**APPENDIX B**

REACTOR OVERSIGHT PROCESS REALIGNMENT

1. PURPOSE

To describe how the Agency will conduct its periodic review of the Reactor Oversight Process (ROP) baseline inspection procedures (IP) to ensure the most effective overall application of inspection resources.

1. BACKGROUND

There are multiple catalysts to change ROP baseline IPs. Those catalysts include ongoing review of IPs with feedback submitted in accordance with Inpection Manual Chapter (IMC) 0801, Reactor Oversight Process Feedback Program; enhancements identified during the annual ROP self-assessment, as addressed in Appendix A of this manual chapter; and identification of focus areas as a result of internal or external events. (See Attachment (Att) 1). The collective purpose of these activities is to evaluate the effectiveness of each baseline IP using reviews of past inspection results, industry events and other inspection activities conducted, to determine if any changes to the IPs are warranted to improve the effectiveness of the inspection program.

For the ROP realignment process, criteria have been established and are presented in Att 2. IP Owners will analyze and review their assigned IPs using those criteria and provide a recommendation on whether or not the IP warrants any changes based on their analysis and review. Any recommended changes to the IPs, with the corresponding analysis, will be summarized and provided to the Division of Reactor Safety and Division of Reactor Projects in each Region; Division for Security Oversight (DSO) and Division for Preparedness and Response (DPR) in the Office of Nuclear Security and Incident Response (NSIR); and Division of Inspection and Regional Support, (DIRS), Nuclear Reactor Regulation (NRR); Directors for comment and approval. Change(s) to any IPs which result from this review effort can only be made if the majority of the regions and DIRs management (or DSO management for IPs in the security and DPR management for IPs in the emergency preparedness areas) concur with the recommended changes.

1. IMPLEMENTATION
   1. Review Team:

The review team will consist of the following:

1. Review team leader from DIRS (team leader will be selected from Reactor Inspection Branch (IRIB) or Performance Assessment Branch (IPAB))
2. IP Owners (DIRS, DSO, DPR, and Regions)
3. Regional representatives
4. Other representatives as assigned (examples include individuals from the Operating Experience and Technical Specification branch).

b. Review Team Leader Responsibilities:

* 1. Develops a review schedule and coordinates the review meetings. (See Att 4 for project timeline.)
  2. Works with DIRS, DSO, DPR, and Regional Division Directors to revise, if needed, and obtain concurrence on any revised review criteria to be used for evaluating the IPs.
  3. Provides direction to the IP owners and ensures that IPs are evaluated in accordance with the review criteria.
  4. Collects evaluation results for each IP from the IP owner.
  5. Conducts the review meetings with DIRS, DSO, DPR, and the regions to discuss the evaluation results and recommended changes to IPs, if any.
  6. Provides a summary of the evaluation results and recommended changes to the IPs, if any, for approval by DIRS, DSO, DPR, and Regional Division Directors.
  7. Provides evaluation results to the annual ROP Self-Assessment Paper. For example, CY 2011 evaluation results will be provided as an input to the ROP Self-Assessment Paper issued in CY 2012.
  8. Ensures training for any changes are approved by the IMC 1245 management steering committee and the approved training is implemented before revised IPs are issued.
  9. Ensures that the approved changes are made to the affected procedures (IPs and IMCs) before the beginning of the calendar year in which the IPs and IMCs will take affect.

c. Inspection Procedure Owners (DIRS, DSO, DPR, and Regions) Responsibilities:

1. Performs IP evaluations and proposes any recommended changes (add/delete inspection requirements; increase/decrease inspection sample requirements; add/delete inspection procedure; or no change recommended) and the basis for recommending the change(s). The basis should contain the criteria used for making a recommendation to revise the IP.
2. Acts as a lead during the review meeting with the regional representatives to discuss the results of their IP review and recommendations for change to the IP.
3. Revises and issues IP, if required.
4. Identifies and recommends training requirements for any changes made to their IPs to the review team leader.
5. Regional, DSO, DPR, and DIRS Division Directors or Representatives:
   1. Regional, DSO and DPR Division Directors will appoint, if necessary, an IP lead to work with DIRS staff to perform an evaluation of each IP using the selected criteria identified in Att 2 and the format provided in Att 3.
   2. Regional, DSO, and DPR Division Directors or their assigned representatives shall attend the ROP realignment review meeting coordinated by DIRS staff.
   3. Regional, DSO, DPR, and DIRS Division Directors or their assigned representatives shall attend the ROP realignment approval meeting. If a representative is sent to the meeting, they will be expected to represent their Division management viewpoint. The purpose of the approval meeting is to allow the IP owners to brief the various Division Directors on the reasons for the recommended changes to the IP and to allow the Directors to provide comments or ask questions on the analysis performed and conclusions reached by the IP owners.
   4. Regional, DSO, DPR, and DIRS Directors will either concur, modify or reject the recommended changes to each IP at that meeting. Additional meetings will be held as necessary to discuss any additional information which may aid in the decision to either accept or reject the proposed changes being made to the IPs.
6. Review Scope:

The outcome of this review is to improve the alignment of inspection resources across the inspection program to improve the inspectors’ ability to identify risk significant licensee performance deficiencies. It is not intended that this review should result in a net increase of inspection resources to complete the baseline inspection program since addition of a new inspection requirement would need to be offset by a deletion of another requirement such that the overall budgeted ROP inspector resource requirement remains the same. However, guidance at the start of each ROP realignment should address specific resource expectations for that review.

