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## INSPECTION MANUAL CHAPTER 0609, APPENDIX E, PART III

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### CONSTRUCTION FITNESS-FOR-DUTY SIGNIFICANCE DETERMINATION PROCESS FOR NEW REACTORS

#### 0609EIII-01 PURPOSE

The construction fitness-for-duty significance determination process (cFFDSDP) in this Appendix is designed to provide a means by which **U.S. Nuclear Regulatory Commission (NRC)** inspectors and management can assess the significance of fitness-for-duty (FFD) findings identified at facilities subject to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 26 for which a limited work authorization and/or a combined license has been issued authorizing construction activities.

#### 0609EIII-02 OBJECTIVE

Each construction issue of concern must be screened to determine if it is a performance deficiency that is more-than-minor using the guidance provided in **Inspection Manual Chapter (IMC) 0613, "Power Reactor Construction Inspection Reports,"** Appendix B, "Issue Screening." Once a performance deficiency has been determined to be more-than-minor, it is considered a finding, and its significance is determined using the guidance provided in IMC 2519, "Construction Significance Determination Process." IMC 2519 directs the user to this Appendix to determine the significance of construction FFD findings.

When multiple examples of a single performance deficiency are identified, that performance deficiency should be represented by the most significant example, not a cumulative sum of all of the examples. Similarly, when a programmatic finding is identified, the finding should be characterized by the most significant example of the failure of the program, and the performance deficiency should reflect the programmatic nature of the issue.

#### 0609EIII-03 DEFINITIONS

Program Elements – Inspection requirements that are included in the security construction Inspection Procedure (IP) 81504, "**Fitness-for-Duty Program for Construction,**" and baseline IP 71130.08, "**Fitness-for-Duty Program.**" The inspection areas are essential for the defense-in-depth concept of the licensee's security plans.

Tier – A categorization process based on each program element's importance to the overall physical security effectiveness as part of the NRC's regulatory requirements.

Additional applicable definitions are found in IMC 0609, Appendix E, Part I, “Baseline Security Significance Determination Process for Power Reactors,” IMC 2506, “Construction Reactor Oversight Process General Guidance and Basis Document,” and IMC 2519.

## 0609EIII-04 CONSTRUCTION FITNESS-FOR-DUTY SIGNIFICANCE DETERMINATION PROCESS

Licenses are required to implement an FFD program for construction; licenses may implement a program that meets the requirements contained in 10 CFR Part 26, Subpart K, or they may choose to implement a full testing program (i.e., compliant with subparts A through H, N and O of 10 CFR Part 26). If the licensee implemented an FFD program that meets the requirements contained in 10 CFR Part 26, Subpart K, then inspectors will evaluate the finding to determine if the program elements in IP 81504 have been met. If the licensee implemented a full testing program, then inspectors will evaluate the finding to determine if the program elements in IP 71130.08 have been met.

### 04.01 Determining the significance of a finding.

1. Identify the program that the licensee is implementing to discern which program elements apply (IP 81504 or IP 71130.08).
2. Refer to Figure 1, “Construction Fitness-for-Duty Significance Determination Process Worksheet,” to determine the number of program elements in Tier I, Tier II, and Tier III that are impacted by the finding. If multiple program elements are contained within a single box, all elements identified will constitute one program element when counting impacted values.
3. Determine if the deficiency in the FFD program resulted in unfit personnel working on safety-related or security-related structures, systems, and components (SSCs). An unfit individual is a person, determined by licensee, who is not trustworthy and reliable and/or cannot safely and competently perform assigned duties and responsibilities due to mental or physical impairment from any cause.
4. Refer to Figure 2, “Construction Fitness-for-Duty Significance Determination Process Assessment Table,” Section A, to determine the finding’s impact on the total number of program elements under each tier. The finding’s impact is determined through a combination of the number of program elements impacted by the finding and whether or not work was or could have been conducted by unfit personnel on safety-related or security-related SSCs. The number in the applicable row below the number of impacted program elements in each tier will be assigned to the finding. For example, if three program elements in Tier I were impacted, but no work was conducted on safety-related or security-related SSCs by unfit personnel, then a “2” would be assigned for Tier I. If three program elements in Tier I were impacted and work was conducted on safety-related or security-related SSCs by unfit personnel, then a “4” would be assigned for Tier I. Assign a number to the finding for each tier. If no program elements were impacted under a tier, the value will yield zero.

5. Determine the significance of the finding by adding the numbers assigned to Tier I, Tier II, and Tier III, and then applying the total point value to the range specified in Figure 2, Section B.

Findings with a total point value within a range of 0 - 6 have a significance of GREEN.

Findings with a total point value within a range of 7 – 15 have a significance of WHITE.

#### 04.02 Step-by-step example.

The following is a step-by-step evaluation of a typical construction FFD inspection finding that demonstrates how the cFFDSDP is to be used in determining the significance of findings.

