corrected before they pose an undue risk to public health and safety. The thresholds for some performance indicators are based on changes in risk from probabilistic risk assessment (PRA) sensitivity analyses. Other thresholds that cannot be assessed using PRA models are tied to regulatory requirements (e.g., facility technical specifications) or are based on the expert judgment of NRC internal and external stakeholders. (2)

Many of the performance indicators initially selected for the reactor oversight process were based on indicators that were already in use by industry or that were readily available. In establishing these indicators, NRC benchmarked them and their thresholds against several plants. NRC will continue to assess the performance indicators and their thresholds to ensure they provide appropriate insights on performance attributes. Detailed guidance for performance indicators, including the formal process for resolving questions regarding interpretation of the performance indicator reporting guidelines and considering changes to the performance indicators or thresholds, is contained in NRC Inspection Manual Chapter (IMC) 0608, "Performance Indicator Program." (3)

Licensees voluntarily submit performance indicators on a quarterly basis to the NRC using the Nuclear Energy Institute reporting guide NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," which has been formally endorsed by NRC in a regulatory issue summary. However, if licensees fail to submit the performance indicators, NRC will perform additional inspections as

Performance Indicators (C) (continued)

necessary to collect the information normally provided by the performance indicators. (4)

Inspection Programs (D)

The NRC's inspection program collects information about licensee performance through direct observation by NRC inspectors. The inspectors perform this fundamental function and determine whether or not licensees are operating their plants safely and in accordance with their regulatory requirements. NRC has resident inspectors assigned to each plant site who conduct inspections, and it also uses inspectors from NRC regional offices and headquarters as appropriate to complete the inspection program. (1)

The inspection program is designed to sample a cross-section of licensee activities important to plant safety, reliability, and risk, as well as other licensee activities that may warrant additional attention. Performance issues are evaluated for their risk significance within the appropriate cornerstone using a significance determination process (SDP) that incorporates both generic and plant-specific risk information. Those issues determined to be significant are flagged as input to the assessment process and for followup actions by both licensees and NRC. The inspection program is discussed in greater detail in NRC IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase," and detailed guidance for the SDP is contained in NRC IMC 0609, "Significance Determination Process." (2)

NRC's inspectors routinely review a great deal of data and information about licensee performance. Performance issues that are assessed as risk-significant using the SDP are documented as findings in inspection reports. Documentation of information in inspection reports is discussed in greater detail in NRC IMC 0612, "Power Reactor Inspection Reports." The findings from inspection reports are summarized

Inspection Programs (D) (continued)

in a plant issues matrix (PIM) for each plant, which is available on the NRC's Web site. (3)

The inspection program is intended to provide regional administrators flexibility in the planning and application of inspection resources to deal with risk-significant issues and problems at specific plants. Inspections are planned on the basis of a 12-month cycle and are updated at least semiannually to reflect any changes in performance that may require an adjustment of inspection resource allocation. (4)

The inspection program is composed of the following four major elements. (5)

Baseline Inspections (a)

- The risk-informed baseline inspection program is the routine level of inspection conducted at all power reactor facilities, regardless of licensee performance. It is designed to detect indications of declining safety performance in key areas. Licensees performing at a level not requiring additional NRC oversight are typically inspected only at this level of effort. The baseline program is conducted by the resident and region-based inspectors, who inspect licensee performance in all seven cornerstones. The baseline inspections in certain cornerstones (e.g., emergency preparedness, radiation safety, and physical protection) are typically performed or supplemented by region-based specialists. (i)

- The scope of the baseline program is defined by inspectable areas that are linked to the cornerstones of safety. The baseline program includes inspections for those areas in which no performance indicators have been identified and in which performance indicators do not fully cover the inspectable area. It also includes periodic verification of the accuracy of performance indicator data that have been reported by the licensee. The baseline inspection

Inspection Programs (D) (continued)

Baseline Inspections (a) (continued)

program assesses licensee performance in cross-cutting areas through performance indicators and inspection findings. (ii)

- The baseline inspection program is risk-informed by (1) selection of the inspectable areas based on their risk importance in measuring cornerstones; (2) determination of the inspection frequency and sample size for each inspectable area based on risk information; and (3) selection of sample activities and equipment to inspect in each inspectable area based on risk insights that incorporate plant-specific information. (iii)

Plant-Specific Supplemental Inspections (b)

