MANUAL CHAPTER 0610*

# POWER REACTOR INSPECTION REPORTS

## Table of Contents

# INSPECTION REPORTS

## 0610-01 PURPOSE

To give guidance on content, format, and style for reports of power reactor inspections.

## 0610-02 OBJECTIVES

To ensure that inspection reports:

02.01 Clearly communicate significant inspection results to licensees, NRC staff, and the public.

02.02 Provide a basis for significance determination and enforcement action.

02.03 Present information associated with significant inspection findings in a manner that will be useful to NRC management in developing longer-term, broad assessments of licensee performance.

## 0610-03 DEFINITIONS

The following terms are applicable to the enforcement program.

Apparent violation. A potential noncompliance with a regulatory requirement (regardless of possible significance or severity level) that has not yet been formally dispositioned by the NRC.(All inspector identified violations greater than the level of an NCV are initially apparent violations).

Closed Item. A matter previously reported as a noncompliance, an inspection finding, a licensee event report, or an unresolved item, that the inspector concludes has been satisfactorily addressed based on information obtained during the current inspection.

Credible. A scenario offering reasonable grounds for being realistic (given a set of existing conditions postulating a scenario with no more than one “if”).

Cross-Cutting Issues. Cross-cutting issues are those concerns related to the areas of human performance, problem identification and resolution, and safety-conscious work environment which have the potential to affect multiple cornerstones.

Deficiency. (Applies to emergency preparedness) A demonstrated level of performance (e.g., in a drill) that could have detracted from effective implementation of the emergency plan in the event of an actual emergency.

Deviation. A licensee's failure to satisfy a written commitment, such as a commitment to conform to the provisions of applicable codes, standards, guides, or accepted industry practices when the commitment, code, standard, guide, or practice involved has not been made a requirement by the Commission.

Escalated Enforcement Action. A notice of violation or civil penalty for any Severity Level I, II, or III violation (or problem); a notice of violation associated with an inspection finding that the significance determination process characterizes as having low to moderate, or greater safety significance; or any order based upon a violation.

Finding. An issue with some significance that has been placed in context and determined either to be of sufficient significance to warrant more detailed analysis using the SDP or to have extenuating circumstances warranting its documentation in an inspection report. To be a finding, it must pass through the threshold screening process described in Appendix B, "Threshold for Documentation", in this Manual Chapter. Findings may or may not be related to regulatory requirements.

Green Finding. A finding of very low safety significance.

Independent Item. An item used to track information that does not originate in or is typically documented in an inspection report but may be used to assess plant performance such as an Office of Investigation harassment and intimidation case.

Integrated Inspection Reports. A reactor inspection report that combines inputs from several inspections (resident, regional, etc.) conducted within a specific period.

Issue. A well-defined observation or collection of observations which are of concern and may or may not result in a finding.

Minor Violation/ Finding. A violation or finding that is less significant than either a Severity Level IV violation or less significant than a finding which the significance determination process characterizes as Green (very low safety significance). Although minor violations must be corrected, they are not usually described in inspection reports.

Non-Cited Violation (NCV). A method for dispositioning a Severity Level IV violation or a violation associated with a finding that the significance determination process characterizes as Green (very low safety significance). Provided applicable criteria in the Enforcement Policy are met, such issues are documented as violations, but are not cited in notices of violation which normally require written responses from licensees.

Noncompliance. A violation (regardless of whether they are cited or not), nonconformance, or deviation.

Nonconformance. A vendor's or certificate holder's failure to meet contract requirements related to NRC activities (e.g., 10 CFR Part 50, Appendix B, Part 71, or Part 72) where the NRC has not placed requirements directly on the vendor or certificate holder.

Notice of Violation (NOV). A formal written citation in accordance with 10 CFR 2.201 that sets forth one or more violations of a legally binding regulatory requirement.

Observation. A fact; any detail noted during an inspection.

Open Item. A matter that requires further inspection or evaluation. The reason for requiring further inspection or evaluation may be that the matter has been identified as an unresolved item.

Potentially Generic Issue. An inspection finding that may have implications for other licensees, certificate holders, and vendors whose facilities or activities are of the same or similar manufacture or style.

Red finding. A finding of high safety significance.

Significance. The quality of being important: As used in this Inspection Manual Chapter (IMC), it involves the consideration of (1) actual safety consequences; (2) potential safety consequences,

including the consideration of risk information; (3) potential for impacting the NRC's ability to perform its regulatory function; and (4) any willful aspects of the violation.

Significance Determination. The characterization of the significance of an inspection finding using the significance determination process (SDP) outcome color scheme to identify the level of safety significance (i.e., Green, White, Yellow, Red).

Significance Determination Process (SDP). The process used to determine the risk or safety significance of pertinent inspection findings within the reactor oversight process.

Significant. Having or likely to have influence or effect. For example, a White issue still under review is an apparent significant issue with low to moderate safety significance.

Substantive. Involving matters of major or practical importance; considerable in amount or numbers. In this manual chapter substantive information must be placed in context relative to the inspection scope and the potential or actual safety significance.

Unresolved Item. A matter about which more information is required to determine whether the issue in question is an acceptable item, a deviation, or a violation, or for which the significance has not yet been determined: such a matter may require additional information from the licensee or cannot be resolved until additional guidance or information is obtained such as through a task interface agreement (TIA), or other policy determinations.

Violation. The failure to comply with a legally binding regulatory requirement, such as a statute, regulation, order, license condition, or technical specification.

Weakness. (Applies to emergency preparedness.) A demonstrated level of performance (e.g., in a drill) that could have precluded effective implementation of the emergency plan in the event of an actual emergency.

Willfulness. An attitude toward non-compliance with requirements that ranges from careless disregard to a deliberate intent to violate or to falsify.

White Finding. A finding of low to moderate safety significance.

Yellow Finding. A finding of substantial safety significance.

## 0610-04 RESPONSIBILITIES

All NRC inspectors are required to prepare inspection reports in accordance with the guidance provided in this inspection manual chapter. General and specific responsibilities are listed below.

04.01 General Responsibilities for Power Reactor Inspections. Each inspection of a reactor facility shall be documented in a report consisting of a cover letter, a cover page, a summary of findings, and inspection details.

04.02 Report Writing

a. Inspectors have the primary responsibility for ensuring that inspection findings are accurately reported, and that referenced material is correctly characterized. Advice, subjective opinions, and recommendations are not to be included in inspection reports.

b. Inspectors are responsible for ensuring that the content of the report does not conflict with the information presented at the exit meeting. When the report provides information that differs significantly from that presented at the exit meeting, the inspector (or the report reviewer) should discuss those differences with the licensee before the report is issued.

c. Report writers and reviewers should ensure that inspection reports follow the general format given in this chapter and displayed in the enclosed sample report (see Exhibits 1 and 2).

d. For inspections conducted by regional and resident inspectors, the report number is to be identified in the following form:

Docket No./Year - [sequential number of the report in that year] (e.g., 50-363/00-01)

For inspections conducted by NRR, or other headquarters offices, the report number is to be identified in the following form:

Docket No./Year - 2 [sequential number of the report in that year] (e.g., 50-250/00-201)

04.03 Report Review and Concurrence

a. Before issuance, each inspection report shall, as a minimum, be reviewed by a member of NRC management familiar with NRC requirements in the area inspected.

b. The report reviewer (i.e., the member of management referred to above) shall ensure that inspector findings are consistent with NRC policies and requirements and that enforcement-related issues are addressed in accordance with the NRC Enforcement Policy and the NRC Enforcement Manual.

c. The report reviewer shall ensure that assessments made in the inspection report are in accordance with the SDP.

d. Regional administrators and office directors shall establish internal procedures to provide a record of inspectors' and reviewers' concurrences. The procedures should address how to ensure continued inspector concurrence when substantive changes are made to the report as originally submitted, and how to treat disagreements that occur during the review process. As a minimum, substantial changes shall be discussed with the inspector or inspectors involved to ensure continued concurrence, and disagreements that cannot be adequately resolved shall be documented.

NOTE: The record of inspector and reviewer concurrence is maintained by the issuing office. This concurrence record is not included in the distributed version of the report.

04.04 Report Issuance. For regional inspection reports, the applicable division director or designated branch chief is responsible for the report content, tone, and overall regulatory focus. For integrated reports, the Director, Division of Reactor Projects (DRP), or the designated branch chief is responsible for issuing the report.

04.05 Report Timeliness

a. General Timeliness Guidance. Inspection reports should be issued no later than 30 calendar days after inspection completion (45 calendar days for integrated reports and major team inspections).

NOTE: For non-resident conducted inspections, inspection completion is normally defined as the day of the exit meeting. For resident inspector and integrated inspection reports, inspection completion is normally defined as the last day covered by the inspection report.

b. Reports Preceding Escalated Enforcement Actions. Timeliness goals should be accelerated for inspection reports covering potential escalated enforcement actions.

c. Expedited Reports for Significant Safety Issues. Whenever an inspector identifies issues of greater safety significance (i.e., White or higher) or a significant or immediate public health and safety concern, an expedited inspection report should be considered that is limited in scope to the specific issue. IMC 0609 allows for issues of significance to be documented on an expedited basis.

## 0610-05 GUIDANCE-INSPECTION REPORT

This section relates primarily to the details contained in the inspection report. Refer to Exhibit 2 as a general example (Note: Report details will be added to Exhibit 2 in a future revision to this IMC after experience is gained).

Although this guidance applies to all power reactor inspections, additional guidance for reports documenting supplemental inspections is found in Appendix C and in Appendix D for guidance on inspection reports associated with IP 71152, “Problem Identification and Resolution”.

Whenever possible, the Details section of routine and integrated NRC inspection reports should conform to the standard format described in this section and illustrated in the attached Exhibit 1. This standardization in format significantly enhances consistency, readability, and information retrieval, which in turn increases efficiency and improves the ability to integrate inspection results. Exceptions include major team inspection reports, augmented inspection team (AIT) and special inspection reports, supplemental inspections, and other cases where the specifically directed focus of the inspection does not easily fit into the baseline inspection program and subtopics given in the standardized report outline. In these cases and in the cover letters of inspection reports where a standard format is not readily applied, the most important subject should be identified first, followed by a discussion of major topics identified in descending order of significance.

Guidance and cover letter format for enforcement issues vary. Guidance and sample cover letters are found in the Enforcement Manual, Appendix B, “Standard Formats for Enforcement Packages.” The following guidelines apply to what should be documented in the cover letter, the summary of findings, and the details of the report.

(1) Findings and violations whose significance is known are to be discussed in the report details, summary of findings, and in the cover letter. The significance is either a color as defined by the SDP evaluation, no color or a severity level for non-SDP violations. If the finding is other than Green, the significance evaluation paragraph should state that “the significance of this item is preliminarily (White or Yellow or Red).

(2) Findings (including violations) whose final significance is not yet determined but is known to be at least Green, are considered unresolved items and should be discussed in the report

details, summary of findings, and in the cover letter. The significance is entered in the summary of findings as "TBD" as a lead in color.

(3) Findings whose significance is known from the SDP to be at least Green but the compliance aspect has not yet been determined are considered unresolved items and should be discussed in the report details, summary of findings, and in the cover letter. The significance is the SDP evaluation color or TBD. Additional action may be required to (1) determine whether a non-compliance exist, (2) to update the Plant Issues Matrix (PIM) and, (3) take other associated actions for findings greater than Green.

(4) Unresolved items whose significance has not been evaluated by the SDP should be documented in the report, but not documented in the summary of findings or mentioned in the cover letter. These items are identified as unresolved items (URIs) in the report.

(5) Independent Items are used to track items/information from sources other than inspections (e.g., final SDP letters, OI discrimination letters). They should be documented under 4OA5, "Other."

05.01 Cover Letter. Three example cover letters for reports with (1) no findings,(2) White findings, and (3) Green findings with NRC identified NCVs are provided with the example routine report.

Inspection reports are transmitted using a cover letter from the applicable NRC official (branch chief, division director, or regional administrator) to the designated licensee executive. Cover letter content varies somewhat depending on whether or not the inspection identified noncompliances. In general, however, every cover letter has the same basic structure.

a. Addresses, Date, and Salutation. At the top of the first page, the cover letter begins with the NRC seal and address, followed by the date on which the report cover letter is signed and the report issued.

   For cover letters transmitting reports with issues assigned an enforcement action (EA) number, the EA number should be placed in the upper left-hand corner above the principal addressee's name.

