Exelon Nuclear Limerick Generating Station P.O. Box 2300 Pottstown, PA 19464 www.exeloncorp.com

T.S. 4.0.5 & 10CFR50.55a(g)

Exelon

Nuclear

July 3, 2007

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

> Limerick Generating Station, Unit 2 Facility Operating License No. NPF-85 NRC Docket No. 50-353

Subject: LGS Unit 2 Summary Report for Inservice Inspections (2R09)

The LGS Unit 2 Summary Report for Inservice Inspections and ASME Section XI nondestructive examinations, repairs and replacements for the period March 19, 2005 to April 4, 2007 Report No. 9 is submitted in accordance with ASME Section XI, Article IWA-6200, Unit 2 Technical Specifications Section 4.0.5 and 10CFR50.55a(g).

There are no commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

for CH Mudrick

Christopher H. Mudrick Vice President - LGS Exelon Generation Company, LLC

Enclosure: Limerick Generating Station Unit 2, Summary Report for the March 19, 2005 to April 4, 2007 Periodic Inservice Inspection Report No. 9

cc: S. Collins, Administrator, Region I, USNRC S. Hansell, LGS USNRC Senior Resident Inspector

C. Mudrick-GML 5-1 (w/o attachments) bcc: R. DeGregorio - KSA-3N (w/o attachments) K. Jury - Cantara (w/o attachments) P. Gardner - GML 5-1 (w/o attachments) P. Cowan - KSA 2N (w/o attachments) D. Helker - KSA 2N (w/o attachments) R. Kreider - SSB 2-4 w/attachments R. Dickinson - SSB 3-1 (w/o attachments) S. Bobyock - SSB 3-1 (w/o attachments) H. Do- Cantera (w/o attachments) M. Karasek - SSB 3-4 (w/attachments) G. Budock-SSB 3-4 (w/attachments) J. Toro - SSB 4-2 (w/attachments) S. Gamble - SSB 2-4 (w/o attachments) P. Lenair - SSB 3-1 (w/attachments) K. Fisher - JSK 4-1 (w/attachments) J. Kramer – GML 2-5 (w/attachments)

R. Janati - Commonwealth of PA DEP (w/attachments)

D. Dyckman - (PABRP) SSB 2-4 (w/o attachments)

# ISI Summary Report Limerick Generating Station Unit 2 Refueling Outage: 2R09

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Commercial Service Date: January 8, 1990

Examination Dates March 19, 2005 to April 4, 2007

> Owner: Exelon Generating Company, LLC 200 Exelon Way Kennett Square, PA 19348

Plant: Limerick Generating Station 3146 Sanatoga Road Pottstown, PA 19464

Report Completion Date:	July 03 2007
Prepared By:	Hy PSidente
Reviewed By:	Michelle Karasek
Reviewed By:	Dro, ALu
Approved By:	Style J. Brook

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	SIR-05-249, Revision 0, Evaluation of the Limerick Generating Station Unit 2 Core Shroud Welds H1, H2, H3, H4, and H6 for Operation Through Li2R10, dated September 9, 2005.	57
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NIS1 2R09 Sheet 1 of 2

#### FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS As required by the Provisions of the ASME Code Rules

1. Owner <u>Exe</u>	elon Generation Company, LLC, (Name and	200 Exelon Way, Kennett d Address of Owner)	Square, PA 19348	• •
2. Plant	Limerick Generating Station, 31 (Name an	<u>46 Sanatoga Road, Pottst</u> d Address of Plant)	<u>own, PA 19464</u>	
3. Plant Unit	2	4. Owner Certificate of	f Authorization (if require	ed) <u>N/A</u>
5. Commercial Service Dat	te <u>January 8, 1990</u>	6. National Board Nun	nber for Unit	3960
7. Components Inspected:		·		
Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Nuclear Reactor				
Vessel	Chicago Bridge & Iron Co.	B-5027	*	3960
Primary Containment	Bechtel/			
Vessel	Chicago Bridge & Iron Co.	*	*	PASPEC5382
Class 1, 2, & 3			· .	
Piping Systems				
& Supports	*	*	*	. *
				· .
	· ·			

\* Traceability per Form N-5 Data Report, Design Specification and Line Number.

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is  $8\frac{1}{2}$  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.

This Form (E00029) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

NIS1 2R09 Sheet 2 of 2

#### FORM NIS-1 (Back)

8. Examination Dates <u>March 19, 2005</u> to <u>April 4, 2007</u>

9. Inspection Period Identification: Period No. 1

10. Inspection Interval Identification: \_\_\_\_Third Interval, Inspection Program B (ISI); Second Interval, Inspection Program B (CISI)

11. Applicable Edition of Section XI 2001 Addenda 2003

12. Date/Revision of Inspection Plan: \_\_\_Specification NE-328, Revision 0

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan.

Refer to Section 1, Summary of In-Service Inspection Results

14. Abstract of Results of Examinations and Tests.

Refer to Section 2, Summary of Reportable Conditions Observed

15. Abstract of Corrective Measures.

Refer to Section 3, Summary of ASME Section XI Repairs and Replacements

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No	. (if applicable)	N/A	Expiration Date	<u>N/A</u>
Date June 27, 2007	SignedE	Exelon Generation Co., LLC E Owner	31- A	Jole

i, the undersigned, holding a valid commi	ission issued by the National Board of Boiler and Pressure Vessel Inspectors
	ania and employed by HSBCT of
	spected the components described in this Owner's Report during the period
	07, and state that to the best of my knowledge and belief, the Owner
	nd taken corrective measures described in this Owner's Report in accordance
with the Inspection Plan and as required	
	Inspector nor his employer makes any warranty, expressed or implied,
	corrective measures described in this Owner's Report. Furthermore, neither the
nspector 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 ir	

#### **Introduction**

#### **Examination Period and Requirements**

During the period from March 19, 2005 to April 4, 2007 In-Service Inspections were performed at Limerick Generating Station Unit 2. Unit 2 was shutdown for the ninth refuel outage during the period of March 9, 2007 through April 4, 2007. Relief Request I3R-01 "Request for Relief for Alternative Requirements for the Synchronization of Ten-Year ISI Intervals Between Units 1 and 2 for Class 1, 2, 3, MC, and CC Components In Accordance with 10CFR50.55 a(a)(3)(i)" was approved on August 4, 2006.

- March 19, 2005 to January 31, 2007- the examinations will be credited to the Second Interval, Second Period.
  - Examinations of the Reactor Pressure Vessel and Class 1, 2, and 3 Piping Systems and Supports were completed in accordance with ASME Section XI, 1989 Edition with No Addenda.
  - Examinations of the Primary Containment Vessel Class MC and CC Components were performed in accordance with the requirements of ASME Section XI, 1992 Edition with the 1992 Addenda.
- February 1, 2007 to April 4, 2007- the examinations will be credited to the Third Interval, First Period.
  - Examinations of the Reactor Pressure Vessel and Class 1, 2, and 3 Piping Systems and Supports were completed in accordance with ASME Section XI, 2001 Edition with the 2003 Addenda.
  - Examinations of the Primary Containment Vessel Class MC and CC Components were performed in accordance with the requirements of ASME Section XI, 2001 Edition with the 2003 Addenda.

In addition to ASME Section XI, Augmented In-Service Inspections were performed in accordance with the following regulatory requirements and industry guidance.

Generic Letter 88-01	Intergranular Stress Corrosion Cracking
IE Bulletins 95-02 and 96-03	RHR and Core Spray Suction Strainers
NUREG-0619	BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking
NUREG-0800	No Break Boundaries
FSAR Table 3.2-1	Non-Q RPV Internal Components
BWRVIP-05	BWR Reactor Pressure Vessel Shell Weld Inspection Recommendations
BWRVIP-18-A	Core Spray Internals Inspection and Flaw Evaluation Guidelines
BWRVIP-38	Shroud Support Inspection and Flaw Evaluation Guidelines
BWRVIP-38	Jet Pump Inspection and Flaw Evaluation Guidelines
BWRVIP-41, Rev 1	LPCI Coupling Inspection and Flaw Evaluation Guidelines
BWRVIP-42-A	Lower Plenum Inspection and Flaw Evaluation Guidelines
BWRVIP-47-A	Pressure Vessel ID Attachment Welds Inspection and Flaw Evaluation Guidelines
BWRVIP-47-A	Technical Basis for Revision to Generic Letter 88-01 Inspection Schedules
BWRVIP-76	Core Shroud Inspection and Flaw Evaluation Guidelines
BWRVIP-139	Steam Dryer Inspection and Flaw Evaluation Guidelines
GE SIL No 455	Recommendation for Additional ISI of Alloy 182 Nozzle Weldments

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
3G	702500	B-A	XI	UT	98	NRI	3/15/2007	XI-RPV-2
Shell Ring No. 3 Vertical Seam Weld	1	B1.12						
AH .	714600	B-A	XI	UT	100	NRI	3/17/2007	XI-RPV-2
Closure Head Dollar Plate Veld		B1.21						UT examination performed from 240 degrees to 360 degrees
DN .	715200	B-A	XI	UT	100	NRI	3/17/2007	XI-RPV-2
Closure Head Weld	. 1 .	B1.22	· .					
)P	715300	B-A	XI	UT	100	NRI	3/17/2007	XI-RPV-2
Closure Head Weld	1	B1.22				•		
G	714500	B-A	XI	MT	92	NRI	3/17/2007	XI-RPV-2
Closure Head to Flange . Veld	1 .	B1.40		UT	92	NRI		MT and UT examinations performed from 240 degrees to 360 degrees
117D-IR	712700	B-D	XI	UT	.100	NRI	3/20/2007	XI-RPV-2
PCI "C" Loop Nozzle	. 1	B3.100					<sup>•</sup> N-648-1	
I2H-IR	706700	B-D	XI	UT	100	NRI	3/15/2007	XI-RPV-2
ecirculation Inlet "A" oop Nozzle Inside adius Section	1	B3.100					N-648-1	· .
I2J-IR	707000	B-D	XI	UT	100	NRI	3/15/2007	XI-RPV-2
Recirculation Inlet "A" oop Nozzle Inside Radius Section	1	B3.100					N-648-1	
13C-IR	708200	B-D	XI	UT	100	NRI	3/19/2007	XI-RPV-2
fain Steam "C" Loop lozzle Inside Radius section	1	B3.100					. N-648-1	
I3D-IR	708500	B-D	XI	UT	100	NRI	3/14/2007	XI-RPV-2
fain Steam "D" Loop lozzle Inside Radius Section	1	B3.100					N-648-1	
I4A-IR	708800	B-D	XI	UT	100	NRI	3/21/2007	XI-RPV-2
eedwater "A" Loop lozzle Inside Radius Section	1	B3.100	•				N-648-1	· · · ·
I4F-IR	710300	B-D	XI	UT	100	NRI	3/21/2007	XI-RPV-2
eedwater "F" Loop lozzle Inside Radius section	1	B3.100					N-648-1	
15B-IR	710900	B-D	XI	UT	100	NRI	3/21/2007	XI-RPV-2
core Spray "A" Loop lozzle Inside Radius lection		B3.100					N-648-1	
N17D	712600	B-D	XI	UT	84	NRI	3/20/2007	XI-RPV-2
PCI "C" Loop Nozzle to /essel Weld	1	B3.90						Limited examination due to interference

Component ID	Summary #	Category	Exam	Actual	Code	Exam	· Insp. Date	Iso Number
Description	Class	Item	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
N2H	706600	B-D	XI	UT	80	NRI	3/15/2007	XI-RPV-2
Recirculation Inlet "A" _oop Nozzle to Vessel Weld	1	B3.90						Limited examination due to N8 nozzle interference
N2J	706900	B-D	XI	UT	80	NRI	3/15/2007	XI-RPV-2
Recirculation Inlet "A" _oop Nozzle to Vessel Weld	1	B3.90						Limited examination due to nozzle configuration
N3C	708100	B-D	XI	UT	82	NRI	3/19/2007	XI-RPV-2
Main Steam "C" Loop Nozzle to Vessel Weld	1	B3.90			۰.			Limited examination due to nozzle configuration
N3D	708400	B-D	XI	UT	82	NRI	3/14/2007	XI-RPV-2
Main Steam "D" Loop Nozzle to Vessel Weld	1	B3.90		• .				Limited examination due to nozzle
N4A	708700	B-D	XI	UT	79	RI	3/15/2007	XI-RPV-2
Feedwater "A" Loop Nozzle to Vessel Weld	1	B3.90						Limited examination due to proximity of mirror insulation near the stabilizer brackets and N11A nozzle; 2 indications were recorded and evaluated to be acceptable per IWB-3000.
N4F	710200	B-D	XI	UT	80	NRI	3/15/2007	XI-RPV-2
Feedwater "F" Loop Nozzle to Vessel Weld	1	B3.90	·					Limited examination due to proximity of mirror insulation near the stabilizer brackets
N5B	710800	B-D	XI	UT	85	NRI	3/21/2007	XI-RPV-2
Core Spray "A" Loop Nozzle to Vessel Weld	1	B3.90						Limited examination due to nozzle configuration
2BP-201 2-6-01	600200	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1.,	B6.180		·		ľ	· .	
2BP-201 2-6-02	600300	B-G-1	XI	ŲΤ	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	<sup>.</sup> B6.180					•	•
2BP-201 2-6-03	600400	B-G-1	ХI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	<b>1</b> .	B6.180					· · ·	
2BP-201 2-6-04	600500	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180						
2BP-201 2-6-05	600600	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter.Stud	1	B6.180						:
2BP-201 2-6-06	600700	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180			·			· ·
2BP-201 2-6-07	600800	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180				•	· ·	

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
2BP-201 2-6-08		B-G-1		UT	100		3/15/2007	
Recirculation Pump	600900 1	B6.180	XI	01	100	NRI	3/15/2007	XI-2P-201
Casing 3" Diameter Stud	1 .	50.100						
BP-201 2-6-09	601000	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180						
2BP-201 2-6-10	601100	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180						
2BP-201 2-6-11	601200	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180						
BP-201 2-6-12	601300	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180						
2BP-201 2-6-13	601400	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	<sup>·</sup> 1	B6.180						
BP-201 2-6-14	601500	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180					•	
BP-201 2-6-15	601600	B-G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud		B6.180			·			· .
2BP-201 2-6-16	601700	<b>B-</b> G-1	XI	UT	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Stud	1	B6.180					· ·	
2BP-201 2-10-01	601800	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-02	601900	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200				•		•
BP-201 2-10-03	602000	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
BP-201 2-10-04	602100	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
BP-201 2-10-05	602200	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
BP-201 2-10-06	602300	B-G-1	XI	_VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
						······		·
2BP-201 2-10-07	602400	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-08	602500	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200			• .			
2BP-201 2-10-09	602600	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-10	602700	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200			х.		·	
2BP-201 2-10-11	602800	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						•
2BP-201 2-10-12	602900	B-G-1	ХI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-13	603000	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-14	603100	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
2BP-201 2-10-15	603200	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200					2	
2BP-201 2-10-16	603300	B-G-1	XI	VT-1	100	NRI	3/15/2007	XI-2P-201
Recirculation Pump Casing 3" Diameter Nut	1	B6.200						
HV-51-2F050B Bolting	327600	B-G-2	XI	VT-1	100	NRI	3/25/2007	XI-DCA-204-3
12" A.O. Check Valve Bonnet and Hinge Pin Cover Bolting	1	B7.70		·			· · ·	
PSV-41-2F013A Bolting	172800	B-G-2	XI	VT-1	100	NRI	3/16/2007	XI-APE-2MS-LA
6" X 10" Relief Valve Bonnet/2nd Stage Bonnet Bolting	1	B7.70						