Supplemental inspections are conducted at a facility when risk-significant issues are identified either by the SDP as significant inspection findings or when performance indicator thresholds are exceeded. In general, supplemental inspections are performed for white, yellow, or red performance issues (either performance indicator or inspection findings). Supplemental inspections are more diagnostic than baseline inspections and are designed to address problems and issues that are beyond the scope of normal baseline inspections. The scope of the supplemental inspections consists of a range of activities that may include oversight of licensee root cause evaluations, expansion of the baseline inspection sample, a focused team inspection (as necessary to evaluate the extent of the condition), or a broad-scope, multidisciplined team inspection for substantive safety performance issues to examine multiple cornerstone areas and inspect cross-cutting areas.

Generic Safety Issues and Infrequent Inspections (c)

Concerns with safety issues that have generic applicability for many facilities may be addressed through a combination of the Office of

Inspection Programs (D) (continued)

Generic Safety Issues and Infrequent Inspections (c) (continued)

Nuclear Reactor Regulation's (NRR's) license review process, regulatory communications issued to licensees, and one-time inspections under the safety issues program element. Examples of these issues could include inspections of licensee activities associated with license renewal, steam generator replacement, or upgrades to digital instrumentation. This element of the program also includes inspections conducted to fulfill NRC obligations under interagency memoranda of understanding.

Event Followup and Response (d)

The baseline inspection program includes followup by resident or region-based inspectors of routine events and emphasizes collection of event information for use by risk analysts in evaluation of risk significance. The event response element of the inspection program provides for additional inspection followup of certain events or problems using a graded approach based on risk significance and deterministic criteria. The response can range from further evaluations by NRC resident inspectors to more comprehensive inspections by multidisciplined investigation teams. This response is described in NRC IMC 2515 and Management Directive (MD) 8.3, "NRC Incident Investigation Program." In general, significant operational events may be investigated by special inspections that are initiated by regional administrators and use only regional personnel, augmented inspection teams that are also initiated by regional administrators, and multidisciplined incident investigation teams that are initiated by the Executive Director for Operations (EDO) and are composed of both regional and headquarters personnel. In addition, for an event of extraordinary safety significance or profound regulatory implications, an accident review group may be formed that reports directly to the Commission, as described in MD 8.9, "Accident Investigation."

Significance of Indicators and Findings (E)

Performance indicators provide an indication of the level of licensee performance within a cornerstone by monitoring selected attributes of ongoing performance. The safety significance of that performance is established by the use of thresholds. Inspection findings are individually assessed using the SDP, which also establishes the safety significance of those specific sets of conditions. The safety significance of performance indicators and inspection findings is expressed using a common color scheme. This color scheme facilitates a consistent agency response and enhances stakeholder understanding of the oversight process. (1)

Four colors are used to describe the safety significance of performance indicators and inspection findings in the oversight process. The colors are used as inputs to the action matrix, which determines the appropriate level of NRC engagement with licensees for their indicated performance. (2)

- Green indicators - very low safety significance
- White indicators - low to moderate safety significance
- Yellow indicators - substantial safety significance
- Red indicators - high safety significance

Allegations (F)

A significant cross-cutting area is licensee maintenance of a safety-conscious work environment, and NRC review of allegations is an important part of monitoring that environment. NRC's allegations program is described in MD 8.8, "Management of Allegations." Inspections may be performed to follow up on allegations to ensure that the issues are well understood and that appropriate licensee and NRC actions have been taken to address them. If appropriate, the

Allegations (F) (continued)

results of these followup inspections provide information to the assessment process, along with performance indicators and other inspection findings, and are considered for enforcement action when warranted.

Performance Assessment (G)

The performance assessment program integrates information sources relevant to licensee safety performance, principally from performance indicators and the inspection program, to enable NRC to reach objective conclusions regarding licensees' safety performance utilizing the action matrix described below. On the basis of this assessment, NRC takes an appropriate agency action and publicly communicates the results of its assessment and response. Detailed guidance for the performance assessment program is in NRC IMC 0305, "Operating Reactor Assessment Program." (1)

Licensee performance is assessed in several ways. It is evaluated continuously by the resident and regional staff through ongoing inspections and monitoring of plant activities. After each quarter, the NRC regional staff assesses plant performance using updated inspection findings and performance indicator data. The NRC regions conduct a more comprehensive review after the second quarter of the year (mid-cycle) to assist in planning inspections for the next 6-12 months. The regions also conduct an annual (end-of-cycle) review after the fourth quarter of the year to develop an annual performance summary for each plant and to plan inspections for the next 12 months. (2)

