

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

- | | | | | |
|----|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|
| 1. | Owner | <u>Exelon Nuclear</u>
Name
<u>4300 Winfield Road, Warrenville, IL 60555</u>
Address | Date | <u>04/06/07</u> |
| 2. | Plant | <u>Byron Nuclear Power Station</u>
Name
<u>4450 N. German Church Road, Byron, IL 61010</u>
Address | Sheet | <u>1</u> of <u>1</u> |
| | | | Unit | <u>00</u> |
| | | | <u>Work Order No. 00790202-01</u>
Repair Organization, P.O. No., Job No., etc. | |
| 3. | Work Performed by | <u>Byron Mechanical Maintenance</u>
Name
<u>4450 N. German Church Road, Byron, IL 61010</u>
Address | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | | Authorization No. | <u>Not Applicable</u> |
| | | | Expiration Date | <u>Not Applicable</u> |
| 4. | Identification of System | <u>SX ESSENTIAL SERVICE WATER - SPARE ASSEMBLY</u> | | |
| 5. | (a) Applicable Construction Code | <u>Section III</u> | 19 <u>74</u> Edition, <u>W/75</u> Addenda, | <u>None</u> Code Case |
| | (b) Applicable Edition of Section XI Utilized for Repairs or Replacement Components | <u>2001 ED/2003 AD</u> | | |
| | (c) Section XI Code Cases used, | <u>None</u> | | |
| 6. | Identification of Components Repaired or Replaced and Replacement Components | | | |

[illegible]

7. Description of Work TACK WELD VALVE DISC TO DISC UNION AND RETURN TO STORES.
-
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒
Other ☐ Pressure N/A psi Test Temp N/A °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO#00790202-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

Sam RRR Carol
Owner or Owner's Designee, Title

Date 5/14, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 5/12/06 to 5/14/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.

J. J. [Signature]
Inspector's Signature

Commissions

ILL-1254

National Board, State Province, and Endorsements

Date:

May 14, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 04/08/07
4300 Winfield Road, Warrenville, IL
 Name Address
 Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL
 Name Address
Work Order No. 00827538 - 01
 Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481
 Name Address
 Authorization No. Not Applicable
 Expiration Date Not Applicable
4. Identification of System ESSENTIAL SERVICE WATER [SX]
 1986 Edition/1987 Addenda (Valve)
5. (a) Applicable Construction Code ASME Section III 1974 Edition, S75 Addenda, None Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
4" Outlet x 36" Run Weldolet	Consolidated Power Supply	HT#2016ANR	N/A	2SX32A-4" Cat ID 1414497-1	2007	Installed	No
4" Gate Valve	Flowserve	S/N: BC465	N/A	2SX035 Cat ID 1414079-1	2006	Installed	Yes

7. Description of Work ADD 4" DRAIN LINE AND 4" VALVE TO LINE 2SX13A-36"
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure 90 psi Test Temp. 67 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WORK ORDER: 00827538-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature] SAR RRR Carol
Owner or Owner's Designee, Title

Date 5/18, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 1.25.07 to 5.21.07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]

Inspector's Signature

Commissions

166-1854

National Board, State Province, and Endorsements

Date:

May 21, 20 07

Document No.: 7.0

Revision No.: 0

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 4/14/07
 Name
4300 Winfield Road, Warrenville, IL
 Address
 Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 02
 Name
4450 N. German Church Road, Byron, IL
 Address
Work Order No. 00836116 - 01
 Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
 Name
36400 S. Essex Road, Wilmington, IL 60481
 Address
 Authorization No. Not Applicable
 Expiration Date Not Applicable
4. Identification of System ESSENTIAL SERVICE WATER (SX)
5. (a) Applicable Construction Code ASME Section III 19 **74** Edition, **S75** Addenda, **1702**, Code Case **1773**
 (b) Applicable Edition of Section XI Used for Repair/Replacement 2001 Edition / 2003 Addenda
 Activity
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Butterfly Valve	Jamesbury	ND-48858-20B	N/A	2SX034	1978	REMOVED	YES
Butterfly Valve	ENERTECH	11536	N/A	2SX034	2007	INSTALLED	YES

7. Description of Work REPLACE VALVE 2SX034
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

Other ☐ Pressure 102 psi Test Temp. 67 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order No. 00836116 - 01

Document No.: 7.0

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME

Code, Section XI.

Type Code Symbol Stamp Not Applicable

Certificate of Authorization No. Not Applicable

Signed [Signature] Date 6/22, 20 07
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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 3/22/07 to 6/12/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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 12L-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: June 22, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 4/14/07
4300 Winfield Road, Warrenville, IL Sheet 1 of 1
 Name
 Address
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL Work Order No. 00836116 - 01
 Name
 Address Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481 Authorization No. Not Applicable
 Name
 Address Expiration Date Not Applicable
4. Identification of System Essential Service Water [SX]
5. (a) Applicable Construction Code ASME Section III 1974 Edition, S75 Addenda, None Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Bolt, Stud 1 1/2" X 19 3/4"	Texas Bolt Co.	Ht. Code: GT44	N/A	2SX034 Stud #2	1977	Removed	No
Bolt, Stud 1 1/2" X 19 3/4"	Nova Machine Products	Ht. Code: 239162 Trace Code: OC16	N/A	2SX034 Stud #2	2006	Installed	No
Bolt, Stud 1 1/2" X 19 3/4"	Texas Bolt Co.	Ht. Code: GT45	N/A	2SX034 Stud #18	1977	Removed	No
Bolt, Stud 1 1/2" X 19 3/4"	Nova Machine Products	Ht. Code: 239162 Trace Code: OC16	N/A	2SX034 Stud #18	2006	Installed	No
Bolt, Stud 1 1/2" X 7 3/4"	Texas Bolt Co.	Ht. Code: GT44	N/A	2SX034 Stud #2A	1977	Removed	No
Bolt, Stud 1 1/2" X 7 3/4"	Nova Machine Products	Ht. Code: 239162 Trace Code: OC16	N/A	2SX034 Stud #2A	2006	Installed	No
Bolt, Stud 1 1/2" X 7 1/4"	Texas Bolt Co.	Ht. Code: GT44	N/A	2SX034 Stud #31A	1977	Removed	No
Bolt, Stud 1 1/2" X 7 1/4"	Nova Machine Products	Ht. Code: 239162 Trace Code: OC16	N/A	2SX034 Stud #31A	2006	Installed	No

7. Description of Work REPLACE VALVE/PIPE FLANGE STUDS/NUTS - 2SX034
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 N/A Other ☐ Pressure 102 psi Test Temp. 67 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order No. 00836116 - 01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature] RRR Coarb
Owner or Owner's Designee, Title

Date 6/22, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/3/07 to 6/22/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]
Inspector's Signature

Commissions

111-1254
National Board, State Province, and Endorsements

Date: June 22, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 4/18/07
4300 Winfield Road, Warrenville, IL Sheet 1 of 1
 Address
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL **Work Order No. 00860234-01**
 Address Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481 Authorization No. Not Applicable
 Address Expiration Date Not Applicable
4. Identification of System SX -ESSENTIAL SERVICE WATER
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2SXB7A-8"	Southwest Fabricating	#29625	N/A	2SXB7A-8" Spool SX-88-1	1980	Removed	YES
2SXB7A-8"	Consolidated Power Supply	HT# X22341	N/A	2SXB7A-8"	2007	Installed	NO

7. Description of Work REPLACE APPROX. 14'-8" OF 8" PIPE BETWEEN FIELD WELDS FW-2595 AND FW-2852
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure 58 psi Test Temp. 68 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order 00860234-01
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp Not Applicable

Certificate of Authorization No. Not Applicable

Signed [Signature] RLR Carol Date 5/10, 20 07
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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 11/1/06 to 5/11/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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 1LL-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: May 11, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY **As Required by the Provisions of the ASME Code Section XI**

1. Owner Exelon Nuclear Date 04/16/07
4300 Winfield Road, Warrenville, IL
 Address Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL
 Address Work Order No. 00862605-01/16
 Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481
 Address Authorization No. Not Applicable
 Expiration Date Not Applicable
4. Identification of System SX-ESSENTIAL SERVICE WATER
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, None Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
6" PIPE W/90° ELBOW	Southwest Fabricating	S/N: 10190	N/A	2SXA9A-6" Spool SX-29-5	1977	Removed	Yes
6" PIPE	Consolidated Power Supply	Ht.#: X82519 ✓ Ht.#: U21214 ✓	N/A	2SXA9A-6" Cat ID 24417-1	2006	Installed	No
6" 90° ELBOW	Consolidated Power Supply	Ht.#: P402E ✓	N/A	2SXA9A-6" Cat ID 24913-1	2007	Installed	No
6" PIPE	Southwest Fabricating	S/N: 10189	N/A	2SXA9A-6" Spool SX-29-4	1977	Removed	Yes
6" PIPE	Consolidated Power Supply	Ht.#: X82519 ✓	N/A	2SXA9A-6" Cat ID 24417-1	2006	Installed	No
6" PIPE	Southwest Fabricating	Ht#: N95364	N/A	2SXA9A-6" Spool SX-59-1A	1980	Removed	No
6" PIPE	Consolidated Power Supply	Ht.#: X82519 ✓	N/A	2SXA9A-6" Cat ID 24417-1	2006	Installed	No
6" PIPE	Guyon Steel	Ht#: 104138	N/A	2SXA9A-6" Spool SX-59-2A	1981	Removed	No
6" PIPE	Consolidated Power Supply	Ht.#: X82519 ✓	N/A	2SXA9A-6" Cat ID 24417-1	2006	Installed	No

