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U. S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

Braidwood Station, Unit 1
Facility Operating License No. NPF-72
NRC Docket No. STN 50-456

Subject: Braidwood Station, Unit 1 Inservice Inspection Summary Report

Enclosed please find the post-outage summary report (i.e., 90 day report) for inservice inspection (ISI) examinations conducted during Braidwood Station, Unit 1 Refueling Outage 16 (A1R16). This report is submitted in accordance with the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for the Inservice Inspection of Nuclear Power Plant Components," and ASME Code Case N-532-4, "Repair/Replacement Activity Documentation Requirements and Inservice Summary Report Preparation Submission – Section XI, Division 1."

Attachment 1 provides the Owner's Activity Report (OAR) for ISI activities conducted during A1R16 including a list of items with flaws or relevant conditions that required evaluation for continued service and an abstract of repair/replacements activities required for continued service. In addition, Attachment 2 provides the results of Containment ISI activities performed in accordance with ASME Section XI, Subsection IWE, "Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Power Plants," and Subsection IWL, "Requirements of Class CC Components of Light-Water Cooled Power Plants," with specified modifications and limitations in 10 CFR 50.55a, "Codes and standards."

Please direct any questions you may have regarding this submittal to Mr. Chris VanDenburgh, Regulatory Assurance Manager, at (815) 417-2800.

Respectfully,

Daniel J. Enright
Site Vice President
Braidwood Station

Attachments:
1. Owner's Activity Report (OAR) for A1R16
2. A1R16 Containment ISI (IWE/IWL) Results

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - Braidwood Station
NRR Project Manager – Braidwood Station
Illinois Emergency Management Agency – Division of Nuclear Safety

ATTACHMENT 1

FORM OAR-1 OWNER'S ACTIVITY REPORT

TABLE 1, ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

TABLE 2, ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQURIED FOR CONTINUED SERVICE

ATTACHMENT 1

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number A1R16

Plant Braidwood Generating Station, 35100 South Route 53, Suite 84, Braceville, Illinois 60407

Unit No. 1 (if applicable) Commercial Service Date July 29, 1988 Refueling Outage Number A1R16

Current Inspection Interval Third Inspection Interval (ISI), Second Inspection Interval (Containment ISI) (1st, 2nd, 3rd, 4th, other)

Current Inspection Period First Inspection Period (ISI and Containment ISI) (1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plans ASME Section XI 2001 Edition through 2003 Addenda

Date / Revision of Inspection Plans March 25, 2012 / Revision 5

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans Same as above

Code Cases used: N-460, N-508-3, N-513-3, N-532-4, N-566-2, N-586-1, N-597-2, N-613-1, N-624, N-639, N-648-1, N-652-1, N-661-1, N-685, N-695, N-696, N-700, N-706-1, N-722-1, N-729-1, N-731, N-739, N-751, N-753, N-770-1

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests, meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of A1R16 (refueling outage number) conform to the requirements of Section XI

Signed Brendan J. Casey Brendan J. Casey, ISI Program Owner Date 8/14/2012
(Owner or Owner's designee. Title)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by HSBCT of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty expressed or implied concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature] Commissions NB#3756, IL#1085 ANIC
(Inspector's Signature) National Board, State, Province, and Endorsements

Date 8-15-2012

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TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Examination Item Number	Item Description	Evaluation Description
D-B	D2.10	1DG5045A	Crack observed visually inside valve body was evaluated under EC 385798 (IR 1256964)
D-B	D2.10	1AB8458	Body-to-bonnet leak evaluation completed under ATI 1261575-02
C-H	C7.10	1CS01SA Eductor Flange	Flange bolting evaluation completed under ATI 1326453-02
C-H	C7.10	1CV8119	Inlet flange bolting evaluation completed under ATI 1334556-02
C-H	C7.10	1CV128	Body-to-bonnet bolting evaluation completed under ATI 1334971-02
D-B	D2.10	1FC8762B	Body-to-bonnet bolting evaluation completed under IR 1335573
D-B	D2.10	1FC01P Discharge Flange	Flange bolting evaluation completed under ATI 1341352-02
D-B	D2.10	0AB8575B	Bonnet bolting evaluation completed under ATI 1346996-02
D-B	D2.10	1FC013	Body-to-bonnet bolting evaluation completed under ATI 1357587-03
C-H	C7.10	1CV8444	Body-to-bonnet bolting evaluation completed under ATI 1207169-02
D-B	D2.10	0SXA5AA	Minimum wall evaluation completed under EC 385472 / Calculation BRW-11-0135-M (IR 1249027)
D-B	D2.10	1FC8762A	Body-to-bonnet bolting evaluation completed under ATI 1110373-02

