Davis-BesseNPEm Resource

From: CuadradoDeJesus, Samuel
Sent: Wednesday, December 07, 2011 12:32 PM
To: dorts@firstenergycorp.com
Cc: Davis-BesseHearingFile Resource; custerc@firstenergycorp.com
Subject: FW: Davis-Besse License Renewal Letter L-11-376
Attachments: L-11-376 Telecon Supp B.2.1-2_2011-12-07.pdf

Thanks

From: dorts@firstenergycorp.com [mailto:dorts@firstenergycorp.com]
Sent: Wednesday, December 07, 2011 11:19 AM
To: CuadradoDeJesus, Samuel
Cc: custerc@firstenergycorp.com
Subject: Davis-Besse License Renewal Letter L-11-376

Sam..... attached is Davis-Besse License Renewal Letter L-11-376 dated today, December 7, 2011. This letter provides a copy of the highlighted procedures requested by the NRC during a recent telephone conference related to the ASME Code general visual examiner qualifications (RAI Followup B.2.1-2).

Should you have any questions regarding the attached, please contact Cliff Custer or me.

Thank you,

_____
Steve Dort
DBNPS License Renewal

Hearing Identifier: Davis_BesseLicenseRenewal_Saf_NonPublic
Email Number: 2846

Mail Envelope Properties (377CB97DD54F0F4FAAC7E9FD88BCA6D0806F8F5D99)

Subject: FW: Davis-Besse License Renewal Letter L-11-376
Sent Date: 12/7/2011 12:32:25 PM
Received Date: 12/7/2011 12:32:30 PM
From: CuadradoDeJesus, Samuel

Created By: Samuel.CuadradoDeJesus@nrc.gov

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MESSAGE	1293	12/7/2011 12:32:30 PM
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Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

FENOC
FirstEnergy Nuclear Operating Company

5501 North State Route 2
Oak Harbor, Ohio 43449

Barry S. Allen
Vice President - Nuclear

419-321-7676
Fax: 419-321-7582

December 7, 2011
L-11-376

10 CFR 54

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT:
Davis-Besse Nuclear Power Station, Unit No. 1
Docket No. 50-346, License Number NPF-3
Reply to Request for Supplemental Information for the Review of the Davis-Besse Nuclear Power Station, Unit No. 1, License Renewal Application (TAC No. ME4640)

By letter dated August 27, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102450565), FirstEnergy Nuclear Operating Company (FENOC) submitted an application pursuant to Title 10 of the *Code of Federal Regulations*, Part 54 for renewal of Operating License NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS). During a telephone conference held on November 22, 2011, the Nuclear Regulatory Commission (NRC) requested supplemental information to complete its review of the License Renewal Application (LRA).

The information requested is related to the FENOC response to NRC request for additional information (RAI) Followup B.2.1-2 submitted by FENOC letter dated August 26, 2011 (ML11242A166). The NRC requested copies of the sections of the documents described in the August 26 response. The Enclosure provides the requested document sections.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Clifford I. Custer, Fleet License Renewal Project Manager, at 724-682-7139.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 7, 2011.

Sincerely,

Barry S. Allen

Enclosure:
Document Sections Described in the FENOC Response to NRC Request for Additional Information (RAI) Followup B.2.1-2

cc: NRC DLR Project Manager
NRC Region III Administrator

cc: w/o Enclosure
NRC DLR Director
NRR DORL Project Manager
NRC Resident Inspector
Utility Radiological Safety Board

Enclosure

Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS)

Letter L-11-376

Document Sections Described in the FENOC Response to NRC Request for Additional Information (RAI) Followup B.2.1-2

11 pages follow

Highlighted sections of the following DBNPS documents are enclosed:

DB-PF-03009	**Revision 7**
NOP-CC-5708	**Revision 3**
Third Ten Year Inservice Inspection Program	**Revision 5**