7. Description of Work REPLACE APPROX. 50' OF 6" PIPE AND 90 DEG. ELBOWS (SEE REMARKS)
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure 78 psi Test Temp. 68.5 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 00862605-01/16

Applicable Manufacturer's Data Reports to be attached

Replace approximately 50' of 6" pipe and associated fittings at 3 separate locations on line 2SXA9A:

- 1) Pipe (Spool SX-29-4 Partial Replacement) between FW520 and prior to 2SX71010R and Pipe and Elbow (Spool SX-29-5 Complete Replacement) between FW520 and FW521.
- 2) Pipe (Spool SX-59-1A Partial Replacement) between FW2371 and first elbow shop weld east of pipe support 2SX71013R.
- 3) Pipe (Spool SX-59-2A Partial Replacement) approximately 8'-1/6" of horizontal pipe running north/south between two elbow shop welds.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature] RRR Carl
Owner or Owner's Designee, Title

Date 5/10, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 1/24/07 to 5/11/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]

Inspector's Signature

Commissions

1LL-1254

National Board, State Province, and Endorsements

Date:

May 11, 20 07

(Final)

FORM NIS-2 (Back)

9. Remarks WO# 00938349-02

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature]
RRR Coed
Owner or Owner's Designee, Title

Date 2/5, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 1/6/07 to 2/6/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]
Inspector's Signature

Commissions

166-1854
National Board, State Province, and Endorsements

Date: Feb. 6, 20 07

FORM NIS-2 SUPPLEMENTAL SHEET

- | | | | | |
|----|-------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------|----------------------------------------------------|
| 1. | Owner | <u>Exelon Nuclear</u> | Date | <u>1/4/2007</u> |
| | | <u>Name</u> | | |
| | | <u>4300 Winfield Road, Warrenville, IL</u> | Sheet | <u>2</u> of <u>2</u> |
| | | <u>Address</u> | | |
| 2. | Plant | <u>Byron Nuclear Power Station</u> | Unit | <u>0</u> |
| | | <u>Name</u> | | |
| | | <u>4450 N. German Church Road, Byron, IL</u> | Work Order No. 00938349-02 | |
| | | <u>Address</u> | <u>Repair Organization, P.O. No., Job No., etc.</u> | |
| 3. | Work Performed by | <u>Byron Mechanical Maintenance</u> | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | <u>Name</u> | | |
| | | <u>4450 N. German Church Road, Byron, IL</u> | Authorization No. | <u>Not Applicable</u> |
| | | <u>Address</u> | Expiration Date | <u>Not Applicable</u> |
| 4. | Identification of System | <u>SX ESSENTIAL SERVICE WATER</u> | | |
| 5. | (a) Applicable Construction Code | <u>Section III</u> | <u>19 74</u> | Edition, <u>S75</u> Addenda, <u>None</u> Code Case |
| | (b) Applicable Edition of Section XI Utilized for Repairs or Replacement Components | <u>2001 Ed/2003 Ad</u> | | |
| | (c) Section XI Code Cases used, | <u>None</u> | | |
| 6. | Identification of Components Repaired or Replaced and Replacement Components | | | |

[illegible]

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 3/30/07
4300 Winfield Road, Warrenville, IL
 Name
 Address
2. Plant Byron Nuclear Power Station Unit 01
4450 N. German Church Road, Byron, IL
 Name
 Address
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481
 Name
 Address
4. Identification of System SX(ESSENTIAL SERVICE WATER)
 1986 Edition, 1987 Addenda (Valve) 1974 Edition, S74 Addenda (Support)
5. (a) Applicable Construction Code ASME Section III 1974 Edition, S75 Addenda, N-249-1 Code Case thru 5
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Weldolet, 3" Outlet, Sch. 40, SA-234 WPB	Consolidated Power Supply	Ht#: 3433ANB ✓	N/A	1SX11B-3"	2007	Installed	NO
Valve, Gate, 3", 150#, SA-351 Gr. CF8M	Flowserve	S/N: BC427 ✓	N/A	1SX271B	2006	Installed	YES
Flange, 3" RFWN, 150#, SA-105	Consolidated Power Supply	Ht#: 3M40774 ✓	N/A	1SX11B-3"	2003	Installed	NO
Flange, 3" RFWN, 150#, SA-105	Consolidated Power Supply	Ht#: S1324 ✓	N/A	1SX11B-3"	2003	Installed	NO
Rod, Threaded, 5/8-11, SA-193 Gr. B7	Nova Machine Products	Ht: 230111 ✓ Ht. Code: P514	N/A	1SX11B-3"	2005	Installed	NO
Nut, Heavy Hex, (2 ea.) 5/8-11 SA-194 Gr.2H	Nova Machine Products	Ht: B87035 ✓ Ht#: B711	N/A	1SX11B-3"	2001	Installed	NO
Nut, Heavy Hex, (6 ea.) 5/8-11 SA-194 Gr.2H	Nova Machine Products	Ht: B87035 ✓ Ht#: VCF	N/A	1SX11B-3"	2000	Installed	NO
Pipe, 3", SCH. 40 SA-106 Gr. B	Consolidated Power Supply	HT#D00103 ✓	N/A	1SX11B-3"	2006	Installed	NO
Elbow, 3", 90°, (4 ea.) SA-234 Gr. WPB	Consolidated Power Supply	Ht#: S068B1A ✓	N/A	1SX11B-3"	2007	Installed	NO
U-Bolt, Pipe, 3/4" Rod X 3" Pipe, w/ Hex Nuts	Bergen Power Pipe Supports	Ht#: JB1214 ✓	N/A	2SX43021G	2004	Installed	NO
Cap, Pipe, 3", Sch. 40, SA-234 Gr. WPB	Consolidated Power Supply	Ht#: S551A-17 ✓	N/A	1SX11B-3"	2007	Removed	NO

7. Description of Work INSTALL ALTERNATE FLOW PATH TIE-IN FOR 1B SX CUBICLE COOLER PER EC# 356162.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 VT-3 Other ☒ Pressure 110 / 12 psi Test Temp. 70 / 82 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 00963779-01/19

Applicable Manufacturer's Data Reports to be attached

Removed pipe cap was installed under parent alternate flow path Work Order 00973172-01

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature] SRG RRR Card
Owner or Owner's Designee, Title

Date 6/11, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 3/10/07 to 6/20/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]

Inspector's Signature

Commissions

1LL-1254

National Board, State Province, and Endorsements

Date: June 20, 20 07

(Final)

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

- | | | | | |
|----|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------|
| 1. | Owner | <u>Exelon Nuclear</u>
Name
<u>4300 Winfield Road, Warrenville, IL</u>
Address | Date | <u>3/15/07</u> |
| 2. | Plant | <u>Byron Nuclear Power Station</u>
Name
<u>4450 N. German Church Road, Byron, IL</u>
Address | Sheet | <u>1</u> of <u>1</u> |
| 3. | Work Performed by | <u>Shaw/Stone & Webster</u>
Name
<u>36400 S. Essex Road, Wilmington, IL 60481</u>
Address | Unit | <u>01</u> |
| | | | <u>Work Order No. 00973172-01</u>
Repair Organization, P.O. No., Job No., etc. | |
| | | | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | | Authorization No. | <u>Not Applicable</u> |
| | | | Expiration Date | <u>Not Applicable</u> |
| 4. | Identification of System | <u>SX (ESSENTIAL SERVICE WATER)</u>
1986 Edition, 1987 Addenda (Valve) | | |
| 5. | (a) Applicable Construction Code | <u>ASME Section III</u> | 19 <u>74</u> Edition, <u>S75</u> Addenda, <u>None</u> Code Case | |
| | (b) Applicable Edition of Section XI Used for Repair/Replacement Activity | <u>2001</u> | Edition / <u>2003</u> Addenda | |
| | (c) Section XI Code Case(s) | <u>NONE</u> | | |
| 6. | Identification of Components | | | |

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe, 3"(6-3/4")	Southwest Fabricating	20391	N/A	1SXB1AB-3"	1979	Removed	YES
Valve, Gate, 3", 150#	Flowserve	S/N: BC426 ✓	N/A	1SX275B	2006	Installed	YES
Pipe, Seamless, 3"	Consolidated Power Supply	Ht#: D00103 ✓	N/A	1SX11B-3"	2006	Installed	NO
Elbow, Pipe, 90°, 3"	Consolidated Power Supply	Ht#: S068B1A ✓	N/A	1SX11B-3"	2007	Installed	NO
Tee, Pipe 3" x 3" x 3"	Consolidated Power Supply	Ht#: P347G ✓	N/A	1SXB1AB-3" 1SX11B-3"	2007	Installed	NO
Cap, Pipe, 3"	Consolidated Power Supply	Ht#: S551A-17 ✓	N/A	1SX11B-3"	2007	Installed	NO
U-Bolt, Special with Nuts	Bergen Power Pipe Supports	Ht#: 24993 ✓ Ht#: 220642	N/A	2SX43022T	2007	Installed	NO

- | | | | | | | | | | |
|----|---------------------|------------------------------------------------------------------|-------------------------------------|-----------|--------------------------|----------------------------|-------------------------------------|--------|--------------------------|
| 7. | Description of Work | INSTALL PIPING, FITTINGS, VALVE, AND PIPE SUPPORT PER EC# 361557 | | | | | | | |
| 8. | Test Conducted: | Hydrostatic | <input type="checkbox"/> | Pneumatic | <input type="checkbox"/> | Nominal Operating Pressure | <input checked="" type="checkbox"/> | Exempt | <input type="checkbox"/> |
| | VT-3 | Other | <input checked="" type="checkbox"/> | Pressure | 103 | psi | Test Temp. | 70 | °F |

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 00973172-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

SMA

RRR Good

Date

6/7

, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/22/07 to 6/7/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.