•	Summary #	Category	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date	Iso Number
Description	Class	ltem	Reason	Exam	Coverage		Code Cases	Exam Comments
CRD HOUSING FLANGE BOLTING	739700	B-G-2	XI	VT-1	100	NRI	3/18/2007	XI-BN-6
185 CRD Housing Flanges - 8 Cap Screws per Flange	1	B7.80					· .	Examined bolting at 19 core locations disassembled for maintenance Li2R09: CRD 10-23 10-35, 18-19, 22-31, 26-11, 26- 15, 26-35, 30-11, 30-19, 30-23, 30-27, 30-31, 30-47, 34-23, 34-
								27, 38-31, 42-55, 54-19, and 58- 31. Bolt inspection per W/O R0997991-03: Bolt replacement resolved all reportable indications CRD 30-19 received one new bol and CRD 30-27 received one new bolt.
CG	724900	B-K	XI	MT	100	NRI	3/22/2007	XI-BH-1
Skirt Knuckle to RPV Weld	l 1 <sub>.</sub>	B10.10			·			MT examination performed from 240 degrees to 360 degrees.
FR	724800	B-K	XI	MT	100	NRI	3/22/2007	XI-BH-1
RPV Weld Build-Up	1	B10.10						MT examination performed from 240 degrees to 360 degrees.
HV-51-2F050B Internal Surfaces	327700	B-M-2	XI	VT-3	100	NRI	3/25/2007	XI-DCA-204-3
12" A.O. Check Valve Internal Surfaces	1	B12.50						·
PSV-41-2F013A Internal Surfaces	173500	B-M-2	XI	VT-3	100	NRI	3/16/2007	XI-APE-2MS-LA
6" X 10" Relief Valve: Internal Surfaces	1	B12.50	•					· · ·
ST-4-041-950-2		B-P	· · XI	VT-2	100	RI	3/30/2007	ST-INDEX
ISI System Leakage Test for all Class 1 Systems and some Class 2 Systems	· 1	B15.10			·			Leakage was identified and evaluated as acceptable per IR# 610203 A02.
EBB-208-1 FW19A	132000	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-18 to 12" Pipe (H23)	2	C3.20		•	• •			
EBB-208-1 FW19B	132100	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-19 to 12" Pipe (H23)	2	C3.20						
EBB-208-1 FW19C	132200	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-20 to 12" Pipe (H23)	2	C3.20		·				• •
EBB-208-1 FW19D	132300	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-21 to 12" Pipe (H23)	2	C3.20						
EBB-208-1 FW19E	132400	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-22 to 12" Pipe (H23)	2	C3.20			· ·			
EBB-208-1 FW19F	132500	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
Lug EBB-208-1-23A to 12" Pipe (H23)	2	·C3.20						

Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	Item	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
BB-208-1 FW19G	132600	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
ug EBB-208-1-24 to 12" Pipe (H23)	2	C3.20		·				· ·
BB-208-1 FW19H	132700	C-C	XI	PT	100	NRI	3/14/2007	XI-EBB-208-1
ug EBB-208-1-25 to 12" Pipe (H23)	2	C3.20				· .		
0P-203 PS1	294000	C-C	XI	MT	75	NRI	3/11/2007	XI-20P-203
Nounting Support to Pump	2	C3.30						Bottom of weld not inspected due to pedestal
0P-203 SWD1	294500	C-G	XI	MT	100	NRI	3/11/2007	XI-20P-203
Pump Casing Weld Pump o Discharge Nozzle	2	C6.10						
0P-203 SWS1	294405	C-G	XI	MT	100	NRI	3/11/2007	XI-20P-203
Pump Casing Weld Suction Nozzle to Pump	2	C6.10						
ST-4-026-950-2		C-H	XI	VT-2	100	NRI	7/27/2006	ST-INDEX
SI Inservice Pressure Test of Plant Process Radiation Monitoring	2	C7.30						Pressure test credited to second ISI interval.
Piping	·	· .						
T-4-030-950-2		С-Н	XI	VT-2	100	NRI	3/26/2007	ST-INDEX
Pass and Containment Atmospheric Control Ample Loops Functional Pressure Test and Contaminated Piping Inspection	2	C7.30						
ST-4-047-952-2		C-H	XI	VT-2	100	NRI	11/18/2005	ST-INDEX
SI Pressure Test of East Bank of CRD HCU'S	2	C7.30					2	Pressure test credited to second ISI interval.
ST-4-047-953-2		C-H	XI	VT-2	100	NRI	11/18/2005	ST-INDEX
SI Pressure Test of West Bank of CRD HCU'S	2	C7.30						Pressure test credited to second ISI interval.
ST-4-048-950-2		C-H	XI	VT-2	100	NRI	7/22/2005	ST-INDEX
SI Functional Pressure Test of Standby Liquid Control Discharge Piping o Squib Valves	2	C7.30					· · · ·	Pressure test credited to second ISI interval.
		C-H	XI	VT-2	100	NRI	7/12/2005	ST-INDEX
SI Inservice Pressure est of Standby Liquid	2	C7.30	, and the second s		100	· · ·		Pressure test credited to second ISI interval.
Control Suction Piping							0.10.15.5.5.5	
T-4-049-950-2		C-H	XI	VT-2	100	NRI	9/8/2006	ST-INDEX
SI Functional Pressure est of RCIC Pump ischarge and Turbine xhaust	2	C7.30						Pressure test credited to second ISI interval.
ST-4-049-951-2		C-H	XI	VT-2	100	NRI	9/13/2006	ST-INDEX
SI Inservice Pressure est of RCIC Pump and urbine Supply	2	C7.30						Pressure test credited to second ISI interval.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
ST-4-049-953-2	<u></u>	C-H	XI	VT-2	100	NRI	6/1/2006	ST-INDEX
ISI Inservice Pressure Test of RCIC Exhaust Vacuum Breaker Piping	2	C7.30						Pressure test credited to second ISI interval.
ST-4-051-951-2		C-H	XI	VT-2	100	NRI	7/27/2005	ST-INDEX
ISI Functional Pressure Test of RHR Loop A	2	C7.30						Pressure test credited to second ISI interval.
ST-4-051-952-2		С-Н	XI	VT-2	100	NRI	3/2/2006	ST-INDEX
ISI Functional Pressure Test of RHR Loop B	2	C7.30					· · ·	Pressure test credited to second ISI interval.
ST-4-051-953-2		C-H	XI	VT-2	100	NRI	10/20/2005	ST-INDEX
ISI Functional Pressure Test of RHR Loop C	2	C7.30					•	Pressure test credited to second ISI interval.
ST-4-051-954-2		С-Н	XI	VT-2	100	NRI	8/17/2006	ST-INDEX
ISI Functional Pressure Test of RHR Loop D	2	C7.30						Pressure test credited to second ISI interval.
ST-4-052-953-2		C-H	XI	VT-2	100	NRI	7/15/2005	ST-INDEX
ISI Functional Pressure Test of Safeguard Piping Fill Loops A and B	2	C7.30	÷					Pressure test credited to second ISI interval.
ST-4-055-951-2		C-H	XI	VT-2	100	. NRI	12/21/2005	ST-INDEX
ISI Inservice Pressure Test of HPCI Pump and Turbine Supply	2	C7.30	•					Pressure test credited to second ISI interval.
ST-4-055-954-2		С-Н	XI	VT-2	100	NRI	9/20/2006	ST-INDEX
ISI Inservice Pressure Test of HPCI Exhaust Vacuum Brealer Piping	2	C7.30	• .					Pressure test credited to second ISI interval.
ST-4-057-951-2		C-H, D-B	XI	VT-2	100	NRI	3/22/2007	ST-INDEX
A Post LOCA Recombine Pneumatic Pressure Test and Contaminated Piping Inspection	r 2	C7.10, D2.10		·	• : •			
ST-4-057-952-2		C-H, D-B	XI	VT-2	100	NRI .	3/17/2007	ST-INDEX
B Post LOCA Recombine Pneumatic Pressure Test and Contaminated Piping Inspection	r 2	C7.10, D2.10						· · ·
ST-4-020-953-2		D-A	XI	VT-2	100	NRI	8/8/2005	ST-INDEX
ISI Functional Pressure Test of D23 Diesel Fuel Oil Transfer System	3	D1.10			·			Pressure test credited to second ISI interval.
ST-4-020-954-2	<u> </u>	D-A	XI	VT-2	100	NRI	8/15/2005	ST-INDEX
ISI Functional Pressure Test of D24 Diesel Fuel Oil Transfer System	3	D1.10						Pressure test credited to second ISI interval.

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Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments				
ST-4-020-961-2	,	D-A	XI	VT-2	100	NRI	8/18/2005	ST-INDEX				
D21 Diesel Fuel Oil Storage and Transfer System Buried Pipe and Storage Tank 2A-T527 Pressure Decay Test	3	D1.10	·					Pressure test credited to second ISI interval.				
ST-4-020-962-2		D-A	XI	VT-2	100	NRI	8/30/2006	ST-INDEX				
D22 Diesel Fuel Oil Storage and Transfer System Buried Pipe and Storage Tank 2BT527 Pressure Decay Test	3	D1.10						Pressure test credited to second ISI interval.				
	· · · · · · · ·				400		714010005					
ST-4-020-963-2		D-A	XI	VT-2	100	NRI	7/13/2005	ST-INDEX				
D23 Diesel Fuel Oil Storage and Transfer System Buried Pipe and Storage Tank 2C-T527 Pressure Decay Test	3	D1.10					· .	Pressure test credited to second ISI interval.				
ST-4-020-964-2		D-A	XI	VT-2	100	NRI	2/15/2006	ST-INDEX				
D24 Diesel Fuel Oil Storage and Transfer System Buried Pipe and Storage Tank 2DT527 Pressure Decay Test	3	D1.10						Pressure test credited to second ISI interval.				
					100							
ST-4-092-961-2 ISI Pressure Test of the	3	D-A D1.10	XI	VT-2	100	NRI	6/28/2006	ST-INDEX Pressure test credited to second				
D21 Diesel (2AG501) Fuel and Diesel Oil Storage and Transfer Systems							• •	ISI interval.				
ST-4-092-962-2		D-A	XI	VT-2	100	NRI	6/1/2006	ST-INDEX				
ISI Pressure Test of the D22 Diesel (2BG501) Fuel and Diesel Oil Storage and Transfer Systems	3	D1.10						Pressure test credited to second ISI interval.				
ST-4-092-963-2		D-A	XI	VT-2	100	NRI	6/11/2006	ST-INDEX				
ISI Pressure Test of the D23 Diesel (2CG501) Fue and Diesel Oil Storage and Transfer Systems	3 I	D1.10						Pressure test credited to second ISI interval.				
	<u></u>				100	NDI	10/17/2006					
ST-4-092-964-2 ISI Pressure Test of the D24 Diesel (2DG501) Fue and Diesel Oil Storage and Transfer Systems	3 I	D-A D1.10	XI	VT-2	100	NRI	10/17/2006	ST-INDEX Pressure test credited to second ISI interval.				
GBC-201-7 FW4A	263700	D-A	XI	VT-1	100	NRI	3/20/2007	GBC-201-7				
Lug GBC-201-7-13 to 12" Pipe (H50)	3	D1.20										
GBC-201-7 FW4B	263800	D-A	XI	VT-1	100	NRI	3/20/2007	GBC-201-7				
Lug GBC-201-7-14 to 12" Pipe (H50)	. 3	D1.20						· · ·				
GBC-201-7 FW4C	263900	D-A	XI	VT-1	100	NRI	3/20/2007	GBC-201-7				
Lug GBC-201-7-15 to 12" Pipe (H50)	3	D1.20										

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
GBC-201-7 FW4D	264000	D-A	XI	VT-1	100	NRI	3/20/2007	GBC-201-7
Lug GBC-201-7-16 to 12" Pipe (H50)	3	D1.20						
ST-4-012-951-2		D-B	XI	VT-2	100	NRI	5/12/2005	ST-INDEX
ISI Functional Pressure Test of 2B Residual Heat Removal Service Water HX	3	D2.10						Pressure test credited to second ISI interval.
ST-4-041-960-2		D-B	XI	VT-2	100	NRI	3/15/2007	ST-INDEX
"A" MSRV Discharge Pipe Pneumatic Test	3	D2.10					· .	
ST-4-041-961-2		D-B	XI	VT-2	100	NRI	3/17/2007	ST-INDEX
"B" MSRV Discharge Pipe Pneumatic Test	3	D2.10		۰.				
ST-4-041-962-2		D-B	XI	VT-2	100	NRI	3/17/2007	ST-INDEX
"C" MSRV Discharge Pipe Pneumatic Test	3	D2.10					· ·	
ST-4-041-963-2	·	D-B	XI	VT-2	100	NRI	3/15/2007	ST-INDEX
"D" MSRV Discharge Pipe Pneumatic Test	3	D2.10						
ST-4-041-964-2		D-B	XI	VT-2	100	NRI	3/16/2007	ST-INDEX
'E" MSRV Discharge Pipe Pneumatic Test	3	D2.10						
ST-4-053-951-2		D-C	XI	VT-2	100	NRI	4/20/2005	ST-INDEX
ISI Inservice Pressure Test of the Fuel Pool Cooling System	3	D3.10			·			Pressure test credited to second ISI interval.
APE-2MS-LC STG-2MS- H027	190300	F-A	XI	VT-3	100	NRI	3/20/2007	XI-APE-2MS-LC SH. 1
Rigid Support	1	F1.10			•		:	
DBA-206-2 FW2	130800	F-A	XI	VT-3	100	NRI	3/14/2007	XI-DBA-206-2 SH. 1
Anchor: Flued Head X-11 to Penetration Sleeve	1	F1.10	•					
DBA-206-H006	128300	F-A	XI	VT-3	100	NRI	3/15/2007	XI-DBA-206-1 SH. 1
Mechanical Snubber	1	F1.10						
DBA-207-H020	293100	F-A	XI	VT-3	100	NRI	3/17/2007	XI-DBA-207-1 SH. 1
Rigid Support	1	F1.10						
DBA-207-H022	293200	F-A	XI	VT-3	100	NRI	3/17/2007	XI-DBA-207-1 SH. 1
Mechanical Snubber	1	F1.10						
DCA-201-H004	669400	F-A	XI	VT-3	100	RI	3/14/2007	XI-DCA-201-1 SH. 1
Variable Support	<sup>1</sup>	F1.10		-	•••			The as found load setting was out of tolerance. Evaluation A1608599-01 determined the condition to be acceptable.
DCA-201-H005	668500	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DCA-201-1 SH. 1
Variable Support	1	F1.10						