An NRC security inspector identified a performance deficiency with the licensee's test results review. The inspector determined that the licensee's testing program was inadequate because it did not include a provision to test, under the post-accident condition (as required by 10 CFR 26.405(c)(3)), individuals subject to drug and alcohol testing in accordance with 10 CFR 26.4(f). The inspector determined that no individuals had been subjected to drug and alcohol testing following a work-related accident. Subsequent procedure reviews determined that there was not a provision in the licensee's program for the conduct of post-accident testing.

The failure to conduct post-accident testing precludes the ability of the licensee to identify whether the individual was unfit, and therefore either allowed, or had the potential to allow an unfit individual the ability to perform work on SSCs.

##### Step 1

In this example the licensee was implementing a Subpart K program, therefore the program elements in IP 81504 are applicable. (Refer to Figure 1.)

##### Step 2

The following program elements were impacted:

##### Tier I

- (1) Policy and Procedures (81504-02.01(d)) – element selected due to inadequate/omission for post-accident testing.
- (2) Tests Results Review (81504-02.02(a)) – element selected because the licensee's program did not include a provision to subject personnel to post-accident testing.
- (3) Sanctions (81504-02.07(a)) – element selected because the licensee's program did not include a provision to subject personnel to post-accident testing, in which sanctions could have been applied, in cases where testing resulted in a positive result **thereby enabling a potentially unfit individual to remain in the construction site workforce.**

##### Step 3

It was determined that the individual was allowed to conduct work on safety-related or security-related SSCs following the accident.

**Step 4**

In this example, three program elements in Tier I were impacted; **however**, the program elements of Policy and Procedures (81504-02.01(d)) and Test Results Review (81504-02.02(a)) are **located** in the same box in Figure 1, therefore **it counts** as one program element being impacted. **With the addition** of the program element of Sanctions (81504-02.07(a)), **it would yield a total of two** program elements impacted. **Referring to Figure 2, Section A, Tier I**, since the individual was allowed to conduct work on safety-related or security-related SSCs **and two program elements were impacted**:

Fitness-for-Duty for Construction	Total Number of Program Elements Impacted			
	TIER I			
Program Elements	1	2	3	4
No SSC Work	0	↓	2	3
SSC Work	2	→	3	5

A total point value of “3” is assigned. Since no program elements were impacted in Tier II or Tier III, a value of “0” is assigned to those tiers.

**Step 5**

Input the **total point** value associated with **each** Tier into **Figure 2, Section B** of the Assessment Table:

Fitness-for-Duty for Construction	Tier		
	1	2	3
	3	0	0
<b>Total Number:</b>			3

The total number **assigned from Tier I, Tier II, and Tier III** is the value used to assess the **significance** of the finding.

Range	Color
0 - 6	Green
7 - 15	White

In this example, the issue screened a **total point value of “3”**, therefore it is assigned a **significance of Green**.

0609EIII-05 REFERENCES

IMC 0609, Appendix E, Part I, "Baseline Security Significance Determination Process for Power Reactors"

IMC 0613, "Power Reactor Construction Inspection Reports," Appendix B, "Issue Screening

IMC 2506, "Construction Reactor Oversight Process General Guidance and Basis Document"

IMC 2519, "Construction Significance Determination Process"

IP 71130.08, "Fitness-for-Duty Program"

IP 81504, "Fitness-for-Duty Program for Construction"