J. Smith

Inspector's Signature

Commissions

ILL-1254

National Board, State Province, and Endorsements

Date:

June 7

, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

- | | | | | |
|----|---------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------|-----------------------|
| 1. | Owner | <u>Exelon Nuclear</u> | Date | <u>03/15/07</u> |
| | | Name | | |
| | | <u>4300 Winfield Road, Warrenville, IL</u> | Sheet | <u>1</u> of <u>1</u> |
| | | Address | | |
| 2. | Plant | <u>Byron Nuclear Power Station</u> | Unit | <u>02</u> |
| | | Name | | |
| | | <u>4450 N. German Church Road, Byron, IL</u> | Work Order No. 00973172-01 | |
| | | Address | <u>Repair Organization, P.O. No., Job No., etc.</u> | |
| 3. | Work Performed by | <u>Shaw/Stone & Webster</u> | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | Name | Authorization No. | <u>Not Applicable</u> |
| | | <u>36400 S. Essex Road, Wilmington, IL 60481</u> | Expiration Date | <u>Not Applicable</u> |
| | | Address | | |
| 4. | Identification of System | <u>SX (ESSENTIAL SERVICE WATER)</u> | | |
| 5. | (a) Applicable Construction Code | <u>ASME Section III 19 74 Edition, S74 Addenda, None</u> Code Case | | |
| | (b) Applicable Edition of Section XI Used for Repair/Replacement Activity | <u>2001</u> Edition / <u>2003</u> Addenda | | |
| | (c) Section XI Code Case(s) | <u>NONE</u> | | |
| 6. | Identification of Components | | | |

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2EA. Bolting, 1/2" for Fig. 212N	ITT Grinnell	N/A	N/A	2SX43002R FIG. 212N CLAMP	1979	Removed	NO
2EA. Nut, 1/2" For Fig. 212N	ITT Grinnell	N/A	N/A	2SX43002R FIG. 212N CLAMP	1979	Removed	NO
2EA. Nut, Jam, 1/2" For Fig. 212N	ITT Grinnell	N/A	N/A	2SX43002R FIG. 212N CLAMP	1979	Removed	NO
2EA. Nut, Heavy Hex, SA194 2H, 1/2"-13	Nova Machine Products	Ht#: B87035 ✓	N/A	2SX43002R CAT ID 37027	2007	Installed	NO
2EA. Nut, Hex, Jam, SA194 2H 1/2"-13	Nova Machine Products	Ht#: DQS ✓	N/A	2SX43002R CAT ID 36995	1992	Installed	NO
1EA. Screw, Heavy Hex, 1/2"X 2-1/2 Lg., SA193 B7	Nova Machine Products	Ht#: US Y06420 ✓	N/A	2SX43002R CAT ID 23093	2003	Installed	NO
1EA. Screw, Heavy Hex, 1/2"X 3 Lg., SA193 B7	Nova Machine Products	Ht#: US Y06420 ✓	N/A	2SX43002R CAT ID 23225	2003	Installed	NO

- | | | | | | | | | |
|----|------------------------------------------------------------------------|-------------------------------------------|------------------------------------|-----------------------------------------------------|-----|---------------------------------|-----|----|
| 7. | Description of Work <u>REPLACE CLAMP BOLTING FOR SUPPORT 2SX43002R</u> | | | | | | | |
| 8. | Test Conducted: | Hydrostatic <input type="checkbox"/> | Pneumatic <input type="checkbox"/> | Nominal Operating Pressure <input type="checkbox"/> | | Exempt <input type="checkbox"/> | | |
| | VT-3 | Other <input checked="" type="checkbox"/> | Pressure | N/A | psi | Test Temp. | N/A | °F |

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 00973172-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature] RRR Cond
Owner or Owner's Designee, Title

Date 6/7, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 3/15/07 to 6/7/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]

Inspector's Signature

Commissions

166-1254

National Board, State Province, and Endorsements

Date:

June 7, 20 07

(Final)

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

- | | | | | |
|----|------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------|
| 1. | Owner | <u>Exelon Nuclear</u> | Date | <u>04/11/07</u> |
| | | Name | | |
| | | <u>4300 Winfield Road, Warrenville, IL</u> | Sheet | <u>1</u> of <u>1</u> |
| | | Address | | |
| 2. | Plant | <u>Byron Nuclear Power Station</u> | Unit | <u>02</u> |
| | | Name | | |
| | | <u>4450 N. German Church Road, Byron, IL</u> | Work Order No. 97098856-01 | |
| | | Address | Repair Organization, P.O. No., Job No., etc. | |
| 3. | Work Performed by | <u>SHAW/STONE & WEBSTER</u> | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | Name | Authorization No. | <u>Not Applicable</u> |
| | | <u>36400 S. Essex Road, Wilmington, IL 60481</u> | Expiration Date | <u>Not Applicable</u> |
| | | Address | | |
| 4. | Identification of System | <u>ESSENTIAL SERVICE WATER(SX)</u> | | |
| 5. | (a) | Applicable Construction Code <u>ASME Section III 19 74</u> Edition, <u>S75</u> Addenda, <u>1702, 1773</u> Code Case | | |
| | (b) | Applicable Edition of Section XI <u>Used for Repair/Replacement Activity</u> <u>2001</u> Edition / <u>2003</u> Addenda | | |
| | (c) | Section XI Code Case(s) <u>NONE</u> | | |
| 6. | Identification of Components | | | |

[illegible]

- | | | | | | | |
|----|--------------------------------|---------------------------------------|------------------------------------|----------------------------------------------------------------|---------------------------------|-------|
| 7. | Description of Work | <u>REPLACE BUTTERFLY VALVE 2SX033</u> | | | | |
| 8. | Test Conducted: | Hydrostatic <input type="checkbox"/> | Pneumatic <input type="checkbox"/> | Nominal Operating Pressure <input checked="" type="checkbox"/> | Exempt <input type="checkbox"/> | |
| | Other <input type="checkbox"/> | Pressure | 90 | psi | Test Temp. | 67 °F |

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 97098856-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed



SM

RRR Coad

Date

5/18

, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 3-14-07 to 5-18-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.



Inspector's Signature

Commissions

166-1254

National Board, State Province, and Endorsements

Date:

May 18

, 20

07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 04/11/07
4300 Winfield Road, Warrenville, IL
 Name
 Address
2. Plant Byron Nuclear Power Station Sheet 1 of 1
4450 N. German Church Road, Byron, IL
 Name
 Address
3. Work Performed by SHAW/STONE & WEBSTER Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481
 Name
 Address
4. Identification of System ESSENTIAL SERVICE WATER(SX)
 Authorization No. Not Applicable
 Expiration Date Not Applicable
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, NONE Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Bolt, Stud 1 1/2" X 19 3/4"	Texas Bolt Company	HT: 90295 Trace: GT45	N/A	2SX033 #15	1977	Removed	No
Bolt, Stud 1 1/2" X 19 3/4"	Nova Machine	Ht.#: 53669 Trace: R694	N/A	2SX033 #15	2005	Installed	No
Bolt, Stud 1 1/2" X 7 3/4"	Texas Bolt Company	HT: 90295 Trace: GT45	N/A	2SX033 #15A	1977	Removed	No
Bolt, Stud 1 1/2" X 7 3/4"	Nova Machine	Ht.#: 53669 Trace: R694	N/A	2SX033 #15A	2005	Installed	No

7. Description of Work REPLACE TWO FLANGE STUDS IN SUPPORT OF VALVE 2SX033 VALVE REPLACEMENT
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure 90 psi Test Temp. 67 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks 97098856-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

[Signature]
Owner or Owner's Designee, Title

Date 5/18, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 12-6-06 to 5-18-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]
Inspector's Signature

Commissions

166-1854
National Board, State Province, and Endorsements

Date: May 18, 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

- | | | | | |
|----|------------------------------|--------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------|
| 1. | Owner | <u>Exelon Nuclear</u> | Date | <u>4/14/07</u> |
| | | Name | | |
| | | <u>4300 Winfield Road, Warrenville, IL</u> | Sheet | <u>1</u> of <u>2</u> |
| | | Address | | |
| 2. | Plant | <u>Byron Nuclear Power Station</u> | Unit | <u>02</u> |
| | | Name | | |
| | | <u>4450 N. German Church Road, Byron, IL</u> | Work Order No. 99217319-01 | |
| | | Address | Repair Organization, P.O. No., Job No., etc. | |
| 3. | Work Performed by | <u>Shaw/Stone & Webster</u> | Type Code Symbol Stamp | <u>Not Applicable</u> |
| | | Name | Authorization No. | <u>Not Applicable</u> |
| | | <u>36400 S. Essex Road, Wilmington, IL 60481</u> | Expiration Date | <u>Not Applicable</u> |
| | | Address | | |
| 4. | Identification of System | <u>ESSENTIAL SERVICE WATER</u> | | |
| | | 1977 Edition W78 (Valve) | | |
| 5. | (a) | Applicable Construction Code | <u>ASME Section III</u> | <u>19 74</u> Edition, <u>S75</u> Addenda, <u>None</u> Code Case |
| | (b) | Applicable Edition of Section XI | <u>Used for Repair/Replacement Activity</u> | <u>2001</u> Edition / <u>2003</u> Addenda |
| | (c) | Section XI Code Case(s) | <u>NONE</u> | |
| 6. | Identification of Components | | | |