Component ID	Summary #	Category	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date	Iso Number
Description	Class	Item					Code Cases	Exam Comments
DCA-201-H066	674600	F-A	BL	VT-3	100	NRI	3/28/2007	XI-DCA-201-3 SH. 1
/ariable Support	1	F1.10						Hanger adjusted. Issue identified during incidental observation.
DCA-201-H067	673900	F-A	BL	VT-3	100	NRI	3/28/2007	XI-DCA-201-3 SH. 1
/ariable Support	1	F1.10						Hanger adjusted. Issue identified during incidental observation.
DCA-201-H072	669900	F-A	BL	VT-3	100	NRI	3/28/2007	XI-DCA-201-1 SH. 1
/ariable Support	1	F1.10						Hanger adjusted. Issue identified during incidental observation.
DCA-204-H004	324400	F-A	BL	VT-3	100	NRI	3/27/2007	XI-DCA-204-1 SH. 1
/ariable Support	1	F1.10						Hanger disassembled and reassembled for RHR 50 Valve replacement
DCA-204-H005	324900	F-A	BL	VT-3	100	NRI	3/27/2007	XI-DCA-204-1 SH. 1
/ariable Support	1	F1.10					5 	Hanger disassembled and reassembled for RHR 50 Valve replacement
DCA-205-H002	332400	F-A	XI	VT-3	100	NRI	3/17/2007	XI-DCA-205-1 SH. 1
/ariable Support	1	F1.10						· · · · · · · · · · · · · · · · · · ·
DCA-213-E03-H001	588360	F-A	BL	VT-3	100	NRI	3/25/2007	XI-DCA-213-E3
Rigid Support	1	F1.10						Hanger installed per ECR 06-
DCA-213-H003	586400	F-A	BL	VT-3	100	NRI	3/28/2007	XI-DCA-213-1 SH. 1
/ariable Support	1	F1.10			7			Hanger adjusted. Issue identified during incidental observation.
DCA-418-H001	340600	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DCA-418-1 SH. 1
Mechanical Snubber	1	F1.10				I.		
DCA-418-H002	347600	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DCA-418-3 SH. 1
Mechanical Snubber	1	F1.10						
DLA-207-H003	111600	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-207-1 SH. 1
/ariable Support	1 -	F1.10						
DLA-207-H004	112200	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-207-1 SH. 1
/ariable Support	1	F1.10					1	
DLA-207-H019	111100	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-207-1 SH. 2
Mechanical Snubber	1	F1.10						
DLA-207-H020	112600	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-207-1 SH. 2
Mechanical Snubber	1	F1.10						
DLA-208-H003	118700	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-208-1 SH. 1
/ariable Support	1 · · · ·	F1.10						
DLA-208-H004	119300	F-A	XI	VT-3	100	NRI	3/16/2007	XI-DLA-208-1 SH. 1
variable Support	1	F1.10					·	
VRR-2RD-HHB2	644700	F-A	XI	VT-3	100	NRI	3/17/2007	XI-VRR-2RD-2B SH. 1
Variable Support	1	F1.10	2.1					

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
EBB-202-H026	214000	F-A	BL	VT-3	100	RI	3/23/2007	XI-EBB-202-1 SH. 1
Rigid Support	2	F1.20						Baseline - hanger removed for weld inspection; Lack of thread engagement upon reinstallation was evaluated as acceptable per IR# 608323 A02.
EBB-207-H007	237405	F-A	XI	VT-3	100	NRI	3/20/2007	XI-EBB-207-1 SH. 1
Mechanical Snubber (A & 3)	2	F1.20						
EBB-208-H003	141500	F-A	XI	VT-3	100	RI	3/21/2007	XI-EBB-208-2 SH. 1
/ariable Support	2	F1.20						Cold load set was found out of tolerance, A1565572-31 concluded the print was in error.
EBB-208-H023	136200	F-A	XI	VT-3	100	NRI	3/14/2007	XI-EBB-208-1 SH. 1
Rigid Support	2	F1.20						. ,
BB-208-H026	136400	F-A	XI	VT-3	100	NRI	3/14/2007	XI-EBB-208-1 SH. 1
Rigid Support	2	F1.20						·
EBB-209-H029	305200	F-A	XI	VT-3	100	NRI	3/18/2007	XI-EBB-209-2 SH. 1
/ariable Support	2	F1.20						
EBB-209-H030	305305	F-A	XI	VT-3	100	NRI	3/16/2007	XI-EBB-209-2 SH. 1
Mechanical Snubber (A & 3)	2	F1.20						
EBB-226-H002	308500	F-A	XI	VT-3	100	NRI	3/13/2007	XI-EBB-226-1 SH. 1
Rigid Support	2	F1.20						· .
EBB-226-H003	308600	F-A	XI	VT-3	100	NRI	3/13/2007	XI-EBB-226-1 SH. 1
Rigid Support	2	F1.20						
EBB-229-H006	155005	F-A	XI	VT-3	100	NRI	3/13/2007	XI-EBB-229-2 SH. 1
Mechanical Snubber (A & 3)	2	F1.20					· .	
EBB-231-H003	034305	F-A	XI	VT-3	100	NRI	3/21/2007	XI-EBB-231-1 SH. 1
Mechanical Snubber (A & 3)	2	F1.20						
GBB-201-H010	383200	F-A	XI	VT-3	100	NRI	3/13/2007	XI-GBB-201-1 SH. 1
/ariable Support	2	F1.20						
GBB-207-H027	414000	F-A	XI .	VT-3	100	NRI	3/16/2007	XI-GBB-207-1 SH. 1
Rigid Support	2	F1.20						
GBB-207-H028	417500	F-A	XI	VT-3	100	NRI	3/17/2007	XI-GBB-207-2 SH. 1
Rigid Support	2	F1.20						
GBB-207-H029	418100	F-A	XI	VT-3	100	NRI	3/17/2007	XI-GBB-207-2 SH. 1
Rigid Support	2	F1.20						
GBB-207-H031	41,4200	F-A	XI	VT-3	100	NRI	3/14/2007	XI-GBB-207-1 SH. 1
Rigid Support	2	F1.20						
GBB-211-H004	424400	F-A	XI	VT-3	100	NRI	3/16/2007	XI-GBB-211-1 SH. 1
Rigid Support	2	F1.20	-	_	-			

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
GBB-211-H005	424500	F-A	XI	VT-3	100	NRI	3/14/2007	XI-GBB-211-1 SH. 1
Rigid Support	2	F1.20						
GBB-219-H030	478900	F-A	XI	VT-3	100	NRI	3/17/2007	XI-GBB-219-5 SH. 1
Rigid Support	2	F1.20						·
GBB-219-H065	463300	F-A	XI	VT-3	100	NRI	3/16/2007	XI-GBB-219-2 SH. 1
Rigid Support	2	F1.20	74		100			
GBB-219-H066	463400	F-A	XI	VT-3	100	NRI	3/16/2007	XI-GBB-219-2 SH. 1
Rigid Support	403400	F1.20		VI-5 .	100		5/10/2007	XI-ODD-213-2 OTI. 1
				VT 2	100	NDI	2/46/2007	
GBB-219-H068 Rigid Support	465900 . 2	F-A F1.20	XI	VT-3	100	NRI	3/16/2007	XI-GBB-219-3 SH. 1
						· · · · ·		
GBB-219-H078	477705	F-A	XI	VT-3	100	NRI	3/22/2007	XI-GBB-219-5 SH. 1
Mechanical Snubber (A & B)	2	F1.20						
GBB-219-H079	455900	F-A	XI	VT-3	100	NRI	3/14/2007	XI-GBB-219-1 SH. 1
Variable Support	2	F1.20						
GBB-219-H090	455705	F-A	XI	VT-3	100	NRI	3/14/2007	XI-GBB-219-1 SH. 1
Mechanical Snubber (A & B)		F1.20					-	
HBB-208-H001	166200	F-A	XI	VT-3	100	NRI	3/16/2007	XI-HBB-208-2 SH. 1
Rigid Support	2	F1.20					:	
HBB-217-H008	492100	F-A	XI	VT-3	100	NRI	3/12/2007	XI-HBB-217-3 SH. 1
Rigid Support	2	F1.20						
HBB-217-H009	492200	F-A	XI	VT-3	100	NRI	3/12/2007	XI-HBB-217-3 SH. 1
Rigid Support	2	F1.20				•		
HBB-220-H027	065000	F-A	XI	VT-3	100	NRI	3/21/2007	XI-HBB-220-2 SH. 1
Rigid Support	2	F1.20		VIS	100		012112001	
				VT-3	100	NRI	2/21/2007	
HBB-220-H028 Rigid Support	065200 2	F-A F1.20	XI	VI-3	100	INRI	3/21/2007	XI-HBB-220-2 SH. 1
							0/40/0007	
GBC-216-9 FW51 Anchor: Flued Head X-	28040 <u>0</u> 3	F-A F1.30	XI	VT-3	100	NRI	3/16/2007	GBC-216-9 SH. 1
232J to Penetration Sleev		F 1.30						
GBC-216-H015	274100	F-A	XI	VT-3	100	NRI	3/16/2007	GBC-216-12 SH. 1
Rigid Support	3	F1.30						
GBC-216-H016	278300	F-A	XI	V <b>T-</b> 3	100	NRI	3/16/2007	GBC-216-6 SH. 1
Rigid Support	3	F1.30						
HBC-243-H001	075700	F-A	XI	VT-3	100	NRI	3/21/2007	HBC-243-2 SH. 1
Rigid Support	3	F1.30						
HBC-243-H901	075500	F-A	XI	VT-3	100	NRI	3/21/2007	HBC-243-1 SH. 1
Anchor	. 3	F-A F1.30		v1-5	100	IN N	012 112001	

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
20P-203 FC-1	294900	F-A	XI	VT-3	100	NRI	3/9/2007	XI-20P-203 SH. 1
RCIC Pump Support Assembly, Final	2	F1.40			i			
Mechanical Connection, Embedded 1 1/4" Bolting to Building (Typical of 4)	•		·					
20P-203 IC-1	294600	F-A	XI	VT-3	100	NRI	3/9/2007	XI-20P-203 SH. 1
RCIC Pump Support Assembly, Intermediate Mechanical Connection,	2	F1.40						
Pump to Support Pedestal (Bolting) (Typical of 4)		1	· .				х. 	
20P-203 IC-2	294800	F-A	XI	VT-3	100	NRI	3/9/2007	XI-20P-203 SH. 1
RCIC Pump Support Assembly, Intermediate Welded Connection,	2	F1.40						
Pump Support Pedestal to Baseplate (Typical of 2)							· · ·	
20P-203 IM-1	294700	F-A	XI	VT-3	100	NRI	3/9/2007	XI-20P-203 SH. 1
RCIC Pump Support Assembly, Pedestal Surfaces (Typical of 2)	2	F1.40		'				
CS STRAINER MODULE	540220	NA	AG	VT-3	100	NRI	3/16/2007	XI-HBB-220-1A
Pump Suction Strainer Screen (Debris Exam)	2	NA					•	Examination was completed on 2C1F214
N4A-BORE	708910	NA	AG	UT	100	NRI	3/21/2007	XI-RPV-2
Feedwater Loop A	່ 1	NA						
N4F-BORE	710410	NA	AG	UT	100	NRI	3/21/2007	XI-RPV-2
Feedwater Loop F	1 .	NA					2	
RHR STRAINER MODULE	540210	NA	AG	VT-3	100	NŔI	3/16/2007	XI-HBB-217-1A
Pump Suction Strainer Screen (Debris Exam)	- 2	NA						Examination was completed on 2C1F211 and 2C2F211
DCA-204-1 FW1501	323507	R-A	BL	UT-E	100	NRI	3/25/2007	XI-DCA-204-1
12" Pipe Pup Piece to 12" Pipe	1	R1.11		:			<b>N-578-1</b>	
DCA-204-1 SW1502	328405	R-A	BL	UT-E	50	NRI	3/8/2007	XI-DCA-204-1
12" Pipe to Check Valve HV-51-2F050B Pup Piece	. 1	R1.11					N-578-1	No downstream exam performed due to valve configuration.
DCA-204-3 FW1102	328407	R-A	BL	UT-E	100	NRI	3/25/2007	XI-DCA-204-3
Pup Piece to 12" Pipe	1	R1.11					N-578-1	
DCA-204-3 SW1101	323506	R-A	BL	UT-E	50	NRI	3/8/2007	XI-DCA-204-3
Valve HV-51-2F050B to Pup Piece	1	R1.11					N-578-1	No upstream exam performed due to valve configuration.
DCA-212-E2 W15	693300	R-A	XI	VT-2	100	NRI	3/28/2007	XI-DCA-212-E2
2" Elbow to Pipe	1	R1.11					N-578-1	
DCA-277-E1 W3	610300	R-A	XI	VT-2	100	NRI	3/28/2007	XI-DCA-277-E1
2" Pipe to Valve 43- 2F051A	<sup>.</sup> 1	R1.11					N-578-1	

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
DCA-285-E2 W7	612300	R-A	XI	VT-2	100	NRI	3/28/2007	XI-DCA-285-E2
2" Pipe to Valve 43- 2F051B	1	R1.11					N-578-1	
DCA-418-2 FW6	341800	R-A	XI	UT-E	100	NRI	3/20/2007	XI-DCA-418-2
12" Elbow to Pipe	1	R1.11					N-578-1	
DCA-418-2-2 SW1	341900	R-A	XI	UT-E	100	NRI	3/20/2007	XI-DCA-418-2
12" Pipe to Elbow	1	R1.11					N-578-1	
DCA-418-3 FW3	344800	R-A	Xi	UT-E	100	NRI	3/17/2007	XI-DCA-418-3
12" Elbow to Pipe	1	R1.11					N-578-1	
DCA-418-3 FW6	345300	R-A	XI	UT-E	100	NRI	3/17/2007	XI-DCA-418-3
12" Elbow to Pipe	<u> </u>	R1.11					N-578-1	
DCA-418-3-2 SW1	345400	R-A	XI	UT-E	100	NRI	3/17/2007	XI-DCA-418-3
12" Pipe to Elbow	. 1	R1.11					N-578-1	
DCA-418-4 FW1	350600	R-A	XI	UT-E	78	NRI	3/14/2007	XI-DCA-418-4
12" Pipe to Safe End (Az. 315 Deg.)	1	R1.11				• •	N-578-1	Examination used new Limerick site specific procedure and tooling which was qualified at EPRI per PDI requirements. Only 78 percent examined due to weld configuration.
DCA-420-1 FW1	023900	R-A	XI	UT-E	72	NRI	3/14/2007	XI-DCA-420-1
10" Pipe to Safe End (Az. 300 Deg)	1	R1.11					N-578-1	Examination used new Limerick site specific procedure and tooling which was qualified at EPRI per PDI requirements. Only 72 percent examined due to weld configuration.
DCA-418-4 N17D	724000	R-A	XI	UT-E	. 100	NRI	3/14/2007	XI-DCA-418-4
Safe End to Nozzle (Az.315 Deg.)	· 1	R1.11, R1.16					N-578-1	
DCA-420-1 N5B	722800	R-A	XI	UT-E	97	NRI	3/14/2007	XI-DCA-420-1
Nozzle to Safe End (Az. 300 Deg.)	1	R1.11, R1.16					N-578-1	
DLA-208-1 N4F1	722000	R-A	XI	UT-E	100	NRI	3/19/2007	XI-DLA-208-1
Safe End to Safe End (GE)(Az.330 Degrees)	1	R1.11, R1.18					N-578-1	
DLA-208-1 N4F2	722300	R-A	XI	UT-E	100	NRI	3/19/2007	XI-DLA-208-1
Safe End to Nozzle (GE) (Az.330 Degrees)	1	R1.11, R1.18					N-578-1	
DLA-208-1 S4F	116000	R-A	XI	UT-E	100	NRI	3/19/2007	XI-DLA-208-1
12"Pipe to Safe End (GE)(Az.330 Degrees)	1	R1.11, R1.18					N-578-1	
HBB-208-1 FW2	161700	R-A	XI	UT-E	100	NRI	3/18/2007	XI-HBB-208-1
20" Elbow to Pipe	2	R1.11, R1.18					N-578-1	