The IP owner will review the past three years of inspection findings associated with their assigned IP and determine whether appropriate inspection resources are being applied based on the review criteria contained in Att 2. The overall goal is to achieve the most effective application of inspection resources by directing inspectors to areas where there are potentially risk significant issues or where licensees are experiencing higher numbers of performance deficiencies.

The IP owners shall provide their analysis in the format provided in Att 3. Reactor Program Systems (RPS) Reports 28, IP Analysis Report, can be used to generate data.

1. Review Process and Timeline:

The ROP realignment process will begin in September/October to identify the review team, discuss expectations specific to this realignment, and to revise the review criteria if necessary. As appropriate senior management (deputy Regional Administrators) will be contacted to obtain any guidance specific to the current ROP relalignment. DIRS, DSO, DPR, and Regional Division Directors will approve the review criteria to be used by IP owners for their evaluation of IP effectiveness. The review criteria can be changed to reflect current inspector and industry performance issues/concerns and past evaluations. The ROP realignment team leader will communicate any guidance from senior management and will revise Att 2 to reflect the most recent review criteria.

The review of the IPs will begin in January. The IP owners will review inspection findings from the most recent 3 years of inspections. IP owners will work with regional representatives assigned to the team, subject matter experts for their IPs, and other appropriate points-of-contact (such as Operating Experience experts) to evaluate and provide recommended changes and the basis for the recommended change(s) to the IPs, if any. With respect to Operating Experience, additional guidance is provided in IMC 2523, “NRC Application of Operating Experience in the Reactor Oversight Process.

The ROP realignment team leader will collect and send the IP evaluations to all working group members in preparation for a review meeting to discuss the proposed changes to the IPs. Changes made as a result of that meeting will be noted. The revised summary of the proposed IP changes will be sent to the Regional, DSO, DPR, and DIRS Division Director for review prior to the approval meeting. The team leader will facilitate the approval meeting to discuss proposed changes to the ROP IPs. The IP owners and regional representatives should attend the meeting to answer any questions which may be raised concerning specific IPs.

After the approval meeting with the division directors, the ROP realignment team leader will issue a memorandum summarizing the changes agreed to during the approval meeting with the division directors.

The IP owners will make the changes to the IPs and ensure that adequate training is provided to the inspectors prior to implementation of the revised IPs in the following calendar year.

The purpose of the ROP realignment process is to appropriately allocate inspection resources within the inspection resource budget. The outcome of the review is to recommend and approve a realignment of inspection resources across the inspection program which if required, would translate into addition or deletion of inspection requirements and/or an increase or decrease in the number of samples. In situations where an inspection requirement or entire inspection procedure is deleted, considerations shall be given to provide, through other inspection means, a way to identify safety significant performance deficiencies which may occur in the future in the area no longer inspected. The resource evaluation required to complete the revised inspection program will be completed as part of an independent annual inspection resource analysis performed annually by IPAB.

ATTACHMENTS

* + 1. Reactor Oversight Process Inspection Procedure Change Catalysts

2 Inspection Procedure Review Criteria

3 Format for Inspection Procedure Evaluation

4 Timeline for ROP Alignment Activities

5 Revision History for IMC 0307 Appendix B

Attachment 1

Reactor Oversight Process

Inspection Procedure Change Catalysts

Existing Evolving

**Focus Areas**

Identified During 0307B Realignment

Internal Identification

(e.g. Self Assessments)

External Driver

(e.g. 2011 Robinson and Japan Events)

**Ongoing Review**

**(Feedback IMC 0801)**

Individuals (Inspector, IP Owner, SME)

Via Feedback Process

Collectives (Working Groups, SMEs)

Via Interface Meetings

**Annual Review (IMC 0307)**

ROP Self-Assessment

**Biennial Review**

**(IMC 0307B)**

ROP Realignment

Attachment 2

Inspection Procedure Review Criteria

**Fundamentals of Reactor Oversight Process (ROP)**

Maintain inspection elements which are fundamental to the ROP as defined in IMC 0308, ROP Basis Document and supporting documents.

Consider changes to Performance Indicators in the past three years to ensure there has not been a reduction or unintended gap in the key safety attributes of each safety cornerstone.

**Program Optimization (flexibility, efficiency, operating experience, resource alignment, and feedback)**

Consider changes that will improve baseline inspection effectiveness through enhanced flexibility of procedure requirement.