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
3", 150LB, W.N.R.F. FLG.	Ladish Co.	RT2T Ht#: 6018347	N/A	2SX98BA	1983	Removed	No
3", 150LB, W.N.R.F. FLG.	Consolidate Power Supply	Ht#: S1324 ✓	N/A	CAT ID # 25020 2SX98BA	2003	Installed	No
3 X 2 SWAGE NIPPLE	Chicago Tube & Iron	D20 Ht#: N53110	N/A	2SX98BA	1983	Removed	No
3 X 2 SWAGE NIPPLE	Consolidate Power Supply	Ht#: 2542ANB ✓	N/A	CAT ID # 43064 2SX98BA	2004	Installed	No
2" 3000#, S.W. 90 DEG. ELBOW (2)	Bonney Forge	Lot#: M240	N/A	2SX98BA	1977	Removed	No
2" 3000#, S.W. 90 DEG. ELBOW (2)	Consolidate Power Supply	Lot#: 76259 ✓	N/A	CAT ID # 47207 2SX98BA	2006	Installed	No
2" SCH. 80 PIPE	Gulf States Tube Div	Ht. Code: AA	N/A	2SX98BA	1977	Removed	No
2" SCH. 80 PIPE	Consolidate Power Supply	HT: A82900 ✓	N/A	CAT ID # 24507 2SX98BA	2006	Installed	No

- | | | | | | | | | |
|----|---------------------|----------------------------------------------|------------------------------------|----------------------------------------------------------------|---------------------------------|----|--|--|
| 7. | Description of Work | REPLACED PIPE, FITTINGS, AND VALVE 2SX2185B. | | | | | | |
| 8. | Test Conducted: | Hydrostatic <input type="checkbox"/> | Pneumatic <input type="checkbox"/> | Nominal Operating Pressure <input checked="" type="checkbox"/> | Exempt <input type="checkbox"/> | | | |
| | | Other <input type="checkbox"/> | Pressure 78 | psi | Test Temp. 72 | °F | | |

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order No. 99217319-01

Applicable Manufacturer's Data Reports to be attached

Replaced portion of pipe spool S-SX-100-101-1 from flange to FW4017 **excluding** valve 2SX2185A.

Replaced portion of pipe spool S-SX-100-101-2 from flange to FW4019 **including** valve 2SX2185B.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

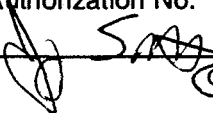
Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed



Owner or Owner's Designee, Title

Date 5/17, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/21/06 to 5/17/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.



Inspector's Signature

Commissions

166-1254

National Board, State Province, and Endorsements

Date:

May 17

, 20 07

FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner Exelon Nuclear Date 4/14/07
4300 Winfield Road, Warrenville, IL
Name
Address
2. Plant Byron Nuclear Power Station Sheet 2 of 2
4450 N. German Church Road, Byron, IL
Name
Address
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481
Name
Address
4. Identification of System ESSENTIAL SERVICE WATER
1977 Edition W78 (Valve)
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, None Code Case
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
(c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
3", 150LB, W.N.R.F. FLG.	Ladish Co.	RT2T Ht#: 6018347	N/A	2SX98BB	1983	Removed	No
3", 150LB, W.N.R.F. FLG.	Consolidate Power Supply	Ht#: S1324 -	N/A	CAT ID # 25020 2SX98BB	2003	Installed	No
3 X 2 SWAGE NIPPLE	Chicago Tube & Iron	D20 Ht#: N53110	N/A	2SX98BB	1983	Removed	No
3 X 2 SWAGE NIPPLE	Consolidate Power Supply	Ht#: 2542ANB -	N/A	CAT ID # 43064 2SX98BB	2004	Installed	No
2" 3000#, S.W. 90 DEG. ELBOW (2)	Bonney Forge	Lot#: M240	N/A	2SX98BB	1977	Removed	No
2" 3000#, S.W. 90 DEG. ELBOW (2)	Consolidate Power Supply	Lot#: 76259 -	N/A	CAT ID # 47207 2SX98BB	2006	Installed	No
2" SCH. 80 PIPE	Gulf States Tube Div	Ht. Code: AA	N/A	2SX98BB	1977	Removed	No
2" SCH. 80 PIPE	Consolidate Power Supply	HT: A82900 -	N/A	CAT ID # 24507 2SX98BB	2006	Installed	No
2", 150 LB. BALL VALVE	ITT Grinnell	80-52894-5-91	N/A	2SX2185B	1981	Removed	Yes
2", 150 LB. BALL VALVE	ITT Grinnell	733744-001-002 ✓	N/A	CAT ID# 1393954 2SX2185B	2004	Installed	Yes

FORM NIS-2 (Back)

9. Remarks Work Order No. 99217322-01

Applicable Manufacturer's Data Reports to be attached

REPLACED PIPE SPOOLS S-SX-100-100-2A, S-SX-100-100-3, AND S-SX-100-100-6 IN THEIR ENTIRETY.

REPLACED PIPE SPOOL S-SX-100-100-4A FROM FW4006 TO VALVE 2SX2167A.

** ORIGINAL VALVES 2SX2167A AND 2SX2167B WERE REINSTALLED.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed



SM

RRR

Control

Owner or Owner's Designee, Title

Date

5/17

, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/24/06 to 5/17/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.



Inspector's Signature

Commissions

ILL-1254

National Board, State Province, and Endorsements

Date:

MAY 17

, 20 07

FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner Exelon Nuclear Date 4/14/07
4300 Winfield Road, Warrenville, IL
Name
Address
2. Plant Byron Nuclear Power Station Sheet 2 of 2
4450 N. German Church Road, Byron, IL
Name
Address
3. Work Performed by Shaw/Stone & Webster Unit 02
36400 S. Essex Road, Wilmington, IL 60481
Name
Address
4. Identification of System ESSENTIAL SERVICE WATER
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, None Code Case
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
(c) Section XI Code Case(s) NONE
6. Identification of Components

Work Order No. 99217322-01/02
Repair Organization, P.O. No., Job No., etc.

Type Code Symbol Stamp Not Applicable
Authorization No. Not Applicable
Expiration Date Not Applicable

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
3", 150LB, W.N.R.F. FLG.	Ladish Co.	RT2T HT: 6018347	N/A	2SXC4AB	1983	Removed	No
3", 150LB, W.N.R.F. FLG.	Consolidated Power Supply	Ht#: 3M40774	N/A	CAT ID # 25020 2SXC4AB	2003	Installed	No
3 X 2 SWAGE NIPPLE	Chicago Tube & Iron	D20 HT: N53110	N/A	2SXC4AB	1983	Removed	No
3 X 2 SWAGE NIPPLE	Consolidated Power Supply	Ht#: 2542ANB	N/A	CAT ID # 43064 2SXC4AB	2004	Installed	No
2" 3000#, S.W. 90 DEG. ELBOW (3)	Bonney Forge	M240	N/A	2SXC4AB	1977	Removed	No
2" 3000#, S.W. 90 DEG. ELBOW	Consolidated Power Supply	HT: 49870 Lot#: 76150	N/A	CAT ID # 47207 2SXC4AB	2007	Installed	No
2" SCH. 80 PIPE	Gulf States Tube Div	AA	N/A	2SXC4AB	1977	Removed	No
2" SCH. 80 PIPE	Consolidated Power Supply	Ht#: A82900	N/A	CAT ID # 24507 2SXC4AB	2006	Installed	No

(Final)

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 06/29/06
 4300 Winfield Road, Warrenville, IL Name
 Address Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 0
 4450 N. German Church Road, Byron, IL Name
 Address **Purchase Order No. 00403603**
 Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Anderson Greenwood Type Code Symbol Stamp **NR**
 Crosby Name
 43 Kendrick St. Wrentham, MA 02093 Address Authorization No. **NR-68**
 Expiration Date **12/11/06**
4. Identification of System Essential Service Water [SX] Spare Valve
5. (a) Applicable Construction Code ASME Section III 1974 Edition, W75 Addenda, None Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity: **2001 Edition/2003 Addenda**
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
36" Swing Check Valve Body	Anderson Greenwood	HT: 216236 / Code: TPUL N04-2456-001	n/a	Cat. ID: 1034815-1 Vlv S/N: A130	1978	Corrected	Yes
36" Swing Check Valve Disc	Anderson Greenwood	HT: 92577 / Code: 77CI N04-2457-010	n/a	Cat. ID: 1034815-1 Vlv S/N: A130	1978	Corrected	No
Hinge Pin Bushing (2)	Anderson Greenwood	HT: 615158 / Code: 77CU N04-2461-001	n/a	Cat. ID: 1034815-1 Vlv S/N: A130	1978	Removed	No
Hinge Pin Bushing	Anderson Greenwood	HT: 8998577 / Code: B797	n/a	Cat. ID: 1034815-1 Vlv S/N: A130	1978	Installed	No
Hinge Pin Bushing	Anderson Greenwood	HT: 8998577 / Code: B718	n/a	Cat. ID: 1034815-1 Vlv S/N: A130	1978	Installed	No

7. Description of Work: Machine Valve Body Seating Area. Machine and Weld Repair Valve Disc. Replace Hinge Pin Bushings
8. Test Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure 425 psi Test Temp. Ambient °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Purchase Order No. 00403603

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp Not Applicable

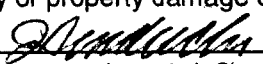
Certificate of Authorization No. Not Applicable

Signed  Date 1/16, 20 07
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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 11/8/05 to 1/18/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.