   The name and title of the principal addressee are placed at least four lines below the letterhead, followed by the licensee's name and address. Note that the salutation is placed after the subject line.

b. Subject Line. The subject line of the letter should state the plant name (e.g.,"DIRJAC Generating Station- NRC INSPECTION REPORT") followed by the report number. The words "NOTICE OF VIOLATION" (or "NOTICE OF DEVIATION," etc.) should be included if such a notice is accompanying the inspection report.

c. Introductory Paragraphs. The first two paragraphs of the letter should give a brief introduction.

d. Body of the Letter. In keeping with the "Plain English Initiatives" which implements the requirements of SECY-99-070 "Implementation Plan for the Public Communications Initiative (DSI-14), the most important topics should be discussed first. White findings or above, for which the issuance of a notice of violation is being considered, should be briefly discussed in the order of their significance. The appropriate wording for issues that are also violations of requirements is included in the Enforcement Manual (under Guidance

Documents). If Non-Cited Violations were identified, the report should state that these items were not cited due to their very low safety significance and because they have been entered into the licensee's corrective action system. If Green findings, other than violations, were identified, including unresolved items which have been evaluated by the SDP, the report should state: " There were [the number] findings of very low safety significance (Green) identified in the report;" without further elaboration. If there are no findings in the inspection report, the final statement in this paragraph should state: "Based on the results of this inspection no findings of significance were identified."

e. Closing. The final paragraph consists of standard legal language that varies based on whether or not enforcement action is involved, (See example cover letters in Exhibit 2).

The signature of the appropriate NRC official is followed by the docket number(s), license number(s), and lists of enclosures and distribution.

05.02 Cover Page. The report cover page gives a quick-glance summary of information about the inspection (see Exhibit 2). It contains the dates of inspection, the report number, the names and titles of participating inspectors, and the name and title of the approving NRC manager.

05.03 Summary of Findings. The summary should be informative but concise. The inspection report summary is an overview of the significant inspection findings. It also provides the text for entries to the PIM and Agency Document Access and Management System (ADAMS). The first paragraph is an input into the NRC ADAMS template to improve public access to inspection reports.

a. ADAMS Template. The first paragraph of the summary of findings is used in the title value field of the ADAMS template NRC-002 as a report summary. The paragraph must be cryptic, without the use of extraneous words or articles, and include in the following order: (1) the inspection report number (note the format in example EX2); (2) the dates of the inspection; (3) the name of the utility; (4) the name of the site; and (5) the titles only of the inspection procedures or attachments in which findings were identified (e.g, equipment alignment, fire protection, operability evaluations.) If no findings were identified, then the general inspection area should be listed (e.g, radiation specialist report, or resident inspector report, or environmental report.) This information must be a concise, single paragraph because the field in the ADAMS template is limited to 256 characters.

For non-routine inspections, the same format should be followed for identifying the report number, utility and unit names, and dates of inspection. These are followed by the title of the inspection and a list of findings. (See Appendix C and D for examples).

b. Summary Paragraph. A paragraph following the ADAMS template paragraph describes who conducted the inspection (i.e., resident or specialist inspectors), the number of findings and violations, and a statement that the significance of most (or all) findings described in the report was determined using the significance determination process.

c. Findings. The body of the summary of findings should be compiled by reviewing each report section and writing a summary of each finding, noncompliance, unresolved item, or apparent violation. All findings except licensee identified NCVs or green findings and those that could result in an acceptable conclusion should be included in the summary of findings. Specific requirements violated should also be cited.

Each finding's summary begins with the significance color (using TBD for those findings whose significance has not yet been determined) or No Color for non-SDP findings. This

indication of safety significance is followed by one paragraph that briefly describes the finding, followed by a second paragraph that briefly describes the regulatory nexus or safety evaluation of the finding. If the finding has no color, the second paragraph should describe why the finding is considered to be significant.

The findings summaries are listed by cornerstones in the order specified in Exhibit 1. Cross-cutting issues are documented as described in Section 06.02. SDP analyzed findings that have a crosscutting element as a causal factor are summarized under the appropriate cornerstone heading. Significant trends in cross cutting areas (based on multiple findings) that are determined to be separate findings are summarized under Section 4OA4.

Inspectors should ensure that the text of the summaries is consistent with the details and that each summary ends with a reference to the section of the report details where the finding is discussed.

d. Plant Issues Matrix (PIM). The PIM is a consolidated listing of plant issues (i.e., inspection findings) in the Reactor Program System (RPS) that are used by the NRC to assess plant performance. All the entries in the summary of findings are transferred directly to the RPS and designated for the PIM, except for the color of the finding and the reference to the report details paragraph. Although the RPS and PIM are not directly a part of the inspection report, instructions are included here to help inspectors identify during the inspection the information required for the PIM.

The PIM shall be updated within 14 days after the date of the report and shall include the following information: type, title, cornerstone, significance determination, date, who identified the finding (NRC or licensee), item description and significance description, and source document (normally expected to be the inspection report number). Data will be entered into the PIM via the Reactor Program System/Item Reporting (RPS/IR) module. Detailed guidance on entering and updating PIM entries using RPS/IR will be included in a future IMC titled “Information Technology Support.”

The information from the summary of findings and licensee identified NCVs from section 4OA7 as appropriate shall be transferred to the PIM as written with only minor editorial changes. PIM entries may be changed; however, only information contained in the body of the report shall be used. Care should be taken to ensure that new or undocketed information is not inadvertently introduced into the PIM. Any changes to the facts stated in a PIM entry shall be included within brackets [ ] to clearly show the editing. If the meaning of a PIM entry is confusing after the inspection report is issued, the PIM may be edited to clarify the finding and to improve the reader’s understanding of the issue. Brackets are not necessary for edits that only clarify a PIM entry.

Issues whose significance is known are entered in the PIM with the applicable type code of finding (FIN), violation (VIO), or Non-Cited Violation(NCV). The color of the finding (for SDP issues) or the severity level of the violation (for non-SDP issues) is entered in the significance field. The appropriate cornerstone is designated.

Issues initially categorized as having a potential safety significance of greater than very low significance (i.e., potentially other than Green), but whose significance has not yet been made final, should be categorized in the RPS significance field as TBD. The type code should be FIN (or AV for apparent violation, if applicable), and the appropriate cornerstone entered into the cornerstone field. After the risk is finally determined by the SDP oversight panel following a regulatory conference (if held) and a letter with that

determination is sent to the licensee, the RPS significance field is changed from TBD to the appropriate color. Similarly, after a final enforcement decision is made for issues initially categorized as apparent violations, the type code is changed from AV to VIO. In both cases, text should be added to the original PIM entry that describes the final SDP conclusion and enforcement actions with references to the docketed correspondence.

Unresolved items (URIs) There are various types of URIs, however each is documented in an inspection report, and assigned a tracking number. See Section 0610-05 (2) (3) and (4). If either the significance is known or the compliance aspect is known, they are also entered into RPS. For those that have not been evaluated by the SDP the significance field in RPS for the URI is TBD. the item may be marked for entry into the PIM at a later date, it is not considered in the assessment process. The PIM entry should be made once the issue is resolved and the resolution is documented in an inspection report or other docketed correspondence.

Independent items are used to track items or information from sources other than inspection reports, such as final SDP letters and OI discrimination letters, or to track items given to another organization to follow up. To enter independent items, they must be referenced in an inspection report and entered into RPS through RPS/IR. They are documented in Section 4OA5, "Other," of the next resident inspection report. For SDP issues, the original PIM entry is updated to reflect the disposition described in the final SDP letter. The text added to the PIM entry describes the final SDP conclusion and any enforcement actions, and references the docketed final SDP letter. The RPS significance field for the PIM entry is changed from TBD to G/W/Y/R, as appropriate, and the RPS type code is changed to the appropriate type if applicable (for example from AV to VIO).

Issues related to problem identification and resolution (PI&R) that are identified during routine baseline inspections and documented in inspection reports are in the PIM as part of the RPS entry for the associated inspection finding. Conclusions made on PI&R effectiveness resulting from these routine inspections are not included in the PIM, except to the extent they are associated with an individual inspection finding or contribute to a significant cross-cutting issue as described in Section 06.02 of this manual chapter. However, a summary conclusion regarding the effectiveness of the PI&R program resulting from the annual PI&R inspection (IP 71152) is entered into the PIM with Miscellaneous in the cornerstone field and N/A in the significance field.

Issues from verifying performance indicators (PIs) are entered in the PIM only if correcting the data causes or would cause the PI to cross a threshold. They are documented in the PIM under Miscellaneous in the cornerstone field, VIO or NCV in the type field, and the severity level of the violation in the significance field. Each PI verification issue is a separate PIM entry. Neutral or positive PI verification issues, or issues where the correction of the PI data does not cause the PI to cross a threshold, are not designated for the PIM.

A paragraph summarizing the results of a supplemental inspection of a White, Yellow or Red inspection finding is added to the PIM entry for the original inspection finding. A paragraph summarizing the results of a supplemental inspection performed to address a White, Yellow or Red performance indicator is designated for the PIM under the cornerstone associated with the performance indicator. In general, no color will be assigned to either of these PIM entries, unless a new SDP characterized issue was found during the supplemental inspection.

05.04 Table of Contents. For reports which are considered complicated or are of significant length (i.e., the Report Details section is more than 20 pages long), the writer should include a table of contents as an aid to clarity.

05.05 Report Arrangement. The standardized report outline is provided as Exhibit 1 to this manual chapter. Inspection reports may begin with a Summary of Plant Status section. The section briefly describes pertinent operational issues such as any plant shutdowns or significant changes in power. For specialist inspections, this summary is not needed (e.g., plant operating status may or may not be relevant to a safeguards or emergency preparedness inspection). The report details should be topically arranged in accordance with the standardized report outline. This does not mean that each outline topic should be covered in each report. To the extent that inspection is performed in a particular area (e.g., inspection of "gaseous and liquid effluents"), the resulting findings should be placed in the corresponding standard section of the report (e.g., in 2PS1 of the standardized outline in Exhibit 1).

> NOTE: For events the discussion of the entire event should be included under 4OA3 Event Follow-up. However, situations may arise where circumstances surrounding an event or related issues are documented in an another cornerstone area. In this case the event description should be referenced under section 4OA3. For example:
>
> "4OA3 Event Follow-up
>
> .1 Section 2PS1 describes the circumstances and licensee actions regarding a release of gaseous effluents which exceeded 10 CFR Part 20 limits."

05.06 Report Details. The overall organization of each report section should follow the same basic progression of inspectable area, optional title, scope, and findings, as will be shown in the attached sample report (Exhibit 2).

a. Inspection Scope. This section includes a list of items or activities inspected in sufficient detail to inform the reader of what was inspected and what criteria were used to determine the acceptability of what was inspected. The scope should be derived from the inspection objectives and requirements sections from the applicable inspection procedure. Generally, inspection criteria include requirements, codes, industry standards and licensee administrative procedures or drawings (or in some cases the inspection procedure).

   In cases where there are "no significant findings," additional detail should be provided to inform the reader of the methods of inspection as well as objectives and criteria used. Typical methods are a walk down, an in office review, observation of test from the control room, or participation in an exercise.

b. Findings. This portion of each inspectable area of the report is used to document the inspection results. Within each inspectable area the report should discuss the most important finding first. If the inspector identifies no findings during an inspection (other than minor issues), then in the corresponding section of the report, under Findings the inspector should enter "No findings of significance were identified." Minor issues, which may have been identified and discussed with the licensee, and licensee identified Green findings are normally not documented except as noted in 06.03.b.

   When findings are identified, the first sentence or two of this section provides the results of the inspection in the area. This introductory sentence is briefer than the summary of

findings and does not need to stand alone because the discussion that will follow will provide the supporting details.

The next paragraph should provide the description of the finding. The description may consist of several paragraphs depending on the significance and complexity of the finding. This section is to be followed by a significance evaluation paragraph that describes the logic for entering the SDP. That is, it answers the pertinent group 1, 2, or 3 "thresholds for documentation" questions found in Appendix B of this manual chapter. For example:

> "This finding, if left uncorrected, would become a more significant concern and could cause an increase in the frequency of an initiating event because...."