ATTACHMENT 1

TABLE 2

ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description Of Work	Date Completed	Repair/Replacement Plan Number
2	1SI03AA Through-Wall Leak (IR 1180138)	Replace Existing Pipe with New Pipe	3/3/2011	WO# 1413529-01 (1-11-005)
2	In-Process Weld Repair of 1SI03AA (IR 1181689)	Repair Welds That Failed Radiography	3/3/2011	WO# 1413529-01 (1-11-005)
2	In-Process Weld Repair of 1SI03AA (IR 1182629)	Repair Welds That Failed Radiography	3/3/2011	WO# 1413529-01 (1-11-005)
3	1VP01D Tube Leak (IR 1183482)	Install mechanical tube plugs	3/6/2011	WO# 1415197-04
3	Support 1SX72009R Loose Lock Nut (IR 1349032)	Tighten Loose Lock Nut	4/5/2012	WR 398107
3	0FC004 Hinge Pin Leak (IR 1347425)	Clean and tighten hinge pin	4/18/2012	WR 397911
1	1RC01BA Tube R19-C138	Plug tube based on eddy current results	4/28/2012	WO# 1231322-02 (1-11-018)
1	1RC8042B Diaphragm Leak (IR 1354708)	Rebuilt valve	4/27/2012	WO# 1354708-01
2	1CV8108 Body-to-Bonnet Leak (IR 1353632)	Replaced bonnet gasket	5/3/2012	WO# 1531828
2	In-Process Weld Repair Line 1SI08CA (IR 1354639)	Repair Weld That Failed Preservice Ultrasonic Exam	5/4/2012	WO# 1450740-03 (1-12-030)
2	In-Process Weld Repair Line 1SI08CA (IR 1360099)	Repair Weld That Failed Visual Examination of Weld Root	5/4/2012	WO# 1450740-03 (1-12-030)
1	Reactor Upper Head Penetration #69 (IR 1357298)	Perform Embedded Flaw Repair of Penetration 69	5/8/2012	WO # 1534769-03 (1-12-024)
1	In-Process Repair on Reactor Upper Head Penetration #69 (IR 1363159)	Remove Liquid Penetrant Indications From Embedded Flaw Repair	5/8/2012	WO # 1534769-03 (1-12-024)
2	1CV8382A Body-to-Bonnet Leak (IR 1363840)	Replaced bonnet gasket	5/9/2012	WO# 1539047-01

ATTACHMENT 2

A1R16 CONTAINMENT ISI (IWE/IWL) RESULTS

ATTACHMENT 2

A1R16 Containment ISI (IWE/IWL) Results

REPORT OF CONTAINMENT DEGRADATION

Containment inspections are performed in accordance with Subsection IWE (Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Power Plants) and IWL (Requirements for Class CC Components of Light-Water Cooled Power Plants) of ASME Section XI, Division 1, with specified modifications and limitations in 10CFR 50.55a. A limited scope of IWE inspections was completed during A1R16. The completed surveillances for IWE contain all the examination details along with indications recorded and their associated evaluations required by ASME Section XI.

The 25th Year Inservice Inspection of Class CC Concrete Surfaces and Post Tensioning Systems were completed for Braidwood Unit 1 (and Unit 2) prior to Refuel Outage A1R16. The completed surveillances for IWL contain all the examination and testing details along with their associated evaluations required by ASME Section XI. The results of the Unit 2 surveillance will be included in the A2R16 Inservice Summary Report.