 Commissions ILL-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: Jan. 16, 20 07

124866

17-NOV-06 * CORRECTED COPY
QC-435, Rev. B
Sheet 1 of 2

FORM NR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR INSTALLATION OF REPLACEMENT ☐
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by ANDERSON GREENWOOD CROSBY 00403603 REV. 3
(name of NR certificate holder) (PO NO., Job No., etc.)
43 KENDRICK ST., WRENTHAM, MA 02093
(address)
2. Owner EXELON GENERATION
(name)
(address) 4450 NORTH GERMAN CHURCH ROAD
3. Name, address and identification of nuclear power plant BYRON NUCLEAR STATION, BYRON IL.
4. System COOLING

5a. Items Which Required Repair, Modification, or Replacement Activities

Identification								Construction Code				Activity
No.	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	Repair/Mod/Replace
1	36" CHECK VALVE	Anderson	A130	N/A	N/A	N/A	1978	ASME SEC. III	1974 Edition W75 Addenda	N/A	3	Repair/
2		Greenwood										
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

5b. Items Installed During Replacement Activities

Identification								Construction Code				
Type of Item	Installed or Replaced 5a Item No.	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	
Hinge Pin	N/A	Anderson	N04-2461-001	N/A	N/A	N/A	1978	ASME SEC. III	1974 Edition W75 Addenda	N/A	3	
Bushings		Greenwood	B797- (2 pcs) * AND B718									
			DET 17-NOV-06									
			h/n NOV 17, 06									
			ANI									

6. ASME Code Section XI applicable for inservice inspection: 2001 EDITION 2003 ADDENDA
7. ASME Code Section XI used for repairs, modification, or replacements: 2001 EDITION 2003 ADDENDA
8. Construction Code used for repairs, modifications, or replacements: 1974 EDITION W1975 ADDENDA
9. Design responsibilities ANDERSON GREENWOOD
10. Tests conducted: ☒ Hydrostatic ☐ Pneumatic ☐ Design review ☒ Visual 175 psi Code Case(s) N/A

124866

11. Description of work

(use of properly identified additional sheet(s) or sketch(es) is acceptable)

The valve was disassembled and the body seat re-machined and lapped. The disc was remachined and a stainless steel seat inlaid (weld package provided to customer), machined and lapped. The hinge pin bushings were replaced with customer supplied parts and the valve was reassembled for testing. A hydrostatic test and seat leakage test was performed. A repair tag was attached and packaged for return shipment.

12. Remarks NONE

CERTIFICATE OF COMPLIANCE

I, DAVID TUTTLE certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conform to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. NR-68 to use the "NR" stamp expires December 11, 2006

NR Certificate Holder ANDERSON GREENWOOD CROSBY

Date 29-JUN-06 Signed D. E. TUTTLE QA MANAGER
(name) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Vicki Lyster holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Massachusetts and employed by HSB - CT of Hartford, CT

have inspected the repair, modification or replacement described in this report on 6-27-2006 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or a loss of any kind arising from or connected with this inspection.

Date June 29, 2006 Signed [Signature] Commissions NB 7813, MA 1430
(Inspector) (National Board and jurisdiction no.)
N, I, A, N, S

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 04/16/07
4300 Winfield Road, Warrenville, IL
 Name Address
 Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 00
4450 N. German Church Road, Byron, IL
 Name Address
Purchase Order No. 00417714 Rev. 4
 Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Anderson Greenwood Crosby Type Code Symbol Stamp **NR**
43 Kendrick St., Wrentham, MA 02093
 Name Address
 Authorization No. NR-68
 Expiration Date 12/11/09
4. Identification of System Spare Valve (Essential Service Water-SX)
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S76 Addenda, None Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity: 2001 Edition/2003 Addenda
 (c) Section XI Code Case(s) None
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve Body	Anderson Greenwood	NO4-2348-001 28712-3	N/A	S/N A-3485	1978	Corrected	Yes
Hinge Pin Bushing (2)	Anderson Greenwood	NO4-2353-002	N/A	S/N A-3485	1978	Removed	No
Hinge Pin Bushing (2)	Anderson Greenwood	HT 33443 B693	N/A	S/N A-3485	1997	Installed	No
Drilled Shank Bolt	Anderson Greenwood	NO4-2309-035	N/A	S/N A-3485	1978	Removed	No
Drilled Shank Bolt	Anderson Greenwood	HT 8887666 HG21	N/A	S/N A-3485	1985	Installed	No
5/8" Slotted Hex Nut	Anderson Greenwood	NO5-2107-003	N/A	S/N A-3485	1978	Removed	No
5/8" Slotted Hex Nut	Anderson Greenwood	HT: D41073 Code AM59	N/A	S/N A-3485	1985	Installed	No
Valve Disc	Anderson Greenwood	NO4-2407-010	N/A	S/N A-3485	1978	Removed	No
Valve Disc	Anderson Greenwood	B721-3 HT 7438304	N/A	S/N A-3485	1997	Installed	No

7. Description of Work Machine and Weld Valve Body Faces and Seat Area. Replace Hinge Pin Bushings, Drilled Shank Bolt and 5/8" Slotted Hex Nut (See Remarks)
8. Test Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure 425 psi Test Temp. Ambient °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Purchase Order No. 00417714 Rev. 4

Applicable Manufacturer's Data Reports to be attached

Final valve body face dimensions were out of tolerance. Valve body face to be re-worked per Purchase Order

00421825.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp

Not Applicable

Certificate of Authorization No.

Not Applicable

Signed

SMA RRR Cappel
Owner or Owner's Designee, Title

Date 5/3/07, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 1/14/07 to 5/4/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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]
Inspector's Signature

Commissions

12L-1254

National Board, State Province, and Endorsements

Date: May 4, 20 07

CORRECTED COPY
16-APR-07

QC-435, Rev. B
Sheet 1 of 2

FORM NR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR INSTALLATION OF REPLACEMENT ☐
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by ANDERSON GREENWOOD CROSBY 00417714 Rev. 004
(name of NR certificate holder) (PO NO., Job No., etc.)
43 KENDRICK ST., WRENTHAM, MA 02093
(address)
2. Owner EXELON GENERATION
(name)
4450 NORTH GERMAN CHURCH ROAD
(address)
3. Name, address and identification of nuclear power plant BYRON STATION NUCLEAR POWER PLANT
4450 NORTH GERMAN CHURCH ROAD
4. System COOLING WATER

5a. Items Which Required Repair, Modification, or Replacement Activities

Identification								Construction Code				Activity
No.	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	Repair/Mod/Replace
1	8" Ck. Valve	AG	A3485	N/A	N/A	N/A	1978	ASME SEC III	1974 S1976	N/A	3	REPAIR
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

5b. Items Installed During Replacement Activities

Identification								Construction Code			
Type of Item	Installed or Replaced 5a Item No.	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class
Body	Replaced-REPAIR	AG	28712-3	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3
Bushing	Replaced	AG	N04-2353-002	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3
Bushing	Replaced	AG	N04-2353-002	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3
Bolt	Replaced	AG	N04-2309-035	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3
Nut	Replaced	AG	N05-2107-003	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3
Link	Replaced	AG	D00909-0004	N/A	N/A	N/A	N/A	Dedicated	1974 S76	N/A	DED
Pin	Replaced	AG	D00946	N/A	N/A	N/A	N/A	Dedicated	1974 S76	N/A	DED
Disc	Replaced	AG	N04-2407-010	N/A	N/A	N/A	N/A	ASME SEC.III	1974 S76	N/A	3

6. ASME Code Section XI applicable for inservice inspection: _____
7. ASME Code Section XI used for repairs, modification, or replacements: 2001 2003
8. Construction Code used for repairs, modifications, or replacements: 1974 S1976
9. Design responsibilities ANDERSON GREENWOOD
10. Tests conducted: ☒ hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure 425 psig Code Case(s) --

11. Description of work

(use of properly identified additional sheet(s) or sketch(es) is acceptable)

The valve was received and visually inspected and the body was found to be in poor condition, rust and corrosion, on both faces and the interior. A complete set of replacement parts were sent along with the body. The body faces were re-machined to the minimum overall dimension and the seat was cut out for weld repairing and re-machining. Following re-machining, the body faces still had corrosion inboard of the gasket sealing area, but this was unacceptable to the customer. At this point, the body faces were completely weld repaired and the seat area was also weld repaired. The body was then re-machined to the original print dimensions. All weld repair and re-machined areas were magnetic particle inspected before weld repairing and after re-machining. The seats were lapped and the valve was re-assembled using the customer supplied parts. ^{all of} A hydrostatic test and a seat leakage test were ^{except two Helicott inserts.} performed. An NR/VR tag was attached to the valve and it was packaged for return shipment. The work was controlled using AG Crosby's National Board approved NR/VR program, QC-110 Supplement 4.

