

VSC-24 CoC Renewal – Discussion of Implementation Requirements

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*All you need in radioactive and hazardous waste
management*

Agenda

- Introductions and Background
- NRC update on TI for Aging Management
- NRC update on Rulemaking Status
 - Changes to conditions
 - Schedule
- Discussion of CoC Renewal Implementation Requirements
 - CH Requirements (*Energy Solutions*)
 - GL Requirements/Plans/Clarifications (presented by Entergy)
- Summary and Conclusions

Background

- VSC-24 OG meeting held in June 2016
 - ES provided overview of CoC renewal requirements
 - Meeting conclusions:
 - Clarification of conditions needed for consistent interpretation by all involved (CH, GLs, NRC regional inspectors, NRC headquarters)
 - Understanding of requirements in pending TI on Aging Management important for compliance
 - Meeting needed with NRC (headquarters and inspection branch) to clarify requirements in order to assure compliance with conditions of CoC renewal

CH Implementation Requirements



The following condition was added to the Initial CoC and Amendments 1 through 6:

“FSAR UPDATE FOR RENEWED COC

The CoC holder shall submit an updated FSAR to the Commission, in accordance with 10 CFR 72.4, within 90 days after the renewal of the CoC has been approved by the Commission. The updated FSAR shall reflect the changes and CoC holder commitments resulting from the review and approval of the renewal of the CoC. The CoC holder shall continue to update the FSAR pursuant to the requirements of 10 CFR 72.248.”

Discussion:

- ES interprets this to require submittal of the next revision of the FSAR (i.e., Revision 9), but not to require new versions of each existing FSAR revision.
- GLs will need to reference next revision of FSAR for Aging Management requirements.

VSC

General Licensee Slides

Status of TI/Inspection Procedure

- ❖ NRC indicated at the May EPRI Extended Storage Collaboration Program Meeting that the draft TI/IP for AMA would be available Fall of 2016.
- ❖ NRC update on TI for Aging Management
- ❖ How will the test sites be identified and notified?

Draft Certificate of Compliance

iv. OPERATING PROCEDURES FOR SYSTEMS IN SERVICE LONGER THAN 20 YEARS

The general licensee (i.e., the user) that operates VSC-24 storage system SSCs for more than 20 years shall establish, implement, and maintain written procedures for each aging management program (AMP), including the lead cask inspection program, described in Section 9.3.3, “Aging Management Program” of the FSAR. The procedures shall be consistent with the AMP descriptions in the FSAR and shall include provisions for changing AMP elements as necessary and within the limitations specified in other CoC conditions and technical specifications to address new information on aging effects that is derived from the results of AMP inspections and/or industry operating experience. Each procedure shall contain a reference to the specific aspect of the AMP element implemented by that procedure, and that reference shall be maintained even if the procedure is modified.

The general licensee shall establish and implement these written procedures within 180 days of the effective date of the renewal of the CoC or the 20th anniversary of the loading of the first VSC-24 cask at its site, whichever is later. The general licensee shall maintain these written procedures for as long as it (the licensee) continues to operate VSC-24 storage system SSCs that have been in service for longer than 20 years.

Implementation Plan

- ❖ All General Licensee will have at least one cask in service >20 years at time of renewal
- ❖ Resources will be allocated to plant refueling outages and cask loading campaigns

Implementation Plan

Entergy Implementation Plans have not been finalized but current plans are to develop the following:

- 1) Overall Implementation Procedure
- 2) Guidance for use of the INPO Aging Management Database
- 3) Each AMP will have a procedure developed that lists the inspections requirements (including inspector qualifications), acceptance criteria and what do if criteria not met, includes entry into the corrective action program.

Implementation Plan

- ❖ Implementation Plans will **not** include work orders, detailed inspection procedures or ensure that all inspection tools and equipment have been procured and are at the site.
- ❖ These additional deliverables will be completed in accordance with the project schedule that is developed per the guidance in the overall implementation procedure.

Role of the Corrective Action Program

- ❖ AMP's will direct any conditions that do not meet the acceptance criteria and any unanticipated adverse conditions to be entered into the licensee's corrective action program.
- ❖ The corrective action program will determine next actions and evaluate functionality of the cask. A time frame for actions will also be established based on evaluations performed under the corrective action program.

Extent of Condition

Draft AMP “Examination of the VCC Assembly Ventilation Ducts and Annulus”
Table 15

Extent of Condition: If blockage exceeding the acceptance criteria is identified, the extent of condition evaluation shall include remote visual examination of the air inlets, air outlets, and annulus of at least two additional VSC-24 storage systems (i.e., casks) at the site for blockage. The GL shall select the additional casks based upon those factors that are most relevant to the type of blockage observed (e.g., location or orientation of the casks on the ISFSI pad or time in service). If unacceptable blockage is identified in any of the additional casks examined, then all casks at the site shall be examined for blockage. Any blockage identified in the casks examined for extent of condition that can be removed by reasonable means shall be removed.

Note: Additional AMP’s have similar language

Extent of Condition

AMP will clarify that the population for additional inspections will be limited to casks at the site of the same type (VSC-24) and casks that have been inservice >20 years.

Extent of Condition that contain multiple inspections in a single AMP

Draft AMP “Examination of VSC Top End Steel Components” Table 16

Inspection of the following component surfaces for coating degradation and corrosion:

- All surfaces of the VCC Cask Lid and VCC Lid Bolts;
- Readily accessible top and inner radial surfaces of the VCC Liner Flange;
- Top surface (chamfer and weld) of the VCC Shielding Ring Plates (Liner Assembly);
- Top and inner radial surface of the VCC Shielding Ring Plates (Shield Ring);(1)
- Top surfaces of the MSB Structural Lid, MSB Valve Covers, MSB Closure Weld, and top edge of the MSB Shell;

*Replacement of the VCC lid gasket and locking wire.(2)

Extent of Condition

AMP will clarify that extent of condition evaluation performed for the corrective action will consider what items exhibit coating degradation or corrosion and the scope of inspections for additional casks may be limited to the component that exhibited degradation.

Example Extent of Condition

For example if the inspection finds that all parameters are acceptable except the VCC bolts and they require replacement due to degradation. The VCC bolts will be replaced and the VCC bolts on additional casks will be inspected but the other inspection parameters will not be included in the expanded scope of inspection.

Scope Clarification

Draft AMP, “Examination of MTC Assembly” Table 17

Visual examination of following component surfaces of the MTC assembly for coating degradation and corrosion:

- Exposed external surfaces of the Outer Shell, Inner Shell, Top Ring, and Bottom Ring;
- Inner and outer surfaces (i.e., those normally covered by the Trunnion Cylinder / End Cover) of both Trunnions;
- All surfaces of the MTC Lid, Lid Bolts, and Shim/Flange;
- All readily accessible surfaces of the Rail Shields, Rail Lower Plates, and Shield Doors (with shield doors in fully-opened and fully-closed positions).

Assumption was that the MTC is stored with the doors installed if the doors are not installed there is no reason to include the scope in the 4th bullet above. All readily accessible surfaces identified can be inspected without having the doors installed and fully open or closed. AMP will provide this clarification.

Questions ?????

Summary

- TI on Aging Management
- Rulemaking status and schedule
- CH requirements for CoC Renewal implementation
- GL requirements for CoC Renewal implementation