Davis-Besse Nuclear Power Station

SURVEILLANCE TEST PROCEDURE

DB-PF-03009

CONTAINMENT VESSEL AND SHIELD BUILDING VISUAL INSPECTION

REVISION 07

Prepared by: Mark Swain

Procedure Owner: Supervisor - Nuclear Engineering Programs

Effective Date: JUN 17 2011

LEVEL OF USE:

STEP-BY-STEP

1.0 PURPOSE

1.1 This procedure performs the visual examinations of the Containment Vessel and Shield Building as specified in the Containment Leakage Rate Testing Program in accordance with 10 CFR 50 Appendix J, Option B. The visual examination of the Containment Vessel and Shield Building is performed of the accessible interior and exterior surfaces of the containment system in order to detect any structural deterioration which may affect the containment leak-tight integrity.

1.2 This procedure is generally performed prior to the Integrated Leak Rate Test (ILRT) and during two other refueling outages when the Type A test is on a 10 year frequency per Regulatory Guide 1.163.

1.3 This procedure satisfies Surveillance Requirement SR 3.6.1.1 of the Technical Specifications.

1.4 This procedure is a prerequisite for performing the Integrated Leak Rate Test (ILRT).

1.5 The examination of the interior surface of the Containment Vessel is conducted in accordance with the requirements of Subsection IWE of ASME Section XI.

1.6 The examination of the exterior surface of the Containment Vessel is not within the scope of ASME Section XI. However, the acceptance criteria of IWE-3500 are used to evaluate the acceptability of the examination results.

1.7 This procedure may be used to perform pre or post maintenance/modification testing. Only those portions of the procedure pertaining to the area affected by the maintenance/modification activity need be performed. The Containment System Engineer will N/A those steps which need not be performed.

2.0 LIMITS AND PRECAUTIONS

2.1 Administrative

2.1.1 The requirements of the RWP shall be followed at all times.

2.1.2 Personnel who perform general visual examinations of the exterior surface of the Containment Vessel and the interior and exterior surfaces of the Shield Building shall meet the requirements for a general visual examiner in accordance with NOP-CC-5708, Written Practice for the Qualification and Certification of Nondestructive Examination Personnel. These individuals shall be knowledgeable of the types of conditions which may be expected to be identified during the examinations.

2.1.3 The inspection of the outside portions of the Shield Building shall be conducted during daylight hours to ensure adequate lighting for the inspection is available. This inspection may be performed prior to the refueling outage for safety considerations to avoid performing the inspection in inclement weather.

2.2 Equipment

2.2.1 None

WRITTEN PRACTICE FOR THE QUALIFICATION AND CERTIFICATION OF NONDESTRUCTIVE EXAMINATION PERSONNEL

Effective Date: **04/30/10**

Approved: Colin P. Keller 4/21/2010
Program Manager Date

1.0 PURPOSE

1.1 This procedure establishes the minimum requirements, responsibilities and methodology for the qualification and certification of First Energy Nuclear Operating Company (FENOC) personnel performing Nondestructive Examination (NDE) and Boric Acid Corrosion Control (BACC) activities and defines the criteria for documenting their qualification(s) and certification(s).

1.2 This procedure specifies minimum education, experience, and training requirements for each level and method of certification.

1.3 This procedure meets the intent and requirements of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI through the 2001 Edition, 2003 Addenda and referenced specification ASNT-CP-189, through 1995 Edition.

2.0 SCOPE

2.1 Applicability

This procedure applies to all FENOC NDE examination personnel who require qualification and certification to perform their job functions under the requirements of ASME/ANSI Section B31.1, ASME Code Section I (ASME Section I 2007 Edition requires SNT-TC-1A 2006 Edition), III, IV, VIII, XI and also ANSI/ASNT CP-189-1991 &1995 or SNT-TC-1A through the 2004 edition. These duties include the areas of Electromagnetic Testing (ET), Liquid Penetrant Testing (PT), Magnetic Particle Testing (MT), Radiographic Testing (RT), Ultrasonic Testing (UT), Ultrasonic Thickness Testing (UTT), Ultrasonic Void (UTV) and Visual Examination (VT - 1, 2, 3) and Detailed and General Visual Examinations governed by ASME Section XI, Subsections IWE and IWL (VT-1C, VT-1M, VT-3C, VT-3M and General Visual). This procedure is applicable to NDE personnel who are performing NDE under the FENOC QA program.