12. Remarks None

CERTIFICATE OF COMPLIANCE

I, DAVID TUTTLE certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conform to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. NR-68 to use the "NR" stamp expires December 11, 2009

NR Certificate Holder ANDERSON GREENWOOD CROSBY

Date 11 April 2007 (name)

Signed D. F. Tuttle

RIV-APR-07 D.F. TUTTLE (authorized representative)

* SR QA ENGINEER

QA MANAGER

(title)

CERTIFICATE OF INSPECTION

I, Luther Melder holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Massachusetts and employed by

HSB - CT

of

Hartford, CT

have inspected the repair, modification or replacement described in this report on 4-4-07 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or a loss of any kind arising from or connected with this inspection.

Date 4-4-07

Signed Luther Melder

(Inspector)

Commissions NA16312 (A/E) MA1053

(National Board and jurisdiction no.)

* 4-10-07

4-16-07

* V. L. HSB-CT

N. L. HSB-CT

* NA 7853 (N.I.A.), MA 1400

133729

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear Date 05/3/07
Name
4300 Winfield Road, Warrenville, IL
Address
Sheet 1 of 1
2. Plant Byron Nuclear Power Station Unit 00
Name
4450 N. German Church Road, Byron, IL
Address
Purchase Order No. 00421825
Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Anderson Greenwood Crosby Type Code Symbol Stamp NR
Name
43 Kendrick St., Wrentham, MA 02093
Address
Authorization No. NR-68
Expiration Date 12/11/09
4. Identification of System Spare Valve (Essential Service Water-SX)
5. (a) Applicable Construction Code ASME Section III 1974 Edition, S76 Addenda, None Code Case
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity: 2001 Edition/2003 Addenda
(c) Section XI Code Case(s) None
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve Body	Anderson Greenwood	NO4-2348-001 28712-3	N/A	S/N A-3485	1978	Corrected	Yes

7. Description of Work Machine and Weld Valve Body Faces to Within Drawing Tolerances
8. Test Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐
Other ☐ Pressure 425 psi Test Temp. Ambient °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Purchase Order No. 00421825

Applicable Manufacturer's Data Reports to be attached

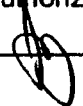
Re-Work from Purchase Order 00417714 Rev. 4.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp Not Applicable

Certificate of Authorization No. Not Applicable

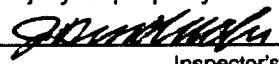
Signed  S M A R R R Coord. Date 5/3, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 5/2/07 to 5/4/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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.

 Commissions 126-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: May 4, 20 07

FORM NR-1 REPORT OF REPAIR ☒, MODIFICATION ☐, OR INSTALLATION OF REPLACEMENT ☐
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by ANDERSON GREENWOOD CROSBY 00421825 REV. 001
(name of NR certificate holder) (PO NO., Job No., etc.)
43 KENDRICK ST., WRENTHAM, MA 02093
(address)
2. Owner EXELON GENERATION
(name)
4450 NORTH GERMAN CHURCH ROAD
(address)
3. Name, address and identification of nuclear power plant BYRON STATION NUCLEAR POWER PLANT
4450 NORTH GERMAN CHURCH ROAD
4. System COOLING WATER

5a. Items Which Required Repair, Modification, or Replacement Activities

Identification								Construction Code				Activity
No.	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	Repair/Mod/Replace
1	8" Ck. Valve	AG	A3485	N/A	N/A	N/A	1978	ASME SEC III	1974 S1976	N/A	3	REPAIR
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

5b. Items Installed During Replacement Activities

Identification								Construction Code			
Type of Item	Installed or Replaced 5a Item No.	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Juris. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class

6. ASME Code Section XI applicable for inservice inspection:
7. ASME Code Section XI used for repairs, modification, or replacements: 2001 2003
8. Construction Code used for repairs, modifications, or replacements: 1974 S1976
9. Design responsibilities ANDERSON GREENWOOD
10. Tests conducted: ☒ hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure 425 psig Code Case(s)

11. Description of work _____
(use of properly identified additional sheet(s) or sketch(es) is acceptable)

12. Remarks REFERENCE NR-1 FORM FOR P.O. 00417714 REV. 004

CERTIFICATE OF COMPLIANCE

I, DAVID TUTTLE certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conform to Section XI of the ASME Code and the *National Board Inspection Code* "NR" rules.

National Board Certificate of Authorization No. NR-68 to use the "NR" stamp expires December 11, 2009

NR Certificate Holder ANDERSON GREENWOOD CROSBY

Date 3-MAY-07 Signed [Signature] QA MANAGER
(name) (authorized representative) (title)

CERTIFICATE OF INSPECTION

I, VISH IYER holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Massachusetts and employed by HSB - CT of Hartford, CT

have inspected the repair, modification or replacement described in this report on 5-3-2007 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the *National Board Inspection* "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or a loss of any kind arising from or connected with this inspection.

Date MAY 3, 2007 Signed [Signature] Commissions NB 7883, MA 1420
(Inspector) (National Board and jurisdiction no.)

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Exelon Nuclear
Name
4300 Winfield Road, Warrenville, IL
Address

Date 4/17/07

Sheet 1 of 3

2. Plant Byron Nuclear Power Station
Name
4450 N. German Church Road, Byron, IL
Address

Unit 02

Work Order No. 00850352-01
Repair Organization, P.O. No., Job No., etc.

3. Work Performed by Shaw/Stone & Webster
Name
36400 S. Essex Road, Wilmington, IL 60481
Address

Type Code Symbol Stamp Not Applicable
 Authorization No. Not Applicable
 Expiration Date Not Applicable

4. Identification of System PRIMARY CONTAINMENT VENTILATION (VP)

5. (a) Applicable Construction Code ASME Section III 1974 Edition, S76 Addenda, 1695-1 Code Case
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
(c) Section XI Code Case(s) NONE

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Channel Head - Designation SX-RH-1	CARRIER	7865418-1	138735	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-RH-1	AEROFIN	070251	2176	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-RH-2	CARRIER	7865420-1	138739	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-RH-2	AEROFIN	070250	2175	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-RH-3	CARRIER	7865420-2	138740	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-RH-3	AEROFIN	070249	2174	2VP01AD	2007	Installed	YES

7. Description of Work REPLACE RCFC CHANNEL HEADS WITH STAINLESS STEEL HEADS PER EC 343537. HEADS ARE ALSO UPGRADED FROM ASME CLASS 3 TO ASME CLASS 2.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
Other ☐ Pressure 90 psi Test Temp. 64 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO# 00850352-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp Not Applicable

Certificate of Authorization No. Not Applicable

Signed [Signature] Date 6/11, 20 07

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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/3/07 to 6/19/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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 ILL-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: June 19, 20 07

FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner Exelon Nuclear Date 4/17/07
4300 Winfield Road, Warrenville, IL Sheet 2 of 3
 Name
 Address
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL **Work Order No. 00850352-01**
 Name
 Address Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481 Authorization No. Not Applicable
 Name
 Address Expiration Date Not Applicable
4. Identification of System PRIMARY CONTAINMENT VENTILATION (VP)
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S76 Addenda, 1695-1 Code Case
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
 (c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Channel Head - Designation SX-RH-4	CARRIER	7865419-2	138738	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-RH-4	AEROFIN	070248	2173	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-RH-5	CARRIER	7865416-1	138731	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-RH-5	AEROFIN	070247	2172	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-LH-1	CARRIER	7865419-1	138737	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-LH-1	AEROFIN	070246	2171	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-LH-2	CARRIER	7865417-2	138734	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-LH-2	AEROFIN	070245	2170	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-LH-3	CARRIER	7865418-2	138736	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-LH-3	AEROFIN	070244	2169	2VP01AD	2007	Installed	YES

FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner Exelon Nuclear Date 4/17/07
4300 Winfield Road, Warrenville, IL Sheet 3 of 3
Address
2. Plant Byron Nuclear Power Station Unit 02
4450 N. German Church Road, Byron, IL **Work Order No. 00850352-01**
Address Repair Organization, P.O. No., Job No., etc.
3. Work Performed by Shaw/Stone & Webster Type Code Symbol Stamp Not Applicable
36400 S. Essex Road, Wilmington, IL 60481 Authorization No. Not Applicable
Address Expiration Date Not Applicable
4. Identification of System PRIMARY CONTAINMENT VENTILATION (VP)
5. (a) Applicable Construction Code ASME Section III 19 74 Edition, S76 Addenda, 1695-1 Code Case
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition / 2003 Addenda
(c) Section XI Code Case(s) NONE
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Channel Head - Designation SX-LH-4	CARRIER	7865417-1	138733	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-LH-4	AEROFIN	070243	2168	2VP01AD	2007	Installed	YES
Channel Head - Designation SX-LH-5	CARRIER	7865416-2	138732	2VP01AD	1978	Removed	YES
Channel Head - Designation SX-LH-5	AEROFIN	070242	2167	2VP01AD	2007	Installed	YES

