PMNorthAnna3COLPEmails Resource

From: Thomas Kevern
Sent: Thursday, September 25, 2008 8:26 AM
To: Gregory Makar
Cc: Allen Howe; Michael Eudy; NorthAnna3COL Resource
Subject: FW: Draft Copy of FAC Program Description
Attachments: Draft Copy of FAC Program Description 092208.pdf

Greg:

Forwarded for your evaluation - Dominion follow-up to our telecon re response to RAIs 10.3.6-1 & -2. As requested by the staff, Dominion provided the applicable section of the revised FSAR and a commitment to modify text terminology.

Please confirm these RAIs are now considered resolved-confirmatory.

Thanks.
Tom

From: Regina.Borsh@dom.com [mailto:Regina.Borsh@dom.com]
Sent: Wednesday, September 24, 2008 12:44 PM
To: Thomas Kevern
Cc: Joseph.Hegner@dom.com; John.Hayden@dom.com; Mark.Paul@dom.com; Barry.Bryant@dom.com; dcholt@bechtel.com; twilli2@entergy.com; hickste@earthlink.net; joseph.bauer@exeloncorp.com; david.distel@exeloncorp.com; petersonn@dteenergy.com; Spencer.Semmes@dom.com; Mark.J.Loeffler@dom.com
Subject: Draft Copy of FAC Program Description

As a follow-up to our NRC - Dominion phone call last Thursday, attached is a draft copy of North Anna Unit 3 FSAR Section 6.6.7.1, which contains the flow accelerated corrosion (FAC) program description. Additionally, in our next submittal of the FSAR, we will revise the wording in this description to clarify the meaning of the term 'initial inspections.'

Please contact me if you have any questions.

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Hearing Identifier: NorthAnna3_Public_EX
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Subject: FW: Draft Copy of FAC Program Description
Sent Date: 9/25/2008 8:25:52 AM
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From: Thomas Kevern

Created By: Thomas.Kevern@nrc.gov

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Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

RAI NA3 05.02.04-4
(08/12/08)

6.6.6 System Pressure Tests

Revise the second sentence of the first paragraph as follows.

STD COL 5.2-1H

Regardless of which test method is chosen, system leakage and hydrostatic pressure tests will meet all applicable requirements of ASME Code Section XI, IWA-5000 and IWC-5000 for Class 2 components; and IWD-5000 for Class 3 components, including the limitations of 10 CFR 50.55a(b)(2)(xx) and 10 CFR 50.55a(b)(2)(xxvi).

STD-08-052
(Draft 07/08/08)

6.6.7 Augmented Inservice Inspections

STD COL 6.6-1-A

NA3 RAI 10.03.06-2
(07/14/08)

6.6.7.1 Flow Accelerated Corrosion Program Description

The flow accelerated corrosion (FAC) monitoring program analyzes, inspects, monitors, and trends nuclear power plant piping and components that are susceptible to FAC damage. The FAC program is based on EPRI NSAC-202L (Reference 6.6-201).

Prior to start-up, a comprehensive FAC-susceptibility screening will be performed to identify any plant systems that may be susceptible to FAC degradation. Should any plant systems remain susceptible, a FAC program will be implemented as described below. Program implementation milestones are provided in Section 13.4. Pre-service baseline nondestructive examination (NDE) inspections will be performed and material constituency identified for each as-fabricated piping component in the susceptible systems.

STD-08-052
(Draft 07/08/08)

6.6.7.1.1 Analysis

A program similar to that described in EPRI NSAC-202L is used to identify the most susceptible components and to evaluate the rate of wall thinning for components and piping potentially susceptible to FAC. Each susceptible component is tracked in a database and is inspected, based on susceptibility. For each piping component, the program predicts the wear, and the estimated time until it must be re-inspected, repaired, or replaced.

STD-08-052
(Draft 07/08/08)

6.6.7.1.2 Industry Experience

Industry experience provides a valuable supplement to plant analysis and associated inspections. Reviews of industry experience are performed to identify generic plant problem areas and determine differences in similar

types of components. This information is used to update the FAC program.

NA3 RAI 10.03.06-2 (07/14/08)

6.6.7.1.3 Inspections

Wall thickness measurements establish the extent of wear in a given component, provide data to help evaluate trends, and provide data to refine the predictive model. Components are inspected for wear using ultrasonic techniques (UT), radiography techniques (RT), or by visual observation. The initial inspections are used as a baseline for later inspections. Therefore, the initial inspections use grid locations and measurement methods most likely to be used for inservice inspections according to industry guidelines. Each subsequent inspection determines the wear rate for the piping and components and the need for inspection frequency adjustment for those components.

STD-08-052 (Draft 07/14/08)

6.6.7.1.4 Training and Engineering Judgement

The FAC program is administered by trained and experienced personnel. Task-specific training is provided for plant personnel that implement the monitoring program. Specific NDE is carried out by personnel qualified in the given NDE method. Inspection data is analyzed by engineers or other experienced personnel to determine the overall effect on the system or component.

STD-08-052 (Draft 07/08/08)

6.6.7.1.5 Long-Term Strategy

The FAC program includes a long-term strategy that focuses on reducing wear rates, using improved water chemistry, and optimizing the inspection planning process.

STD-08-052 (Draft 07/08/08)

6.6.7.1.6 FAC Program Documentation

A procedure documents the overall program description and its implementation.

Governing Program Description

A governing program description defines the overall program and associated responsibilities. This program description addresses the following elements:

- A corporate commitment to monitor and control FAC.
- Identification of the tasks to be performed (including implementing procedures) and associated responsibilities.

- Identification of the position that has overall responsibility for the FAC program.
- Communication requirements between the lead position and other departments that have responsibility for performing support tasks.
- Quality assurance requirements.
- Identification of long-term goals and strategies for reducing high FAC wear.
- A method for evaluating plant performance against long-term goals.

Program Implementation

The implementation of each specific task conducted as part of the FAC program is described in one or more procedures, including:

- Identifying susceptible systems
- Developing FAC inspection drawings
- Developing a FAC inspection database
- Performing FAC analysis
- Selecting and scheduling components for initial inspection
- Performing inspections
- Evaluating inspection data
- Evaluating worn components
- Identifying components for repair and replacement when necessary
- Selecting and scheduling locations for follow-on inspections

STD-08-052
(Draft 07/08/08)

6.6.7.1.7 **Documentation**

The results of inspections are documented in accordance with the requirements of the implementing documents. Periodically, reports are prepared that identify the components inspected, justify the basis for their selection (i.e., predictive ranking, industry experience, engineering judgment), document the results of the inspections, and evaluate and disposition worn components.

6.6.10 Plant Specific PSI/ISI Program Information

6.6.10.1 Relief Requests

Add the following at the end of this section.

STD COL 6.6-1-A

No relief requests for the PSI/ISI program have been identified.