Agency Response (H)

NRC is guided in its responses to licensee performance by an action matrix (see example shown in Exhibit 3). The matrix is intended to provide consistent, predictable, understandable agency responses to

Agency Response (H) (continued)

licensee performance so that stakeholder confidence in NRC's oversight process is enhanced. The actions in the matrix are graded such that the NRC becomes more engaged as licensee performance declines, as reflected in the columns describing licensee performance. Those licensees whose performance is in the "licensee response column" receive only the baseline inspection effort. At this performance level, the performance indicators are within a nominal range, identified deficiencies are of very low safety significance, and deficiencies are consistently addressed as part of the licensee's corrective action program. (1)

Licensees move out of the licensee response column on the basis of the number of performance indicators and inspection findings that exceed the thresholds in each of the cornerstones. For example, a single performance indicator or inspection finding crossing its threshold from green to white would require the NRC to take the actions listed in the "regulatory response column" of the action matrix, which includes additional inspection to assess the licensee's efforts to determine the cause of the assessment input degradation. More significant degradation in performance would cause a licensee to be placed in the other columns, which require increasingly more significant actions. (2)

NRC conducts an annual Agency Action Review Meeting (AARM) to review NRC actions in response to licensee performance at plants that warrant agency-level oversight. Plants in this category are those that are in the "multiple/repetitive degraded cornerstone column" or the "unacceptable performance column" of the action matrix. In addition, at the AARM the NRC reviews the effectiveness of the reactor oversight process and any statistically significant adverse industry trends in safety performance. The AARM is chaired by the EDO and is held shortly after the end-of-cycle reviews. Participants include the Director of NRR, regional administrators, and senior managers from various NRC offices. Discussions on specific plant

Agency Response (H) (continued)

performance, if any, are led by the cognizant regional administrator. MD 8.14, "Agency Action Review Meeting," describes the AARM in detail. (3)

Communications With Stakeholders (I)

NRC communicates the results of its oversight process to licensees to ensure that they take appropriate actions to address performance issues. NRC also communicates the results to both NRC internal and external stakeholders to keep them informed of licensee performance and to enhance confidence that the NRC's mission is being accomplished. (1)

Communication with licensees is accomplished primarily by sending letters to each licensee that contain a summary of NRC's assessment of performance, along with NRC's plans for inspecting the facility. NRC regional offices send these letters after both the mid-cycle and the end-of-cycle reviews. Letters may be sent after the quarterly reviews if NRC determines that licensee performance warrants a change in regulatory oversight in accordance with the action matrix. The distribution list includes appropriate State and local officials, public interest groups that have expressed interest in licensee performance, appropriate NRC senior managers, and the reactor oversight program office (NRR). (2)

The regional offices reach out to stakeholders through public meetings held annually with each licensee to discuss performance. Press releases may be issued to announce these public meetings, as appropriate. The meetings are normally held soon after sending the annual performance assessment review letter. The meeting is conducted on site or in the vicinity of the site, if feasible, to provide greater accessibility to the local public and to foster a more widespread understanding of the NRC's assessment results. Licensees are given the opportunity to respond at the meeting and to

Communications With Stakeholders (I) (continued)

provide written comments, if desired. Members of the public, the press, and other Government officials, although observers at these meetings, are typically provided an opportunity to interact with the NRC representatives. (3)

To communicate more readily with all stakeholders, the NRC's Office of Public Affairs issues press releases regarding significant items of interest. In addition, the NRC staff publishes a variety of plant-level information on the NRC's Web site, including inspection reports, assessment letters, performance indicators, and inspection findings. The NRC staff also publishes industry-level information on the Web site and in various NUREGs, including NUREG-1350, "NRC Information Digest." (4)

The NRC staff reports to the Commission annually on the status of the reactor oversight process, including a list of any plants with significant performance issues, an assessment of the efficacy of the oversight process, and a summary of industry-level performance trends. The NRC staff normally briefs the Commission on the oversight process shortly after the AARM. In addition, the results of performance measures related to the oversight process are reported to Congress annually as part of the NRC's Performance and Accountability Report. (5)

Enforcement Program (J)