REV. NO.: 0

1.	Owner	<u>Exelon Nuclear</u>	Date	<u>4/17/07</u>
		Name		
		<u>4300 Winfield Road, Warrenville, IL</u>	Sheet	<u>1</u> of <u>1</u>
		Address		
2.	Plant	<u>Byron Nuclear Power Station</u>	Unit	<u>02</u>
		Name		
		<u>4450 N. German Church Road, Byron, IL</u>	Work Order No.	<u>00850352-01/19</u>
		Address		Repair Organization, P.O. No., Job No., etc.
3.	Work Performed by	<u>Shaw/Stone & Webster</u>	Type Code Symbol Stamp	<u>Not Applicable</u>
		Name	Authorization No.	<u>Not Applicable</u>
		<u>36400 S. Essex Road, Wilmington, IL 60481</u>	Expiration Date	<u>Not Applicable</u>
		Address		
4.	Identification of System	<u>PRIMARY CONTAINMENT VENTILATION (VP)</u>		
5.	(a) Applicable Construction Code	<u>ASME Section III 1974 Edition, S76 Addenda, 1695-1 Code Case</u>		
	(b) Applicable Edition of Section XI Used for Repair/Replacement Activity	<u>2001</u> Edition / <u>2003</u> Addenda		
	(c) Section XI Code Case(s)	<u>NONE</u>		
6.	Identification of Components			

[illegible]

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
Other ☐ Pressure 90 psi Test Temp. 64 °F

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO# 00850352-01

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp Not Applicable

Certificate of Authorization No. Not Applicable

Signed [Signature] RRR Prod. Date 6/11, 20 07
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 HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 1/8/07 to 6/19/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's 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 11L-1254
Inspector's Signature National Board, State Province, and Endorsements

Date: June 19, 20 07

EC 363076 Rev. 0

**EVALUATE CONDITIONS THAT DID NOT MEET THE ACCEPTANCE CRITERIA DURING
THE 2nd IWL 5-YEAR CONTAINMENT CONCRETE SURVEILLANCE**

Reason for Evaluation/Scope:

This evaluation is being performed to address all conditions that exceeded the acceptance criteria established by the Owner in surveillance packages for the conduct of the 2nd IWL containment concrete surveillance (per Ref.'s 2 & 3) at Byron. These conditions were documented individually in the following IR's:

- 1) IR #515883: CORROSION LEVELS FOR TENDON H01EF-F CAN IN U-2 FAILS AC (the acceptance criteria is no active corrosion).
- 2) IR #515877: CORROSION LEVELS FOR TENDON H01AC-C CAN IN U-1 FAILS AC (the acceptance criteria is no active corrosion).

The above conditions are evaluated as acceptable since adequate design margins exist and therefore, no repair/replacement is required until the 25th-yr tendon surveillance (scheduled in 2009) where these cans will be replaced like for like.

This evaluation includes the requirements of the "Evaluation Report" section of Ref.1. As such, the following items have been addressed in this evaluation report:

- 1) The cause of the condition that does not meet the acceptance criteria,
- 2) The applicability of condition to the opposite unit,
- 3) The acceptability of the concrete containment and hence, the acceptability of the condition,
- 4) Whether or not repair/replacement activity is required and,
- 5) Extent, nature and frequency of additional examinations.

In the Detailed Evaluation portion of this document, both conditions described in the IR's above are addressed.

Detailed Evaluation:

1) The Unit-2 tendon grease can H01EF-F and Unit-1 tendon grease can H01AC-C exhibited active corrosion as indicated by the presence of a reddish layer of corrosion on the outer surface of the cans. This condition was observed during the conduct of the 2nd IWL 5-yr containment structure concrete surfaces and exceeded the acceptance criteria established by the Owner (provided in Ref's. 3 & 2 respectively and given here as Attachment 1). The grease cans are located at the base of the containment structures in enclosed buttresses with moisture present on the floor of the buttresses. It is the presence of this moisture in this environment that had contributed to the corrosion on the cans. The moisture has since been removed and no source of new moisture has been identified.

Upon close examination of the corrosion condition of the tendon grease cans, it was noted that the corrosion is not in the form of delamination and only as a thin layer of dust. Based upon the freshness of the color of the corrosion products and the fact that these grease cans were not identified as having corrosion in the 1st IWL 5-yr containment concrete surfaces examination

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EVALUATE CONDITIONS THAT DID NOT MEET THE ACCEPTANCE CRITERIA DURING THE 2nd IWL 5-YEAR CONTAINMENT CONCRETE SURVEILLANCE

(Ref's 4 & 5), it was determined that active corrosion is taking place. However, it was also determined that only superficial metal loss on the can surfaces had taken place. No corrosion was taking place on the can bolts and the welds also were unaffected.

The tendon grease cans only hold grease and do not serve any other structural function. The grease cans are made out of a 1/8" steel sheet rolled into a tube and welded to two 3/4" thick plates (lid and flange) to complete a cylinder (Ref. 8).

The amount of metal loss due to the observed corrosion is minimal and considering the length of time it has taken for the corrosion to develop, it is acceptable and it will not challenge the structural integrity of the grease cans and the cans will retain their ability to hold grease. The grease can replacement is required during the 25th-yr tendon surveillance (scheduled in 2009 per Ref's 6 & 7). Instructions have been added to the work orders (Ref's 6 & 7) to ensure replacement cans are procured and installed.

These grease cans will also be inspected one additional time prior to the 3rd 5-yr containment concrete examination surveillance to monitor the condition of the corrosion. This is tracked by ATI's 515883-03 and 515877-03 for Units 2 and 1 respectively. Therefore, although the observed condition exceeded the acceptance criteria established in Ref's 2 & 3, it met the acceptance criteria for the external grease can examinations of section 4.3.1 of Ref. 9.

During the conduct of this surveillance, all tendon grease cans at both Units were examined and no active corrosion was observed on any of the remaining grease cans.

The frequency of the containment concrete surfaces examination remains at 5 years with the additional examination scheduled once prior to the 3rd 5-yr surveillance.

Conclusion:

The active corrosion on tendon grease cans H01EF-F (Unit-2) and H01AC-C (Unit-1) as documented in this evaluation is acceptable (does not challenge the ability of the tendon grease cans to hold grease) without additional corrective actions until they are replaced in 2009 (per Ref's 6 & 7).

The existing frequency of concrete surfaces examination surveillance (every 5 years) is therefore, considered adequate per the current Concrete ISI Program requirements. The additional examinations are tracked by ATI's 515883-03 and 515877-03 for Units 2 and 1 respectively.

References:

- 1) 2001 Edition with the 2003 Addenda of ASME Section XI, Subsection IWL, Paragraph IWL-3310
- 2) WO #713045-01 (Unit-1)
- 3) WO #713046-01 (Unit-2)
- 4) WO #99238605-01 (Unit-2)

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EVALUATE CONDITIONS THAT DID NOT MEET THE ACCEPTANCE CRITERIA DURING
THE 2nd IWL 5-YEAR CONTAINMENT CONCRETE SURVEILLANCE

- 5) WO #99238606-01 (Unit-1)
- 6) WO #943328-01 (Unit-1)
- 7) WO #943330-01 (Unit-2)
- 8) Inland Ryerson drawing No. 170W18R (Attachment 2).
- 9) ER-AA-330-006 procedure (Rev.03)

Answers to applicable DAR questions:

Question 4.1.4.1:

The containment structures are designed to contain radioactive material that may be released from the reactor core following a design basis Loss Of Coolant Accident.

Additionally, they provide shielding from the fission products that may be present in the containment atmosphere following accident conditions. The tendon grease cans function to hold tendon sheathing protection medium.

Question 4.1.4.2:

The containment structures are Safety-Related.

Question 4.1.4.3:

The containment structures are seismically qualified.

Question 4.1.39:

The tendon grease cans only serve to retain grease and therefore, must only be able to support self weight and any applicable weight of grease (primarily only the grease inside the can). They are not subject to any other civil or structural loading requirements.

Question 4.1.40:

The grease cans are not safety-related and are not seismically qualified.

Preparer: Nader Vakili Date: 10/20/06

Reviewer: Ron Janowiak Date: 10/25/06

Approved: Ken Kovar Date: 10/26/06

Jeff Hendricks Date: 10/31/06
ANII Representative

EC 363076 Rev. 0

**EVALUATE CONDITIONS THAT DID NOT MEET THE ACCEPTANCE CRITERIA DURING
THE 2nd IWL 5-YEAR CONTAINMENT CONCRETE SURVEILLANCE**

Attachment 1:

Recordable indications:

Cracks, exposed rebars or other metallic items, grease leakage, moisture, leaching, settlement, deflections, popouts, voids, spalls, honeycombs, bug holes, corrosion, scaling, coating deteriorations (including damage, flaking, blistering, peeling or missing coating), abrasions, wear, efflorescence, deviations from design drawings, and other irregularities.

Acceptance Criteria per IWL 3211 for components subject to the examination Category L-A requirements of IWL subsection (there are no augmented examinations) shall be as follows:

General conditions:

- a) No evidence of unusual contamination, foreign material or debris.
- b) No abrasion, erosion, cavitation, wear or any other degradation mechanism resulting in significant loss of concrete material.
- c) No unusual bulges on containment vessel structure.
- d) No deviation from the design drawings.
- e) No other conditions specified or not specified in the "Recordable Indication Type Codes" table of Attachment 6 of ER-AA-335-018 procedure that may violate the containment leak-tight integrity.