The example above answers the group 1 question that helped the inspector determine that the finding was more than minor, and the group 2 question that helped the inspector determine that the issue affected a cornerstone. If applicable, a group 3 question would be answered to help determine if the finding had extenuating circumstances. This paragraph should also discuss the results of the significance determination.

The concluding paragraph states any associated enforcement actions and references the requirements violated. The paragraph gives the licensee's corrective action program number for the issue to aid the NRC in locating the licensee's corrective action during a later inspection. The enforcement action must be consistent with the preceding significance determination. For example:

> "This finding did have a credible impact on safety; however, since only the initiating event cornerstone is affected and associated assumptions have no other impact than slightly increasing the likelihood of an uncomplicated reactor trip, the finding is considered to be of very low safety significance (Green). The inspectors also determined that, at the time of the event, procedure DOP 512 was not appropriate to the circumstances, constituting a violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures." However because of the very low safety significance of the item and because the licensee has included this item in their corrective action program (CAP ref. Xxx-xx-2000), this procedure violation is being treated as a Non-Cited Violation (NCV XXX/99007-02)."

For White, Yellow or Red findings the report details present the assumptions supporting an SDP determination, including pertinent issues such as duration, mitigation capabilities, accident scenarios, and worst-case safety significance. Clearly indicate in discussions of accident scenarios and worst-case safety significance if the condition actually occurred or could have credibly occurred. The following guidance applies to providing the appropriate level of detail for documenting complex Green findings or White, Yellow or Red findings.

1. The degree of actual or potential safety consequence associated with a finding should be a primary consideration in determining the level of appropriate detail. Items of potential significance (issues assessed using the reactor SDP phase 2 or similar issues) merit more discussion.

2. Findings likely to have generic concerns should include details such as manufacturer's model number for components, specifications, and other technical data that identifies the item of concern.

3. Findings related to cross-cutting areas must be related to other previously identified or contemporaneous findings that have been analyzed using the SDP. Cross-cutting issues should be discussed in sufficient detail to communicate the nexus or causal relationship to the other findings.

4. If an inspector determines that a finding has added significance based on risk, that perspective should be explained. For example, if the inspector finds that two components with reliability problems are related by a dominant event sequence, that relationship should be explained.

5. Positive issues should not be documented. However, when describing all the information needed to properly perform an SDP evaluation, those licensee actions that mitigate a potential problem should be supported by the appropriate description of positive licensee performance that influenced the significance of the finding.

6. When documenting an unresolved item, the issue description should provide enough background information that a different inspector, using that information, would be able to perform the follow-up inspection.

7. If an issue found during an inspection is to be referred to OI, the inspection report should not lead a reader to conclude or infer that an OI investigation is possible. For issues referred to OI, the report should contain only relevant factual information collected during the inspection. The referral to OI is made by correspondence separate from the inspection report and includes any additional information needed to support the referral. Any reports containing material that may be related to an on-going investigation should be reviewed by OI before it is issued. An internal record of OI concurrence according to Section 04.03(d) is retained.

Uncomplicated Green findings should be succinctly described in less than a page. Complex Green issues should be described in no more than 2 pages. More significant findings may need more documentation because of their complexity and significance.

05.07 Exit Meeting Summary. The final section of each reactor inspection report briefly summarizes the exit meeting. It identifies the licensee manager who attended the meeting, which is also described in the first paragraph of the cover letter. This summary normally includes the following information:

a. Absence of Proprietary Information. At the exit meeting, the inspectors should verify whether or not the licensee considers any materials provided to or reviewed by the inspectors to be proprietary.

NOTE: When an inspection is likely to involve proprietary information (i.e., based on the technical area or other considerations of inspection scope), the topic of how to handle such information should be discussed at the entrance meeting).

If the licensee does not identify any material as proprietary, the exit meeting summary should include a sentence to that effect (see Inspection Manual Chapter (IMC) 0611 on actions to take if the report includes proprietary material). Will be incorporated into Exhibit 2 Section 4AO6.

b. Subsequent Contacts or Changes in NRC Position. The inspector should briefly discuss any contact with the licensee management after the exit meeting to discuss new information relevant to an inspection finding. In addition, if the NRC's position on an inspection finding changed after the exit meeting, that change should be discussed with the licensee before the report is issued.

The following information normally is not included in the exit meeting summary.

c. Characterization of Licensee Response. In general, the report should not characterize a licensee's exit meeting response. If the licensee disagrees with the inspector's finding, this position may be characterized by the licensee in their formal response to the inspection report, if applicable. Specific items discussed elsewhere in the report should not be described in this section in detail.

d. Oral Statements and Regulatory Commitments. If, at the exit meeting or at any other time during the inspection, the licensee makes an oral statement that it will take a specific action, the report should not attempt to characterize that statement nor should this be interpreted as a commitment. Should the licensee wish to make a commitment, the commitment should be documented by licensee correspondence, after which the inspector may reference the correspondence in the inspection report. Oral statements made or endorsed by a member of licensee management authorized to make commitments are not regulatory commitments unless they are documented by the licensee as such. For further guidance on licensee commitments, see ADAMS Accession Nos. ML003680088 (NEI 99-04), ML003680078 (NEI Cover Letter), and ML003679799 (SECY 00-045 endorsing NEI 99-04 guidance).

Because regulatory commitments are a sensitive area, the inspector should ensure that any reporting of such a licensee-documented statement is paraphrased accurately, and contains appropriate reference to the licensee's document.

05.08 Report Attachments. The attachments discussed below are included at the end of the inspection report if applicable to the inspection. The attachments may be combined into a single attachment titled "Supplementary Information."

a. Key Points of Contact. The inspector lists, by name and title, those individuals who furnished relevant information or were key points of contact during the inspection (except in cases where there is a need to protect the identity of an individual). The list should not be exhaustive: a list of 5–10 individuals is sufficient. The alphabetized list includes the most senior licensee manager present at the exit meeting and NRC technical personnel who were involved in the inspection if they were not listed as inspectors on the cover page.

b. List of Items Opened, Closed, and Discussed. The report should provide a quick-reference list of items opened and closed, including the item type, the tracking number for the item, and a brief phrase matching the title used in PIM headers describing the item. Open items that were discussed (but not closed) should also be included in this list, along with a reference to the sections in the report in which the items were discussed. Will incorporate into the sample list included with Exhibit 2.

c. List of Documents Reviewed. A listing of the documents and records reviewed during an inspection is to be publicly available. Therefore, if a listing is not otherwise made public, the report should include a listing of all the documents and records reviewed during the inspection that are not identified in the body of the report. (Reference IMC 0620 Inspection Documents and Records). "Reviewed" in this context means to examine

critically or deliberately. The list does not include records that were only superficially reviewed.

d. List of Acronyms. Reports whose details section exceeds 20 pages in length must include a list of acronyms as an attachment. For reports in which a relatively small number of acronyms have been used, the list is optional. In all cases, however, acronyms should be clearly defined when first used in inspection report text.

05.09 Release and Disclosure of Inspection Reports

a. General Public Disclosure and Exemptions. Except for report enclosures containing exempt information, all final inspection reports will be routinely disclosed to the public. IMC 0611, "Review and Distribution of Inspection Reports," describes the various types of exempt information. IMC 0620, "Inspection Documents and Records," gives guidance on acquiring and controlling NRC records, including inspection-related documents.

b. Release of Investigation-Related Information. When an inspector accompanies an investigator on an investigation, the inspector must not release either the investigation report or his or her individual input to the investigation report. This information is exempt from disclosure as required by 10 CFR 9.5, and must not be circulated outside the NRC without specific approval of the Chairman (refer to OI Policy Statement 23).

0610-06 GUIDANCE OTHER

06.01 Thresholds of Significance. This section gives guidance on how to determine if violations and issues rise to a level of significance that warrant documentation, and on when and how to document findings related to cross-cutting issues.

Two paths lead to documenting findings or violations. One path processes an issue through the SDP and ends in a finding with a color designating an associated safety significance. For example:

> A maintenance rule issue about unreliability and unavailability of a high pressure safety injection (HPSI) pump, which affects the functionality of a mitigating system would have its risk characterized by being evaluated by the SDP, after which the issue becomes a finding and is assigned a color to characterize the safety significance.

The second path addresses issues that either (1) are of more than minor significance but are not related to a cornerstone, or (2) are minor issues with extenuating circumstances. If this path is more suitable to the issue, the issue becomes a finding without an assigned color, and the safety significance is related to with the severity levels in the NRC Enforcement Manual. For example:

> A maintenance rule issue regarding failure to perform the annual/refueling evaluation pursuant to 50.65 (a)(3), and failed to have several risk significance systems within scope of the rule would not be suitable for the SDP. However, this would likely be a no color Severity Level IV violation and processed in accordance with the NRC Enforcement Manual.

Each path asks a final question: “Is the finding a violation?” If the finding was assessed using the SDP and is a violation, then it has a color defining the safety significance associated with it. If the finding resulted from being an extenuating circumstance and is a violation, it has no color and its

significance is designated by the severity level using the Enforcement Policy. In either case the issue is documented.

The documenting screening process (Appendix B) uses three sets of screening questions and a flow diagram. The questions are intended to (1) assure all significant issues are documented, and (2) increase the consistency of issues NRC inspectors document. Inspectors should use Appendix B Figure 1 and group 1,2 and 3 questions in determining whether an issue should be documented in an inspection report. The decision points in this process are discussed in detail below:

a. Issues. The inspector identifies a concern believed to constitute an issue. The inspector must then determine whether the issue warrants further analysis by the SDP or whether the issue is minor.

b. Minor Issue/Violation (Group 1 Questions). The inspector uses Appendix B group 1 questions to determine if an issue can be considered minor. If, after considering group 1 questions, the inspector cannot decide if the issue is minor or not, the inspector should refer to the NRC Office of Enforcement (OE) "Guidance for Classifying Violations as Minor Violations," for additional guidance. This document is on the OE's WEB-page under Guidance Documents, Appendix A, and Index, "Guidance for Classifying Violations as Minor Violations." If the finding does not have more than minor significance, it should not be documented.

   If the answer to any group 1 question is "Yes", the issue is considered to be more than minor. The inspector should then determine if the issue affects a cornerstone by asking Appendix B group 2 questions. If the answer to all the group 1 questions is "No", the issue can be considered minor. However, the inspector should also review the group 3 questions to determine whether the issue has extenuating circumstances which may warrant documenting the issue.

   Documenting a minor violation may be necessary in several circumstances such as (1) closing a licensee event report, or (2) information relates directly to an issue of agency-wide concern (e.g., in documenting the results of an NRC temporary instruction). If the inspector determines that it is necessary to document a minor issue which is also a violation, then the inspector documents it as a minor violation and references Section IV of the NRC Enforcement Policy, NUREG-1600, such as: "Although this issue should be corrected, it constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC's Enforcement Policy." Minor violations are not included in the Summary of Findings or the cover letter and are not given a tracking number.

c. Issues Affecting Cornerstones (Group 2 Questions). The SDP evaluates safety significance and assign colors to those issues which affect a cornerstone. Appendix B group 2 questions should be used to determine whether an issue affects a cornerstone.

   If the answer to any group 2 question is "yes", the issue should be analyzed using the SDP process, documented in the inspection report and assigned a color. If the answers to all group 2 questions are "no" then the inspector should determine whether there are extenuating circumstances by reviewing group 3 questions which may then merit documenting the issue.

d. Extenuating Circumstances (Group 3 Questions). If an issue is either minor, or more than minor and does not affect a cornerstone, there should be extenuating circumstances associated with the issue in order for it to be documented. Appendix B group 3 questions

should be used to determine whether an issue has extenuating circumstances. If all the answers to the group 3 questions are "No", the issue does not have extenuating circumstances and should not be documented. If the answer to any group 3 question is "yes", the issue should be documented as a finding or as a violation. Since the issue/violation did not go through the SDP, a color associated with its safety significance cannot be assigned. All violations greater than minor not assessed using the SDP will be assessed through the enforcement policy for assignment of a severity level.

e. SDP Analysis. All NRC identified findings or violations that have greater than minor significance and are related to a cornerstone, should be documented with a safety significance color assigned to them after evaluation by the SDP.

f. Violations. The SDP assigns findings a safety significance color whether it is a violation or not. All documented violations, either with or without a color, are dispositioned according to the requirements in the Enforcement Policy. Note: Violations that were identified by the licensee, have been previously entered into their corrective action system, and are of very low significance or meet the criteria of Section IV of the Enforcement Policy should not be documented in the cover letter or the summary but should be listed in section 4OA7.