The purpose of the NRC enforcement program is to support the NRC's overall safety mission in protecting the public and the environment. Consistent with that purpose, enforcement actions are used as a deterrent to emphasize the importance of compliance with requirements and to encourage comprehensive correction of violations. The NRC's Enforcement Policy is contained in NUREG-1600, "NRC Enforcement Policy," and is outlined below as it applies to the reactor oversight process. (1)

Enforcement Program (J) (continued)

The NRC Enforcement Policy separates violations associated with inspection findings into two groups, depending on whether the SDP can be used to assess their significance. When possible, the SDP is used to evaluate the safety significance of inspection findings. The NRC response to assess the extent of the condition and the adequacy of the corrective actions taken is in accordance with the action matrix. Violations associated with findings evaluated as having very low safety significance (i.e., green) and that are addressed in the licensee's corrective action program are not normally cited. Violations associated with findings evaluated as having a greater significance (i.e., other than green) are normally cited in a Notice of Violation (NOV). These violations are not normally subject to civil penalties. (2)

Violations that result in actual consequences, impede the regulatory process, or involve willful acts are processed under the traditional enforcement program since the regulatory importance of these issues is not limited to the underlying technical significance of the findings. These violations are assigned a severity level and licensees are subject to civil penalties in accordance with the criteria described in the NRC Enforcement Policy. Violations processed under the traditional enforcement program may not receive direct consideration under the action matrix. (3)

Both the traditional enforcement program and the assessment program are exercised for cases in which a violation satisfies the criteria for traditional enforcement and is associated with a finding that has an underlying significance that can be processed under the SDP. Specifically, the violation would be given a severity level and would be considered for a civil penalty. In addition, the significance of the finding would be processed under the SDP and the result would be entered into the action matrix, as appropriate. (4)

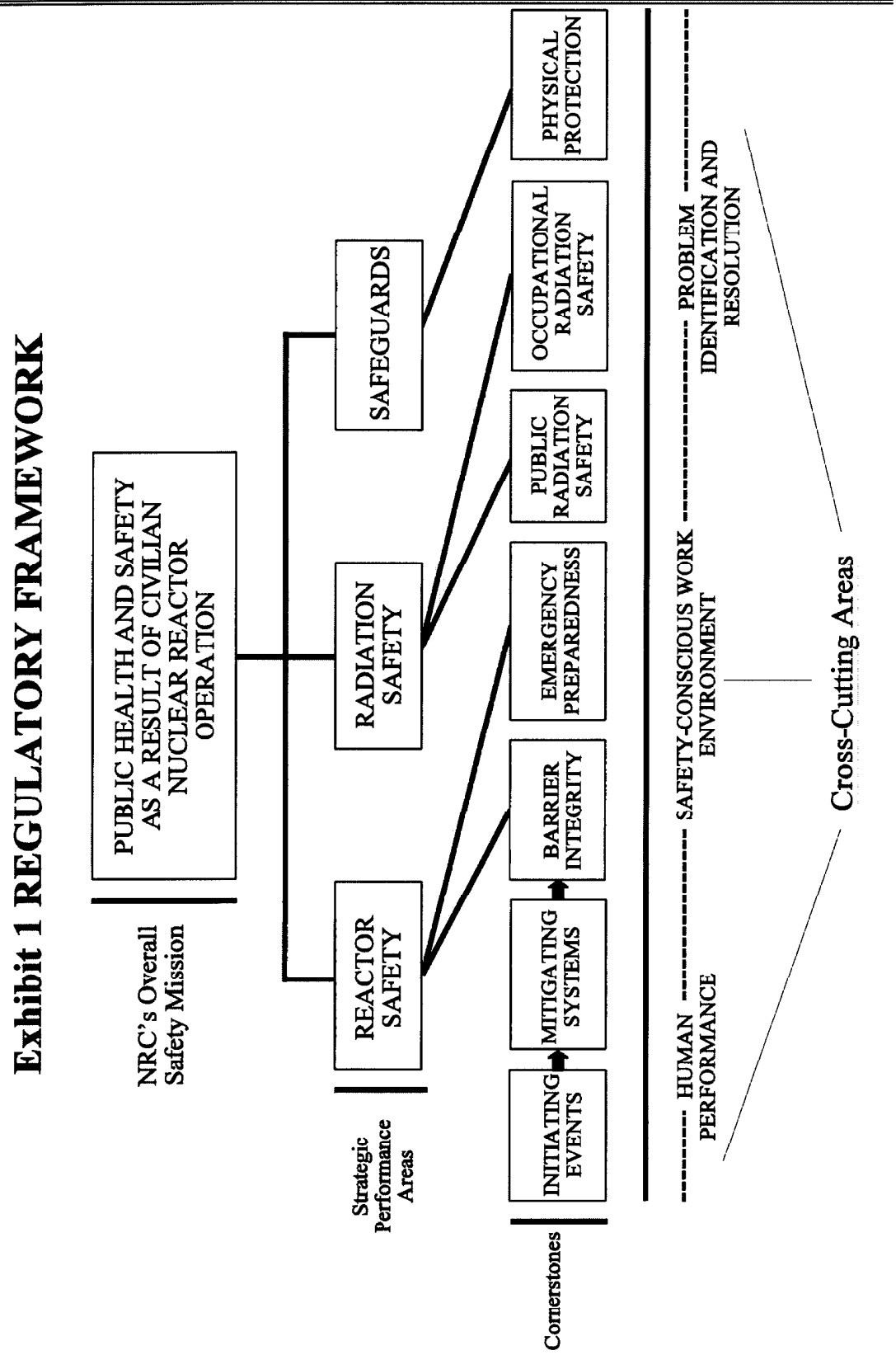
Shutdown Plants (K)