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam		Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
HBB-208-1-3 SW2	162900	R-A	XI	UŢ-E	100	NRI	3/18/2007	XI-HBB-208-1
20" Pipe to 45 degree Elbow	2	R1.11, R1.18		·			N-578-1	
APE-2MS-LC WC06	187000	R-A	XI	UT-E	100	NRI	3/21/2007	XI-APE-2MS-LC
Flued Head X-7C to Valve HV-41-2F028C	1	R1.20					N-578-1	
APE-2MS-LC-35 SWA	188900	R-A	XI ·	UT-E	100	NRI	3/20/2007	XI-APE-2MS-LC
26" Pipe to Elbow	1	R1.20					N-578-1	
APE-2MS-LD-38 SWA	195000	· R-A	XI	UT-E,	100	NRI	3/20/2007	XI-APE-2MS-LD
26" Pipe to Elbow	1	R1.20					N-578-1	
DCA-212-E2 W11	692900	R-A	XI	VT-2	100	NRI	3/28/2007	XI-DCA-212-E2
Valve 48-2027 to 2" Pipe	1	R1.20					N-578-1	
DCA-419-1-1 SW1	015700	R-A	XI	UT-E	100	NRI	3/20/2007	XI-DCA-419-1
12" Pipe to Elbow (Bimetallic Weld)	1	R1.20					N-578-1	
EBB-202-1 FW2	208700	R-A	XI	UT-E	100	NRI	3/20/2007	XI-EBB-202-1
26" Elbow to Pipe	. 2	R1.20					N-578-1	
EBB-202-1 FW43	213400	R-A	XI	UT-E	100	NRI	3/20/2007	XI-EBB-202-1
26" Valve HV-41-2F028D to 26" Pipe ID. 23.647" Match Valve ID	2	R1.20					<b>N-578-</b> 1	
EBB-202-1-1 SW1	210900	R-A	XI	UT-E	100	NRI	3/20/2007	XI-EBB-202-1
26" Pipe to Elbow	2	R1.20					N-578-1	
VRR-2RD-2A WA17	627700	R-A	XI	UT-E	98	NRI	3/14/2007	XI-VRR-2RD-2A
Pipe to Safe End (Az.270)	1	R1.20					N-578-1	
VRR-2RD-2A WA18	628200	R-A	XI -	UT-E	95	NRI	3/14/2007	XI-VRR-2RD-2A
Pipe to Safe End (Az.300)	1	R1.20					N-578-1	

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
_i2/45-03b N17C	751205	N/A	RE	EVT-1	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Shroud Attachment Ring to Shroud Weld (225 Az)	BWRVIP-42	N/A				·		
.i2/45-03b N17D	751305	N/A	RE	EVT-1	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Shroud Attachment Ring to Shroud Weld (315 Az)	BWRVIP-42	N/A	·					
.i2/45-06a N17C	751210	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Clamp / Bolt RPV (225 Az)	BWRVIP-42	N/A						
.i2/45-06b N17C	751215	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Clamp / Bolt Shroud (225 Az)	BWRVIP-42	N/A						
.i2/45-06c N17C	751220	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Clamp / Bolt RPV (225 Az)	BWRVIP-42	N/A						
.i2/45-06d N17C	751225	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-14
PCI Coupling Clamp / solt Shroud (225 Az).	BWRVIP-42	N/A				• .		
.i2/45-08a N17C	751230	N/A	RE	VT-1	70	NRI	3/22/2007	XI-BN-14
PCI Coupling Eye Bolt Nut to Clamp Weld (225 Az)	BWRVIP-42	<b>N/A</b>						
.i2/45-08b N17C	751235	N/A	RE	V <b>T-</b> 1	70	NRI	3/22/2007	XI-BN-14
PCI Coupling Eye Bolt Nut to Clamp Weld (225 Az)	BWRVIP-42	N/A						
.i2/45-08c N17C	751240	N/A	RE	VT-1	60	NRI	3/22/2007	XI-BN-14
PCI Coupling Eye Bolt lut to Clamp Weld (225 lz)	BWRVIP-42	N/A				· .		
.i2/45-08d N17C	751245	N/A	ŔE	VT-1	60	NRI	3/22/2007	XI-BN-14
PCI Coupling Eye Bolt Jut to Clamp Weld (225	BWRVIP-42	N/A			· .			
	751250	N/A	RE	EVT-1	0	NRI	3/22/2007	XI-BN-14
PCI Coupling Sleeve lange to Thermal Sleeve Veld at RPV (225 Az)	BWRVIP-42	N/A		φα Ψ Ι <sup>−</sup> Ι		,		Best effort exam; Angle and distance requirements not met due to nozzle configuration and FW sparger interference
i2/45-12 N17D	751350	N/A	RE	EVT-1	0	NRI	3/21/2007	XI-BN-14
PCI Coupling Sleeve Tange to Thermal Sleeve Veld at RPV (315 Az)	BWRVIP-42	N/A						Best effort exam; Angle and distance requirements not met due to nozzle configuration and FW sparger interference

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/AHC 000 Deg	738600	B-N-2	RE	VT-1	95	NRI	3/18/2007	XI-BN-04
Access Hole Cover Plate and Weld to Shroud Support Plate	SIL-462 / B-N- 2	B13.40					· .	
i2/AHC 180 Deg	738700	B-N-2	RE	VT-1	90	NRI	3/22/2007	XI-BN-04
Access Hole Cover Plate and Weld to Shroud Support Plate	SIL-462 / B-N- 2	B13.40				•		
Li2/CR/OFS/OF-1 18-27	127307	B-N-2	BL	VT-3.	100	NRI	3/18/2007	XI-BN-07-4
Fuel Support Casting and Fuel Support Orifice to Drifice Plate Weld	BWRVIP-47	B13.40						
_i2/CR/OFS/OF-1 18-35	127301	B-N-2	BL	VT-3	100	NRI	3/18/2007	XI-BN-07-4
Fuel Support Casting and Fuel Support Orifice to Drifice Plate Weld	BWRVIP-47	B13.40			· · ·	·	· :	
_i2/CR/OFS/OF-1 26-27	127895	B-N-2	BL	VT-3	100	NRI	3/18/2007	XI-BN-07-4
Fuel Support Casting and Fuel Support Orifice to Drifice Plate Weld	BWRVIP-47	B13.40			·			
_i2/CR/OFS/OF-1 42-27	127709	B-N-2	BL	VT-3	100	NRI	3/18/2007	XI-BN-07-4
Fuel Support Casting and Fuel Support Orifice to Drifice Plate Weld	BWRVIP-47	B13.40					÷ .	
i2/CR/OFS/OF-1 42-35	127676	B-N-2	BL	VT-3	100	NRI	3/18/2007	XI-BN-07-4
Fuel Support Casting and Fuel Support Orifice to Drifice Plate Weld	BWRVIP-47	B13.40						
i2/CRDH/ST-1 02-39	127721	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-06-2
Control Rod Drive lousing to Stub Tube Veld	BWRVIP-47	B13.40		VT-3	0	NRI	· · · · · · · · · · · · · · · · · · ·	Examined when JP-17 was removed for jet pump modifications.
.i2/CRDH/ST-1 02-43	127718	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-06-2
Control Rod Drive	BWRVIP-47	B13.40		VT-3	20	NRI		Examined when JP-17 was removed for jet pump

Weld

Weld

Housing to Stub Tube

Li2/CRDH/ST-1 06-47

Housing to Stub Tube

Control Rod Drive

127712

**BWRVIP-47** 

B-N-2

B13.40

ΒL

Best

Effort VT-1

VT-3

0

0

NRI

3/19/2007

removed for jet pump

XI-BN-06-2

Examined when JP-17 was

removed for jet pump modifications.

modifications.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
.i2/CRDH/ST-1 10-11	126650	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Weld	BWRVIP-47	B13.40		. VT-3	0	NRI	· ·	Examined when JP-12 was removed for jet pump modifications.
.i2/CRDH/ST-1 14-07	126584	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Veld	BWRVIP-47	B13.40		VT-3	0	NRI	· · ·	Examined when JP-12 was removed for jet pump modifications.
.i2/CRDH/ST-1 14-11	126581	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-12 was removed for jet pump modifications.
.i2/CRDH/ST-1 38-59	126398	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Weld	BWRVIP-47	B13.40		VT-3	0	NRI	· ·	Examined when JP-1 was removed for jet pump modifications.
.i2/CRDH/ST-1 42-59	126545	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Neld	BWRVIP-47	B13.40		VT-3	20	NRI		Examined when JP-1 was removed for jet pump modifications.
.i2/CRDH/ST-1 46-55	126485	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing to Stub Tube Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-1 was removed for jet pump modifications.
.i2/CRGT-2 18-27	550660	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide	BWRVIP-47	B13.40						
_i2/CRGT-2 18-35	550640	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Tube Body to Sleeve Weld	BWRVIP-47	B13.40			· ·			
.i2/CRGT-2 26-27	550960	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Fube Body to Sleeve Weld	BWRVIP-47	B13.40						
.i2/CRGT-2 42-27	551560	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Tube Body to Sleeve Weld	BWRVIP-47	B13.40						

Limerick 2R09 IVVI	Component Exan	nination Results

Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	Item	Reason		Coverage		Code Cases	Exam Comments
.i2/CRGT-2 42-35	551540	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide ube Body to Sleeve Wel	BWRVIP-47 d	B13.40	<u>.</u>		1		· .	
i2/CRGT-3 18-27	552510	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Tube Base to Body Weld	BWRVIP-47	B13.40		·				
.i2/CRGT-3 18-35	552490	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Tube Base to Body Weld	BWRVIP-47	B13.40						
.i2/CRGT-3 26-27	552810	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide ube Base to Body Weld	BWRVIP-47	B13.40		• • •				
i2/CRGT-3 42-27	553410	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide Tube Base to Body Weld	BWRVIP-47	B13.40		•				
.i2/CRGT-3 42-35	553390	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BN-07-4
Control Rod Drive Guide ube Base to Body Weld	BWRVIP-47	B13.40					·:	
i2/CRST/RPV-1 02-39	127721	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-06-2
control Rod Drive lousing Stub Tube to IPV Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-17 was removed for jet pump modifications.
i2/CRST/RPV-1 02-43	127718	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-06-2
Control Rod Drive lousing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	20	NRI		Examined when JP-17 was removed for jet pump modifications.
i2/CRST/RPV-1 06-47	127712	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-06-2
Control Rod Drive lousing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	• 0	NRI		Examined when JP-17 was removed for jet pump modifications.
i2/CRST/RPV-1 10-11	126650	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
ontrol Rod Drive lousing Stub Tube to PV Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-12 was removed for jet pump modifications.
i2/CRST/RPV-1 14-07	126584	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
Control Rod Drive Housing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-12 was removed for jet pump modifications.

Component ID	-	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	Item	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
.i2/CRST/RPV-1 14-11	126581	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-06-2
Control Rod Drive Housing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	. 0	NRI		Examined when JP-12 was removed for jet pump modifications.
Li2/CRST/RPV-1 38-59	126398	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-1 was removed for jet pump modifications.
Li2/CRST/RPV-1 42-59	126545	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	20	NRI		Examined when JP-1 was removed for jet pump modifications.
Li2/CRST/RPV-1 46-55	126485	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-06-2
Control Rod Drive Housing Stub Tube to RPV Weld	BWRVIP-47	B13.40		VT-3	0	NRI		Examined when JP-1 was removed for jet pump modifications.
Li2/CSB 274.5 Az	744500	B-N-2	RE	EVT-1	90	NRI	3/19/2007	XI-BNN
Core Spray "A and C" Header Vertical Bracket (PB7) Attachment Weld to RPV	BWRVIP-48	B13.30		VT-3	90	NRI		
_i2/CSB 345 Az	744100	B-N-2	RE	EVT-1	90	NRI	3/16/2007	XI-BNN
Core Spray "A and C" Header Bracket (PB8) Attachment Weld to RPV	BWRVIP-48	B13.30		VT-3	90	NRI		. *
Li2/FS/PERIPHERAL FUEL SUPPORT	740900	N/A	RE	VT-3	100	NRI	3/20/2007	XI-BN-07
24 CASTING BY CORE POSITION	N/A	N/A						Examined fuel support pieces at core locations 05-12, 05-50, 07- 12, 07-50, 11-06, 11-08, 11-54, 11-56, 49-06, 49-08, 49-54, 49- 56, 53-12, 53-50, 55-12, and 55- 50 with no recordable indications identified.
_i2/FWS N4A	744700	N/A	RE	VT-3	100	NRI	3/24/2007	XI-BN-09
N4A Feedwater Sparger Assembly and Brackets (5- 55 Az)	NUREG 0619	N/A						· · · ·
Li2/FWS N4B	744900	N/A	RE	VT-3	100	NRI	3/23/2007	XI-BN-09
N4B Feedwater Sparger Assembly and Brackets (65-115 Az)	NUREG 0619	N/A						

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Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	Item	Reason				Code Cases	Exam Comments
Li2/FWS N4C	745000	N/A	ŔE	VT-3	100	RI	3/23/2007	XI-BN-09
N4C Feedwater Sparger Assembly and Brackets (125-175 Az)	NUREG 0619	N/A				. '		INR-Li2R09-IVVI-07-22 identified FME in FW sparger nozzle. Reference IR# 607889.
Li2/FWS N4D	745200	N/A	RE	V <b>T-</b> 3	100	NRI	3/22/2007	XI-BN-09
N4D Feedwater Sparger Assembly and Brackets (185-235 Az)	NUREG 0619	N/A						
Li2/FWS N4E	745500	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-09
N4E Feedwater Sparger Assembly and Brackets (245-295 Az)	NUREG 0619	N/A						
Li2/FWS N4F	745600	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-09
N4F Feedwater Sparger Assembly and Brackets (305-355 Az)	NUREG 0619	N/A						
Li2/FWSB 185 Az	746400	B-N-2	BL	EVT-1	55	NRI	3/22/2007	XI-BNN
N4D Feedwater Sparger Bracket Attachment Weld to RPV	BWRVIP-48	B13.30	· .	VT-3	55	NRI		· .
Li2/FWSB 235 Az	746500	B-N-2	BL	EVT-1	55	NRI	3/22/2007	XI-BNN
N4D Feedwater Sparger Bracket Attachment Weld to RPV	BWRVIP-48	B13.30		VT-3	55	NRI	· · · ·	
Li2/H08	603141	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Plate to Support Cylinder Weld	BWRVIP-38 / B-N-2	B13.40		VT-3	3	NRI		Examined from underside of weld only when JP-1, JP-12, and JP-17 were removed for jet pump modifications.
Li2/H09	603151	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Plate to RPV Weld	BWRVIP-38 / B-N-2	B13.40		VT-3	3	NRI		Examined from underside of weld only when JP-1, JP-12, and JP-17 were removed for jet pump modifications.
Li2/H10-01	127436	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Cylinder to Support Leg Weld 10° Az	B-N-2	B13.40	·	VT-3	10	NRI		Examined when JP-1 was removed for jet pump modifications.
Li2/H10-02	127439	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Cylinder to Support Leg Weld 30° Az	B-N-2	B13.40		VT-3	10	NRI	· .	Examined when JP-1 was removed for jet pump modifications.

Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	ltem	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
i2/H10-09	127565	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
Core Shroud Support Cylinder to Support Leg Veld 210° Az	B-N-2	B13.40			. 10	NRI		Examined when JP-12 was removed for jet pump modifications.
.i2/H10-10	127568	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
ore Shroud Support Vinder to Support Leg Veld 240° Az	B-N-2	B13.40		VT-3	10	NRI		Examined when JP-12 was removed for jet pump modifications.
i2/H10-11	127571	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Cylinder to Support Leg Veld 270° Az	B-N-2	B13.40		VT-3	10	NRI	· .	Examined when JP-17 was removed for jet pump modifications.
.i2/H10-12	127574	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Cylinder to Support Leg Veld 300° Az	B-N-2	B13.40		VT-3	10	NRI		Examined when JP-17 was removed for jet pump modifications.
.i2/H11-01	128315	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Leg o Support Stub Weld 10°	B-N-2	B13.40		VT-3	10	NRI		Examined when JP-1 was removed for jet pump modifications.
i2/H11-02	128312	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Leg o Support Stub Weld 30°	B-N-2	B13.40		VT-3	10	· NRI		Examined when JP-1 was removed for jet pump modifications.
i2/H11-09	128426	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
Core Shroud Support Leg D Support Stub Weld 210		B13.40		VT-3	10	NRI	·.	Examined when JP-12 was removed for jet pump modifications.
i2/H11-10	128423	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
Core Shroud Support Leg o Support Stub Weld 240		B13.40		VT-3	10	NRI		Examined when JP-12 was removed for jet pump modifications.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/H11-11	128420	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Leg to Support Stub Weld 270°		B13.40		VT-3	<b>10</b>	NRI		Examined when JP-17 was removed for jet pump modifications.
Li2/H11-12	128417	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Leg to Support Stub Weld 300°		B13.40		VT-3	10	NRI		Examined when JP-17 was removed for jet pump modifications.
Li2/H12-01	128408	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Stub to RPV Weld 10°	B-N-2	B13.40		VT-3	10	NRI	·	Examined when JP-1 was removed for jet pump modifications.
_i2/H12-02	128405	B-N-2	BL	Best Effort VT-1	0	NRI	3/21/2007	XI-BN-10
Core Shroud Support Stub o RPV Weld 30°	B-N-2	B13.40		VT-3	10	NRI		Examined when JP-1 was removed for jet pump modifications.
_i2/H12-09	128384	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
Core Shroud Support Stub to RPV Weld 210°	B-N-2	B13.40		VT-3	10	NRI	· · ·	Examined when JP-12 was removed for jet pump modifications.
_i2/H12-10	128381	B-N-2	BL	Best Effort VT-1	0	NRI	3/16/2007	XI-BN-10
Core Shroud Support Stub o RPV Weld 240°	B-N-2	B13.40		VT-3	10	NRI	· ·	Examined when JP-12 was removed for jet pump modifications.
_i²/H12-11	128378	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Stub o RPV Weld 270°	B-N-2	B13.40		VT-3	10	NRI		Examined when JP-17 was removed for jet pump modifications.
.i2/H12-12	128375	B-N-2	BL	Best Effort VT-1	0	NRI	3/19/2007	XI-BN-10
Core Shroud Support Stub o RPV Weld 300°	B-N-2	B13.40		VT-3	10	NRI	· ·	Examined when JP-17 was removed for jet pump modifications.
Li2/JP01 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/22/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						After JP 1 reassembly, no gap was identified at this location.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
.i2/JP01 AS-1 (VS)		N/A	RE	VT-1	100	NRI	3/22/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						After JP 1 reassembly, no gap was identified at this location.
.i2/JP01 MX-7	•	N/A	SP	VT-1	75	NRI	3/17/2007	XI-BN-04
let Pump Wedge Bracket o Inlet Mixer Welds	BWRVIP-41	N/A						
.i2/JP01 WD-1	543400	N/A	BL	VT-1	100	RI	3/16/2007	XI-BN-04
let Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-07. Main Wedge was replaced and restrainer bracket resurfaced in 2R09. Reference IR# 607248 A02.
.i2/JP01 WD-2a		N/A	ES	VT-1	75	NRI	3/17/2007	XI-BN-04
let Pump Wedge Adjusting Rod Tack Veld - Top	BWRVIP-41	N/A		,				
.i2/JP01 WD-2b		N/A	ES	VT-1	75	NRI	3/17/2007	XI-BN-04
et Pump Wedge djusting Rod Tack Veld - Bottom	BWRVIP-41	N/A						
i2/JP01-02 RS-6	542400	N/A	SP	EVT-1	75	NRI	3/17/2007	XI-BN-04
P Riser Pipe to Restrainer Bracket Circumferential Weld; RS- i is on JP01 side of riser	BWRVIP-41	N/A	·					
.i2/JP01-02 RS-7	542500	N/A	ES	EVT-1	80	NRI	3/24/2007	XI-BN-04
P Riser Pipe to Restrainer Bracket	BWRVIP-41	N/A						
Circumferential Weld; RS- ' is on JP02 side of riser					· .			
i2/JP01-02 RS-8	542600	N/A	SP	EVT-1	90	NRI	3/17/2007	XI-BN-04
let Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A <sup>+</sup>						
.i2/JP01-02 RS-9	542700	N/A	SP	EVT-1	90	NRI	3/17/2007	XI-BN-04
et Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A						
.i2/JP02 AS-1 (SS)	·····	N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
.i2/JP02 AS-1 (VS)		N/A	RE	VT-1	100	NRI	3/16/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP02 MX-7		N/A	ES	VT-1	75	NRI	3/18/2007	XI-BN-04
let Pump Wedge Bracket o Inlet Mixer Welds	BWRVIP-41	. N/A			,		· .	
.i2/JP02 SJC		N/A	BL	VT-1	100 -	ŅRI	3/17/2007	XI-BN-04
let Pump Slip Joint Clamp	BWRVIP-41	N/A					·	·
.i2/JP02 WD-1	543410	N/A	BL	VT-1	100	RI	3/16/2007	XI-BN-04
let Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-04. Reference IR# 607248 A02.
.i2/JP02 WD-2a		N/A	ES	VT-1	100	RI	3/18/2007	XI-BN-04
let Pump Wedge Adjusting Rod Tack Neld - Top	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-04R1 indicates that minor wedge rod wear on the top side of the wedge. Reference IR# 604855.
_i2/JP02 WD-2b		N/A	ES	VT-1	100	Ŕ	3/18/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Bottom	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-04R1 indicates that minor wedge rod wear on the top side of the wedge. Reference IR# 604855.
.i2/JP03 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A		·		•		No gap noted.
_i2/JP03 AS-1 (VS)		N/A	RE	VT-1 .	100	NRI	3/17/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
_i2/JP03 WD-1	543420	N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-04
let Pump Wedge Bearing Surface	BWRVIP-41	N/A						
_i2/JP03-04 RS-7	542510	N/A	ES	EVT-1	80	NRI	3/23/2007	XI-BN-04
JP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 7 is on JP04 side of riser	BWRVIP-41	N/A					ч. Ч. – С	
_i2/JP03-04 RS-8	542610	N/A	ES	EVT-1	60	NRI	3/23/2007	XI-BN-04
let Pump Riser Pipe to Riser Brace Dircumferential Weld	BWRVIP-41	N/A						
_i2/JP03-04 RS-9	542710	N/A	ES	EVT-1	80	NRI	3/23/2007	XI-BN-04
let Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A						
Li2/JP04 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A			·			No gap noted.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP04 AS-1 (VS)		N/A	RE	VT-1	100	RI	3/17/2007	XI-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A		·	ı			Gap noted = 0.029 inch.
Li2/JP04 MX-7		N/A	ES	VT-1	75	ŅRI	3/18/2007	XI-BN-04
Jet Pump Wedge Bracket to Inlet Mixer Welds	BWRVIP-41	N/A				н ц. 14		
Li2/JP04 SJC		N/A	BL	VT-1	80	NRI	3/17/2007	XI-BN-04
Jet Pump Slip Joint Clamp	BWRVIP-41	N/A					· ·	
Li2/JP04 WD-1	543430	N/A	BL	VT-1	100	RI	3/16/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A			:			Additional wear observed on wedge and restrainer bracket.
				·			• <u>.</u>	See INR-Li2R09-IVVI-07-06R1. Reference IR# 607248 A02
Li2/JP04 WD-2a		N/A	ES	<b>VT-</b> 1	80	RI	3/18/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Top	BWRVIP-41	N/A					•	INR-Li2R09-IVVI-07-06R1 documents minor wedge rod wear at wedge / rod interface. Reference IR# 605078.
Li2/JP04 WD-2b			ES	VT-1	80	RI	3/18/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Bottom	BWRVIP-41	N/A					0,10,2007	INR-Li2R09-IVVI-07-06R1 documents minor wedge rod wear at wedge / rod interface. Reference IR# 605078.
Li2/JP05 AS-1 (SS)		N/A	RE	VT-1 .	100	NRI	3/16/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A				,	1. 1.	No gap noted.
Li2/JP05 AS-1 (VS)		N/A	RE	VT-1	100	RI	3/16/2007	XI-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A						Gap noted = 0.014 inch.
Li2/JP05 WD-1	543440	N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/Á						
Li2/JP06 AS-1 (SS)	. ·	N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A				. *		No gap noted.
Li2/JP06 AS-1 (VS)		N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
Li2/JP06 WD-1	543450	N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-04
Jet Pump Wedge Bearing Surface		N/A						
Li2/JP07 AS-1 (SS)	···	N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	Ņ/A						No gap noted.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	lso Number Exam Comments
_i2/JP07 AS-1 (VS)	······································	N/A	RE	VT-1	100	RI	3/17/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						Gap noted = 0.030 inch.
.i2/JP07 WD-1	543460	N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-04
et Pump Wedge Bearing Surface	BWRVIP-41	N/A						
i2/JP07-08 RS-7	542530	N/A	SP	EVT-1	75	NRI	3/17/2007	XI-BN-04
IP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- ' is on JP08 side of riser	BWRVIP-41	N/A				·		· · · · · · · · · · · · · · · · · · ·
i2/JP07-08 RS-8	542630	N/A	SP	EVT-1	90	NRI	3/17/2007	XI-BN-04
et Pump Riser Pipe to Riser Brace Dircumferential Weld	BWRVIP-41	N/A						
.i2/JP07-08 RS-9	542730	N/A	SP	EVT-1	90	NRI	3/17/2007	XI-BN-04
let Pump Riser Pipe to. Riser Brace Circumferential Weld	BWRVIP-41	N/A						
i2/JP08 Aux Wedge Repair (SS)		N/A	BL	VT-3	100	NRI	3/16/2007	XI-BN-04
Shroud Side Jet Pump Nux Wedge Repair	BWRVIP-41	N/A						
i2/JP08 Aux Wedge Repair (VS)		N/A	BL	VT-3	100	NRI	3/16/2007	XI-BN-04
'essel Side Jet Pump ux Wedge Repair	BWRVIP-41	N/A						
i2/JP08 MX-7		N/A	SP	VT-1	75	NRI	3/16/2007	XI-BN-04
et Pump Wedge Bracket Inlet Mixer Welds	BWRVIP-41	N/A			• •			
i2/JP08 SJC		N/A	BL	VT-1	100	NRI	3/22/2007	XI-BN-04
et Pump Slip Joint Clamp	BWRVIP-41	N/A						
2/JP08 WD-1	543470	N/A	BL	VT-1	100	RI	3/16/2007	XI-BN-04
let Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-08. Reference IR# 607248 A02
i2/JP08 WD-2a		N/A	ES	VT-1	100	NRI	3/16/2007	XI-BN-04
et Pump Wedge djusting Rod Tack /eld - Top	BWRVIP-41	N/A						
i2/JP08 WD-2b		N/A	ES	VT-1	100	NRI	3/16/2007	XI-BN-04
et Pump Wedge djusting Rod Tack Veld - Bottom	BWRVIP-41	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP09 AD-1	544280	N/A	BL	EVT-1	75	NRI	3/25/2007	XI-BN-04
Jet Pump Adapter Top to Adapter Bottom Weld - Bimetallic Weld	BWRVIP-41	N/A						
.i2/JP09 AD-2	544480	N/A	BL	EVT-1	60	NRI	3/25/2007	XI-BN-04
let Pump Adapter Bottom Lower Ring) to Shroud Support Plate Weld	BWRVIP-41	N/A	· •				· .	
_i2/JP09 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A					·	No gap noted.
.i2/JP09 AS-1 (VS)		N/A	RE	VT-1	100	RI	3/17/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						Gap noted = 0.011 inch.
i2/JP09 DF-1	543680	N/A	BL	EVT-1	70	NRI	3/24/2007	XI-BN-04
et Pump Diffuser Collar Diffuser Shell Weld	BWRVIP-41	N/A						
i2/JP09 DF-2	543880	N/A	BL	EVT-1	70	NRI	3/25/2007	XI-BN-04
et Pump Diffuser Shell to ailpipe Weld	BWRVIP-41	N/A				•		
i2/JP09 MX-7		N/A	ES	VT-1	75	NRI	3/22/2007	XI-BN-04
et Pump Wedge Bracket o Inlet Mixer Welds	BWRVIP-41	N/A	•					
i2/JP09 WD-1	543480	N/A	BL	V <b>T-</b> 1	80	RI	3/17/2007	XI-BN-04
et Pump Wedge Bearing Surface	BWRVIP-41	N/A						New wear observed on wedge and restrainer bracket. See INR- Li2R09-IVVI-07-12. Reference IR# 607248 A02
i2/JP09 WD-2a		N/A	ES	VT-1	100	RI	3/22/2007	XI-BN-04
et Pump Wedge djusting Rod Tack Veld - Top	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-012R2 identifies minor wedge rod wear at wedge / rod interface. Reference IR# 605407.
i2/JP09 WD-2b		N/A	ES	VT-1	100	RI .	3/22/2007	XI-BN-04
et Pump Wedge djusting Rod Tack Veld - Bottom	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-012R2 identifies minor wedge rod wear at wedge / rod interface. Reference IR# 605407.
i2/JP09-10 RB-2a	541440	N/A	BL	EVT-1	50	NRI	3/23/2007	XI-BN-04
et Pump Riser Brace eaf to Yoke Weld	BWRVIP-41	N/A						
i2/JP09-10 RB-2b	541540	N/A	BL ·	EVT-1	55	NRI	3/25/2007	XI-BN-04
let Pump Riser Brace .eaf to Yoke Weld	BWRVIP-41	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP09-10 RB-2c	541640	N/A	BL	EVT-1	45	NRI	3/23/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	. N/A						
Li2/JP09-10 RB-2d	541740	N/A	BL	EVT-1	55	NRI	3/25/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	N/A						
Li2/JP09-10 RS-6	542440	N/A	ES	EVT-1	75	NRI	3/22/2007	XI-BN-04
JP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 6 is on JP09 side of riser	BWRVIP-41	N/A						
Li2/JP09-10 RS-8	542640	N/A	ES	EVT-1	90	NRI	3/22/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A						
Li2/JP09-10 RS-9	542740	N/A	ES	EVT-1	90	NRI	3/22/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A					. <sup>2</sup>	
		•						·
Li2/JP10 AD-1	544290	N/A	BL	EVT-1	70	NRI	3/25/2007	XI-BN-04
Jet Pump Adapter Top to Adapter Bottom Weld - Bimetallic Weld	BWRVIP-41	N/A					* .	
Li2/JP10 AD-2	544490	N/A	BL	EVT-1	55	NRI	3/25/2007	XI-BN-04
Jet Pump Adapter Bottom (Lower Ring) to Shroud Support Plate Weld	BWRVIP-41	N/A						
Li2/JP10 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/17/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	. N/A						No gap noted.
Li2/JP10 Aux Wedge Repair (VS)		N/A	BL	VT-3	100	RI	3/17/2007	XI-BN-04
Vessel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-16 identified some minor wear observed between the aux wedge and the belly band. Reference IR# 605568.
Li2/JP10 DF-1	543690	N/A	BL	EVT-1	70	NRI	3/25/2007	XI-BN-04
Jet Pump Diffuser Collar to Diffuser Shell Weld	BWRVIP-41	N/A						
Li2/JP10 DF-2	543890	N/A	BL	EVT-1	65	NRI	3/25/2007	XI-BN-04
Jet Pump Diffuser Shell to Tailpipe Weld	BWRVIP-41	N/A						
Li2/JP10 SJC	•	N/A	RE	VT-1	100	NRI	3/19/2007	XI-BN-04

