U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Fuel Facilities
Construction Inspection Program and Budget/Fees Discussion

Public Meeting (Observation Category)
January 11, 2024, 1:00PM - 5:00PM ET

Opening Remarks

Agenda

- Open Remarks
- Purpose
- Use of Oversight Processes Inspection Manual Chapter (IMC) 2600 Verses IMC 2694 for New Construction and Modifications
- IMC 2694 and 2600 Updates
- Inspection Procedures (IP) 88200 - 88202 Updates and Examples
- Fuel Facility Budget and Fee Discussion
- Closing Remarks

Purpose of Meeting

- NRC staff to provide additional granularity to internal and external stakeholders with respect to the IMC and IP revisions for construction and major modification activities that are projected to occur in the near-term, and to discuss the industry proposals related to the budget and fee process for fuel facilities.
- Today's presentation will provide draft language revisions, along with discussion on concepts for IMC 2600, IMC 2694, and IP 88200 – 88202 revisions. Note: These are still "in-draft" and are not meant to convey a final regulatory position.
- After each agenda section, the public is afforded an opportunity to ask questions and/or provide comments.

Use of Oversight Processes IMC 2600 Verses IMC 2694 for New Construction and Modifications

IMC 2600 “Fuel Cycle Facility Operational Safety and Safeguards Inspection Program” (Concept)

- To be used for existing licensees.
- Depending on the scope and complexity of a licensee’s modifications (e.g. including higher material category levels, new technologies, new accident sequences, etc.), plant modification IPs guidance will use a risk-informed inspection strategy approach to determine inspection hours for modifications. This approach could result in lower or higher inspection hours for modifications.
- Core inspection hours are established in IMC 2600 App B. However, inspection scope of the large and complex modifications that the industry is proposing were not specifically considered and addressed in IMC 2600.

IMC 2600 “Fuel Cycle Facility Operational Safety and Safeguards Inspection Program” (Concept)

- In the past, major modification inspections used a combination of operating core and construction procedures. These revisions provide additional guidance for clarity, transparency, and consistency.
- Inspectors will utilize new construction IPs (88200 – 88202 series) for technical and management measures (MM) inspections, as applicable, during construction phase and existing operating core IPs during operational readiness review (ORR) inspections, as applicable.

IMC 2600 Appendix B "NRC Core Inspection Requirements"

DRAFT LANGUAGE

Table 3: As Needed Inspection Procedures

IP Number	Title
Management Measures	
71152	Problem Identification and Resolution
88071	Configuration Management Programmatic Review
88161	Corrective Action Program (CAP) Implementation at Fuel Cycle Facilities
Enforcement	
92702	Follow-Up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, and Orders
92722	Follow-Up Inspections for Any Severity Level I or II Traditional Enforcement Violation or For Two or More Severity Level III Traditional Enforcement Violations in a 12-Month Period
92723	Follow-Up Inspection for One Severity Level III and Two Severity Level IV Traditional Enforcement Violations or for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period
Event Response	
88003	Reactive Inspection for Events at Fuel Cycle Facilities
88075	Event Follow Up
93800	Augmented Inspection Team
93812	Special Inspection Team
Safety Culture	
40100	Independent Safety Culture Assessment Follow-up
93100	Safety-Conscious Work Environment Issue of Concern Follow up
95003.02	Guidance for Conducting an Independent NRC Safety Culture Assessment
Strike Preparation/Recovery	
92709	Contingency Plans for Licensee Strikes or Lockouts
92711	Implementation of Licensee Contingency Plans During a Strike/ Lockout
92712	Resumption of Normal Operations After a Strike/Lockout
81700.10	Protection of Safeguards Information at Category I Fuel Cycle Facilities
Modifications/Construction	
88200	Inspections of Safety Significant Items (and Services) During Construction of Fuel Cycle Facilities
88201	Inspections of Management Measures During Construction of Fuel Cycle Facilities
88202	Inspections of Operational Readiness During Construction of Fuel Cycle Facilities

Defining Major Modifications for Existing Licensees (Concept)

- Purpose – to establish process gates that are predictable and repeatable in our decision-making process, along with being transparent to all stakeholders.
- The trigger for a "major modification" is when the facility is making a ***substantial change in their structures, systems, and components that require a license amendment.*** Not all license amendments affect major changes to a facility such that a major modification inspection is needed.
- If these modification activities are performed within the licensee's current license (without the need for an amendment), using the core inspection hours effort and program flexibilities should be adequate to verify reasonable assurance of adequate protection.