END

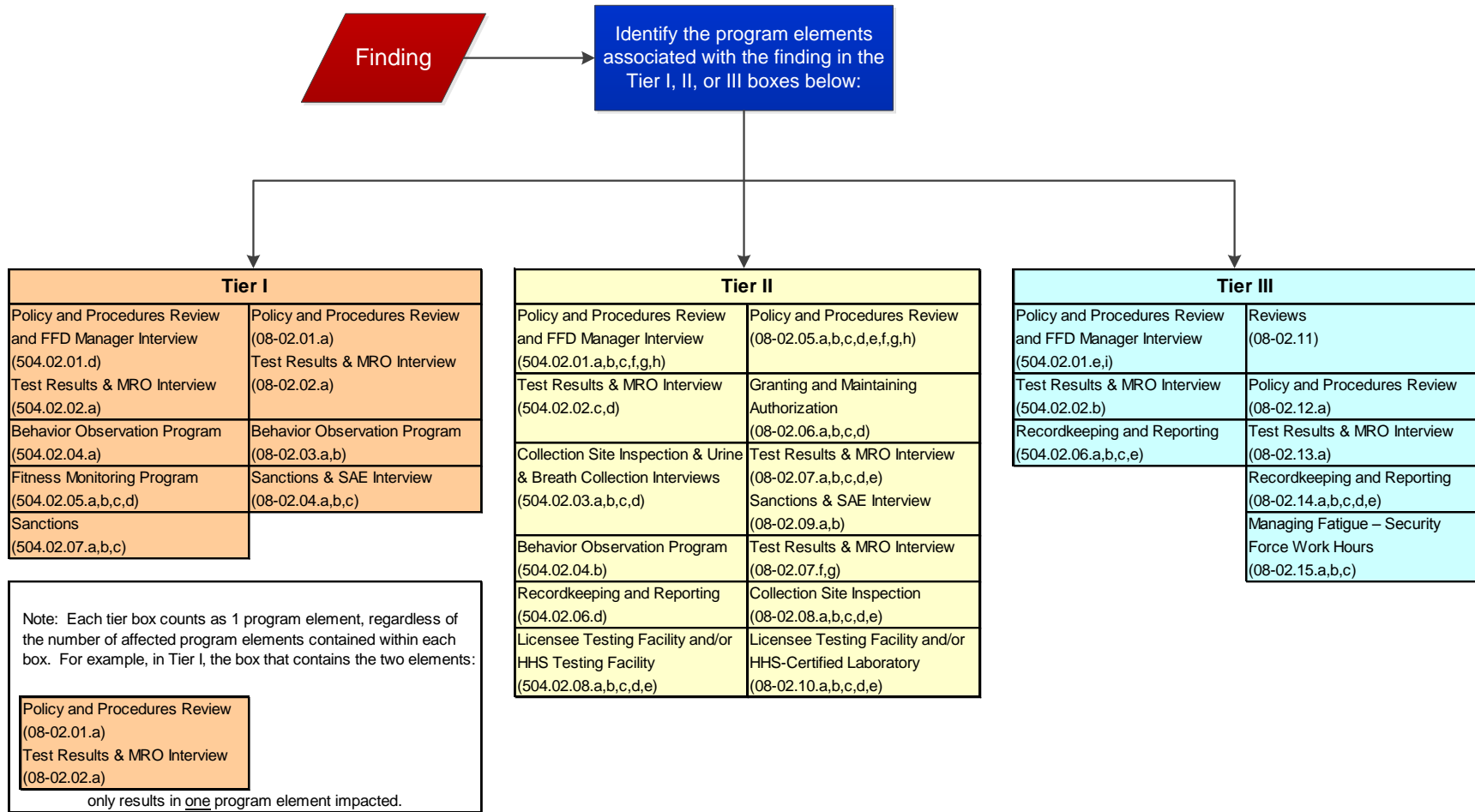
Figures:

1. Construction Fitness-for-Duty Significance Determination Process Worksheet
2. Construction Fitness-for-Duty Significance Determination Process Assessment Table

Attachment:

1. Revision History for IMC 0609, Appendix E, Part III

**Figure 1 - Construction Fitness-for-Duty Significance Determination Process Worksheet**



**Figure 2: Construction Fitness-for-Duty  
Significance Determination Process Assessment Table**

**Section A:**

Fitness-for-Duty for Construction	Total Number of Program Elements Impacted			
	TIER I			
Program Elements	1	2	3	4
No SSC Work	0	1	2	3
SSC Work	2	3	4	5

Fitness-for-Duty for Construction	Total Number of Program Elements Impacted					
	TIER II					
Program Elements	1	2	3	4	5	6
No SSC Work	0	0	1	2	3	4
SSC Work	1	2	3	4	5	6

Fitness-for-Duty for Construction	Total Number of Program Elements Impacted			
	TIER III			
Program Element	1	2	3	4
No SSC Work	0	0	0	1
SSC Work	0	1	2	3

**Section B:**

<u>Fitness-for-Duty for Construction</u>	<u>Tier</u>			<table border="1"> <thead> <tr> <th>Range</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>0 - 6</td> <td>Green</td> </tr> <tr> <td>7 - 15</td> <td>White</td> </tr> </tbody> </table>	Range	Color	0 - 6	Green	7 - 15	White
	Range	Color								
0 - 6	Green									
7 - 15	White									
	1	2	3							
<u>Total Number:</u>				<input type="text"/>						

Attachment 1  
Revision History for IMC 0609, Appendix E, Part III

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession No. (Pre-Decisional, Non-Public Information)
N/A	ML12206A494 09/19/12 CN 12-021	Researched commitments made in the last four years and found none. IMC developed to support security construction inspections significance determination process for fitness-for-duty findings.	N/A	ML12212A143
N/A	ML17037D271 07/26/18 CN 18-021	Pilot implementation of this SDP has been completed and IMC has been finalized. Administrative edits were made to update IMC. Upon completion of a SUNSI review, the staff concluded that this document should be decontrolled. Consistent with the staff's SUNSI determination, this revision of the IMC removed SUNSI markings.	N/A	ML17068A022