

Draft Temporary Instruction for Aging Management Program Reviews for Independent Spent Fuel Storage Installations

Marlone Davis
NMSS/DSFM/IOB
NRC Regulatory Conference
December 8, 2016



Agenda

- Introduction
- Objective
- Contents of TI
- Path Forward
- Summary





Introduction

- The purpose of this presentation is to provide an informative overview of the Aging Management Program (AMP) Temporary Instruction (TI) developed to review and verify how the licensees' plan to implement the AMP at their Independent Spent Fuel Storage Installation (ISFSI).
- Success for this presentation is to have a good interaction and dialogue about the TI.





Objective

To verify, through inspection, the adequacy of the licensee's implementation of Aging Management Program, including supporting activities, to ensure the licensee complies with the requirements of Title 10 of the Code of Federal Regulation (10 CFR), Part 72.42 and conditions set forth in their Independent Spent Fuel Storage Installation (ISFSI) license or the Certificate of Compliance (CoC).

- Review what the licensee developed
- Verify how the licensee implemented or plan to implement the AMP



Objective

Temporary Instruction (TI)

- A temporary inspection procedure focused on current safety issues that are not currently addressed by an established Inspection Procedure (IP)
- Generally are placed in effect for a period of 12 to 24 months
- Used for a one-time initial inspection of a safety issue or for a collection of information
- Not used to provide policy and guidance information to licensees

Inspection Procedure (IP)

- Specific guidance for inspection activities
- Describe the activities performed by an inspector or technical staff, including administrative requirements.
- Identify the applicable program, state the objective of the inspection, list the inspection requirements, give inspection guidance, and estimate the resources needed











Contents of TI

- Scope
- Preventive Actions
- Parameters Monitored or Inspected
- Detection of Aging Effects
- Monitoring and Trending
- Acceptance Criteria
- Corrective Actions
- Confirmation Process
- Administrative Controls
- Operating Experience





Review of Scope

Structures, systems and components (SSCs) addressed in the AMP and maintained throughout the period of extended operation (PEO).

➤ Check that the Site Specific and/or General Licensee scoped SSCs related to aging management into their program.







Preventive Actions

Contains actions that will be used to prevent/mitigate aging effects and rates of aging for SSCs.

- ➤ Check if there is a process or procedure that looks at performance of preventive actions (Not all licensee's AMPs will contain this section).
- ➤ For example, if the process or procedure include information on coating the cask to prevent loss of material due to corrosion.





Parameters Monitored

Parameters are signs of deterioration, including corrosion, crackling, sulfate and chloride concentrations, etc. that are linked to aging effects on SSCs.

Check that the process or procedure involve monitoring and inspecting all parameters incorporated into each AMP.





Detection of Aging Effects

Includes inspection and monitoring details, methods and techniques, frequency, sample size, data collection and timing of inspections.

- Check that the specific types of inspections to perform and if these inspections are clearly stated as a part of the program.
- Check that the program includes performance of inspections/examinations at appropriate intervals.





Monitoring and Trending

Describes how data will be collected and evaluated in order to determine the extent of the aging effects and the need for corrective or mitigating actions.

- ➤ Check that the process or procedure clearly state the parameters that will be trended, in addition to the monitoring methodology and timeline.
- Check that the process or procedure require that results of inspections are used to establish rates of degradation to establish potential inspection frequencies.



Acceptance Criteria

Provides the criteria against the need for corrective actions. Intended to ensure that the SSC functions and approved design basis are maintained.

- ➤ Check that the process or procedure contain acceptance criteria, and include a methodology for analyzing the results against the applicable criteria.
- Check to determine if the criteria use objective or standard methods (i.e., Managing Aging Processes in Storage).



Corrective Actions

Describes the measures to be taken when the acceptance criteria are not met.

- Check that the licensee has a corrective action program.
- ➤ In some cases, an AMP may specify certain corrective actions.





Confirmation Process

Includes provisions to ensure corrective actions are adequate and appropriate, which is consist with an Quality Assurance Program approved under 10 CFR Part 72, Subpart G, or 10 CFR Part 50, Appendix B.

Check that the licensee has a corrective action program (Effectiveness Review).





Administrative Controls

Includes provisions to perform formal review and approve processes, record retention requirements, reporting, document control, and change processes (e.g. 72.48 changes).

➤ Check how the licensee's control changes, administer review and approvals, and reporting requirements.





Operating Experience

The program references and evaluate applicable operating experience.

- Check that there is a method to collect and assess operating experience during the PEO as described in the AMP.
- Check for provisions to enter conditions into an operating experience database and implement a periodic operating experience assessment throughout the PEO.



Path Forward

DATE	MILESTONE
May 2016	Internal NRC Review of TI
June 2016	Discussed TI at Inspector Counterpart Meeting / Received Feedback from NRC Regional Offices
CY 2017	TI Finalized
CY 2017	TI Implemented at Selected Site
CY 2017	Information from TI Inspections
CY 2018	Initiate draft Inspection Procedure





Summary

- Review and Verify AMP at ISFSI under license renewal
- Select one site-specific and one general licensee to gather information to inform the inspection procedure
- Conduct TI inspection activities CY 2017 using the 10 program elements with a team consisting of Head Quarters and Regional Inspectors



Questions