Examples Considered as Major Modifications (Concept)

- Construction of new, permanent, buildings that will house and operate substantially new processes, technologies, or control systems for which the licensee has no prior experience, that requires a license amendment.
  - For example: An increase of Category for special nuclear material allowed to be possessed and used by the current license and/or the creation of a new process line that will utilize the increased Category of material, for which the licensee has no prior experience.
- Substantially expanded current process capabilities, including the physical expansion of the facility via substantial construction activities, that requires a license amendment.

Examples Considered as *NOT* Major Modifications (Concept)

- License amendment required for an increase of processing uranium percentage weight, without a change in Category of material, but does not represent a substantial facility or process change.

- Substantially expanded current process capabilities, including the physical expansion of the facility via substantial construction activities, that does not require a license amendment.

IMC 2600 Appendix B: NRC Core Inspection Requirements Tables 1 and 2

(Proposed Revisions in Red)

Table 1: Fuel Fabrication Facilities

		Category I Fuel Fabrication Facility		Category II Fuel Fabrication Facility		Category III Fuel Fabrication Facility	
Function/Program Areas	Procedure or Procedure Suite	Inspection Frequency	Estimated Resources per IP (hrs)	Inspection Frequency	Estimated Resources per IP (hrs)	Inspection Frequency	Estimated Resources per IP (hrs)
Plant Modifications (Annual)	88070	Annual unless 88072 is performed	30-90*	Annual unless 88072 is performed	30-90*	Annual unless 88072 is performed	30-90*
Plant Modifications (Triennial)	88072	Triennial	90*	Triennial	90*	Triennial	90*
Plant Modifications (Major Modification)	88070 and Various*	As needed	100-400*	As needed	100-400*	As needed	100-400*

Table 2: Other Fuel Facilities

		Uranium Conversion Facility		Gas Centrifuge Facility		Gas Centrifuge Facility with Approved CAP	
Function/Program Areas	Procedure or Procedure Suite	Inspection Frequency	Estimated Resources per IP (hrs)	Inspection Frequency	Estimated Resources per IP (hrs)	Inspection Frequency	Estimated Resources per IP (hrs)
Plant Modifications (Annual)	88070	Annual unless 88072 is performed	30-90*	Annual unless 88072 is performed	30-90*	N/A	N/A
Plant Modifications (Triennial)	88072	Triennial	90*	Triennial	90*	Triennial	90*
Plant Modifications (Major Modification)	88070 and Various*	As needed	100-400*	As needed	100-400*	As needed	100-400*

1 The details related to the distribution of inspection hours will be described in the licensee's inspection scheduling letter.

* The term "Various" refers to the new construction inspection procedures (IP) (88200 – 88202 series) for technical and management measures inspections, as applicable, during construction phase and existing operating baseline IPs during operational readiness review (ORR) inspections.

Graded Approach to Modification Inspections (Concept)

Modification inspection options in IMC 2600	When to Use	IP	Nominal Hours	Criteria for use
Status Quo (Lower core inspection range hours)	Annual Core Inspections w/o large modifications under 70.72	88070	30	(Annual) Core inspection
Status Quo (Higher core inspection range hours)	Annual Core Inspections with large modifications under 70.72	88070	Up to 90	(Annual) Core inspection
Major Modification	Substantial safety significant modification requiring a license amendment (LA)	88070	100 – 400 per year of modification occurring	When major modification requires LA
Triennial Modification	Triennial review for cumulative affects of modifications	88072	Up to 90	(Triennial) Core inspection

Relevant paragraphs in IMC 2600	
07.05	In addition, the need may arise for specific inspections to address major evolutions limited to one or a few licensees, such as adding new process lines or changing the assay of material processed in a facility. The need for these inspections will also be assessed on a case-by-case basis, and they can be conducted under the guidance of a TI or by using existing IPs in a customized inspection plan as Supplemental Inspections.
07.08	Inspections for the startup of new or modified facilities are handled on a case-by-case basis through the implementation of a project-specific inspection plan or IMC.