ASME IWE REPORT OF CONTAINMENT DEGRADATION

Augmented Section XI IWE examinations of the Class CC liner examinations for the third interval were performed in accordance with the requirements of ASME Section XI, Table IWE-2500-1, Category E-C, Containment Surfaces Requiring Augmented Examination. The scope of the examinations included areas of the liner below the moisture barrier.

Exelon Procedures ER-AA-330-007, *"Visual Examination of ASME Section XI Class MC Surfaces and Class CC Liners"*, ER-AA-335-018 *"Visual Examination of ASME IWE Class MC and Metallic Liners of CC Components"*, and ER-AA-335-004 *"Ultrasonic Measurement of Material Thickness and Interfering Conditions"* were used to perform the examinations.

A description of the type and estimated extent of the conditions that led to the degradation [10CFR 50.55a(b)(2)(ix)(A)(1)]:

The most notable type of degradation was liner pitting just below the moisture barrier resulting in metal loss of varying depths. Maximum pit depth identified was 8/64" (this was found at only one location).

Extent of Condition:

The maximum pit depth was measured at 8/64" and had occurred only at one location based on Detail Visual (VT-1) examinations of the areas inspected. These examinations also indicated that the liner plate contained numerous pits in the areas below the MB with pit depth averages to less than or equal to 3/64" and pits with larger depths occurring less frequently. This pattern is typical of the entire liner plate surfaces below the moisture barrier. Approximately 115' of liner plate directly below the moisture barrier that was not examined previously in A1R14 or A1R15 was examined after the moisture barrier was removed. This completed the VT examination of the entire containment liner plate directly below the moisture barrier.

Description of the Conditions That Led to the Degradation:

Based on the examination results the condition is attributed to corrosion. The liner plate surface below the moisture barrier was coated with Carbo Zinc CZ11 in year 2000 which does not tolerate improper surface preparation. This coating product is not recommended for use unless white metal conditions with contoured surface profile is achieved. Since this strip of liner plate below the moisture barrier is not easily accessible, it is unlikely that the proper surface preparation was

attained. Furthermore, the liner plate surface may not have been completely dried (i.e., some moisture left in the wall from the wet Cerafibre resting against it) when the moisture barrier was replaced in 2000. In the year 2000 the Cerefibre was found wet and adhering to the metal liner. The liner most likely experienced a slow chronic corrosion rate prior to 2000. The bulk of the liner corrosion probably occurred in the early years after the year 2000 when the moisture barrier was replaced. The new coating applied in A1R16 was Keeler and Long 9600 Series used for Service Level I coating in containment which does not require white metal surface conditions.

Evaluation of each area, and the result of the evaluation [10CFR 50.55a(b)(2)(ix)(A)(3)]:

One engineering evaluation was performed to address all the indications since the corrosion leading to the degraded condition is the same contributor affecting the same component (liner plate). The evaluation determined that the liner plate with the highest degraded condition (8/64") bounds all newly documented degraded surfaces and the containment will remain operational and meet its intended design function during the upcoming operating cycle through Refuel Outage A1R17 where additional examinations and repairs are scheduled.

Description of Necessary Corrective Actions Completed [10CFR 50.55a(b)(2)(ix)(A)(3)]:

1) Approximately 115' of liner plate directly below the MB that was not examined previously in A1R14 or A1R15 was examined after the MB was removed. This completed the VT examination of the entire containment liner plate directly below the moisture barrier.

2) Selected areas determined as augmented in A1R14 or A1R15 were further examined using the Ultrasonic examination method to document actual liner plate thicknesses in the vicinity of these pitted areas.

3) This evaluation was completed to provide justification for the acceptability of the liner plate at its thinnest location and operation of the Unit 1 until A1R17 without repair or replacement activities on the containment liner plate.

4) The liner surfaces at all the exposed locations where the moisture barrier had been removed were prepared for Keeler and Long 9600 series coating (used for Level I coating in containment) that was applied during A1R16 along with a new Cerafibre and new moisture barrier.

5) A new moisture barrier was installed at all areas where it was removed. A Pre-Service VT-3 exam was performed after all repairs were made on the entire moisture barrier. No conditions which would allow water intrusion were identified.