Jet Pump Slip Joint Clamp BWRVIP-41

N/A

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP10 WD-1	543490	N/A	BL	VT-1	95	RI	3/17/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-13. Reference IR# 607248 A02
Li2/JP11 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/16/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
Li2/JP11 Aux Wedge Repair (VS)		N/A	BL	VT-3	100	RI	3/16/2007	XI-BN-04
Vessel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-05R1 identified that this aux wedge was at the minimum position. This
						·		aux wedge was replaced with two one located on the shroud side and one located on the vessel side set screw. Reference IR# 604866.
Li2/JP11 MX-7		N/A	ES	VT-1	75	NRI	3/19/2007	XI-BN-04
Jet Pump Wedge Bracket to Inlet Mixer Welds	BWRVIP-41	N/A	×.					· .
Li2/JP11 SJC		N/A	RE	VT-1	100	NRI	3/19/2007	XI-BN-04
Jet Pump Slip Joint Clamp	BWRVIP-41	N/A						·
Li2/JP11 WD-1	543500	N/A	BL	VT-1	100	RI	3/16/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-05. Reference IR# 607248 A02
Li2/JP11 WD-2a		N/A	ES	VT-1	100	RI	3/19/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Top	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-05R1 identifies minor wedge rod wear at the wedge / rod interface. Reference IR# 604866.
Li2/JP11 WD-2b		N/A	ES	VT-1	100	RI	3/19/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Bottom	BWRVIP-41	N/A					0,10,2001	INR-Li2R09-IVVI-07-05R1 identifies minor wedge rod wear at the wedge / rod interface. Reference IR# 604866.
Li2/JP11-12 RS-6	542450	N/A	ES	EVT-1	80	NRI	3/19/2007	XI-BN-04
JP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 6 is on JP11 side of riser	BWRVIP-41	<b>N/A</b>						
Li2/JP11-12 RS-7	542550	N/A	SP	EVT-1	80	NRI	3/21/2007	XI-BN-04
JP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 7 is on JP12 side of riser	BWRVIP-41	N/A						

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Li2/JP11-12 RS-8	542650	N/A	SP	EVT-1	90	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace	BWRVIP-41	N/A			,			
Circumferential Weld			•					
Li2/JP11-12 RS-9	542750	N/A	SP	EVT-1	90	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A		· ·			•	
Li2/JP12 AS-1 (SS)		N/A	RE	VT-1	100	RI	3/18/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						The gap was not measured prior to disassembly; however after reassembly there was a 0.043 inch gap noted.
Li2/JP12 AS-1 (VS)		N/A	RE	VT-1	100	NRI	3/18/2007	X1-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A					:	The gap was not measured prior to disassembly; however after reassembly there was no gap noted.
Li2/JP12 MX-7		N/A	SP	VT-1	75	NRI	3/20/2007	XI-BN-04
Jet Pump Wedge Bracket to Inlet Mixer Welds	BWRVIP-41	N/A			. *			
Li2/JP12 WD-1	543510	N/A .	BL	VT-1	100	RI	3/18/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A				· ·		Wedge found bottomed out and was replaced. Also, the restrainer bracket was resurfaced. Reference IR# 607248 A02
Li2/JP13 AS-1 (SS)	·	N/A	RE	VT-1	100	NRI	3/18/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
_i2/JP13 Aux Wedge Repair (VS)		· N/A	BL	VT-3	100	RI	3/18/2007	XI-BN-04
Vessel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A					: · ·	INR-Li2R09-IVVI-07-10R1 identified some minor wear observed between the aux wedge and the belly band. Reference
•								IR# 605392.
Li2/JP13 SJC		N/A	RE	VT-1	100	NRI	3/19/2007	XI-BN-04
Jet Pump Slip Joint Clamp	BWRVIP-41	N/A						
_i2/JP13 WD-1	543520	N/A	BL	VT-1	80	RI	3/17/2007	XI-BN-04
let Pump Wedge Bearing Surface	BWRVIP-4 <u>1</u>	N/A						No change in wedge wear identified from previous outage inspection. See INR-Li2R09-IVV 07-10R1. Reference IR# 607248 A02

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam		Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
.i2/JP13-14 RS-7	542560	N/A	ES	EVT-1	85	NRI	3/21/2007	XI-BN-04
JP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 7 is on JP14 side of riser	BWRVIP-41	N/A			•			
Li2/JP13-14 RS-8	542660	N/A	ES	EVT-1	90	NRI	3/20/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	<b>N/A</b>						
Li2/JP13-14 RS-9	542760	N/A	ES	EVT-1	90	NRI	3/20/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace	BWRVIP-41	N/A			÷.			
Circumferential Weld								
Li2/JP14 MX-7	•	N/A	ES	VT-1	75	NRI	3/21/2007	XI-BN-04
Jet Pump Wedge Bracket to Inlet Mixer Welds	BWRVIP-41	N/A .						· · · · · · · · · · · · · · · · · · ·
Li2/JP14 SJC		N/A	RE	VT-1	100	NRI	3/19/2007	XI-BN-04
Jet Pump Slip Joint Clamp	BWRVIP-41	N/A					• <u>•</u>	
-i2/JP14 WD-1	543530	N/A	BL	VT-1	100	RI	3/17/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-11. Reference IR# 607248 A02
Li2/JP14 WD-2a		N/A	ES	VT-1	100	NRI	2/24/2007	
Jet Pump Wedge Adjusting Rod Tack Weld - Top	BWRVIP-41	N/A N/A	E3 .	VI-1	100		3/21/2007	XI-BN-04
Li2/JP14 WD-2b		N/A	ES	VT-1	100	NRI	3/21/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Bottom	BWRVIP-41	N/A						
Li2/JP15 AD-1	544340	N/A	BL	EVT-1	70	NRI	3/17/2007	XI-BN-04
Jet Pump Adapter Top to Adapter Bottom Weld - Bimetallic Weld	BWRVIP-41	N/A					:	
_i2/JP15 AD-2	544540	N/A	BL	EVT-1	65	NRI	3/17/2007	XI-BN-04
Jet Pump Adapter Bottom (Lower Ring) to Shroud Support Plate Weld	BWRVIP-41	N/A						
Li2/JP15 AS-1 (SS)	· · · · · · · · · · · · · · · · · · ·	N/A	RE	VT-1	100	NRI	3/16/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A			·			No gap noted.
Li2/JP15 Aux Wedge Repair (VS)		N/A	BL	VT-3	100	NRI	3/16/2007	XI-BN-04
√essel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A						· · · ·

	Limeri	ck 2R09	IVVI Co	ompor	ient Exa	minatio	on Results	· · ·
Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
_i2/JP15 DF-1	543740	N/A	BL	EVT-1	65	NRI	3/17/2007	XI-BN-04
Jet Pump Diffuser Collar to Diffuser Shell Weld	BWRVIP-41	N/A						·
_i2/JP15 DF-2	543940	N/A	BL	EVT-1	65	NRI	3/17/2007	XI-BN-04
Jet Pump Diffuser Shell to Failpipe Weld	BWRVIP-41	N/A						· · ·
Li2/JP15 WD-1	543540	N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A					. ·	· · ·
.i2/JP15-16 RB-1a	553950	N/A	BL	EVT-1	100	NRI	3/16/2007	XI-BN-04
Jet Pump Riser Brace Leaf to RPV Pad Weld	BWRVIP-41	N/A						
Li2/JP15-16 RB-1b	554050	N/A	BL	EVT-1	100	NRI	3/18/2007	XI-BN-04
Jet Pump Riser Brace Leaf to RPV Pad Weld	BWRVIP-41	N/A						
Li2/JP15-16 RB-1c	554150	N/A	BL	EVT-1	100	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Brace _eaf to RPV Pad Weld	BWRVIP-41	N/A						
_i2/JP15-16 RB-1d	554250	N/A	BL	EVT-1	100	NRI	3/18/2007	XI-BN-04
Jet Pump Riser Brace Leaf to RPV Pad Weld	BWRVIP-41	N/A					•••	
Li2/JP15-16 RB-2a	541470	N/A	BL	EVT-1	50	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	N/A						· · ·
Li2/JP15-16 RB-2b	541570	N/A	BL	EVT-1	55	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	N/A						· · · ·
_i2/JP15-16 RB-2c	541670	N/A	BL	EVT-1	50	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	N/A						
Li2/JP15-16 RB-2d	541770	N/A	BL	EVT-1	50	NRI	3/19/2007	XI-BN-04
Jet Pump Riser Brace Leaf to Yoke Weld	BWRVIP-41	N/A	•	·				
Li2/JP15-16 RBSP	738570	B-N-2	BL	EVT-1	100	NRI	3/18/2007	XI-BNN
let Pump Nos. 15 and 16 Riser Brace Support Pad Welds to RPV (2 Weld Buildup Locations 263 and 278 Az)	BWRVIP-48	B13.20		VT-1	100	NRI		
Li2/JP16 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/16/2007	XI-BN-04
Shroud Side Adjusting								

Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	lso Number
Description	Class	ltem	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
Li2/JP16 Aux Wedge Repair (VS)		N/A	BL	VT-3	100	NRI	3/16/2007	XI-BN-04
Vessel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A						
Li2/JP16 WD-1	543550	N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A				·		· · · · · · · · · · · · · · · · · · ·
Li2/JP17 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/21/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A				·		The gap was not measured pric to disassembly; however after reassembly there was no gap noted.
Li2/JP17 AS-1 (VS)		N/A	RE	VT-1	. 100	NRI	3/21/2007	XI-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A				· · ·		The gap was not measured pric to disassembly; however after reassembly there was no gap noted.
_i2/JP17 MX-7		N/A	SP	VT-1	80	NRI	3/21/2007	XI-BN-04
let Pump Wedge Bracket o Inlet Mixer Welds	BWRVIP-41	N/A						
_i2/JP17 WD-1	543560	N/A	BL	VT-1	100	RI	3/15/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-02. Main Wedge was replaced and restrainer bracket resurfaced in 2R09. Reference IR# 607248 A02.
_i2/JP17-18 RB-1a	553960	N/A	BL	EVT-1	100	NRI	3/25/2007	XI-BN-04
let Pump Riser Brace eaf to RPV Pad Weld	BWRVIP-41	N/A	· .					
_i2/JP17-18 RB-1c	554160	N/A	BL	EVT-1	100	NRI	3/25/2007	XI-BN-04
let Pump Riser Brace .eaf to RPV Pad Weld	BWRVIP-41	N/A						
.i2/JP17-18 RS-1	542180	N/A	RE	EVT-1	100	NRI	3/22/2007	XI-BN-04
et Pump Riser Elbow to Thermal Sleeve Weld	BWRVIP-41	N/A						· · · ·
.i2/JP17-18 RS-2	542280	N/A	RE	EVT-1	40	NRI	3/22/2007	XI-BN-04
et Pump Riser Elbow to Riser Pipe Weld	BWRVIP-41	N/A						
.i2/JP17-18 RS-6	542480	N/A	BL	EVT-1	80	NRI	3/22/2007	XI-BN-04
IP Riser Pipe to Restrainer Bracket Circumferential Weld; RS- 5 is on JP17 side of riser	BWRVIP-41	N/A	<i>,</i>					

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/JP17-18 RS-8	542680	N/A	BL	EVT-1	90	NRI	3/22/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A					· .	
Li2/JP17-18 RS-9	542780	N/A	BL	EVT-1	90	NRI	3/22/2007	XI-BN-04
Jet Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A						
Li2/JP18 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/15/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A					· .	No gap noted.
_i2/JP18 Aux Wedge Repair (VS)		N/A	BL	.VT-3	100	NRI	3/15/2007	XI-BN-04
Vessel Side Jet Pump Aux Wedge Repair	BWRVIP-41	N/A						· · ·
Li2/JP18 WD-1	543570	N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A						
₋i2/JP19 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/15/2007	XI-BN-04
Shroud Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
_i2/JP19 AS-1 (VS)		N/A	RE	VT-1	100	NRI	3/15/2007	XI-BN-04
Vessel Side Adjusting Screw Gap	BWRVIP-41	N/A						No gap noted.
Li2/JP19 MX-7		N/A	ES	VT-1	80	NRI	3/21/2007	XI-BN-04
Jet Pump Wedge Bracket to Inlet Mixer Welds	BWRVIP-41	N/A						
Li2/JP19 SJC		· N/A	RE	VT-1	100	NRI	3/24/2007	XI-BN-04
Jet Pump Slip Joint Clamp	BWRVIP-41	N/A		•				
Li2/JP19 WD-1	543580	N/A	BL	VT-1	100	RI	3/15/2007	XI-BN-04
Jet Pump Wedge Bearing Surface	BWRVIP-41	N/A					· · ·	Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-03. Reference.IR# 604848.
				· · ·				· · · ·
Li2/JP19 WD-2a Jet Pump Wedge	BWRVIP-41	N/A N/A	ES	VT-1	100	RI	3/20/2007	XI-BN-04 INR-Li2R09-IVVI-07-03R1 noted
Adjusting Rod Tack Weld - Top	BWRVIF-41							minor rod wear at the top of the wedge rod. Reference IR# 604848.
i2/JP19 WD-2b	<u> </u>	N/A	ES	VT-1	100	RI	3/20/2007	XI-BN-04
Jet Pump Wedge Adjusting Rod Tack Weld - Bottom	BWRVIP-41	N/A						INR-Li2R09-IVVI-07-03R1 noted minor rod wear at the top of the wedge rod. Reference IR# 604848.