Consider strategies to increase inspection efficiency for IPs which inspect related areas.

Consider adjusting inspection requirements or guidance for risk significance events and/or adverse trends identified through the Operating Experience process, severe program/actual events, inspection findings and special inspection team report results over the past three years. Take caution not to delete past significant operating experience that may still be currently applicable.

Consider adjustments to align the inspector scope (actual inspection hours charged) with the allocated inspection hours (estimated inspection hours listed in IP).

Consider adjustments to align the allocated inspection hours (estimated inspection hours listed in IP) with the required IP samples (sample range in IP).

Consider inspector and region feedback, taking into consideration value added inspector field observations that do not result in a finding but where there is an observed safety impact; Agency initiatives; feedback forms; internal surveys; and licensees past inspection performance.

Consider changes to rulemakings, requirements (Technical Specifications and CFRs), and backfits.

**Quantitative (Template)**

Consider improvements which can increase the effectiveness of IPs based on the following quantitative analysis; number of findings per 1000 hours, traditional enforcement violations, percentage of NRC identified findings, and color of the findings.

Attachment 3

Format for Inspection Procedure Evaluation

**1.**  **Inspection Procedure Number and Title**:

**2.** **Time Period of Review**:

**3.** **Resources/Inspection Findings/Feedback:**

(*Additional Data may be needed, depending on the specific IP*)

Findings/1000 hours 3YR Avg 2012 2011 2010

Hours Expended 3YR Avg 2012 2011 2010

Region I:

Region II:

Region III:

Region IV:

Total:

Hours Expended 3YR Avg 2012 2011 2010

1 Unit Sites

2 Unit Sites

3 Unit Sites

Over the past 3 years, there were XX total findings:

X Findings GREEN

X Findings WHITE

X NCV GREEN

X NCV SL-IV

Etc.

* X findings were related to . . . (inadequate procedures, inadequate corrective actions, operator error, inadequate test/evaluation, etc)
* X findings were in HP Cross Cutting Area
* X findings were in PIR Cross Cutting Area
* No other commonalities were identified among the findings
* (*Findings may require further breakdown, depending on the specific IP*)

Findings from NRC special inspections/AITs relevant to the IP

* X inspection findings were generated from this IP as a result of an SIT/AIT.

Feedback forms:

* Provide a summary of each feedback form submitted for the IP during the past 3 years and include how the feedback form was addressed.

**4. Analysis:**

* Conduct other analyses to evaluate the effectiveness of the IP as detailed in the attached review criteria.

**5. Communication:**

* Contact the Subject Matter Experts in each region and as necessary the appropriate branch chiefs to discuss their thoughts as implementers of the inspection procedures and the results of your analysis. This may take more than one call.

**6.**  **Conclusion:**

* Evaluate the results of analyses and address the review criteria.

**7.** **Recommendations:**

* Provide any recommended changes to the IP (add/delete inspection requirements; increase/decrease inspection samples; increase/decrease inspection hours; add or delete inspection procedures; or no change recommended.

Provide any recommended changes to the IP (add/delete inspection requirements; increase/decrease inspection samples; add or delete inspection procedures or no change recommended).

* Provide any recommended changes to the ROP.

Attachment 4

**Timeline for ROP Alignment Activities**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Time Period** | **Participants** |
| Assign Review Team and approve ROP Realignment Review Criteria | September-December | DIRS, DPR, DSO, and Regional Division Directors; with Review Team Leader |
| Meet with Review Team to discuss expectation for ROP realignment and provide direction to IP Owners | October/November | Review Team Leader, Review Team |
| Conduct Analysis/Review of IP and provide recommendations to the Review Team Leader. | January/February | IP Owners |
| Forward the results of the IP Owners recommendation to review team | March/April | Review Team Leader |
| Conduct ROP review meeting | April/May | Review Team Leader, Review Team |
| Forward the results from the ROP review meeting to Division Directors, conduct approval meeting to obtain Division level approval of changes. | May/June | Review Team Leader and Division Directors |
| Issue Memorandum summarizing results. | June/July | Review Team Leader. |
| Revise and issue IPs. | July - December | IP Owners |
| Conduct training on revised IPs, if required | August - December | IP Owners |

Attachment 5

Revision History - IMC 0307 Appendix B

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| --- | --- | --- | --- | --- | --- |
| Commitment Tracking Number | Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| N/A | 01/25/07  CN-07-003 | Initial issuance of Appendix B to  IMC 0307. | NO | N/A | ML070120373 |
| N/A | 04/09/09  CN 09-011 | Revisions to incorporate several recommended changes from regional Division Directors | NO | N/A | ML090640898 |
| N/A | 10/13/11  CN 11-019 | Revisions made to incorporate several recommended changes that resulted during the implementation of the 2011 ROP realignment. | NO | N/A | ML112990461 |