IMC 2694, “Fuel Cycle Facility Construction and Pre-Operational Readiness Review Inspection Program” (Concept)

- To be used for new applicants and new licensees.
- Inspection scope is determined on a case-by-case basis using a principal inspection plan (PIP) and is facility and process-line specific.
- Inspectors will utilize new construction IPs (88200 – 88202 series) for technical and MM inspections, as applicable, during construction phase and existing operating baseline IPs during ORR inspections.

IMC 2694 Appendix A **CURRENT**

Appendix A

FUEL FACILITY CONSTRUCTION INSPECTION PROGRAM-
CONSTRUCTION AND PRE-OPERATIONAL INSPECTION PROCEDURES

See inspection manual chapter (IMC) 2683, "Material Control and Accounting Inspection of Fuel Cycle Facilities," for a complete list of material control and accounting inspection procedures (IPs).

IPs may be added or deleted as required. Portions of these IPs will not apply to the fuel cycle facility being constructed and the applicable sections should be specified in the inspection plan.

See appropriate IMCs for a list of physical security and information security IPs.

Quality Assurance (QA) Inspection Procedures

IP 88106	Quality Assurance: Program Development and Implementation
IP 88107	Quality Assurance: Design and Documentation Control
IP 88108	Quality Assurance: Control of Materials, Equipment, and Services
IP 88109	Quality Assurance: Inspection, Test Control, and Control of Measuring and Test Equipment
IP 88110	Quality Assurance: Problem Identification, Resolution, and Corrective Action
IP 88111	10 CFR Part 21 Inspection-Facility Construction
IP 88112	Software Validation
IP 88113	Control of the Electronic Management of Data
IP 88114	Quality Affecting Item Procurement (10 CFR Part 21) and Commercial Grade Item Dedication Process (Reactive)
IP 88115	Supplier/Vendor Inspection

Construction Inspection Procedures

IP 55100	Structural Welding General Inspection Procedure
IP 88131	Geotechnical/Foundation Activities
IP 88132	Structural Concrete

IMC 2694 Appendix A **DRAFT LANGUAGE**

Appendix A

FUEL FACILITY CONSTRUCTION INSPECTION PROGRAM-
CONSTRUCTION AND PRE-OPERATIONAL INSPECTION PROCEDURES

See inspection manual chapter (IMC) 2683, "Material Control and Accounting Inspection of Fuel Cycle Facilities," for a complete list of material control and accounting inspection procedures (IPs).

IPs may be added or deleted as required. Portions of these IPs will not apply to the fuel cycle facility being constructed and the applicable sections should be specified in the inspection plan.

See appropriate IMCs for a list of physical security and information security IPs.

Construction Inspection Procedures

IP 88200	Inspections of Safety Significant Items (and Services) During Construction of Fuel Cycle Facilities
Appendix A:	Foundations and Buildings
Appendix B:	Structural Concrete
Appendix C:	Structural Steel and Supports
Appendix D:	Piping Systems
Appendix E:	Pipe Support and Restraints
Appendix F:	Mechanical Components
Appendix G:	Electrical Cable
Appendix H:	Electrical Components and Systems
Appendix I:	Ventilation and Confinement Systems
Appendix J:	Instrumentation and Control Systems
Appendix K:	Structural Welding
Appendix L:	Nuclear Welding
Appendix M:	Fire Protection Systems
Appendix N:	Inspection of Digital Instrumentation and Control System/Software Design

Management Measures Inspection Procedures

IP 88201	Inspections of Management Measures During Construction of Fuel Cycle Facilities
Appendix A:	Configuration Management (CM)
Appendix B:	Maintenance
Appendix C:	Training and Qualification
Appendix D:	Procedures