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Li2/JP19-20 RS-6	542490	N/A	BL	EVT-1	80	NRI	3/24/2007	XI-BN-04
JP Riser Pipe to . Restrainer Bracket	BWRVIP-41	N/A						
Circumferential Weld; RS- 5 is on JP19 side of riser								
.i2/JP19-20 RS-7	542590	N/A	BL	EVT-1	80	NRI	3/24/2007	XI-BN-04
P Riser Pipe to Restrainer Bracket Circumferential Weld; RS- ' is on JP20 side of riser	BWRVIP-41	N/A	•					
.i2/JP19-20 RS-8	542690	N/A	BL	EVT-1	90	NRI	3/24/2007	XI-BN-04
et Pump Riser Pipe to	BWRVIP-41	N/A						
Riser Brace Circumferential Weld	· · ·							
i2/JP19-20 RS-9	542790	N/A	BL	EVT-1	90	NRI	3/24/2007	XI-BN-04
et Pump Riser Pipe to Riser Brace Circumferential Weld	BWRVIP-41	N/A						·
i2/JP20 AS-1 (SS)		N/A	RE	VT-1	100	NRI	3/24/2007	XI-BN-04
hroud Side Adjusting crew Gap	BWRVIP-41	N/A	·					No gap noted prior to or after this jet pump was disassembled.
.i2/JP20 AS-1 (VS)		N/A	RE	V <b>T-</b> 1	100	NRI	3/24/2007	XI-BN-04
/essel Side Adjusting Screw Gap	BWRVIP-41	N/A						A gap was noted prior to disassembly of this jet pump, but was not measured. After jet pump was reassembled, no gap was noted.
.i2/JP20 MX-7		N/A	ES	VT-1	75	NRI	3/21/2007	XI-BN-04
et Pump Wedge Bracket o Inlet Mixer Welds	BWRVIP-41	N/A					• • •	
i2/JP20 WD-1	543590	N/A	BL	VT-1	100	RI	3/15/2007	XI-BN-04
et Pump Wedge Bearing Surface	BWRVIP-41	N/A						Additional wear observed on wedge and restrainer bracket. See INR-Li2R09-IVVI-07-01. Main Wedge was replaced and restrainer bracket resurfaced in 2R09. Reference IR# 607248
					· · ·			A02.
i2/P1A	758011	N/A	RE	UT	47	NRI	3/16/2007	XI-BN-8
ore Spray "A" Loop N5B hermal Sleeve to T-Box Veld 300 Az	BWRVIP-18	N/A		EVT-1	0	NRI		Due to configuration and angle o camera, EVT-1 coverage was best effort and therefore no percent coverage credited.
i2/P1B	758021	N/A	RE	UT	48	NRL	3/15/2007	XI-BN-8
Core Spray "B" Loop N5A Thermal Sleeve to T-Box Veld 60 Az	BWRVIP-18	N/A		EVT-1	0	NRI		Due to configuration and angle o camera, EVT-1 coverage was best effort and therefore no percent coverage credited.

Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number	
Description	Class	ltem	Reason	Exam	Coverage	Results	Code Cases	Exam Comments	
i2/P2A	758031	N/A	RE	UT	100	NRI	3/16/2007	XI-BN-8	
Core Spray "A" Loop Header T-Box Cover Plate Weld 300 Az	BWRVIP-18	N/A		EVT-1	100 '	NRI			
.i2/P2B	758041	N/A	RE	UT	100	NRI	3/15/2007	XI-BN-8	
Core Spray "B" Loop Header T-Box Cover Plate Veld 60 Az	BWRVIP-18	N/A		EVT-1	100	NRI			
_i2/P3aA	758051	N/A	RE	UT	78	NRI	3/18/2007	XI-BN-8	
Core Spray "A" Loop Header T-Box to Pipe Weld Right Side 300 Az	BWRVIP-18	N/A		EVT-1	50	NRI			
_i2/P3aB	758071	N/A	RE	UT	100	NRI	3/18/2007	XI-BN-8	
Core Spray "B" Loop Header T-Box to Pipe Weld Right Side 60 Az	BWRVIP-18	N/A		EVT-1	45	NRI	· ·		
.i2/P3bA	758061	N/A	RE	UT	78	NRI	3/18/2007	XI-BN-8	
Core Spray "A" Loop leader T-Box to Pipe Veld Left Side 300 Az	BWRVIP-18	N/A		EVT-1	50	NRI			
.i2/P3bB	758081	N/A	RE	UT	· 93	NRI	3/18/2007	XI-BN-8	
Core Spray "B" Loop Header T-Box to Pipe Weld Left Side 60 Az	BWRVIP-18	N/A		EVT-1	55	NRI			
Li2/P4bA	758131	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8	
Core Spray "A" Loop Elbow to "A" Downcomer Pipe Weld 352:5 Az Header Elevation)	BWRVIP-18	N/A		EVT-1	50	NŖI	.» :		
.i2/P4bB	758141	• N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8	
Core Spray "B" Loop Elbow to "B" Downcomer Pipe Weld 7.5 Az (Header Elevation)	BWRVIP-18	N/A		EVT-1	30	NRI		· · · · ·	
_i2/P4bC	758151	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8	
Core Spray "A" Loop Elbow to "C" Downcomer Pipe Weld 187.5 Az Header Elevation)	BWRVIP-18	N/A		EVT-1	50	NRI .			
_i2/P4bD	758161	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8	
Core Spray "B" Loop Elbow to "D" Downcomer Pipe Weld 172.5 Az (Header Elevation)	BWRVIP-18	N/A		EVT-1	55	NRI			

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/P4dD	758241	N/A	RE	EVT-1	85	NRI	3/23/2007	XI-BN-8
Core Spray "B" Loop "D" Downcomer Elbow to Shroud Pipe Weld 172.5 Az	BWRVIP-18	N/A		·				
Li2/P5A	758251	/N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "A" Loop "A" Downcomer Pipe to Sliding Sleeve Field Weld 352.5 Az	BWRVIP-18	N/A				·		· · · ·
Li2/P5B	758261	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "B" Downcomer Pipe to	BWRVIP-18	N/A			÷.	•		
Sliding Sleeve Field Weld 7.5 Az				· .			· ·	
Li2/P5C	758271	N/A	RE	UT .	100	NRI	3/16/2007	XI-BN-8
Core Spray "A" Loop "C" Downcomer Pipe to Sliding Sleeve Field Weld 187.5 Az	BWRVIP-18	N/A						· ·
Li2/P5D	758281	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "D" Downcomer Pipe to Sliding Sleeve Field Weld 172.5 Az	BWRVIP-18	<b>N/A</b>						
Li2/P6A	758291	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "A" Loop "A" Sliding Sleeve to Outer Sleeve Field Weld 352.5 Az	BWRVIP-18	N/A			÷			
Li2/P6B	758301	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "B" Sliding Sleeve to Outer Sleeve Field Weld 7.5 Az	BWRVIP-18	N/A			100		5/1//2007	
Li2/P6C	758311	N/A	RE	UT	100	NRI	3/16/2007	XI-BN-8
Core Spray "A" Loop "C" Sliding Sleeve to Outer Sleeve Field Weld 187.5 Az	BWRVIP-18	N/A					•	
Li2/P6D	758321	N/A	RE	UT	100	ŅRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "D" Sliding Sleeve to Outer Sleeve Field Weld 172:5 Az	BWRVIP-18	N/A				· ·		· · · · ·
Li2/P7A	758331	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "A" Loop "A" Outer Sleeve to Pipe Shop Weld 352.5 Az	BWRVIP-18	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/P7B	758341	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "B" Outer Sleeve to Pipe Shop Weld 7.5 Az	BWRVIP-18	N/A						
 Li2/P7C	758351	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "A" Loop "C" Outer Sleeve to Pipe Shop Weld 187.5 Az	BWRVIP-18	N/A	RE	01	100	NIXI	5/1//2007	<b>XI-DIY-0</b>
_i2/P7D	758361	N/A	RE	UT	100	NRI	3/17/2007	XI-BN-8
Core Spray "B" Loop "D" Duter Sleeve to Pipe Shop Weld 172.5 Az	BWRVIP-18	N/A						
.i2/P8aA	758371	N/A	RE	EVT-1	90	NRI	3/21/2007	XI-BN-8
Core Spray "A" Loop "A" Shroud Pipe to Collar Veld 352.5 Az	BWRVIP-18	<b>N/A</b>						
.i2/P8aB	758381	N/A	RE	EVT-1	100	NRI	3/23/2007	XI-BN-8
Core Spray "B" Loop "B" Shroud Pipe to Collar Veld 7.5 Az	BWRVIP-18	N/A				• •	· · ·	
.i2/P8aC	758391	N/A	RE	EVT-1	100	RI	3/21/2007	XI-BN-8
Core Spray "A" Loop "Ċ" Shroud Pipe to Collar Veld 187.5 Az	BWRVIP-18	N/A					· .	INR-Li2R09-IVVI-07-19 documented a small piece of raised metal on the corner of the collar at weld P8aC. Ref. IR#607260 A02.
.i2/P8aD	758401	N/A	RE	EVT-1	95	RI	3/24/2007	XI-BN-8
Core Spray "B" Loop "D" Shroud Pipe to Collar Veld 172.5 Az	BWRVIP-18	N/A	· · - · ·					INR-Li2R09-IVVI-07-24 documented a small indentation on the collar between weld P8aI and P8bD. Ref. IR#608730 A02
i2/P8bA	758411	N/A	RE	UT	100	NRI	3/18/2007	XI-BN-8
Core Spray "A" Loop "A" Collar to Shroud Weld 52.5 Az	BWRVIP-18	N/A		EVT-1	100	NRI	· ·	
i2/P8bB	758421	N/A	RE	UT	100	NRI	3/18/2007	XI-BN-8
ore Spray "B" Loop "B" ollar to Shroud Weld 7.5 z	BWRVIP-18	N/A		EVT-1	100	NRI		
i2/P8bC	758431	N/A	RE	UT	100	NRI	3/18/2007	XI-BN-8
core Spray "A" Loop "C" collar to Shroud Weld 87.5 Az	BWRVIP-18	N/A		EVT-1	100	NRI		
i2/P8bD	758441	N/A	RE	UT	100	NRI	3/18/2007	XI-BN-8
Core Spray "B" Loop "D" Collar to Shroud Weld I72.5 Az	BWRVIP-18	N/A		EVT-1	100	NRI		

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Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/PB7	758551	N/A	RE	EVT-1	90	NRI	3/19/2007	XI-BN-8
Core Spray "A" Loop "A and C" Header Pipe Vertical Bracket 274.5 Az	BWRVIP-18	N/A					· .	
Li2/PB8	758561	N/A	RE	EVT-1	95	NRI	3/21/2007	XI-BN-8
Core Spray "A" Loop "A and C" Header Pipe Bracket 345 Deg Az	BWRVIP-18	N/A	•	•	·			
Li2/S1A	758571	N/A	RE	EVT-1	95	NRI	3/16/2007	XI-BN-8
'A" Sparger T-Box Cover Plate Weld (352.5 Az)	BWRVIP-18	N/A						
_i2/S1B	758581	N/A	RE	EVT-1	100	NRI	3/24/2007	XI-BN-8
'B" Sparger T-Box Cover Plate Weld (7.5 Az)	BWRVIP-18	N/A		·				
Li2/S2aA	758611	N/A	RE	EVT-1	50	NRI	3/16/2007	XI-BN-8
'A" Sparger T-Box to Pipe Weld (Right Side) (352.5 Az)	BWRVIP-18	N/A					• • •	
i2/S2aB	758631	N/A	RE	EVT-1	40	NRI	3/24/2007	XI-BN-8
B" Sparger T-Box to Pipe Weld (Right Side) (7.5 Az)	BWRVIP-18	N/A	KL.		<b></b>	INIXI	5/24/2007	AI-DIV-0
_i2/S2bA	758621	N/A	RE	EVT-1	50	NRI	3/16/2007	XI-BN-8
'A" Sparger T-Box to Pipe Weld (Left Side) (352.5 Az)	BWRVIP-18	N/A						
_i2/S2bB	758641	N/A	RE	EVT-1	40	NRI	3/24/2007	XI-BN-8
'B" Sparger T-Box to Pipe Weld (Left Side) (7.5 Az)		N/A		200		, a și		
_i2/S3aXXA	758691	N/A	RE	VT-1	55	NRI	3/24/2007	XI-BN-8
"A" Sparger Pipe to Nozzle Weld, Typical of 65 Nozzles (XX) (273-88 Az)	BWRVIP-18	N/A					:	
_i2/S3bXXA	758731	N/A	RE	VT-1	65	NRI	3/24/2007	XI-BN-8
'A" Sparger Nozzle to Orifice Weld, Typical of 65 Orifices (XX) (273-88 Az)	BWRVIP-18	N/A		·		· · ·		· · ·
i2/S3dXXA	758811	N/A	RE	VT-1	60	NRI	3/24/2007	XI-BN-8
A" Sparger Nozzle Stitch Welds, 2 Welds 180 Deg Apt, 5 Plcs Ea Noz. (273 - 38 Az)	BWRVIP-18	N/A		• 1 <sup>-</sup> 1			0.2412001	
.i2/S4aA	758891	N/A	RE	EVT-1	. 55	NRI	3/23/2007	XI-BN-8
'A" Sparger Pipe to End Cap Weld (Right Side) (88 Az)	BWRVIP-18	N/A				••		

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Li2/S4aB	758901	N/A	RE	EVT-1	55	NRI	3/23/2007	XI-BN-8
"B" Sparger Pipe to End Cap Weld (Right Side) (88 Az)	BWRVIP-18	N/A					· .	
Li2/S4bA	758931	N/A	RE	EVT-1	65	NRI	3/19/2007	XI-BN-8
"A" Sparger Pipe to End Cap Weld (Left Side) (273 Az)	BWRVIP-18	N/A						
Li2/S4bB	758941	Ň/A	RE .	EVT-1	45	NRI	3/19/2007	XI-BN-8
"B" Sparger Pipe to End Cap Weld (Left Side) (273 Az)	BWRVIP-18	N/A						
Li2/SB01	758971	N/A	RE	VT-1	85	NRI	3/24/2007	XI-BN-8
'A and B" Sparger Bracket and Shroud Attachment Welds (7.5 Az	BWRVIP-18 )	N/A	•				5 11	· · · ·
_i2/SB02	758981	N/A	RE	VT-1	75	NRI	3/23/2007	XI-BN-8
A and B" Sparger Bracket and Shroud Attachment Welds (44 Az)	BWRVIP-18	N/A		·				
i2/SB03	758991	N/A	RE	VT-1	60	NRI	3/23/2007	XI-BN-8
A and B" Sparger Bracket and Shroud Attachment Welds (84 Az)	BWRVIP-18.	N/A						
_i2/SB04	759001	N/A	RE	VT-1	85	NRI	3/23/2007	XI-BN-8
'C and D" Sparger Bracket and Shroud Attachment Welds (96 Az)	BWRVIP-18	N/A				ı	2 	
_i2/SB05	759011	N/A	RE	VT-1	80	RI	3/23/2007	XI-BN-8
'C and D" Sparger Bracket and Shroud Attachment Welds (136 Az)	BWRVIP-18	N/A						INR-Li2R09-IVVI-07-021R1 documents that the middle bracket is offset to the right of the top bracket. Reference IR#607418 A02.
_i2/SB06	759021	N/A	ŘE	VT-1	90	NRI	3/18/2007	XI-BN-8
C and D" Sparger Bracket and Shroud Attachment Welds (172.5 Az)	BWRVIP-18	N/A						
.i2/SB08	759041	N/A	SP	VT-1	90	NRI	3/22/2007	XI-BN-8
C and D" Sparger Bracket and Shroud Attachment Welds (224 Az)	BWRVIP-18	N/A					•	INR-Li2R09-IVVI-07-021R1 documented no change in condition from 2R08. Reference IR# 607418 A02. Reinspect one more time in 2R10, then back to 2R frequency.