2.1.1 This procedure is applicable for personnel who are required to perform Boric Acid Corrosion Control (BACC) Examinations per NOP-ER-2001.

2. Qualified Data Analyst (QDA) – An individual who has successfully completed the written and practical examinations defined in Appendix G of the EPRI PWR Steam Generator Examination Guidelines. If an individual fails any part of the QDA examinations, re-testing shall follow the requirements as stated in Appendix G of the EPRI Steam Generator Examination Guidelines. A QDA who has not analyzed data during any consecutive 15 month period shall be considered to have interrupted service and shall be required to successfully complete the practical examination requirements of Section G.4.2 of Appendix G. QDA Re-qualification shall be performed within one year of EPRI addition of a new technique/damage mechanism to QDA qualification process. The individual should be considered re-qualified if the practical examination requirements of section G.4.2.2 are met for the new technique/damage mechanism.

4.2.4 BACC Inspector

An individual qualified to find, report and evaluate evidence of leakage in borated systems. A BACC Endorsement is required for all VT-2 examiners at Davis-Besse and Beaver Valley. See Attachment 4 for BACC Qualification requirements.

4.2.5 General Visual Examiner (IWE / IWL)

For Davis Besse:

The General Visual examiner visually assesses the general condition of Class MC or metallic liners of CC containment components. General Visual examinations shall be performed by, or under the direction of a Registered Professional Engineer or other individual knowledgeable in the requirements for design, inservice inspection, and testing of MC or CC containments. The examination type is described simply as General Visual.

For Beaver Valley and Perry:

The General Visual examiner visually assesses the general condition of Class MC or metallic liners of CC containment components. General Visual examinations shall be performed by personnel who are qualified for visual examination (i.e. are certified VT-1 or VT-3 examiners) or General Visual examiners. The examination type is described as VT-3M.

- And/Or – VT-2L Qualification Record (NOP-CC-5708-02).
- Practical Examination Data Form (NOP-CC-5708-03)
- General Required Reading List(s) See Attachment 5.
- Specific Required Reading List(s) See Attachment 5.
- Education Verification Form (NOP-CC-5708-04) (if applicable)
- Experience Verification Form (NOP-CC-5708-05) (if applicable)
- Training Certificates, diplomas or evidence thereof; including the instructor's name for training received. (if applicable)
- Annual Vision Examination form (NOP-CC-5708-11) (if applicable).
- Annual vision forms shall also be tracked in FITS for VT-2 and BACC examiners, if applicable.
- NDE Examiner Certification Review Forms (NOP-CC-5708-06) (if applicable)
- NDE Examiner Certification Expiration, Suspension, Revocation or Reinstatement Forms (NOP-CC-5708-07) (if applicable)
- All applicable endorsement documentation (i.e. PDI, PDQS, BACC etc.)

6. BACC Certification Database: The Site FITS database program shall be used to document and track FENOC BACC personnel certifications/qualifications. Each station shall track the site's BACC personnel certifications in FITS.

7. General Visual Examination Memo: Documentation for General visual examiner qualification shall be by memorandum.

ATTACHMENT 1: TRAINING, EXPERIENCE, AND EXAMINATION REQUIREMENTS

Attachment 1 - Table 1	**Training – Level I and Level II**																	
Exam Method	RT (8)		MT		ET (6)		PT		UTT	UTV	VT-1,2,3		VT-2	VT-1/3 (9)		VT-1/3M	VT-1/3C (5)	General Visual
Level	I	II	I	II	I	II	I	II	II	II	I	II	I/II	I	II	I/II	I/II	General
Hours, min.	40	40	12	8	40	40	8	8	4	12(7)	24	40	(3)	8	16	4 (4)	8	N/A (10)