IMC 2694 Appendix A **DRAFT LANGUAGE**

Appendix E:	Audits and Assessments
Appendix F:	Incident Investigations
Appendix G:	Records Management
Appendix H:	Other Quality Assurance (QA) Elements (1-18) (as applicable)

Pre-Operational Inspection Procedures

IP 88202	Inspections of Operational Readiness During Construction of Fuel Cycle Facilities
IP 81815	Authorization for Access to National Security Information (NSI) & Restricted Data (RD)
IP 81820	Physical Protection Facility Approval and Safeguarding of National Security Information (NSI) & Restricted Data (RD)
IP 86740	Inspection of Transportation Activities
IP 88005	Management Organization and Controls
IP 88010	Operator Training/Retraining
IP 88015	Nuclear Criticality Safety
IP 88020	Operational Safety
IP 88025	Maintenance and Surveillance Testing
IP 88030	Radiation Protection
IP 88035	Radioactive Waste Management
IP 88045	Environmental Protection and Effluent Control
IP 88050	Emergency Preparedness
IP 88051	Evaluation of Exercises and Drills
IP 88055	Fire Protection
IP 88070	Permanent Plant Modifications

END

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

IMC 2694 and 2600 Updates

Examples of Concepts/Revisions

Please note that these are still “in-draft” and are not meant to convey a final regulatory position.

Changes to Both IMC 2600 and IMC 2694

IMC Section 04 Definitions "At-Risk Construction" **DRAFT LANGUAGE**

The commencement of construction (as defined by 10 CFR 70.4) prior to the Director of the Office of Nuclear Material Safety and Safeguards (or his/her designee) issues the approved license application or amendment.

IMC Section 11 Conducting Inspections **DRAFT LANGUAGE**

At-risk construction inspections are intended to verify that the applicant or licensee is constructing in accordance with the proposed design with a priority given to, but not limited to, work that the staff can only verify during construction. Inspections do not constitute an approval of the design or the application.

Changes to Both IMC 2600 and IMC 2694

IMC Section 04 Definitions "At-Risk Open Items" **DRAFT LANGUAGE**

During at-risk construction activities, an open item is an inspection tracking mechanism for a discrepancy identified between the as-built condition and the license application, [license amendment request for existing licensees] environmental report, Integrated Safety Analysis (ISA) Summary, or other design basis document that supports the licensing review being performed. The discrepancy, if left unresolved, may result in a potential failure to meet a future regulatory requirement, self-imposed standard, condition of a license, or commitment.

Changes to Both IMC 2600 and IMC 2694

IMC Section 11 Conducting Inspections **DRAFT LANGUAGE**

- At-Risk construction open items will be documented in publicly available inspection reports for transparency to internal and external stakeholders. Report wording could state “The NRC observed a discrepancy between the license application/amendment request and the as-built configuration and is being tracked as an Open Item XXXX.” The inspector could provide a concise description of the specific discrepancy identified to ensure transparency and support future inspection for closure of open items.

Changes to Both IMC 2600 and IMC 2694

IMC Section 11 Conducting Inspections **DRAFT LANGUAGE**

- Each “open item” will be considered on a case-by-case basis. Open items may necessitate further inspection to close, either during construction or during an ORR prior to NRC authorization allowing a licensee to process special nuclear materials related to a licensee application or amendment.
- Open items could be resolved in multiple ways, including but not limited to: physically rework the as-built condition to match the future licensing requirements; revise/update licensing requirements; and/or utilize the configuration management program to change the design, justify as-built use-as-is configurations, etc.

Definitions Specific in IMC 2694

IMC Section 04 Definitions “Safety Significant Items (and Services)”

DRAFT LANGUAGE

Structures, systems, equipment, components, and activities of licensee personnel and its consultants, contractors, and suppliers, as designated by the ISA or equivalent, (e.g. items relied on for safety (IROFS)) that either prevent potential accident sequences or mitigates the consequences to an acceptable level, or as necessary to meet licensing commitments, or regulatory requirements, such as 10 CFR 70.64 facilities, as applicable.