06.02 Issues Related to Cross-Cutting Areas

a. Single Findings. When a finding is evaluated as being more than minor and the cause of the finding is related to one of the three cross-cutting areas of Problem Identification and Resolution, Human Performance, or Establishment of a Safety Conscious Work Environment, the cross-cutting nature of the finding should be described in the inspection report. Pertinent cross-cutting aspects of the finding should be documented along with the inspector's description of the SDP evaluated finding as a contributing or direct cause of the finding, as appropriate. The significance of the finding is determined by the SDP. Inspectors should ensure that the cross-cutting aspects are highlighted in the inspection report description and the summary of findings. Such issues that are related to the cross-cutting area of Problem Identification and Resolution should also be captured in Section 4OA2 of the report to aid in the integration of PI & R issues during the annual IP 71152 inspection. Issues that are associated with a finding that filters out as minor after being subjected to the analysis of group 1 and group 3 questions should not be documented.

b. Multiple Findings. Multiple findings that have a common cause associated with one of the three cross-cutting areas should be first identified as individual findings based on the SDP evaluation. Then, the inspector may consider the accumulation of these findings to constitute a significant cross-cutting issue. The following guidance applies to documenting significant cross-cutting issues that are associated with multiple findings:

(1) Each of the individual findings with which the cross-cutting issue is related must have greater than minor significance.

(2) The cross-cutting issue must have been documented as part of a number of individual findings in either the current or previously issued in the past 12 months reports (sections and previous report numbers must be referenced) and should be associated with more than one cornerstone.

(3) Multiple findings that indicate performance trends or patterns of a significant cross-cutting nature should be documented under either Section 4OA4 or 4OA2. The causally linked relationships of each of the findings and the potential safety impact

of the combined affect within the applicable cross-cutting area should be addressed. The results of this effect will be considered a "finding." For example:

"A performance trend appears to be developing in several cornerstone areas with maintenance errors being the common element. Where as; (1) nine months prior to this inspection maintenance personnel improperly installed a bearing during the refurbishment of the containment spray pump causing the pump to be inoperable (NCV 50-000/00-09-06), (2) six months ago maintenance personnel caused a plant trip during the calibration of the pressurizer pressure transmitter, (finding (50-000/00-12-02), (3) 2 months ago maintenance personnel misaligned the HPSI pump causing its inoperability (NCV 50-000/00-13-04), and (4) during this reporting period maintenance personnel caused a spurious actuation of the safety injection while trouble shooting an emergency diesel generator problem (finding 50-000/00-14-01). The causal relationships of these errors was that some of the maintenance was performed by unqualified technicians. The inspector noted that maintenance staffing on the back shifts was reduced at the completion of the last refueling outage ten months ago which may have contributed to this apparent trend". These individual findings each have had a direct impact on safety, increasing the frequency of initiating events and affecting the reliability, operability and functionality of a train of mitigating equipment. This performance trend is considered a substantive cross-cutting issue not captured in individual issues indicating a performance trend, and is a finding 50-000/00-15-04 characterized as "no color".

Emphasis should be placed on any significant trends or patterns which may be emerging in the different cross-cutting areas. These trends or patterns should be highlighted in the summary of findings. Only a succinct reiteration of the common theme is necessary. The finding should then be carried forward in the PIM and coded as "Miscellaneous" vice a specific cornerstone and the significance should be "not applicable."

c. Programmatic Issues within Cross-cutting Areas. Many of the licensee's programs related to maintaining the condition and operability of System Structures and Components (SSCs) are in effect, elements of the licensee's problem identification and resolution program. Therefore, when assessing the impact of Maintenance Rule or other programmatic deficiencies, the finding must include consideration of any equipment failures that were impacted by the deficient programmatic area. The significance of the finding, including the programmatic deficiency is determined by the impact of the equipment failures within the applicable cornerstone. If the programmatic deficiency has no impact on a cornerstone it cannot be assessed using the SDP and therefore, if greater that minor, would be subject to the group three questions and could result in a "No Color" finding. However, these findings should be carefully scrutinized for being potentially minor.

06.03 Documenting Noncompliances. The primary guidance for all matters related to enforcement, including documentation, is in the NRC Enforcement Policy (NUREG-1600) and in Section 3.12 of the NRC Enforcement Manual (NUREG/BR-0195).

The guidance in the Enforcement Policy and Manual applies to issues found or reviewed during inspections that are also violations of regulatory requirements. The SDP will be used, where applicable, for making the determination of significance. Issues that are not evaluated under the significance determination process and those that should be considered for civil penalties will be processed in accordance with the Enforcement Policy. Such issues are typically situations with actual safety consequences (such as an overexposure to the public or plant personnel or a substantial release of radioactive material) or are violations related to willfulness or to impeding the

regulatory process (such as violations of reporting requirements). See Section 3.5 of the Enforcement Manual.

a. Specific Enforcement Related Guidance. Findings that are minor violations should not be documented but should be discussed with the licensee during the exit meeting following the inspection if not previously discussed. For additional guidance on minor violations refer to Section IV of the NRC Enforcement Policy, NUREG-1600, "Guidance for Classifying Violations as Minor Violations."

1. Violations that are identified by the NRC and have subsequently been incorporated into the licensee's corrective action program which are determined to be of very low safety significance or are categorized as Severity Level IV will normally be treated as Non-Cited Violations (NCVs) in accordance with the Enforcement Policy. Notices of violations (NOVs) are issued if the violation meets any one of the applicable criteria in Section VI.A of the Enforcement Policy.

   The discussion in the body of the report should include sufficient information to support the conclusion that the issue is more than minor and is a violation of regulatory requirements (regardless of whether the issue will be dispositioned as an NCV or an NOV). At a minimum the report should state:

   - what requirement was violated
   - how the violation occurred
   - when the violation occurred, and how long it existed
   - when the violation was identified
   - any actual or potential safety consequence
   - the root cause (if identified)
   - all information required to complete the SDP
   - what corrective actions have been taken or planned. (For licensees with adequate corrective action programs, it is acceptable to only verify that the licensee has entered the issue in its corrective action program for issues that are of very low significance (Green)).

   A conclusion that the violation will or will not be cited should be documented in the details section of the report. See the language in the Enforcement Manual.

2. For issues that are determined to have more than very low safety significance (i.e., White, Yellow, or Red), in addition to the guidance contained in 05.06.b, should include the following if available at the time of documentation:

   - The assumptions used by the inspector or regional Senior Reactor Analyst (SRA) in determining the finding's significance.

   - The significance attributed to the finding by the licensee and, if different than the NRC's determination, a description of the assumptions used by the licensee, and what the licensee considered applicable to its determination that was different from the NRC's.

   - Pertinent accident sequences and mitigating capabilities.

   - Actions the licensee has taken or plans to take to correct the condition and underlying root cause(s), including the appropriate condition report used to enter the issue into the licensee's corrective action program.

- The licensee's position on the NRC's determination that a requirement has been violated, if so determined.

  The final significance determination will be documented, the issue entered into the Plant Issues Matrix (PIM), and the associated enforcement action will be taken based on the significance. If the finding is Green, a Violation should be documented in an inspection report, and if the finding is White, Yellow, or Red, a notice of violation will be issued in accordance with the Enforcement Policy.

3. Some issues may have a preliminary significance of greater than Green, for which the safety characterization may not have been finalized at the date of the report issuance. Issues initially categorized as having a potential safety significance of greater than very low significance (Green) but whose significance has not yet been determined should be documented in the report, and the summary of findings with a significance characterization of To Be Determined (TBD). The issue may be documented as an "apparent violation" if a violation of requirements is associated with the issue, and with a significance of "TBD" in IR. Emphasis should be placed on the safety characterization as being potential and not yet finalized. After a final safety characterization is determined by the SDP oversight and enforcement panel and a letter is sent to the licensee regarding this characterization, the PIM should be updated to reflect the final safety characterization and the next subsequent resident inspector inspection report should include a brief description of the issue and the change in safety classification in the summary of findings.

   - Inspectors must be careful to avoid making direct statements regarding safety significance in the inspection report details outside the SDP analysis or for issues not subject to the SDP. Violation severity levels, as described in the NRC Enforcement Policy, are based on the degree of safety significance involved. In addition, the NRC Enforcement Policy uses the term "safety significance" in a specific sense. Inspectors should refer to the NRC Enforcement Manual for the most recent guidance.

   - Inspection reports should not solely refer to a noncompliance as being (just) "of very low safety significance."

     UNACCEPTABLE: "The issue was determined to be Green by the significance determination process,"

   - The inspector should state why that determination was reached.

     ACCEPTABLE: "The issue was determined to be of very low significance (Green) by the significance determination process because even though the equipment was degraded it was capable of performing its safety function, and trained operators were also available and ready to take appropriate manual actions if needed."

4. Violations of requirements that cannot be evaluated with the SDP should be documented in the report section relating to the inspectable area in which the violation was discovered, or in Section 4, "Other Activities," if unrelated to a specific

inspectable area. The severity level of such violations will be determined using the guidance in the Enforcement Policy and Enforcement Manual.

b. Licensee Identified Violations. Frequently inspectors review issues that have been identified by the licensee and entered into their corrective action program. This is expected in a risk-informed inspection program that attempts to focus inspectors on those issues of potential risk significance. If after examining such licensee identified issues the inspector recognizes that the licensee has correctly evaluated the issue and has developed appropriate corrective actions, and the issue is recognized as being of very low significance, such issues should be referenced in the inspection report for tracking purposes only and not included in the summary of findings or the transmittal cover letter. However these NCVs will be separately captured in the PIM. This is appropriate because it encourages licensee's to self-identify and correct problems. Conversely, inspectors may identify additional deficiencies or concerns associated with the licensee identified issue. In these cases it is appropriate for additional detail regarding the deficiencies to be documented in the inspection report as the inspector has provided value-added in further defining the issue.

Except as noted below violations that are licensee identified which have been incorporated into the licensee's corrective action program and are recognized as very low safety significance or would be categorized as a potential Severity Level IV violation, will normally be only briefly documented in section 40A7 of the inspection report. The documentation must include the NRC tracking number, the requirement violated, a one sentence description of how the requirement was violated and a reference to the licensee corrective action program tracking number or condition report number. For example:

4OA7 Licensee Identified Violations. The following findings of very low significance were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as Non-Cited Violations (NCV).

| NCV Tracking Number | Requirement Licensee Failed to Meet |
|---|---|
| (1) NCV 999/00007-2 | Technical Specifications 3.1.A requires three NI channels to be operable during core alterations. Only two channels were operable during core alterations on January 4, 2000, as described in the licensee corrective action program Reference CAP XXX-000/123. |

Among these types of issues are those that are discovered during the review of LERs or while inspecting licensee corrective action programs or similar types of inspections.

If the inspector identifies a deficiency with the licensee's evaluation, corrective actions or other problems associated with the licensee identified finding, the inspector should document the finding under section 4OA2 of the report irrespective of who identified it. Documentation should clearly emphasize that the licensee identified the finding but failed to recognize the deficiency or the nexus to the problem identified by the inspector.

c. Noncompliances Involving Willfulness. Inspection reports should neither speculate nor reach conclusions about the intent behind a violation, such as whether it was deliberate, willful, or due to careless disregard. The report should include relevant details on the circumstances of the violation without making a conclusion about the possible intent of the violator:

APPROPRIATE: "The radiographer failed to activate his alarming dosimeter, although he had informed the inspectors earlier that he had been properly trained on the use of the device."

INAPPROPRIATE: "The radiographer deliberately failed to activate his alarming dosimeter."

Conclusions about the willfulness of a violation are agency decisions, and are normally not made until after the Office of Investigation (OI) has completed an investigation. A premature or inaccurate discussion of the willfulness of an apparent violation in the inspection report could result in later conflicts based on additional input and review. Inspection reports that include potentially willful violations are to be coordinated with OI and the Office of Enforcement (OE).

06.04 Treatment of Open Items. Issues that require additional inspection before coming to closure on the issue are identified by a unique tracking number and entered into the Item Reporting (IR) module of the Reactor Programs System (RPS) by the originating inspector or office. Open items include unresolved items, violations, deviations, licensee event reports (LERs), and SDP-related issues whose significance has yet to be determined. NCV follow-up is limited to sampling when assessing the licensee's corrective action program.

a. Initiating Open Items. The action of initiating an open item is a commitment of future resources, and should therefore only be used when some specific licensee action is pending, or when needed information is not available at the time of the inspection. When the inspector believes that the additional information may reveal the issue to be a matter of noncompliance, an unresolved item should be initiated. For an unresolved item, the report should identify the actions or additional inspection effort needed to resolve the issue.