1)	All NDE training, organization providing training, dates of training, hours of training, evidence of satisfactory completion, and instructor's name shall be documented for each method the candidate is certifying to.
2a)	To receive credit for training hours the candidate shall pass a final examination covering the topics contained in the training course. A minimum grade of 80% is necessary to receive credit. Reference 4.3.2.1.
2b)	A person may be qualified directly to NDE Level II with no time as a certified NDE Level I, providing the required experience/training consists of the sum of the hours required for Level I and Level II.
3a)	All Nuclear Sites – 4 hours (minimum) of class room training is required for VT-2 limited cert. This training shall cover ASME Section XI requirements, procedures, Industry Operating Experiences related to visual examination issues and failure mechanisms observed in applicable components.
3b)	BV & DB Nuclear Sites – In addition to the VT-2 training above, DB & BV VT-2 Examiners shall receive an additional 3 hours (minimum) of training on boric acid program issues and industry boric acid experiences. The BACC Program training (see Attachment 4) meets this requirement.
3c)	BV & DB Nuclear Sites – In addition to the VT-2 and BACC training above, DB & BV VT-2 Examiners that are required to perform Alloy 600 Bare Metal examinations (this includes RPV Bare Head exams) shall receive an additional 1 hour (minimum) of training on Alloy 600 issues and inspections as required by CC-N722 & 729-1 (4 hours of BACC training).
4)	VT-1/3 examination personnel required to perform IWE (Class MC Components) exams: VT-1/3 examiners shall have received 4 hours of class room training in the inspection of metal containments. This training can be part of the initial training in the above table or an additional course. VT-1/3 examiners who have received IWE training will have an IWE "VT-MC" Endorsement as part of their VT certification. The training shall cover ASME Section XI IWE requirements, procedures, Industry Operating Experiences related to visual examination issues and failure mechanisms observed in MC components.

ATTACHMENT 1: TRAINING, EXPERIENCE, AND EXAMINATION REQUIREMENTS

5)	VT-1/3 examination personnel required to perform IWL (concrete containments & components) exams: VT-1/3 examiners shall have received 8 hours of training covering inspection of concrete containments. This training can be part of the initial training in the above table or an additional course. VT1/3 examiners who have received IWL training will have an IWL "VT-CC" endorsement as part of their CT certification. The training shall cover ASME Section XI IWL requirements, types of degradation as defined in American Concrete Institute ACI-201.1 R-68, "Guide for making a Condition Survey of Concrete in Service), site procedures, Industry Operating Experiences related to visual examination issues and failure mechanisms observed in CC components.
6)	Individuals qualifying for ET Level IIA and/or QDA shall have an additional 8 hours (minimum) of training in data analysis.
7)	Training requirements for UT-Void (UTV) Level IIL are for examiners restricted to UTV Exams using the Panametric LTC instrument. An alternative to the specialized UTV training would be 40 hours of Level I or II training. Level II or III UT personnel do not need additional training in order to perform UT-water level/gas void exams.
8)	RT-L (Film Interpretation Only) requires 40 hrs of industrial radiographic film interpretation training.
9)	VT-3 Snubbers – training requirements for VT-3 snubber examiners shall be a minimum of 8 hours of snubber specific training. EPRI LV-I or II training meets this requirement.
10)	(a) Formal training is not required for IWE/IWL General Visual examination personnel, however, individual shall receive sufficient general familiarization under the direction of a knowledgeable individual experienced in performing CTMT exams and the requirements for design, inservice inspection, and testing of the Class MC and metallic liners of Class CC pressure retaining components. No qualification or training examinations are required. Document familiarization training. (b) Alternatively, VT personnel with MC endorsement are approved to perform the general visual examinations.

DAVIS-BESSE NUCLEAR
POWER STATION
UNIT #1

LOCATION: 5501 North State Route 2
Oak Harbor
Ottawa County
Ohio 43449

OWNERS: FIRST ENERGY CORPORATION
5501 N. ST. ROUTE 2
OAK HARBOR, OHIO 43449

REACTOR SUPPLIER: BABCOCK AND WILCOX COMPANY
LYNCHBURG, VA.