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

IPs 88200 - 88202 Updates and Examples

Examples of Concepts/Revisions

Please note that these are still “in-draft” and are not meant to convey a final regulatory position.

Existing Construction IPs Need Revision (Concept)

- IPs referenced in IMC 2694 (current version):
  - Existing IPs 881XX were written for a Part 70 Category I plutonium processing plant, with technical and quality assurance (QA) requirements that are not applicable to current Part 70 facilities that are being constructed or modified.
  - Existing IPs will remain available for future similar construction projects, as applicable.
- New IPs developed based upon non-power production or utilization facilities (NPUF) (IP 69020 – 69022)
  - Revised construction IPs will be agile, scalable, and flexible, and incorporate lessons learned from other NRC construction oversight processes.
  - Evaluate same construction attributes (structural, welding, electrical, etc.) thru different appendices.
  - Same approach is done for MM/QA elements.

Modification/ Construction Inspection Procedures

IMC 2550: NPUFs Licensed Under 10 CFR Part 50 (SHINE) CIP IP 69020 Inspections of Safety-Related Items (and Services) During Construction of NPUFs	IMC 2630 MOX CIP; IMC 2694 FC CIP; IMC 2696 LES CIP		AP1000 construction IP 65001.X (Being revised to 75000.X for advanced reactors)	
IP 69020 Appendix A: Foundations and Buildings	IP 88131	Geotechnical/Foundation Activities	IP 65001.01	Inspection of ITAAC-Related Foundations & Buildings
IP 69020 Appendix B: Structural Concrete	IP 88132	Structural Concrete Activities	IP 65001.02	Inspection of ITAAC-Related Installation of Structural Concrete
IP 69020 Appendix D: Piping Systems	IP 88134	Quality Assurance: Piping Relied on For Safety	IP 65001.03	Inspection of ITAAC-Related Installation of Piping
IP 69020 Appendix F: Mechanical Components	IP 88136	Mechanical Components	IP 65001.06	Inspection of ITAAC-Related Installation of Mechanical Components
IP 69020 Appendix G: Electrical Cable	IP 88137	Electric Cable	IP 65001.09	Inspection of ITAAC-Related Installation of Electric and Fiber Optic Cable
Appendix H: Electrical Components and Systems	IP 88138	Electrical Components and Systems	IP 65001.08	Inspection of ITAAC-Related Installation of Electric Components and Systems

NOTE: Above chart is a sample of construction attributes.

IP 88200 “Inspections of Safety Significant Items (and Services) During Construction of Fuel Cycle Facilities” (Technical)

Examples of Concepts/Revisions

Please note that these are still “in-draft” and are not meant to convey a final regulatory position.

IP 88200 Appendices **DRAFT LANGUAGE**

Appendix A: Foundations and Buildings
Appendix B: Structural Concrete
Appendix C: Structural Steel and Supports
Appendix D: Piping Systems
Appendix E: Pipe Support and Restraints
Appendix F: Mechanical Components
Appendix G: Electrical Cable
Appendix H: Electrical Components and Systems
Appendix I: Ventilation and Confinement Systems
Appendix J: Instrumentation and Control Systems
Appendix K: Structural Welding
Appendix L: Nuclear Welding
Appendix M: Fire Protection Systems
Appendix N: Inspection of Digital Instrumentation and Control System/Software Design

IP 88200-02 Inspection Requirements **DRAFT LANGUAGE**

NOTE: This IP requirements and guidance is written to be scalable, depending on the extent of the construction or modification project. As a result, not all appendices and/or sections in appendices will apply to every project. Recommended inspection scope and hours will depend on the PIP for new facility construction in accordance with IMC 2694, “Fuel Cycle Facility Construction and Pre-Operational Readiness Review Inspection Program,” Additionally, this IP can be used to provide additional technical inspection guidance for plant modification inspections, on a case-by-case basis, and in accordance with IMC 2600, Appendix B, “NRC Core Inspection Requirements.“

Appendix A: Foundations and Buildings

88200.A-01 Inspection Objectives **DRAFT LANGUAGE**

01.01 To determine whether foundation work and related management measure activities for safety significant structures at fuel cycle facilities (FCF) are being performed in accordance with regulatory requirements, the licensing basis, specifications, drawings, and work procedures.