Issues of noncompliance (except for minor violations) should always be assigned an inspection report item number for tracking purposes. When an inspection involves multiple violations (or multiple examples of a single violation), the inspector should be careful to ensure a one-to-one correlation between the number of IR entries and the number of "contrary to" statements in the accompanying notice of violation. The NRC Enforcement Manual provides additional guidance on tracking and following up issues of noncompliance.

Upon receipt, LERs should be entered into the IR module system for tracking, screening and follow-up.

b. Follow-Up and Closure of Open Items. The level of detail devoted to closing open items depends on the nature and significance of the additional information identified. The closure of an open item should, at a minimum, summarize the topic, summarize the inspector's follow-up actions, evaluate the adequacy of any licensee actions, determine if a violation occurred, and include enough detail to justify closing the issue.

The close out description of a violation should be brief if the licensee's response to the notice of violation already has given an accurate description of the root cause, corrective actions taken, and other aspects of the condition causing the violation, and the inspector identifies no other instances of the violation. Normally NCVs will be opened and closed in the initiating inspection report.

c. Treatment of Events and Licensee Event Reports. Followup of events and LERs are addressed in several areas including IMC 2515 "Light-Water Reactor Inspection Program," IP 71153 "Event Follow-up", and IP 71111.14 "Personnel Performance During Non-Routine Plant Evolutions". Each requires that all LERs be at least screened by an inspector and closed in an inspection report. LERs are initially screened and can be closed after an in-office review based upon the inspector's engineering judgment. Those LERs determined to involve complex events, are immediately recognized as greater than very low significance, events which caused a performance indicator to exceed a threshold, or as directed by one of the above procedures should be considered for follow-up inspection at the facility. Events and LER discussions, including revisions to LERs, should be documented in the inspection report under Section 4OA3, "Event Follow-up". If inspection in another cornerstone area provides a description of an event, or an event for which an LER is issued (i.e., personnel performance during non-routine evolutions), that section of the report should be referenced under Section 4OA3 with a very brief description. (Example will be incorporated in Exhibit 2 Section 4OA3). In general LER reviews should have a brief event description, reference the docketed LER, and require little discussion other than the significance evaluation and reference to the licensee's corrective action program (CAP) system tracking number for the issue.

For LERs involving minor findings, potential violations meeting the criteria for being minor, or issues that the licensee identified, entered into their corrective action program and are of very low significance, the LER closure documentation should note that the issue is captured in the licensee's corrective action program, reference the LER, and state that the LER was reviewed and no findings of significance were identified. LERs that were already addressed by separate NRC letter should also be closed with a brief statement in an inspection report.

When the LER involves more than a minor issue, the inspection report should describe the safety significance of the event, the corrective actions (referencing the (CAP) tracking number), the licensee's determination of the apparent cause, a summary of the inspector's follow-up actions, and any required enforcement actions. If a special inspection was conducted which would provide additional information regarding this event, the inspection report should be referenced.

LERs frequently involve violations of TS or other requirements. If the LER states a violation occurred the violation must be clearly identified in the report as a cited violation, a noncited violation, or a minor violation, as appropriate. (Otherwise, a statement should be included that "this event did not constitute a violation of NRC requirements.") This should be the last statement of the Section.

If an LER describes an issue which may be a potential violation and readily appears to be of no more than very low safety significance, the inspector should ascertain if a noncompliance occurred based on the inspectors knowledge of NRC regulations and the content of the LER, without necessarily gathering additional details. Depending on the details of the issue, the inspector should document the issue in the inspection report as described above referencing the licensee's corrective action program tracking number. If the issue is determined to be greater than very low significance, a more detailed onsite follow-up is required if not already performed.

d. Avoiding "Implied" Inspection Follow-up Items. Other than what is implied in discussing open items, the inspection report should not commit to future NRC attention in a particular area. This will be part of inspection planning and the assessment process described in IMC 0305.

e. Documenting Performance Indicators (PIs). Performance indicator inspection should be documented under section 40A1 in the inspection report. The scope section should include the period of time for which the data was reviewed. Data reported prior to January 2000 is considered historical data and should not be reviewed. The criteria used to verify the PI should be included, (Example to be incorporated into Exhibit 2 Section 4OA1). List the PIs verified and the associated cornerstones. When there are three or more PIs being verified, the scope and findings can be listed separately for each if there are findings.

The findings Section should include those occurrences that would cause a PI to cross a threshold. Minor issues should not be documented unless the issue results in reporting inadequacies or interpretations related to the current version of the NEI 99-02 guidance.

Interpretation issues should be briefly described and captured as an URI - "The resolution of this item is pending a response from Headquarters. It is identified as URI 50-XXX/YYY."

f. Treatment of Third Party Reviews. Reviews of Institute of Nuclear Power Operations (INPO) evaluations or accreditation reports or similar third party reviews that identify confidential safety issues should be documented under 4OA5. This should be a short statement stating that the review of a specified evaluation or accreditation was completed. Documenting an INPO evaluation or accreditation report review, should not include a recounting or listing of INPO findings or reference a final INPO rating. Specifics of any significant differences between NRC and INPO perceptions should be discussed with regional management.

END

EXHIBITS:

Exhibit 1: Standard Reactor Inspection Report Outline
Exhibit 2: Sample Reactor Inspection Report

APPENDICES:

Appendix A: List of Acronyms Used in IMC 0610*
Appendix B: Thresholds for Documentation
Appendix C: Documentation Guidance for Supplemental Inspections
APPENDIX D: Guidance For Documenting Inspection Procedure 71152
"Identification and Resolution of Problems"

Cover Letter
Cover Page
Summary of Findings
Table of Contents (optional)

Report Details:

1 REACTOR SAFETY

Initiating Events/Mitigating Systems/Barrier Integrity [REACTOR - R]

Note: The baseline inspection procedure number is provided here as a convenience. It may be added to the headings in inspection reports at the option of the region.

| [Number | Topic | Baseline Procedure] |
|---|---|---|
| R01 | Adverse Weather Protection | 71111.01 |
| R02 | Evaluation of Changes, Tests, or Experiments | 71111.02 |
| R03 | [R03 Reserved] | |
| R04 | Equipment Alignment | 71111.04 |
| R05 | Fire Protection | 71111.05 |
| R06 | Flood Protection Measures | 71111.06 |
| R07 | Heat Sink Performance | 71111.07 |
| R08 | Inservice Inspection Activities | 71111.08 |
| R09 | [R09 Reserved] | |
| R10 | [R10 Reserved] | |
| R11 | Licensed Operator Requalification | 71111.11 |
| R12 | Maintenance Rule Implementation | 71111.12 |
| R13 | Maintenance Risk Assessments and Emergent Work Evaluation | 71111.13 |
| R14 | Personnel Performance During Non-routine Plant Evolutions | 71111.14 |
| R15 | Operability Evaluations | 71111.15 |
| R16 | Operator Work-Arounds | 71111.16 |
| R17 | Permanent Plant Modifications | 71111.17 |
| R18 | [R18 Reserved] | |
| R19 | Post-Maintenance Testing | 71111.19 |
| R20 | Refueling and Outage Activities | 71111.20 |
| R21 | Safety System Design and Performance Capability | 71111.21 |
| R22 | Surveillance Testing | 71111.22 |
| R23 | Temporary Plant Modifications | 71111.23 |

Emergency Preparedness [EP]

| | | |
|---|---|---|
| EP1 | Exercise Evaluation | 71114.01 |
| EP2 | Alert Notification System Testing | 71114.02 |

| | | |
|---|---|---|
| EP3 | Emergency Response Organization Augmentation Testing | 71114.03 |
| EP4 | Emergency Action Level and Emergency Plan Changes | 71114.04 |
| EP5 | Correction of Emergency Preparedness Weaknesses and Deficiencies | 71114.05 |
| EP6 | Drill Evaluation | 71114.06 |

2. RADIATION SAFETY

Occupational Radiation Safety [OS]

| | | |
|---|---|---|
| OS1 | Access Control to Radiologically Significant Areas | 71121.01 |
| OS2 | ALARA Planning and Controls | 71121.02 |
| OS3 | Radiation Monitoring Instrumentation | 71121.03 |

Public Radiation Safety [PS]

| | | |
|---|---|---|
| PS1 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | 71122.01 |
| PS2 | Radioactive Material Processing and Transportation | 71122.02 |
| PS3 | Radiological Environmental Monitoring Program | 71122.03 |

3. SAFEGUARDS

Physical Protection [PP]

| | | |
|---|---|---|
| PP1 | Access Authorization | 71130.01 |
| PP2 | Access Control | 71130.02 |
| PP3 | Response to Contingency Events | 71130.03 |
| PP4 | Security Plan Changes | 71130.04 |

4. OTHER ACTIVITIES [OA]

| | | |
|---|---|---|
| OA1 | Performance Indicator Verification | 71151 (Note 1) |
| OA2 | Identification and Resolution of Problems | 71152 (Note 2) |
| OA3 | Event Follow-up | 71153 (Note3) |
| OA4 | Cross-cutting Issues | |
| OA5 | Other | (Note 5) |
| OA6 | Meetings, including Exit | |
| OA7 | Licensee Identified Violations | |

NOTES:

1. Any findings related to the performance indicator (PI) verification baseline inspection shall be included under Other, 4OA1.

2. Section 4OA2 is to be used to document the annual identification and resolution of problems, IP 71152, significant trends relating to the corrective action process that are exemplified by other documented inspection findings, and to reference findings discussed in cornerstone areas related to PI&R issues.

3. Section 40A3 is to be used to discuss both following up on recent events using Inspection Procedure 71153 and reported events (LERs). Discussions in other cornerstone areas which provide a description of an event for which an LER is issued should also be referenced under 4OA3.

4. Section 4OA4 is to be used only to document significant trends in the cross-cutting areas.

5. Reviews conducted of Institute of Nuclear Power Operations (INPO) and third party evaluations are included in Section 4OA5.

END

NOTE: The inspection report that follows is based on a fictional reactor licensee and a fictional inspection. The report contains realistic issues; however, any resemblance to an existing facility or actual events is coincidental.

This exhibit may be used as a sample report for format and style. It illustrates how to use the standardized inspection report outline, and adheres to the expected internal organization for each report Section (as discussed in IMC 0610).

Pages are numbered continuously through this exhibit. Inspection reports should use separate page numbering for the cover letter, summary of findings, and report details. Note that these will be provided at a later date when experience is gained with this version of IMC 0610*.

**SAMPLE COVER LETTER NO.1 (No Findings)**

August 14, 1999

Ms. Joan A. Doe, Vice President, Nuclear
Greckenshire Power & Light
721Y Brick Road
Stone Towers, WF 44632

SUBJECT: DIROJAC GENERATING STATION- NRC INSPECTION REPORT 50-998/99-07, 50-999/99-07

Dear Ms. Doe:

On July 24, 1999, the NRC completed an inspection at your Dirojac Units 1 and 2. The enclosed report documents the inspection findings which were discussed on July 24, 1999, with Mr. D. Prue and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

Projects Branch 8
Division of Reactor Projects

Docket Nos.: 50-998, 50-999
License Nos: XXX-77, XXX-79

Enclosure: Inspection Report 50-998/99-07, 50-999/99-07

Attachments: (1) Supplemental Information
(2) List of Documents Reviewed
(3) List of Acronyms Used

cc w/encl: L. Collinsworth, Compliance Manager
R. Littleroy, General Manager, Technical Services
J. Bradwood, Plant General Manager
F. Buckfry, General Counsel
D. Soapsam, Operations Manager

**SAMPLE COVER LETTER NO. 2 (White/Yellow/Red ISSUE)**

EA-YY-XXX

Licensee Address

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A (WHITE, YELLOW, RED) FINDING (if applicable, add: "AND NOTICE OF VIOLATION")(NRC Inspection Report No(s). XX-XXX/YY-NN)
(include name of facility)

Dear (Licensee Official):

The purpose of this letter is to provide you with the final results of our significance determination of the preliminary (White, Yellow, Red) finding identified in the subject inspection report. Inspection finding(s) were assessed using the significance determination process and were preliminarily characterized as (White, Yellow, Red), (i.e., an issue with low to moderate increased importance to safety, which may require additional NRC inspections, an issue with substantial importance to safety that will result in additional NRC inspection and potentially other NRC action; (red) an issue of high importance to safety that will result in increased NRC inspection and other NRC action). This (White, Yellow/Red) finding involved (describe the findings).