ARCHITECT/ENGINEER: BECHTEL POWER CORPORATION
SAN FRANCISCO, CA.

NRC DOCKET NUMBER:	50-346
FACILITY OPERATING LICENSE:	NPF-3
CAPACITY:	2817 Mwt
COMMERCIAL OPERATION DATE:	July 31, 1978

2.0 CODE APPLICABILITY

2.1 Construction Permit/Operating License

The Construction Permit for the Davis-Besse Nuclear Power Station Unit #1 was issued on March 24, 1971. The date of issuance of the operating license for the Davis-Besse Nuclear Power Station Unit #1 by the Nuclear Regulatory Commission (NRC) was April 22, 1977. The Facility operating license number is NPF-3.

2.2 Construction Code

2.1.1 The Nuclear Steam Supply System (NSSS) was furnished by Babcock & Wilcox (B&W) and has two Reactor Coolant loops. The NSSS components were fabricated to the requirements of the ASME Section III, 1968 Edition, 1968 Addenda and the NSSS piping was fabricated to ANSI B31.1-1969. The NSSS was installed to the requirements of ASME Section III, 1971 Edition, Summer 71 Addenda.

2.1.2 The remaining Construction Code Class 1, 2, and 3 components were fabricated and installed to the requirements of ASME Section III, 1971 Edition, Summer 71 Addenda.

2.1.3 The Containment Vessel was fabricated and installed to the requirements of the 1968 Edition including the Summer 1969 Addenda of ASME Section III, Class B.

2.3 Inservice Inspection Code Edition

In accordance with 10CFR50.55a(g)(4)(ii), Inservice Inspection of components subject to examination during the Third 10-Year Inspection Interval at Davis-Besse will comply with the requirements of the specified Code of record referenced by 10CFR50.55a(b) on the date 12 months prior to the start of the Third 10-Year Inspection Interval (i.e. September 21, 1999).

On September 21, 1999, 10 CFR 50.55a referenced the 1989 Edition of ASME Section XI. On September 22, 1999, 10 CFR 50.55a was revised (Federal Register 64FR51370) to reference the 1995 Edition and Addenda through the 1996 Addenda. The effective date for this change to 10 CFR 50.55a was November 22, 1999.

In accordance with 10 CFR 50.55a(g)(4)(iv), the inservice examinations may meet the requirements set forth in subsequent editions and addenda incorporated by reference in

10 CFR 50.55a(b). As the September 22, 1999 Federal Register revision to 10 CFR 50.55a references the 1995 Edition through the 1996 Addenda of ASME Section XI, the 1995 Edition through the 1996 Addenda of ASME Section XI will be the Code Edition used for the Third 10-Year Inspection Interval for the Davis-Besse Nuclear Power Station.

2.4 Inspection Interval

The beginning of the First 10-Year Inspection Interval for Davis-Besse Nuclear Power Station Unit #1 was the date of commercial operation, July 31, 1978. Subsequently, extended outages of greater than six months duration occurred during the first inspection interval caused the interval to be extended an additional 34 months as permitted by IWA-2400 of ASME Section XI.

The start of the Second 10-Year Inspection Interval was September 21, 1990.

The start of the Third 10-Year Inspection Interval will be September 21, 2000. The Third 10-Year Inspection Interval is divided into three inspection periods. The inspection periods are scheduled as follows:

Inspection Period	*Dates*	*Number of Outages*
1st Period	From September 21, 2000 to June 1, 2006. This period was extended to June 1, 2006 in accordance with IWA-2430 (d)(3) of ASME Section XI to coincide with the 14th Refueling Outage which is scheduled for Winter/Spring 2006. Due to the extended 13th Refueling Outage the 1st period and the ten year interval was extended by 2 years from 2004 to 2006 in accordance with IWA-2430(e).	2
2nd Period	From June 1, 2006 to May 20, 2009	1
3rd Period	From May 21, 2009 to September 20, 2012	2