01.02 To determine whether the applicant/licensee's system for preparing, reviewing, and maintaining records relative to safety significant foundation and building activities, as applicable, is functioning properly, and to determine whether the records reflect work accomplishment consistent with specifications and procedures.

01.03 To verify the as-built condition safety significant structures meet the specified design requirements, specifications, and drawings. For installation of concrete structures, also refer to Appendix B of this IP.

01.04 To determine that the implementation of the MMs related to work activities for safety significant foundations and buildings is effective and to verify that deviations from requirements are appropriately resolved.

NOTE: Inspection Objectives are consistent across technical appendices.

Appendix A:Foundations and Buildings

88200.A-02 Inspection Requirements **DRAFT LANGUAGE**

02.01 For the safety significant structure(s) selected for inspection, determine whether appropriate and adequate procedures in the following areas are compatible with the MMs program, if applicable, and prescribe adequate methods to meet the specifications, where applicable: (specific attributes)

02.02 Determine whether the applicant/licensee has an established audit program (including plans, procedures, and audit schedule) for assessing the adequacy of work control functions and requirements, as applicable in their licensing basis, in the area of geotechnical/foundation activities, and for ensuring that examination, inspection, and if required, test personnel associated with performing tests and inspections of geotechnical/ foundation activities are qualified and/or certified to perform their assigned work.

NOTE: Inspection Requirements are consistent across technical appendices.

Appendix A: Foundations and Buildings

88200.A-02 Inspection Requirements **DRAFT LANGUAGE**

02.03 Ascertain whether the following geotechnical/foundation activities, as required by licensing commitments and applicable building codes, are being controlled and accomplished in accordance with the requirements of the documents reviewed in 02.01, above: (specific attributes)

02.04 Review the documentation generated for the safety significant geotechnical/foundation activities. Determine whether the applicant/licensee/contractor system for documenting safety significant work is functioning properly. Records should be complete, reviewed by quality control, engineering personnel, or designee, as required, and readily retrievable.

NOTE: Inspection Requirements are consistent across technical appendices.

Appendix A:Foundations and Buildings

88200.A-03 Inspection Guidance (Concept)

- General Guidance provides inspector good practices and is consistent across all appendices.
- Specific Guidance provides inspection guidance for each of the four Inspection Requirements, and incudes guidance specific to each of the appendices (e.g. civil/structural, mechanical, electrical, etc.)
- All inspection guidance and applicable inspection requirements are defined as “as applicable,” “if required,” etc.

Appendix A:Foundations and Buildings

88200.A-04 Resource Estimate **DRAFT LANGUAGE**

The appendices, or sections of the appendices, and inspection samples and hours, applicable to a specific facility, will be determined and documented in the PIP for that facility. Inspection preparation, including review of licensing basis, ISA, applicable codes and standards, and MM procedure review, all as applicable, is not included in this estimate.

NOTE: Resource Estimate section is consistent across technical appendices.

Appendix A:Foundations and Buildings

88200.A-05 Procedure Completion **DRAFT LANGUAGE**

This inspection procedure is complete when the applicable appendices or applicable appendix sections are completed for the facility, as determined by the PIP. Inspectors are not expected to complete every activity in the appendices of this IP. Instead, inspectors should prioritize inspection activities based on 1) importance of the activity to safety, 2) availability of the on-site activity at the time of the inspection, and 3) available inspection resources. An appendix to this IP need not be completed if there are no IROFS or safety significant items (or services) covered by that appendix at an FCF.

NOTE: Procedure Completion section is consistent across technical appendices.

Inspection Example: Safety-Significant Structures

- Inspections use IP 88200 Appendix A: Foundations and Buildings; Appendix B: Structural Concrete; and Appendix C: Structural Steel and Supports, as applicable.
- For in-process inspections, vertical slice inspection of applicable MM use IP 88201 and applicable appendices. For example, configuration management program ensures design changes do not impact the safety function and license requirements for structures and internal components to withstand NPH.