[For declination of a regulatory conference, include the following paragraph:]

In a telephone conversation with Mr. ___ of NRC, Region X, on Date, (responsible Licensee) of your staff indicated that (Licensee) did not contest the characterization of the risk significance of this finding and that you declined your opportunity to discuss this issue in a Regulatory Conference.

[For regulatory conferences, include the following paragraph:]

At your request, a Regulatory Conference was held on (Date), to further discuss your views on this issue. (A copy of the handout you provided at this meeting is attached.) During the meeting your staff described your assessment of the significance of the findings, detailed corrective actions, including the root cause evaluations for the event classification issues. Specifically, (provide additional details of the licensee assessment if needed).

After considering the information developed during the inspection (if applicable, add: "the additional information you provided in your letter dated (date), and the information you provided at the conference"), the NRC has concluded that the inspection finding is appropriately characterized as (White, Yellow, Red), (i.e., an issue with low to moderate increased importance to safety, which may require additional NRC inspections, an issue with substantial importance to safety that will result on additional NRC inspection and potentially other NRC action; an issue of high importance to safety that will result in increased NRC inspection and other NRC action).

You have 10 business days from the date of this letter to appeal the staff's determination of significance for the identified [white/yellow/red] finding[s]. Such appeals will be considered to have merit only if they meet the criteria given in NRC Inspection Manual Chapter 0609, Supplement 3.

The NRC has also determined that (describe the violation ) is a violation of (list the requirement), as cited in the attached Notice of Violation (Notice). The circumstances surrounding the violation are described in detail in the subject inspection report. In accordance with the NRC Enforcement Policy, NUREG-1600, the Notice of Violation is considered escalated enforcement action because it is associated with a (White, Yellow, Red) finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Because plant performance for this issue has been determined to be in the ____ regulatory response band, we will use the NRC Action Matrix, to determine the most appropriate NRC response for this event. We will notify you, by separate correspondence, of that determination.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

Regional Administrator (or designee)

Docket Nos: 50-99X, 50-9X9
License Nos: XXX-77, XXX-77,

Enclosure: Report No. 05000xxx/1999-007, 05000xxx/1999-007

Attachments: (1) Supplemental Information
(2) List of Documents Reviewed
(3) List of Acronyms Used

**SAMPLE COVER LETTER NO.3 (Green Issue and NCVs)**

August 14, 1999

Ms. Joan A. Doe, Vice President, Nuclear
Greckenshire Power & Light
721Y Brick Road
Stone Towers, WF 44632

SUBJECT: DIROJAC GENERATING STATION- NRC INSPECTION REPORT 50-998/99-07, 50-999/99-07

Dear Ms. Doe:

On July 24, 1999, the NRC completed an inspection at your Dirojac Units 1 and 2. The enclosed report documents the inspection findings which were discussed on July 24, 1999, with Mr. D. Prue and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the inspectors identified three issues of very low safety significance (Green). Two of these issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as Non-cited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these noncited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region ___; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Dirojac facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

Projects Branch 8
Division of Reactor Projects

Docket Nos.: 50-998, 50-999

License Nos: XXX-77, XXX-79

Enclosure(s):Inspection Report 50-998/99-07, 50-999/99-07

Attachments: (1) Supplemental Information
(2) List of Documents Reviewed
(3) List of Acronyms Used

cc w/encl: L. Collinsworth, Compliance Manager
R. Littleroy, General Manager, Technical Services
J. Bradwood, Plant General Manager
F. Buckfry, General Counsel
D. Soapsam, Operations Manager

U.S. NUCLEAR REGULATORY COMMISSION

REGION X

Docket Nos: 50-998, 50-999
License Nos: XXX-77, XXX-79

Report No: 50-998/99-07, 50-999/99-07

Licensee: Greckenshire Power & Light (GP&L)

Facility: Dirojac Generating Station, Units and 2

Location: 11555 Granite Blvd.
Stone Towers, WF 44632

Dates: June 11-July 24, 1999

Inspectors: A. Rand, Senior Resident Inspector
M. Heidegger, Resident Inspector
J. Locke, Senior Radiation Specialist
P. Sappho, Reactor Projects Inspector

Approved by: E. Tudor, Chief, Projects Branch 2
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000998-99-07, IR 05000999-99-07, on 06/01-07/24/1999, Greckenshire Power & Light, Dirojac Generating Station, Units 1 & 2. Emergent work, equip-alignment, inservice inspection, non-routine plant evolutions, post-maint. testing, refueling & outage.

The inspection was conducted by resident inspectors, a regional radiation specialist, and a regional projects inspector. The inspection identified three Green findings, two of which were noncited violations. The significance of most/ all findings is indicated by their color (Green, White, Yellow, red) using IMC 0609 "Significance Determination Process" (SDP) . Findings for which the SDP does not apply are indicated by "no color" or by the severity level of the applicable violation.

A. Inspector Identified Findings

Cornerstone: Initiating Events

- Green. The inspectors identified a Non-Cited Violation for failure to assure that nondestructive examination contract inspectors were qualified in accordance with ANSI N45.2.6.c.2

  The finding was of very low safety significance because, although the inspector performing the reactor vessel weld inspections was not qualified, a different inspector reperformed the weld inspections and did not identify any significant weld deformities. (Section 1R08).

- Green. During plant startup operators failed to initiate emergency feedwater, resulting in an uncomplicated unit trip. The inspectors identified a Non-Cited violation for inadequate procedures (Technical Specification 6.8.1).

  The safety significance of this finding was very low because all mitigation systems remained operable, barrier integrity was not challenged, and the licensee entered the finding into the corrective action program. (Section 1R14).

- Green. The inspectors identified that the licensee's in-progress corrective actions for failure of a drywell fan did not include resolution of the subsequent increase in drywell temperatures above final safety analysis report limits for drywell snubbers.

  This finding was of very low safety significance because the licensee subsequently determined that the snubbers remained functional, although the increased temperature shortened their life by 1 year (Section 1R03).

Cornerstone: Occupational Radiation Safety

- Green. Radiation protection technicians together with the NRC inspectors identified that the licensee failed to remove all material containing low levels of radioactive contamination from a temporary radiologically protected area (10 CFR 20.xyz.(b)), before the area was released for unrestricted use. Additionally the licensee had recently identified two similar problems in radiological problem reports.

  The finding was of very low safety significance because the contamination did not spread beyond the radiological area and the licensee identified and corrected the problem. The inspectors identified this as a Non-Cited violation for failing to follow procedures. (Section 2OS1).

Cross-cutting Issues: Human Performance

- No Color. Similar human performance errors were identified in both initiating event and mitigating system cornerstone areas. Inspectors found that errors in review, coordination, and implementation of maintenance activities during or near Unit 2 refueling outage number 12 led to inoperable safety systems. Operators were unaware that Technical Specification (TS) or administrative limiting-condition-for-operation action statements were entered or exceeded. Required nuclear instruments and emergency diesel generators were not operable during fuel moves (50-998/99-06 Sections 1R04.2 and 1R20.4), automatic depressurization system valves were taken out of service while required (Section 1R20.2), and the high- pressure coolant injection system was inoperable because of incomplete maintenance (50-998/99-05 Section 1R19.1).

  While the risk of the individual events was very low, the number of maintenance-related incidents indicated a performance trend of problems with control, review, and performance of maintenance activities (Section 1R20).

B. Licensee Identified Violations

Violations of very low significance which were identified by the licensee have been reviewed by the inspector. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in section 4OA7 of this report.

EXAMPLE 2 IS UNDER DEVELOPMENT

# LIST OF ACRONYMS USED IN IMC 0610*

NOTE: a separate list of acronyms is given as an enclosure to Exhibit 2, the sample inspection report.

| | |
|---|---|
| AEOD | Office for Analysis and Evaluation of Operational Data |
| ALARA | as low as is reasonably achievable |
| CFR | Code of Federal Regulations |
| CVCS | chemical and volume control system |
| EA | escalated action |
| EP | emergency preparedness |
| ESF | engineered safety feature |
| EW | exercise weakness |
| gpm | gallons per minute |
| GPO | Government Printing Office |
| IFI | inspection follow-up item |
| IFS | Inspection Follow-Up System |
| IMC | inspection manual chapter |
| IPAP | Integrated Performance Assessment Process |
| IR | Item Reporting Module |
| ISI | in-service inspection |
| LER | licensee event report |
| LOCA | Loss-of-Coolant Accident |
| MD | management directive |
| MREM | Milli-roentgen equivalent man |
| NCV | noncited violation |
| NMSS | Office of Nuclear Material Safety and Safeguards |
| NOV | notice of violation |
| NRC | Nuclear Regulatory Commission |
| NRR | Office of Nuclear Reactor Regulation |
| OE | Office of Enforcement |
| OI | Office of Investigations |
| PIPB | Inspection Program Branch |
| PPR | plant performance review |
| PRA | probabilistic risk assessment |
| RA | regional administrator |
| RHR | residual heat removal |
| RP | radiation protection |
| RP&C | radiological protection and chemistry |
| SDP | Significance Determination Process |
| SI | International System of Units |
| TBD | to be determined |
| TI | temporary instruction |
| TS | technical specification |

Appendix B

Thresholds for Documentation

Inspectors use Figure 1 and group 1, 2, and 3 questions in determining if an issue should be documented in an inspection report. The decision points in this process are discussed in detail below. For all the below questions, "could" refers to application of credible scenarios.(see definitions).

A. Issues

The inspector identifies an issue. The inspector should first determine whether the issue has sufficient significance to warrant further analysis or documentation. This is done by determining whether the issue is minor. Minor issues should not be documented in inspection reports.

B. Minor Issues/Violations (group 1 questions)

If the answer to any of the below questions is "Yes", the issue can be considered greater than minor and the inspector should review group 2 questions to determine if the issue impacts a cornerstone. If the answers to all of the group one questions is "No", the issue may be considered minor. However, the inspector should also determine whether the issue has extenuating circumstances that warrant documenting the issue in the inspections report by reviewing group 3 questions. Additional guidance and examples can be found in the NRC Enforcement Manual, Guidance Documents, "Guidance for Classifying Violations as Minor Violations."

Group 1 Questions

Group 1 questions are intended to parallel the Enforcement Manual's guidance on what constitutes a minor violation. Numerous examples are provided in this guidance for a variety of issues and provide clarity regarding complex issues such as those associated with Maintenance Rule findings. Inspectors should consult this guidance after reviewing group 1 questions if there is any question whether an issue should be considered minor.

(1) Does the issue have an actual or credible impact on safety?
(2) Could the issue be reasonably viewed as a precursor to a significant event?
(3) If left uncorrected, would the same issue under the same conditions become a more significant safety concern?
(4) Does the issue relate to collecting or reporting performance indicators that would have caused a PI to exceed a threshold?

C. Issues Affecting Cornerstones (Group 2 Questions)

If the answer to any group 2 question is "Yes", the issue should be analyzed by the SDP process, assigned a color, and documented in the inspection report. If the answers to all group 2 questions are "No", then the inspector should determine whether there are extenuating circumstances by reviewing the group 3 questions.
(Note: Group 2 questions are intended to determine if the identified issues which impact a cornerstone. "No" only means that the issue is not suitable for SDP evaluation).

Group 2 Questions

Reactor Safety—Initiating Events, Mitigating Systems, & Barrier Integrity

(1) Could the issue cause or increase the frequency of an initiating event?
(2) Could the issue credibly affect the operability, availability, reliability, or function of a system or train in a mitigating system?
(3) Could the issue affect the integrity of fuel cladding, the reactor coolant system, reactor containment or control room envelope?
(4) Does the performance of issue involve degraded conditions that could concurrently influence any mitigation equipment and an initiating event?

Reactor Safety—Emergency Planning

(1) Does the issue involve a failure to meet or implement a regulatory requirement?
(2) Does the issue involve a drill or exercise critique problem?