Plants with significant performance issues may shut down either voluntarily or in response to an NRC order. If a plant has multiple and/or repetitive degraded cornerstones or exhibits unacceptable performance, NRC may decide to inspect and assess the facility using the guidance in NRC IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition With Performance Problems." Oversight of the plant is then transferred from the normal reactor oversight program to the process described in IMC 0350. This process is used until the performance problems are appropriately addressed, the plant is restarted, and oversight is returned to the normal reactor oversight process.

Feedback/Self-assessment (L)

Feedback from both NRC internal and external stakeholders is considered for possible changes to the reactor oversight process. This feedback is received from a variety of inputs, including surveys, public meetings with stakeholders, internal meetings, inspections and performance indicators, reviews of operating events, and reviews of operating experience data. In addition, the reactor oversight program office (NRR) and the regions routinely conduct self-assessments of various aspects of the oversight process. Finally, industry-level indicators of plant operations are monitored to provide feedback on licensee safety performance and the efficacy of the reactor oversight process.

Exhibit 1 REGULATORY FRAMEWORK



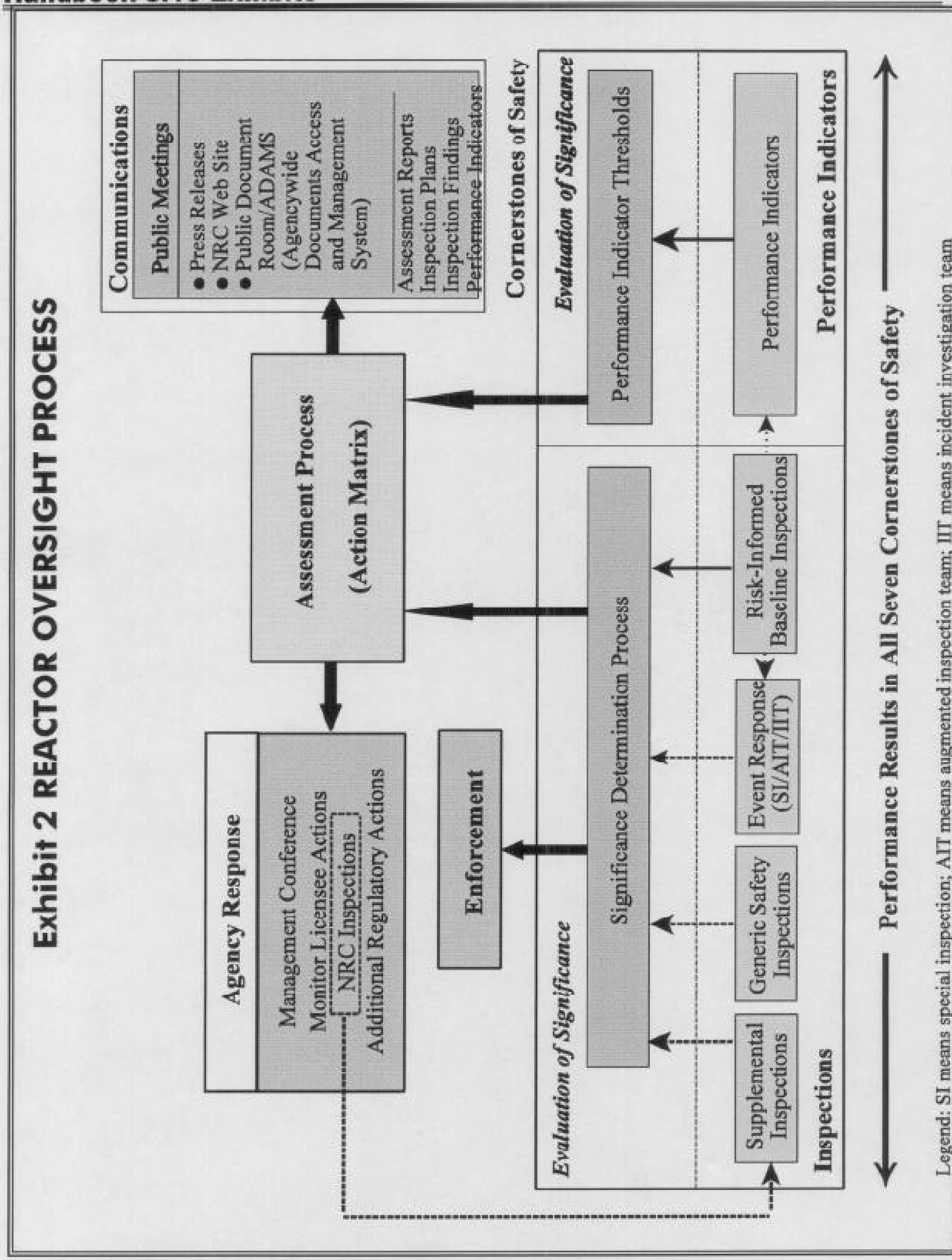


Exhibit 2 REACTOR OVERSIGHT PROCESS
Agency Response
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Monitor Licensee Actions
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Assessment Process
(Action Matrix)
Communications
Public Meetings
Press Releases
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Evaluation of Significance
Significance Determination Process
Evaluation of Significance
Performance Indicator Thresholds
Supplemental Inspections
Generic Safety Inspections
Event Response (SI/AIT/IIT)
Risk-Informed Baseline Inspections
Performance Indicators
Inspections
Performance Indicators
Performance Results in All Seven Cornerstones of Safety
Legend: SI means special inspection; AIT means augmented inspection team; IIT means incident investigation team

Exhibit 3 ACTION MATRIX

(Example only - the current version of the Action Matrix can be found in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program")

		Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
RESULTS		All assessment inputs (performance indicators (PIs) and inspection findings) green; cornerstone objectives fully met	One or two white inputs (in different cornerstones) in a strategic performance area: cornerstone objectives fully met	One degraded cornerstone (two white inputs or one yellow input) or any three white inputs in a strategic performance area; cornerstone objectives met with moderate degradation in safety margin performance	Repetitive degraded cornerstone, multiple degraded cornerstones, multiple yellow inputs, or one red input; cornerstone objectives met with longstanding issues or significant degradation in safety performance	Overall unacceptable performance; plants not permitted to operate within this band, unacceptable margin to safety
RESPONSE	Regulatory performance meeting	None	Branch chief (BC) or division director (DD) meet with licensee	DD or regional administrator (RA) meet with licensee	RA (or EDO) meet with senior licensee management	Commission meeting with senior licensee management
	Licensee action	Licensee corrective action	Licensee root cause evaluation and corrective action with NRC oversight	Licensee cumulative root cause evaluation with NRC oversight	Licensee performance improvement plan with NRC oversight	
	NRC inspection	Risk-informed baseline inspection program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003	
	Regulatory actions[1]	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI (demand for information) -10 CFR 50.54(f) letter - CAL (confirmatory action letter)/Order	Order to modify, suspend, or revoke licensed activities
COMMUNICATION	Assessment letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	
	Annual public meeting	SRI (senior resident inspector) or BC meet with licensee	BC or DD meet with licensee	RA (or designee) discuss performance with licensee	EDO discuss performance with senior licensee management	
	Commission involvement	None	None	None	Plant discussed at AARM (Agency Action Review Meeting)	Commission meeting with senior licensee management
	INCREASING SAFETY SIGNIFICANCE --------->					

Note 1: The regulatory actions for plants in the Multiple/Repetitive Degraded Cornerstone Column are not mandatory agency actions. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available.