Tendon anchorage grease cans:

- a) No deformed or sheared threads in the zone of thread engagement of bolts, studs or nuts.
- b) No localized general corrosion that reduces the bolt or stud cross-sectional area.
- c) No bending, twisting or deformation of bolts or studs to the extent that assembly or disassembly is impaired.
- d) No fractured bolts, studs or nuts.
- e) No evidence of damage or discontinuities that may prevent an acceptable gasket seal between the bearing plate and the grease can.
- f) No bolting conditions that do not meet design/material specifications/drawings.
- g) No evidence of active corrosion.
- h) No evidence of grease leakage exceeding 10% of duct volume of the associate tendon.

Coated and uncoated concrete surfaces:

- a) No evidence of flaking, peeling, blistering, discoloration or other signs of distress other than caused by mechanical damage.
- b) No evidence of active coating wear or erosion.
- c) No appearance of leaching or concrete attack.
- d) No evidence of missing required coating.
- e) No harsh environments that may reduce the life of the coating.
- f) No popouts, scaling, spalls and bug holes of any shape and size that breach the concrete cover.
- g) No corrosion staining of undefined source on the concrete surfaces.
- h) No cracks greater than .04" in maximum width.
- i) No settlement or deflection visible to the unaided eye.
- j) No occurrence of exposed reinforcing steel other than nonstructural exposed rebars, embedded metallic or nonmetallic items that do not adversely impact the structural function of the components.
- k) No apparent patch or repair on the concrete surface.
- l) No wetness other than temporary moisture.
- m) No surface Efflorescence other than those from adjacent non-IWL components.

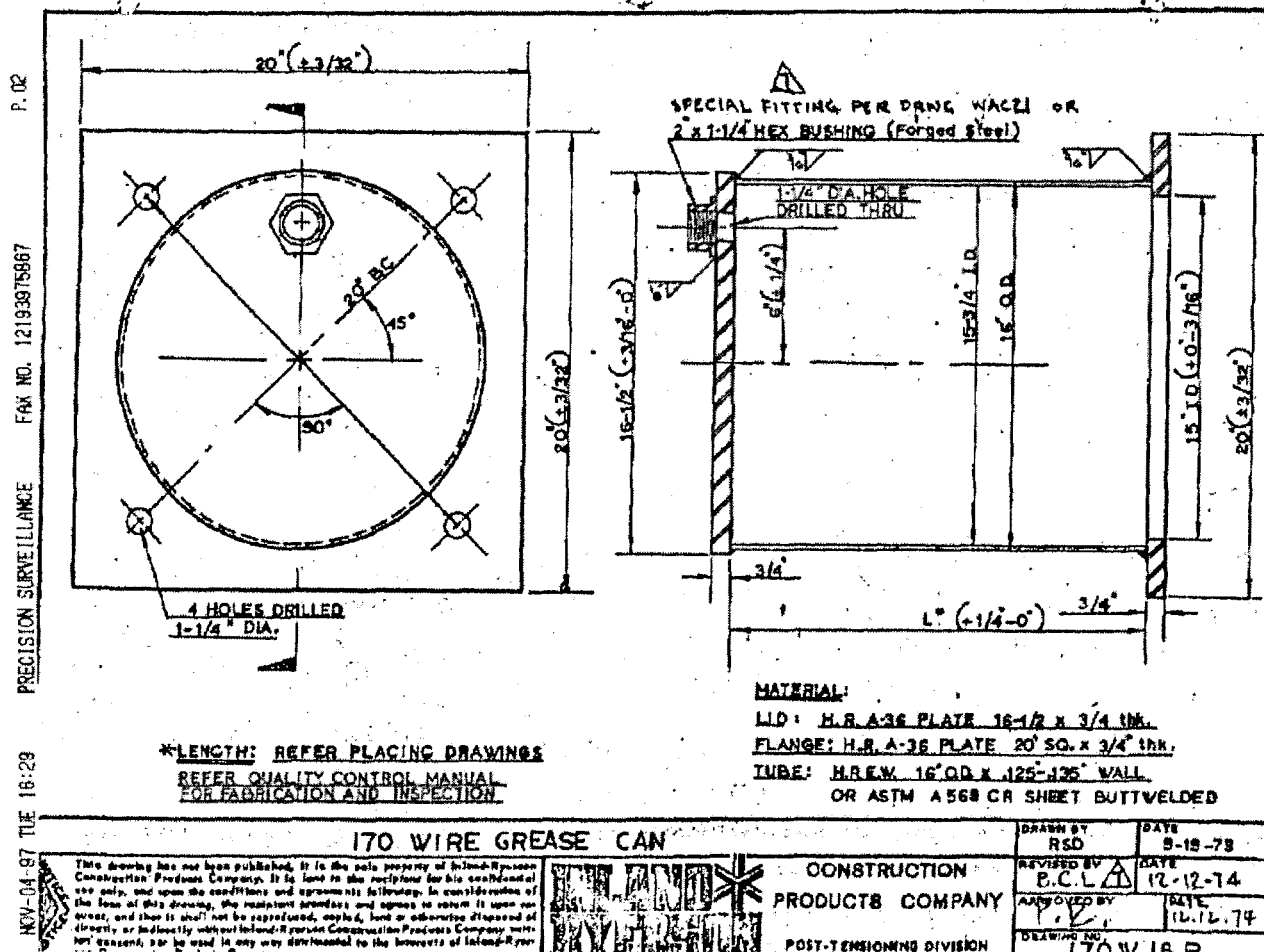
Items exceeding the acceptance criteria shall be considered **suspect areas** and would require introduction into the plant's Corrective Action Program and, resolution in accordance with IWL section 3000 (and applicable parts of section 4.7 of ER-AA-335-018). If a documented resolution, either complete or ongoing, exists that adequately addresses the as-found observed condition, it need not be considered a suspect area and should be recorded for information only.

Recordable Indications that are not classified as suspect areas do not require documentation in the plant's CAP.

EC 363076 Rev. 0

EVALUATE CONDITIONS THAT DID NOT MEET THE ACCEPTANCE CRITERIA DURING THE 2nd IWL 5-YEAR CONTAINMENT CONCRETE SURVEILLANCE

Attachment 2:



CONDITIONS FOUND DURING THE INSPECTION OF PENETRATION 2PC064M

Reason for Evaluation/Scope:

The visual inspection (VT-3) of the U-2 spare penetration #64 bolting per the requirements of IWE subsection and Byron CISI program identified 2 of the 16 bolting as having damaged threads (Recordable Indication) thus not meeting the Acceptance Standards (Recordable Indications did not meet Acceptance Criteria established prior to the inspection).

Byron station is using the 2001 Edition of ASME Code Section XI, Subsection IWE with 2003 Addenda.

This condition is documented in IR #61167 thus meeting section 4.10.1 of ER-AA-330-007, Rev. 5.

An Engineering Evaluation per Section 4.10.2 of ER-AA-330-007 is not required as the defective studs are replaced.

No supplemental examination per Section 4.10.3 of ER-AA-330-007 is required other than the new studs being inspected prior to installation since no Engineering Evaluation is required.

No additional examinations per Section 4.10.4 of ER-AA-330-007, Rev. 5 are required as the examination was conducted to the later than 1998 Edition of the ASME Code, Section XI. The only other required examination is the re-inspection of the new studs prior to installation.

Since the defective studs are replaced, no re-examination is required in the next refueling outage (Examination Cat E-C is not applicable). However, if this connection is scheduled for disassembly during B2R14, it will then be inspected. This meets the intent of the requirements of Section 4.10.5 of ER-AA-330-007.

The conditions discovered with this connection do not indicate the presence of similar condition in other connections that are not disassembled (considered inaccessible areas) during this outage. Penetration #74 was also disassembled and the examination results met the Acceptance Standards. Therefore, the Evaluation as required per 10CFR50.55a (and hence, Section 4.11 of ER-AA-330-007) is not applicable.

Conclusion:

Per Section 4.12 of ER-AA-330-007, the following information is provided to be included in the ISI Summary Report:

- 1) A few threads on the shank of two studs out of 16 on spare Penetration #64 were noted per VT-3 visual examination method to be damaged (prevented rotation through nuts) when the connection was disassembled. This condition did not meet the acceptance Criteria (no damaged threads) established by the Owner prior to the examination. The degradation is attributed to the mishandling of the studs during the disassembly phase.
- 2) No evaluation was required of the inaccessible areas (remaining assembled connections) as a similar disassembled connection (Penetration #74) did not exhibit any signs of degradation.
- 3) The studs were replaced like-for-like prior to the start of the Unit-2 operation.

CONDITIONS FOUND DURING THE INSPECTION OF PENETRATION 2PC064M

The pressure testing requirements of IWE-5000 (specifically, IWE-5221, leakage test) are met when this connection was local leak rate tested at the end of B2R13 per 2BOSR 6.1.1-25.

References:

- 1) 2001 Edition with the 2003 Addenda of ASME Section XI, Subsection IWL and IWE
- 2) Exelon procedure ER-AA-330-007 Revision 5, *Visual Examination of Section XI Class MC Surfaces and Class CC Liners*
- 3) Byron procedure 2BOSR 6.1.1-25 Revision 6, *Unit Two Primary Containment Type B Local Leakage Rate Test of Spare Containment Penetrations*