Radiation Safety—Occupational (ALARA)

(1) Does the actual job dose exceed the projected dose by >50%, AND does the 3-year rolling average collective dose exceed 135 person-rem/unit for a PWR or 240 person-rem/unit for a BWR, AND is the actual job dose > 5 person-rem?

(2) Does the occurrence involve an individual worker(s) unplanned, unintended dose(s) that resulted from actions or conditions contrary to licensee procedures, radiation work permit, technical specifications or NRC regulations?

(3)Does the occurrence involve an individual worker(s) unplanned, unintended dose(s) or potential of such a dose (resulting from actions or conditions contrary to licensee procedures, radiation work permit, technical specifications or NRC regulations) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances?

(4) Does the occurrence involve conditions contrary to licensee procedures, technical specifications or NRC regulations which impact radiation monitors, instrumentation and/or personnel dosimetry, related to measuring worker dose?

Radiation Safety—Public

(1) Does the issue involve an occurrence in the licensee's radiological effluent monitoring program that is contrary to NRC regulations or the licensee's TS, Offsite Dose Calculation Manual (ODCM), or procedures?
(2) Does the issue involve an occurrence in the licensee's radiological environmental monitoring program that is contrary to NRC regulations or the licensee's TS, ODCM, or procedures?
(3) Does the issue involve an occurrence in the licensee's radioactive material control program that is contrary to NRC regulations or the licensee’s procedures?
(4) Does the issue involve an occurrence in the licensee’s radioactive material transportation program that is contrary to NRC or Department of Transportation (DOT) regulations or licensee procedures?

Physical Protection

(1) Does the issue involve a nonconformance with safeguards requirements?

Fire Protection

(1) Does the issue involve impairment or degradation of a fire protection feature?

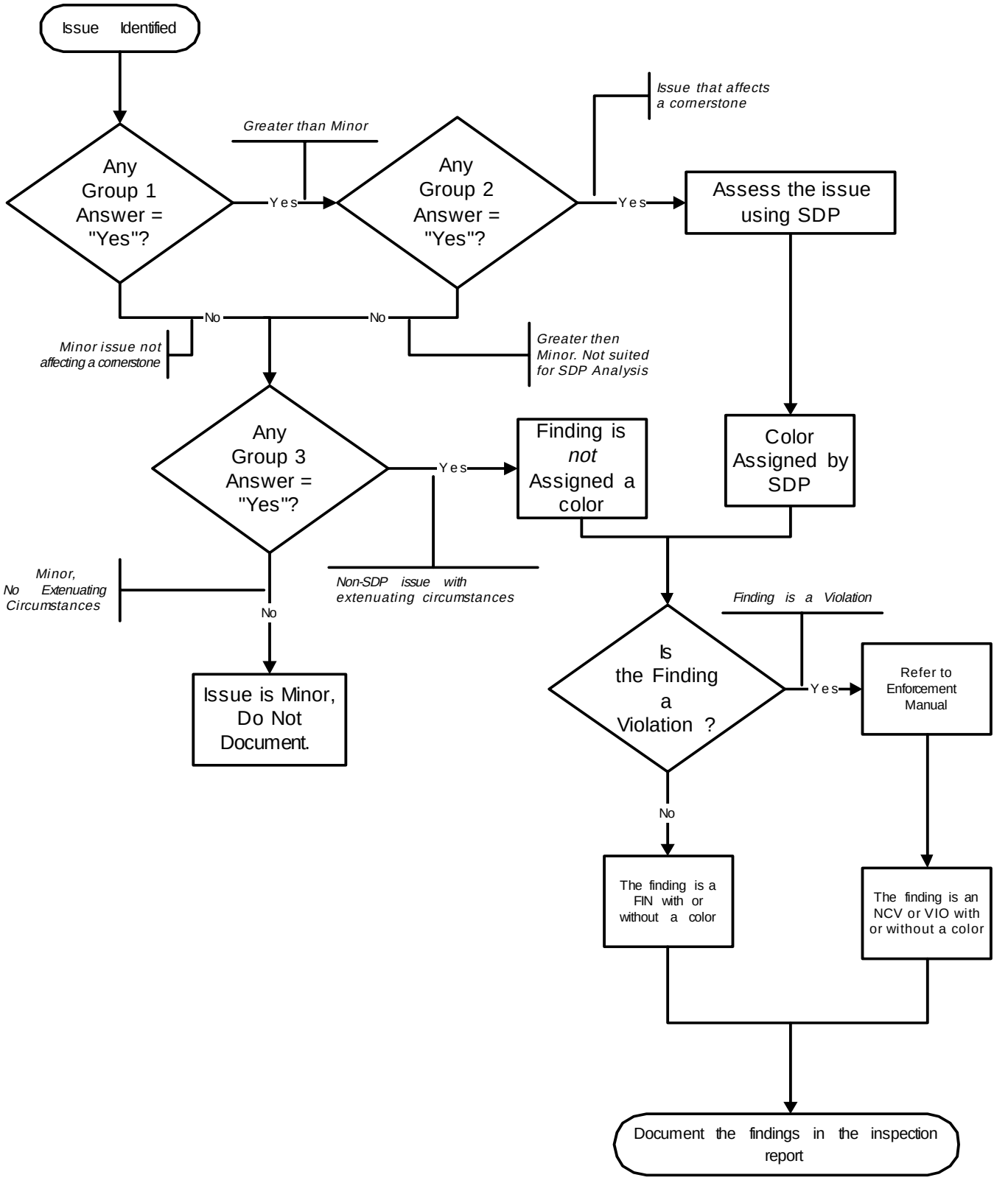
D. Extenuating Circumstances (Group 3 Questions)

If an issue is either minor or more than minor and does not affect a cornerstone, there should be extenuating circumstances associated with the issue that would warrant documentation of the issue. The following questions in group 3 should be reviewed to determine whether an issue has extenuating circumstances.

(1) Are there any associated circumstances that add regulatory or safety concerns (i.e., apparent willfulness, licensee refusal to comply, or discrimination)?
(2) Does the issue have potential for impacting the NRC's ability to perform its regulatory function? For example, a failure to provide complete and accurate information or to perform 10 CFR 50.59 analyses, etc. (see Enforcement Policy IV.A.3)
(3) Is documenting this issue necessary to close an open item such as a licensee event report?
(4) Does the associated technical information relate directly to an issue of agency-wide concern (i.e., a generic safety issue)?
(5) Does the issue describe a substantive cross-cutting issue which has been captured in a number of individual findings in the current or previous reports or which indicates adverse performance trends or patterns?
(6) Was the issue determined to be a violation greater than minor during the review of group 1 questions?

If all the answers to the above questions are "No", the issue does not have extenuating circumstances and would not normally be documented. If the answer to any question is "Yes", the issue should be documented as a finding or a violation without a color.

Note: Credible scenarios must reflect the actual condition or analysis and may assume only one additional hypothetical condition or failure. For example, under a given condition an accident analysis assumes one passive or one active failure in combination with the degraded condition identified during the inspection. It is not credible to assume a change in those conditions and hypothesize an additional failure. Discussions with "if," "potentially," and "could have" regarding the same issue should be reviewed carefully to ensure the finding is credible.




August 28,2000

Thresholds for Documentation

# Appendix C

## GUIDANCE FOR SUPPLEMENTAL INSPECTIONS

In general, most of the guidance contained in this Inspection Manual chapter applies equally to the baseline and the supplemental portions of the power reactor inspection program. However, due to the nature of the supplemental inspections, it is expected that the associated supplemental inspection reports will contain a more complete documentation of the NRC's assessment of each inspection requirement, including pertinent qualitative observations of the licensee's efforts to identify and address the root cause of the issue. The following guidance applies specifically to the documentation of inspections using supplemental Inspection Procedures 95001 and 95002:

- a separate inspection report will usually be generated for each supplemental inspection
- the inspection report will contain the following Sections:
- a summary of findings (to be entered into the PIM), which will provide an overall assessment of the licensee's evaluation of the performance issue, including any specific findings associated with the licensee's evaluation, or findings associated with new issues that emerged during the inspection,
- a summary of the performance issue for which the inspection is being performed (this can be taken from a previous inspection report for a inspection issue or can be a summary of the PI and the particulars associated with its crossing a threshold),
- restatement of each inspection requirement (or an abbreviated heading describing each requirement), followed by a synopsis of the licensee's assessment related to the inspection requirement, followed by the inspector's assessment of the licensee's evaluation, including a description of any additional actions taken by the inspector to assess the validity of the licensee's evaluation,
- a list of persons contacted and all licensee documents reviewed during the inspection, and
- a list of acronyms used in the inspection report.

The independent review of extent of condition called for in Inspection Procedure 95002 and performed using a procedure or procedures chosen from Appendix B to Inspection Manual Chapter 2515 should be documented along with the other inspection requirements contained in Inspection Procedure 95002. Portions of a sample inspection report performed in accordance with supplemental Inspection Procedure 95001 are provided on the following pages. Some Sections of this sample report contain alternative writeups to illustrate how both positive and negative inspection results would be documented.

Specific documentation requirements and report format for supplemental Inspection Procedure 95003 will be provided by the team leader and will generally be similar to that for supplemental Inspection Procedures 95001 and 95002.

U.S. NUCLEAR REGULATORY COMMISSION

REGION X

Docket Nos: 50-998, 50-000
License Nos: xxx-79, xxx-80

Report No: 50-998/2000-08, 50-000/2000-08

Licensee: Iowananuke

Facility: Profit Centers 1 and 2

Location: 1234 Atomic Blvd
Somewhere, USA

Dates: December 25—December 31, 2000

Inspectors: A. Grounder, Senior Resident Inspector
R. Cause, Reactor Projects Inspector

Approved by: S. Slatkin, Projects Branch 1
Division of Reactor Projects

SUMMARY OF FINDINGS

Profit Centers 1 and 2
NRC Inspection Report 50-998/2000-08, 50-000/2000-08

ADAMS TEMPLATE: (TO BE INSERTED HERE, see IMC 0610 Exhibit 2)

Cornerstone: Mitigating Systems

This supplemental inspection was performed by the NRC to assess the licensee's evaluation associated with the inoperability of the Unit 1 diesel generator A. This performance issue was previously characterized as having low to moderate risk significance ("White") in NRC Inspection Report #XXX XXXXX. During this supplemental inspection performed in accordance with Inspection Procedure 95001, the inspectors determined that the licensee performed a comprehensive evaluation of the inoperable diesel. The inoperable diesel was identified by the licensee during a surveillance test. The licensee's evaluation identified the primary root cause of the performance issue to be poor control of vendor manuals, which resulted in the maintenance workers mis-calibrating the governor speed control unit. The vendor manual control issue was not limited to the diesel generator and the licensee has taken corrective actions to ensure vendor manuals are current for all risk significant equipment. In addition, the licensee intends to review the scope of quality assurance audits to determine whether additional resources need to be provided to the quality assurance department to identify similar programmatic deficiencies.

Due to the licensee's acceptable performance in addressing the inoperable Unit 1 diesel generator, the white finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program." Implementation of the licensee's corrective actions will be reviewed during a future inspection.

or

This supplemental inspection was performed by the NRC to assess the licensee's evaluation associated with the in operability of diesel generator A. This performance issue was characterized as having low to moderate risk significance ("White") in NRC Inspection Report #XXX XXXXX. During this supplemental inspection, performed in accordance with Inspection Procedure 95001, several significant deficiencies were identified with the licensee's evaluation of the inoperable diesel.

While the licensee's evaluation attributed the root cause of this issue to improper training of maintenance workers, the NRC inspectors identified that the improper maintenance was actually the result of vendor manuals that were not up to date and contained inaccurate guidance concerning the calibration of the diesel generator governor speed control unit. In addition, the inspectors determined that the vendor manual control issue does not appear to be limited to the diesel generators, as similar concerns regarding the control of vendor manuals have been documented in other NRC inspection reports. Also, the inspectors determined that the licensee's corrective actions were inadequate in that they only involved re-training the maintenance workers and failed to address the issue of vendor manual control.

As a result of these concerns, the White performance issue associated with the inoperable diesel generator will not be closed at this time. In addition, the deficiencies identified in the NRC's review of licensee's corrective actions are being considered for additional enforcement action.

Report Details

01 Inspection Scope

This supplemental inspection was performed by the NRC to assess the licensee's evaluation associated with the inoperability of diesel generator A. This performance issue was previously characterized as "White" in NRC Inspection Report #XXX XXXXX and is related to the mitigating systems cornerstone in the reactor safety strategic performance area.