6) Portions of Class CC liner below the moisture barrier have been categorized as Category E-C in the ISI schedule.

Proposed Corrective Actions for A1R17:

Liner repairs shall be performed in the areas exceeding 4/64" prior to performance of the Containment Integrated Leak Rate Test (ILRT), scheduled in A1R17. In addition to the repairs, additional examinations are scheduled for A1R17. This scope includes locations that showed thickness loss greater than 1/64" as identified during A1R14, A1R15 and A1R16.

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A1R16 Containment ISI (IWE/IWL) Results

Conclusions/Findings:

The liner plate is acceptable and capable of performing its intended design function until A1R17 where a combination of augmented examinations and liner plate weld repairs are scheduled for completion.

ASME IWL REPORT OF CONTAINMENT DEGRADATION

The 25th Year ASME Class CC examinations and tests for Unit 1 (and Unit 2) containment surfaces were completed during 2011 prior to A1R16. Additionally, the 25th year examinations and tests for the Units 1 (and Unit 2) ASME Class CC Post Tensioning Systems were completed. As permitted by ASME Section XI IWL-2421, the examination requirements were modified. The Braidwood Units are identical in design, the post tensioning system operations were completed not more than two years apart. The requirements specified in ASME IWL-2524 and IWL-2525 were met for the Unit 1 Post Tensioning System during the 25th Year Surveillance. The requirements specified in ASME IWL-2523, IWL-2524, and IWL-2525 were met for the Unit 2 Post Tensioning System during the 20th Year Surveillance. NRC Regulatory Guide 1.35.1 (July, 1990) was used to determine predicted forces. The Exelon procedure implemented for the 25th Year Post Tensioning Surveillance was ER-AA-330-006, "In-service Inspection and Testing of the Pre-Stressed Concrete Post Tensioning Systems".

In addition to the tendons selected in accordance with IWL-2521, an augmented sample of tendon grease caps were removed for free water inspection. This sample included grease caps installed on vertical tendons located below grade elevation (401'), grease caps from horizontal tendons located below grade elevation (401') and grease caps from dome tendons. For those locations where the presence of free water was detected, samples of the sheathing filler grease and water (if sufficient quantities were collected to allow for analysis) were obtained and chemically analyzed in accordance with IWL-2525 and examination of the anchorage components and surrounding concrete were performed in accordance with IWL-2524.

During grease cap examinations, there was no evidence of deformation observed which was indicative of deterioration of anchorage hardware.

With regard to pre-stress forces and elongation measurements, all acceptance standards were met. Additionally, the Regression Analysis as specified in NRC Information Notice 99-10 was completed. The results of the regression analysis concludes the projected lift-off forces for each group of tendons for the next surveillance and beyond the 40 year life of the plant is higher than the minimum post tensioning force for all three tendon groups.

As required by 10CFR 50.55(a) the applicant or licensee shall report the following conditions, if they occur, in the ISI Summary Report required by IWA–6000:

(1) The sampled sheathing filler grease contains chemically combined water exceeding 10 percent by weight or the presence of free water:

Discussion as applicable to the 25th Year Post Tensioning Surveillance:
There was no instance where the chemically combined water exceeded ten percent by weight. However the presence of free water was detected. The anchorage components for all tendons are accessible for inspection for the presence of free water when the grease caps are removed. A total of 38 Unit 1 grease caps were removed for presence of free water during the 2011 surveillance. Of these 38 locations, eleven were locations selected in addition to those to meet the requirements of Table IWL-2525-1. The grease caps from these eleven locations were removed for the purpose of examination for the presence of free water. The basis for selection of these eleven locations was history of free water and other locations which may be suspect for free water intrusion. Of the

eleven locations, free water was collected from seven. The majority of the eleven locations were those with a history of the presence of free water during past examinations. The presence of free water at specific locations is managed through additional examinations in conjunction with the post tensioning surveillance activities required by ASME Section XI on a five year frequency. The following table provides a summary of the free water collected:

Unit	Tendon EPN	IR Number	Tendon End	Quantity. Collected (Oz.)	Reason For Selection
1	D-1-37	1247483	Shop	2	Augmented (Free Water Exam)
1	D-1-40	1247480	Shop	17	25th Yr. ISI
1	H-01-AC	1234002	Field	3	Augmented (Free Water Exam)
1	H-02-AC	1234000	Field	1	Augmented (Free Water Exam)
1	H-02-BA	1238029	Shop	6	Augmented (Free Water Exam)
1	H-02-BA	1239892	Field	7	Augmented (Free Water Exam)
1	V-142	1231835	Field	11	25th Yr. ISI

Although free water was collected from these locations, no active corrosion or other physical degradation due to the presence of free water was identified and all chemical analysis acceptance standards were met.

(*2*) The absolute difference between the amount removed and the amount replaced exceeds 10 percent of the tendon net duct volume;

Discussion as applicable to the 25th Year Post Tensioning Surveillance:
There was no instance where the amount of sheathing filler grease removed and the amount replaced exceeded 10 percent of the tendon net duct volume.

(3) Grease leakage is detected during general visual examination of the containment surface.

Discussion as applicable to the 25th Year Containment Concrete Surface Exams:
Five indications of grease leakage through the surface were observed. Three indications are new and have developed since the previous examination in 2006. The following table provides descriptions of the indications:

ATTACHMENT 2

A1R16 Containment ISI (IWE/IWL) Results

UNIT	DESCRIPTION OF CONDITION / INDICATION
1	**NEW INDICATION SINCE 2006 EXAM: Grease Leakage (Containment Surface): Location: Outdoors, Northeast Face, first horizontal joint down**. Leakage is at a previously placed form tie patch, minor shrinkage crack extends down. Surface are of grease is approximately 8" high x 6" wide. Grease accumulation is conservatively estimated at 1 pint. No evidence of exposed reinforcing steel or structural distress was observed.
1	**NEW INDICATION SINCE 2006 EXAM: Grease Leakage (Containment Surface): Location: Outdoors, East Face of Containment,** Location: upper left hand corner of the patch that was placed in support of closure of the steam generator replacement (SGR) project opening. Degradation in the form of pattern cracking (surface area approximately 3'-0" x 3'-0"), a single crack exists (approximately 5'-0" long with minimal width) from a form tie patch down to the edge of the SGR opening patch. Efflorescence exists in localized areas in the pattern cracking, and evidence of grease leakage / staining (no significant accumulation) exists in the vicinity of the crack adjacent to the form tie patch. There is no evidence of structural degradation such as deflection of concrete, significant cracking, settlement, shifting, or exposed reinforcing steel.
1	**CHANGE IN INDICATION SINCE 2006 EXAM: Grease Leakage (Containment Surface): Location: Outdoors, East Face of Containment,** Location: upper right hand corner of the patch that was placed in support of closure of the steam generator replacement project opening. The characteristics of the indication have not changed significantly but additional cracking further up, extending from previously identified cracking (tight widths and approximately 2'-0" in length) and additional minor grease staining / leakage within the new cracked area was observed. There are additional localized areas of pattern cracking in the panel adjacent to the indication. No evidence of structural distress or exposed reinforcing steel was identified.
1	**MINOR CHANGE IN INDICATION SINCE 2006 EXAM: Grease Leakage (Containment Surface): Location: Outdoors,** Location: Horizontal construction joint approximately 30' to the left (south) of the 1B/1C Main Steam Isolation Valve Rooms and approximately 35' above ground level. The only change from the previous inspection is as expected the quantity of grease accumulation has slightly increased, estimated to be a maximum of one quart. There are no significant changes in the characteristics of the previously identified small void / crack. No evidence of structural distress or exposed reinforcing steel was identified.
1	**NEW INDICATION SINCE 2006 EXAM: Grease Leakage (Containment Surface): Location: Outdoors, Northwest Face of Containment,** Location: Above (approximately 1') the second horizontal joint down from the dome access grating approximately 20' to the left of the permanent / vertical ground cable that runs from the top to the bottom of the containment exterior. The leakage starts approximately 1' up from the joint and extends down to the horizontal joint. The source of the leakage is through a minor shrinkage crack / void. The leakage does not appear to be significant or active. The quantity of the grease accumulation is estimated to be a maximum of 1 pint. There is no evidence of structural distress or exposed reinforcing steel.