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

IP 88201 “Inspections of Management Measures During Construction of Fuel Cycle Facilities”

Examples of Concepts/Revisions

Please note that these are still “in-draft” and are not meant to convey a final regulatory position.

IP 88201 Appendices **DRAFT LANGUAGE**

Appendix A: Configuration Management (CM)
Appendix B: Maintenance
Appendix C: Training and Qualification
Appendix D: Procedures
Appendix E: Audits and Assessments
Appendix F: Incident Investigations
Appendix G: Records Management
Appendix H: Other QA Elements (1-18) (as applicable)

Three Phases of Management Measures Inspections (Concept)

1. Initial Team Inspection/Program Review (in most cases, this inspection is for new applicants/new licensees only)
2. Vertical slice during in-process construction inspections (focused on construction applicable MMs)
3. ORR / Readiness Reviews (focused on operational applicable MMs, e.g. administrative IROFS, etc.)

Initial Team Inspection/Program Review

DRAFT LANGUAGE

It is recommended that an initial team inspection be conducted to review the MMs implementing documents within the first six months after construction has begun. This inspection should cover MMs implementing document requirements for all applicable appendices to this IP. During this initial team inspection, if sufficient activities have been conducted or are in-progress, an inspection of the implementation of MMs could be conducted in specific areas. Any samples completed during the initial team inspection can be credited toward the total sampling requirements for the applicable appendix.

Vertical Slice During In-Process Construction Inspections

DRAFT LANGUAGE

After the initial team inspection, periodic inspections of the effective application of MMs will be performed in conjunction with the inspection of the construction of safety significant items (and services) in accordance with IP 88200. The goal is to cover all applicable MMs implementation described in the appendices to this IP during the first year of construction. However, this might not be practical based on the type and amount of construction activities completed during the first year (e.g., no unusual events may have occurred to complete the MMs implementation inspections described in Appendix F, “Incident Investigations”).

Appendix C – Training and Qualifications

88201.C-01 Inspection Objectives **DRAFT LANGUAGE**

01.01. To determine if the applicant's or licensee's training and qualifications program adequately establishes and is implementing measures to ensure that all personnel who perform activities associated with IROFS are trained and tested so as to provide reasonable assurance that they understand, recognize the importance of, and are qualified to perform these activities in a manner that adequately protects public health and safety and the environment.

01.02. To determine if the applicant's or licensee's training and qualifications program is adequately coordinated and integrated with other management measures.

NOTE: Inspection Objectives for MM appendices are unique due to the specific attributes, however each appendices verifies a program in place and is adequately coordinated and integrated.

Appendix C – Training and Qualifications

88201.C-02 Inspection Requirements **DRAFT LANGUAGE**

02.01 Training and Qualifications Program

- Review relevant sections of the applicant's or licensee's ISA. Determine if appropriate measures have been established for the training and qualifications of personnel who perform activities associated with IROFS.
- Determine if any changes the applicant or licensee has made to the training program are in compliance with any requirements and/or licensee commitments.
- Determine if the applicant's or licensee's training program maintains established, written procedures as required by the license application.

Appendix C – Training and Qualifications

88201.C-02 Inspection Requirements **DRAFT LANGUAGE**

02.02 Program Implementation.

- Determine that the applicant or licensee is in compliance with license requirements relating to the implementation of the training program.
- Verify that training for administrative controls IROFS are implemented per 10 CFR 70.62 (d) to ensure that IROFS are available and reliable.

02.03 Training Observations.

- Determine if training classes and/or teaching aids are conducted in accordance with application or license requirements and procedural requirements.

02.04 Changes in Examinations

- Determine if changes to training examinations, if applicable, are in accordance with the license application.