02 Evaluation of Inspection Requirements

02.01 Problem Identification

a. Determination of who (i.e., licensee, self-revealing, or NRC) identified the issue and under what conditions.

The inoperability of the diesel generator was identified during a routine surveillance test performed by the licensee. During testing of diesel generator A, the diesel failed to reach the required speed, at which time the test was stopped and the diesel was declared inoperable.

b. Determination of how long the issue existed, and prior opportunities for identification

The licensee determined that the diesel was likely inoperable since last performing maintenance on September 5, 1999. The inspector agreed with the licensee's evaluation.

c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue

The licensee's evaluation assigned a change in core damage frequency of 5 E-6 to this condition. The inspectors reviewed the licensee's evaluation and assumptions and confirmed their validity.

02.02 Root Cause and Extent of Condition Evaluation

a. Evaluation of method(s) used to identify root cause(s) and contributing cause(s).

The licensee used a combination of structured root cause analysis techniques to evaluate this issue, including barrier, change, and events and causal factor analysis. The inspectors determined that the licensee followed its procedural guidance for performing level 1 root cause analysis. The procedure required conducting interviews with key personnel and the preservation of evidence associated with the issue. The licensee successfully accomplished this by quarantining the diesel until formal troubleshooting controls could be established.

b. Level of detail of the root cause evaluation.

The licensee's root cause evaluation was thorough and identified the primary root cause of the performance issue to be poor control of vendor manuals, which resulted in the maintenance workers mis-calibrating the governor speed control unit. Furthermore, the licensee identified that the vendor manual control issue was not limited to the diesel generator but was applicable to several pieces of risk-significant equipment.

Or

The inspectors determined the root cause evaluation was not conducted to a sufficient level of detail. Although the licensee correctly diagnosed the apparent cause of the diesel failure as being a mis-adjusted governor speed control unit, the licensee's evaluation incorrectly identified the root cause as being maintenance worker error. The inspectors determined that the worker errors were actually caused by out-of-date vendor manuals for the governor speed control units. The calibration procedure in the vendor manual was for an old speed control unit that had been replaced 2 years ago. In addition, the inspectors noted that problems with control of vendor manuals for other equipment had previously been documented during NRC inspections (see NRC Inspection Reports 50-xxx/99-08 and 50-xxx/2000-05); however, the licensee had failed to enter the concerns into their corrective action program.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience.

The licensee's evaluation included a review to see if similar problems had previously been reported with the diesel governor unit. This was the first known instance of a failure of this type. The inspectors did not posses any information to the contrary.

d. Consideration of potential common cause(s) and extent of condition of the problem

The licensee's evaluation considered the potential for common cause and extent of condition associated with the lack of vendor manual control. The licensee determined that the issue of vendor manual control was not limited to the diesel generators and potentially affected other safety equipment. The inspectors agreed that this problem was not limited to the diesels, as they had previously identified problems with vendor manual control when reviewing maintenance on the auxiliary feedwater pumps. These concerns were previously documented in NRC Inspection Report 50/XXX/2000-08.

02.03 Corrective Actions

a. Appropriateness of corrective action(s)

The licensee took immediate corrective actions to make the diesel generator operable. The governor control unit was re-calibrated and the diesel generator vendor was contacted to ensure that the latest technical information was available and being used. The licensee has also specified corrective actions to address the root cause of poor vendor manual control. The licensee has begun a program to re-verify that all safety significant vendor information is current, and is planning to contact each of the associated vendors. The inspectors determined that the proposed corrective actions are appropriate.

b. Prioritization of corrective actions

The licensee's immediate corrective actions restored the diesel generators to operability within the technical specification (TS) allowed outage time. After restoring the affected diesel, the other diesel was tested to ensure that it would perform its intended functions if called upon. The inspectors witnessed this testing and observed that the diesel successfully passed the surveillance test.

c. Establishment of schedule for implementing and completing the corrective actions

The licensee's plans for the re-verification of vendor information are being implemented according to the risk significance of the equipment. The inspectors reviewed the licensee's plans for accomplishing this activity and noted that the risk significance of the equipment was being appropriately considered.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

The licensee has enhanced its monitoring of the diesel generators to ensure that any additional failures are given appropriate management attention. The licensee has also scheduled a quality assurance audit to assess the adequacy of the corrective actions associated with the vendor manual control issue.

03. Management Meetings

Exit Meeting Summary Provide summary of exit meeting.

ATTACHMENT

Persons Contacted

Documents Reviewed (optional if list is publically available some other way)

Acronyms Used (optional)

APPENDIX D
Guidance For Documenting Inspection Procedure 71152
Identification and Resolution of Problems

As one of the objectives of Inspection Procedure 71152 is to provide an assessment of the effectiveness of the licensee's Problem Identification and Resolution (PI & R) programs, the type of documentation for this inspection should be different than for other baseline inspections and may include more qualitative observations. Listed below are some general principles applicable to documenting the results of IP 71152 that supplement the guidance contained elsewhere in this inspection manual chapter.

- The cover letter for this report should conform to the guidance given for other baseline inspections, but it should also contain a brief description of the team's overall conclusion regarding the effectiveness of the licensee's PI & R programs. An example cover letter is provided in the sample inspection report contained in this appendix.

- The summary of findings for this report should contain the team's overall assessment of the licensee's PI & R program based upon both the annual and the routine baseline inspections. This overall assessment should also be placed in the PIM.

- The inspection report should contain an assessment for each of the inspection requirements, as indicated in the attached example report and outline.

- Negative conclusions regarding aspects of the PI & R program should be supported by examples of performance deficiencies. Other conclusions should be supported by a brief statement of the basis of the conclusion, including the scope of material that was reviewed.

July 7, 2000

Mr. Charles Smith
Site Vice President
Iownanuke Power Authority
Iownanuke Unit 1
124 Atomic Blvd.
Hometown, USA

SUBJECT: IOWNANUKE UNIT 1—NRC INSPECTION REPORT NO. 50-999/00-003

Dear Mr. Smith:

On June 9, 2000, the NRC completed a team inspection at the Iownanuke Unit 1 Nuclear Power Plant. The enclosed report documents the inspection findings which were discussed on June 9, 2000, with Ms. Mary Atom and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel.

If no findings were identified use the following:

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The team concluded that problems were properly identified, evaluated and resolved within the problem identification and resolution programs. However, during the inspection, several examples of minor problems were identified that included conditions adverse to quality that were not being entered in to the corrective action program, narrowly focused condition report evaluations, and corrective actions that were ineffectively tracked or had not occurred.

If one or more findings were identified use the following:

On the basis of the sample selected for review, the team concluded that in general, problems were properly identified, evaluated, and corrected, There was one Green finding identified during this inspection associated with the depth and effectiveness of one root cause analysis. [add one or two sentences to provide detail for each finding]. This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a Non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this Non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region ___; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Dirojac facility.

In addition, several examples of minor problems were identified that included conditions adverse to quality that were not being entered in to the corrective action program, narrowly focused condition report evaluations, and corrective actions that were ineffectively tracked or had not occurred.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web-site at http://www.nrc.gov/NRC/ADAMS/index. html (the Public Electronic Reading Room).

Sincerely,

## Summary of Findings

Adams Template:

IR 05000999-00-03, on 06/01-06/9/2000, Iownanuke Power Authority. Iownanuke Unit 1, annual baseline inspection of the identification and resolution of problems. A violation was identified with the licensee's root cause evaluation.

The inspection was conducted by a regional projects inspector, resident inspectors, and a regional radiation specialist. One Green issue of very low safety significance was identified during this inspection and was classified as a Non-cited violation, The issue was evaluated using the significance determination process.

Identification and Resolution of Problems

The team identified that the licensee was effective at identifying problems and putting them into the corrective action program. The licensee's effectiveness at problem identification was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. The licensee effectively used risk in prioritizing the extent to which individual problems would be evaluated and in establishing schedules for implementation of corrective actions. However, of the 10 root cause evaluations reviewed, one was found to be deficient in that it was not performed to a sufficient depth to determine the primary root causes of the issue. Corrective actions, when specified, were generally implemented in a timely manner. Licensee audits and assessments were found to be effective and highlighted a similar concern in the root cause area. Based on the interviews conducted during this inspection, workers at the site felt free to input safety issues into the PI&R program.

Cornerstone: Mitigating Systems

- Green. A Non-Cited Violation was identified because a deficiency was identified with the licensee's root cause evaluation RC-001 of an inoperable turbine-driven auxiliary feedwater pump. The licensee's evaluation attributed the root cause of this issue to be an improper overspeed trip setpoint caused by improper training of maintenance workers. During the inspection, NRC inspectors identified that the improper setpoint was actually the result of vendor manuals that were not up to date and contained inaccurate guidance concerning the calibration of the overspeed trip device.

  The risk associated with the failure of the auxiliary feedwater pump had previously been determined to be of very low safety significance because of the Redundancy in the auxiliary feedwater system.

## Report Details

4. OTHER ACTIVITIES (OA)

**4OA2** Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

Briefly describe the scope of what was looked at to determine whether the licensee is identifying problems at the proper threshold and entering them into the corrective

action system. Include samples taken from the previous 12 months of routine baseline inspection reports. Also include in this Section the results of the team's review of licensee self assessments and audits. For example:

[The inspectors reviewed items selected across the seven cornerstones of safety to determine if problems were being properly identified, characterized and entered into the corrective action program for evaluation and resolution. Specifically, the inspectors selected 50 deviation & event reports (DERs) from approximately 2000 which had been issued between January 1999 and January 2000. The inspectors also reviewed several licensee audits and self-assessments, including two audits of the corrective action program. The effectiveness of the audits and assessments was evaluated by comparing the audit and assessment results against self-revealing and NRC-identified issues.

The inspectors evaluated the DERs to determine the licensee's threshold for identifying problems and entering them into the corrective action program. Also, the licensee's efforts in establishing the scope of problems were evaluated by reviewing pertinent control room logs, work requests, engineering modification packages, self assessment results, system health reports, action plans, and results from surveillance tests and preventive maintenance tasks. The DERs and other documents listed in Attachment 2 were used to facilitate the review.

The inspectors also conducted walkdowns and interviewed plant personnel to identify other processes that may exist where problems and issues could be identified. The inspectors reviewed work requests and attended the licensee's daily work control meeting to understand the interface between the corrective action program and the work control process.]

(2) Issues and Findings

Discuss issues and findings relative to the scope of the inspection and document general conclusions regarding effectiveness of problem identification. Included should be the basis for the general conclusion. The following provides an example of the minimum documentation which should be provided where no findings of significance were identified:

[The team determined that the licensee was effective at identifying problems and entering them into the corrective action system. This was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. Licensee audits and assessments were of good depth and identified issues similar to those that were self- revealing or raised during previous NRC inspections. Also, during this inspection there were no instances identified where conditions adverse to quality were being handled outside the corrective action program.]

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

List the documents that were reviewed to determine whether the licensee is adequately prioritizing and evaluating issues. Include pertinent reference numbers (for example, NCR #s, violation #s, etc.).

(2) Issues and Findings

Discuss issues and findings relative to the effectiveness of the licensee's process for prioritizing issues, technical adequacy and depth of evaluations (including root cause analysis where appropriate), consideration of operability and REPORTABILITY requirements, and identification of pertinent corrective actions. Include in this Section any issues associated with the licensee's use of risk in prioritizing or evaluating issues. Document general conclusions regarding the above review,

c. Effectiveness of Corrective Actions

(1) Inspection Scope

List the documents that were reviewed to determine the timeliness and effectiveness of corrective actions. Include pertinent reference numbers (for example, NCR #s, violation #s, etc.).

(2) Issues and findings

Discuss findings and issues relative to the subject area, including the effectiveness of corrective actions to prevent recurrence. Included within this Section of the report should be an assessment of the licensee's use of risk insights in prioritizing corrective actions. Document general conclusions relative to subject area.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

Describe what actions were taken to assess this subject area.

(2) Issues and findings

This portion of the report should be more general in nature, as the procedure does not contain any specific inspection requirements with regard to this subject area. Discuss findings and issues relative to the subject area. Document general conclusions relative to the subject area.

Attachments:

LIST OF PERSONS CONTACTED

LIST OF DOCUMENTS REVIEWED (optional if documents are identified in the body of the report)

END