ATTACHMENT 2

A1R16 Containment ISI (IWE/IWL) Results

As required by 10CFR 50.55(a), for Class CC applications, the applicant or licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas. For each inaccessible area identified, the applicant or licensee shall provide the following in the ISI Summary Report required by IWA–6000:

(1) A description of the type and estimated extent of degradation, and the conditions that led to the degradation:

(2) An evaluation of each area, and the result of the evaluation, and;

(3) A description of necessary corrective actions.

Discussion as applicable to the 25th Year Containment Concrete Surface Exams:

(1) Description of the type and estimated extent of degradation, and the conditions that led to the degradation: The type of degradation is evidence of grease leakage through the concrete surface. The estimated extent of degradation in the inaccessible area is negligible if any exists. The primary inaccessible area is the containment surface below grade level. During the post tensioning surveillance activities there has been no significant differences in the quantity of sheathing filler grease removed versus installed. Additionally, no degradation has been identified during visual examination or physical testing of the tendons located below grade level. The conditions that led to the degradation is grease seepage / leakage through minor cracks in the structure between the surface and the tendon sheathing.

(2) Evaluation of each area and the result of the evaluation:
Based on RPE review / evaluation the conditions do not warrant repair as it has negligible impact on the structure. With regard to the post tensioning system the quantity of grease leakage is small when compared to the volume (> 100 gallons) in each tendon duct. The condition will not result in post tensioning components becoming uncovered or susceptible to corrosion.

(3) Description of Necessary Actions:
The conditions will be monitored through annual examinations for significant changes in the grease leakage. At this time all indications have been evaluated as not having any significant impact on the structural integrity of the containments.

Discussion as applicable to the Presence of Free Water

(1) Description of the type and estimated extent of degradation, and the conditions that led to the degradation:
The type of degradation is the existence of free water in the post tendon grease caps and ducts. The anchorage components for all tendons are accessible for inspection for the presence of free water when the grease caps are removed. Although undesirable, the presence of free water is not resulting in degradation of the tendon hardware. The condition that led to the presence of free water in the tendons is water infiltration through minor cracks and voids in the outer surface of the structure. Additionally, a damaged dome drainage system contributed to water intrusion into the dome tendons. The drainage system has been repaired.

(2) Evaluation of each area and the result of the evaluation:
The presence of free water inside the sheathing and the resultant potential for corrosion is the condition to be addressed / evaluated. Although undesirable, the potential presence of free water in the tendon ducts / sheathing does not present a

concern with regard to corrosion. The basis for this conclusion is as follows: No active corrosion or other degradation was identified during any examination of the anchorage hardware. The quantity of grease replaced versus removed did not exceed 10% of the tendon net duct volume during any re-greasing operation. The moisture content in all grease samples did not exceed ten percent volume by weight. During a past surveillance (2001) a "worse case" tendon from which a significant quantity (nine gallons) of free water was collected was subjected to force measurement, completely de-tensioned, wire removed for examination and testing, and re-tensioning. The sheathing filler grease ("Visconorust" 2090-P4) was observed to maintain the film integrity during as found inspections. The tendon met all visual and physical acceptance standards. The removed wire showed no evidence of corrosion and met all physical testing acceptance standards. The free water had accumulated in the tendon from construction (1985) until 1998 when it was selected for initial inspection. No further evaluation is required.

(3) Description of Necessary Actions:

Braidwood will continue including selection of additional anchorage locations beyond that required by ASME Section XI for the purpose of inspection for the presence of free water during the 30th year surveillance and beyond. The scope of the tendons selected will include the 10 anchorage locations with greater than ten ounces of free water collected during the 25th year surveillance. Additionally, other anchorage locations located below grade level and dome tendons have been selected for grease cap removal and inspection for evidence of free water. A total of 24 Unit 1 grease caps have been selected for removal for free water inspection during the 30th Year surveillance (2016).