Appendix C – Training and Qualifications

88201.C-03 Inspection Guidance (Concept)

- General Guidance provides inspector good practices and is consistent across all appendices.
- Specific Guidance provides inspection guidance for each of the Inspection Requirements, and incudes guidance specific to each of the appendices (e.g. configuration management, procedures, audits, etc.)
- All inspection guidance and applicable inspection requirements are defined as “as applicable,” “if required,” etc.

Appendix C – Training and Qualifications

88201.C-04 & C.05 **DRAFT LANGUAGE**

88201.C-04 Resource Estimate

The resource estimate for completing this appendix is dependent on the specific facility and will be as determined in the PIP for the facility.

88201.C-05 Procedure Completion

Procedure completion is dependent on the specific facility and will be as determined in the PIP for the facility.

NOTE: Resource Estimate and Procedure Completion sections are consistent across MM appendices.

Appendix H – Other Quality Assurance Elements

Appendix H offers inspection guidance for 18 additional QA elements, as applicable to the applicant/licensee, based upon the commitments in their licensing basis documents.

88201.H-01 Inspection Objectives **DRAFT LANGUAGE**

01.01 To determine if the applicant or licensee has adequately established and is implementing appropriate QA elements to IROFS as described in the ISA.

01.02 To determine if the applicant's or licensee's QA elements are adequately coordinated and integrated with other management measures.

88201.H 02 Inspection Requirements (Concept – Requirements based upon the individual attributes, and as required by license application.)

02.01 Organization
02.02 Quality Assurance Program
02.03 Design Control
02.04 Procurement Document Control
02.05 Instructions, Procedures, and Drawings
02.06 Document Control
02.07 – 02.18

Inspection Example: Safety-Significant Mechanical Components with a MM Vertical Slice

- Inspections may use: IP 88200 Appendix D: Piping Systems; Appendix E: Pipe Support and Restraints; Appendix F: Mechanical Components; and/or Appendix I: Ventilation and Confinement Systems to inspect technical aspect.
- For in-process inspections, vertical slice inspection of applicable MM use IP 88201 and applicable appendices. For example, the records program may demonstrate purchase order information demonstrates component manufactured will withstand specific pressure, temperature, chemical interactions, etc. for the IROFS to perform its safety function.

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

IP 88202 “Inspections of Operational Readiness During Construction of Fuel Cycle Facilities”

Examples of Concepts

Please note that these are still “in-draft” and are not meant to convey a final regulatory position.

ORR/Readiness Reviews (Concept)

- IP 88202 is being developed and modeled from similar NPUF inspection procedures to provide ORR inspection guidance that is consistent and transparent for all applicants and licensees that are required to conduct an ORR as part of a regulatory requirements or license condition.
- IP 88202 will directly reference operational IPs (e.g. IP 88020, etc.) which allows for more transparent fee-billing.

ORR/Readiness Reviews (Concept)

- ORR inspections will include, but not limited to:
  - safety significant items (and services) such as IROFS, and associated management measures with a focus on operational readiness to support safe processing of special nuclear material;
  - IROFS samples may focus more specifically on administrative controls and/or IROFS that due to the nature of construction, were not previously inspected;
  - Functional area programs, as applicable; and
  - Licensee's/applicant's resolutions/corrective actions associated with at-risk construction open items or other findings/violations identified during construction (as-applicable).

ORR/Readiness Reviews

IMC Section 04 Definitions “ORR/Readiness Reviews ” for IMC 2694 and 2600 **DRAFT LANGUAGE**

An assessment review inspection performed by a multi-disciplined inspection team to verify that a new facility, [a major modification to a previously approved facility] can be operated safely within the intended safety basis. In order to support a decision to allow operation of the facility, as applicable, the NRC will review and assess the state of readiness of facility operation based on the results of the ORR inspection.

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

Fuel Facility Budget and Fee Discussion

58

- Summary of the May 2023 and November 2023 Fuel Facility Stakeholder Meeting discussions on the budget and fee processes
- Feedback on NEI's Letter to NRC, "Industry Comments on How NRC Could Fund Shortfalls in the Fuel Cycle Business Line Budget"
- Discussion of potential NRC and Industry actions to inform budget formulation

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments.

Closing Remarks