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SB10	759061	N/A	RE	VT-1	90	NRI	3/19/2007	XI-BN-8
'A and B" Sparger Bracket and Shroud Attachment Welds (276 Az)	BWRVIP-18	N/A						
_i2/SB11	759071	N/A	RE	VT-1	80	NRI	3/21/2007	XI-BN-8
A and B" Sparger Bracket and Shroud Attachment Welds (316 Az)	BWRVIP-18	<b>N/A</b>						
Li2/SB12	759081	N/A	RE .	VT-1	85	NRI	3/21/2007	XI-BN-8
'A and B" Sparger Bracket and Shroud Attachment Welds (352.5 Az)	BWRVIP-18	N/A			•		• •	
Li2/SD	726200	N/A	SP	VT-3	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Assembly Welds, Surfaces & Lugs	N/A	N/A						
Li2/SDBH1a		N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 1 (0 deg side)	BWRVIP-139	N/A		·				
Li2/SDBH1b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 1 (180 deg side)	BWRVIP-139	N/A						
Li2/SDBH2a		N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge	BWRVIP-139	N/A	•					
of Hood No. 2 (0 deg side)	1		• •					
_i2/SDBH2b		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 2 (180 deg side)	BWRVIP-139	N/A						
Li2/SDBH3a		N/A	BL	VT-1	100	NRI	3/18/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 3 (0 deg side)	BWRVIP-139	Ņ/A					· .	
Li2/SDBH3b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 3 (180 deg side)	BWRVIP-139	N/A					· .	

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Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
.i2/SDBH4a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 4 (0 deg side)	BWRVIP-139	N/A	·					
.i2/SDBH4b	. ·	N/A	BL	VT-1	100	RI	3/24/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 4 (180 deg side)	BWRVIP-139	N/A						Anomaly identified with a mesh like apperance above SDBH4B; Ref. INR-Li2R09-IVVI-07-20 and IR# 608667.
.i2/SDBH5a		N/A	BL	· VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Bottom	BWRVIP-139	N/A						
Horizontal weld on edge of Hood No. 5 (0 deg side)			•					· ·
.i2/SDBH5b		N/A	BL.	VT-1	100	NRI	3/25/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 5 (180 deg side)	BWRVIP-139	N/A					•	
i2/SDBH6a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Bottom lorizontal weld on edge f Hood No. 6 (0 deg side)	BWRVIP-139	N/A					· .	
.i2/SDBH6b		N/A	BL	VT-1	100	NRI	3/25/2007	XI-BN-01
Steam Dryer Bottom Horizontal weld on edge of Hood No. 6 (180 deg side)	BWRVIP-139	N/A						
.i2/SDEB1a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 1 (0 deg side)	BWRVIP-139	N/A			• • •			
.i2/SDEB1b		N/A	BL -	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank	BWRVIP-139	N/A						
rertical weld on perforated side of Hood No. 1 (0 deg side)								
.i2/SDEB1c		N/A	BL	VT-1	100	NRI	3/19/2007	XI-BN-01
Steam Dryer End Bank ertical weld on curved ide of Hood No. 1 (180 eg side)	BWRVIP-139	Ň/A						
.i2/SDEB1d		N/A	BL	VT-1	100	NRI	3/19/2007	XI-BN-01
Steam Dryer End Bank vertical weld on perforated side of Hood No. 1 (180 deg side)	BWRVIP-139	N/A				·		

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Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDEB2a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 2 (0 deg side)	BWRVIP-139	N/A						
Li2/SDEB2b		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank vertical weld on perforated side of Hood No. 2 (0 deg side)	BWRVIP-139,	N/A			· .			
Li2/SDEB2c		N/A	BL	VT-1	100	NRI	3/22/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 2 (180 deg side)	BWRVIP-139	N/A	С	• • • •	100		0/22/2007	
Li2/SDEB2d				\/ <b>T</b> 1	100	NRI	2/22/2007	XI-BN-01
LI2/SDEB20 Steam Dryer End Bank vertical weld on perforated side of Hood No. 2 (180 deg side)	BWRVIP-139	N/A ∴ N/A	BL	VT-1			3/22/2007	ו ט-אום-וג
Li2/SDEB3a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 3 (0 deg side)	BWRVIP-139	<b>N/A</b>	·					
Li2/SDEB3b		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer End Bank vertical weld on perforated side of Hood No. 3 (0 deg side)	BWRVIP-139	<b>N/A</b> .					2 	
Li2/SDEB3c		N/A	BL	VT-1	100	NRI	3/22/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 3 (180 deg side)	BWRVIP-139	<b>N/A</b>			·		:	
Li2/SDEB3d		N/A	BL	VT-1	100	NRI	3/22/2007	XI-BN-01
Steam Dryer End Bank vertical weld on perforated side of Hood No. 3 (180 deg side)	BWRVIP-139	N/A			·	·		
Li2/SDEB4a		N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer End Bank vertical weld on curved side of Hood No. 4 (0 deg side)	BWRVIP-139	N/A		·		· · ·		
Li2/SDEB4b		N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer End Bank vertical weld on perforated side of Hood No. 4 (0 deg side)	BWRVIP-139	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments	
Li2/SDEB4c		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on curved side of Hood No. 4 (180 deg side)	BWRVIP-139	N/A							
Li2/SDEB4d	· · · ·	N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on perforated side of Hood No. 4 (180 deg side)	BWRVIP-139	N/A					· · · · · · · · · · · · · · · · · · ·		
Li2/SDEB5a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on curved side of Hood No. 5 (0 deg side)	BWRVIP-139	<b>N/A</b>							•
Li2/SDEB5b		N/A	BL	VT-1	85	NRI	3/15/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on perforated side of Hood No. 5 (0 deg side)	BWRVIP-139	N/A				· .			
Li2/SDEB5c		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on curved side of Hood No. 5 (180 deg side)	BWRVIP-139	N/A							·
Li2/SDEB5d		N/A	BL ·	VT-1	100	NRI	3/23/2007	XI-BN-01	• <u>•</u> •
Steam Dryer End Bank vertical weld on perforated side of Hood No. 5 (180 deg side)	BWRVIP-139	N/A	· ·						
Li2/SDEB6a	· .	N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on curved side of Hood No. 6 (0 deg side)	BWRVIP-139	N/A			· .				
Li2/SDEB6b	· · · · · · · · · · · · · · · · · ·	N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on perforated side of Hood No. 6 (0 deg side)	BWRVIP-139	N/A				· · ·			
Li2/SDEB6c		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01	•
Steam Dryer End Bank vertical weld on curved side of Hood No. 6 (180 deg side)	BWRVIP-139	N/A		·		·	:		
Li2/SDEB6d		N/A	BL	VT-1	95	NRI	3/23/2007	XI-BN-01	
Steam Dryer End Bank vertical weld on perforated side of Hood No. 6 (180 deg side)	BWRVIP-139	N/A	•						«* •

	Limeric	CK 2R09	IVVI Co	ompor	ient Exa	minatio	on Results	
Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDGB 000 Az		N/A	BL	VT-1	80	NRI	3/16/2007	XI-BN-01
Steam Dryer Guide Bracket 000 Degree Azimuth	BWRVIP-139	N/A			,			
Li2/SDHS2b		N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 2b	BWRVIP-139	N/A						
Li2/SDHS2c		N/A	BL	VT-1 .	95	NRI	3/20/2007	XI-BN-01
Steam Dryer Hood Seam Weld 2c	BWRVIP-139	N/A		,	·,			
Li2/SDHS2d		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Hood Seam Weld 2d	BWRVIP-139	N/A					,	
Li2/SDHS3b		N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 3b	BWRVIP-139	N/A						
Li2/SDHS3c		N/A	BL	VT-1	95	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 3c	BWRVIP-139	N/A						• •
Li2/SDHS3d		N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 3d	BWRVIP-139	N/A						
Li2/SDHS4b	• .	N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 4b	BWRVIP-139	N/A	· · ·		•			
Li2/SDHS4c		N/A	BL	VT-1	95	RI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 4c	BWRVIP-139	N/A						An indication was identified at the bottom of the weld area in the hood plate material. Ref. INR- Li2R09-IVVI-07-23 and IR#
		· · ·						608568.
Li2/SDHS4d	· .	N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 4d	BWRVIP-139	N/A						
Li2/SDHS5b		N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 5b	BWRVIP-139	N/A	•					
Li2/SDHS5c		N/A	BL	VT-1	95	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 5c	BWRVIP-139	N/A						· · · ·
Li2/SDHS5d		N/A	BL	VT-1	100	NRI	3/24/2007	XI-BN-01
Steam Dryer Hood Seam Weld 5d	BWRVIP-139	N/A						

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Li2/SDHSR2a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	. N/A		·	,			
Li2/SDHSR2b		N/A	BL	<b>VT-1</b>	100	NRI	3/18/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	<sub>.</sub> N/A						
Li2/SDHSR2c	. ,	N/A	BL	VT-1	100	NRI	3/25/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A					х.	
Li2/SDHSR2d	. ·	N/A	BL	VT-1	100	NRI	3/25/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A					- - 	
Li2/SDHSR3a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	. N/A					м. У	·.
Li2/SDHSR3b	· .	N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDHSR3c		N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A					• .	
Li2/SDHSR3d		N/A	BL	VT-1 .	90	NRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A					.e	
Li2/SDHSR4a		N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	<b>N/A</b>						
Li2/SDHSR4b		N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A				·		
Li2/SDHSR4c		N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDHSR4d		N/A	BL	VT-1	100	ŅRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDHSR5a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDHSR5b	<u> </u>	N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDHSR5c		N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDHSR5d	· · ·	N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Hood Seam Reinforcement	BWRVIP-139	N/A						
Li2/SDLR 041.5 Az		N/A	SP	VT-3	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod 45 Degree Azimuth	N/A	N/A						
Li2/SDLR 138.5 Az		N/A	SP	VT-3	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod 45 Degree Azimuth	N/A	N/A						
Li2/SDLR 221.5 Az		N/A	SP	VT-3	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod 45 Degree Azimuth	N/A	N/A						
Li2/SDLR 318.5 Az		N/A	SP	VT-3	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod 45 Degree Azimuth	N/A	N/A				· ,		· .
Li2/SDLRA1a		N/A	BL	VT-1	70	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A (41.5 deg) attachment welds	BWRVIP-139	N/A						• •
Li2/SDLRA1b		N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A (41.5 deg) attachment welds	BWRVIP-139	N/A						
Li2/SDLRA1c		N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A (41.5 deg) attachment welds	BWRVIP-139	N/A			· .			
Li2/SDLRA2a		N/A	BL	VT-1	85	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A (41.5 deg) attachment welds	BWRVIP-139	<b>N/A</b>						·
Li2/SDLRA2b		N/A	BL	VT-1	90	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A 41.5 deg) attachment welds	BWRVIP-139	N/A				·		·
Li2/SDLRA3a		N/A	BL	VT-1	100	NRI	3/17/2007	XI-BN-01
Steam Dryer Lifting Rod A (41.5 deg) attachment welds	BWRVIP-139	N/A						· · · ·

#### Limerick 2R09 IVVI Component Examination Results Component ID Summary # Category Exam Actual Code Exam Insp. Date Iso Number Reason Exam Coverage Results Description Class Code Cases Exam Comments Item Li2/SDLRA3b N/A ΒL VT-1 100 NRI 3/17/2007 XI-BN-01 Steam Dryer Lifting Rod A BWRVIP-139 N/A (41.5 deg) attachment welds Li2/SDLRA4a N/A BL VT-1 75 NRI 3/17/2007 XI-BN-01 Steam Dryer Lifting Rod A BWRVIP-139 'N/A (41.5 deg) attachment welds Li2/SDLRA4b Ň/A BL VT-1. 100 NRI XI-BN-01 3/17/2007 Steam Dryer Lifting Rod A BWRVIP-139 N/A (41.5 deg) attachment welds Li2/SDLRACP ΒL VT-1 NRI XI-BN-01 N/A 80 3/17/2007 Steam Dryer Lifting Rod A BWRVIP-139 N/A (41.5 deg) to coverplate Li2/SDLRALE N/A ΒL VT-1 100 NRI 3/17/2007 XI-BN-01 Steam Dryer Lifting Rod A BWRVIP-139 N/A (41.5 deg) lifting eye welds Li2/SDLRATW N/A BL VT-1 100 NRI 3/17/2007 XI-BN-01 Steam Dryer Lifting Rod A BWRVIP-139 N/A (41.5 deg) tack welds Li2/SDLRB1a NRI N/A BL VT-1 100 3/20/2007 XI-BN-01 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds Li2/SDLRB1b VT-1 100 NRI N/A ΒL 3/20/2007 XI-BN-01 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds Li2/SDLRB1c BL VT-1 NRI XI-BN-01 N/A 100 3/20/2007 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds Li2/SDLRB2a N/A ΒL VT-1 100 NRI 3/20/2007 XI-BN-01 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds Li2/SDLRB2b N/A ΒL VT-1 90 NRI 3/20/2007 XI-BN-01 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds

weld

Li2/SDLRB3a N/A BL VT-1 90 NRI 3/20/2007 XI-BN-01 Steam Dryer Lifting Rod B BWRVIP-139 N/A (138.5 deg) attachment welds

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDLRB3b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod B (138.5 deg) attachment welds	BWRVIP-139	N/A						
i2/SDLRB4a		N/A	BL	VT-1	90	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod B 138.5 deg) attachment velds	BWRVIP-139	N/A					 	
.i2/SDLRB4b		N/A	BL	VT-1	90	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod B 138.5 deg) attachment velds	BWRVIP-139	N/A						
i2/SDLRBCP	· · ·	N/A	BL	VT-1	90	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod B 138.5 deg) to coverplate veld	BWRVIP-139	N/A						
i2/SDLRBLE	•	N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
team Dryer Lifting Rod B 138.5 deg) lifting eye /elds	BWRVIP-139	N/A						
i2/SDLRBTW		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod B 138.5 deg) tack welds	BWRVIP-139	N/A					• . . •	· · · ·
.i2/SDLRC1a		N/A	BL	VT-1	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) attachment velds	BWRVIP-139	N/A						
i2/SDLRC1b		N/A	BL	VT-1	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) attachment welds	BWRVIP-139	N/A	· .		• •			
i2/SDLRC1c		N/A	 BL	VT-1	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) attachment velds	BWRVIP-139	N/A						
i2/SDLRC2a		N/A	BL	VT-1	95	NRI	3/20/2007	XI-BN-01
iteam Dryer Lifting Rod C 221.5 deg) attachment /elds	BWRVIP-139	Ń/A						
i2/SDLRC2b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) attachment velds	BWRVIP-139	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDLRC3a		N/A	BL	VT-1	95	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C (221.5 deg) attachment welds	BWRVIP-139	N/A						
Li2/SDLRC3b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C (221.5 deg) attachment welds	BWRVIP-139	N/A				·		
Li2/SDLRC4a		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C (221.5 deg) attachment welds	BWRVIP-139	N/A				·		
Li2/SDLRC4b		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C (221.5 deg) attachment welds	BWRVIP-139	N/A						· · · ·
Li2/SDLRCCP		N/A	BL	VT-1	90	NRI	3/20/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) to coverplate weld	BWRVIP-139	N/A						· .
i2/SDLRCLE		N/A	BL	VT-1	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod C (221.5 deg) lifting eye welds	BWRVIP-139	N/A					• .	
-i2/SDLRCTW		N/A	BL	VT-1	100	NRI	3/21/2007	XI-BN-01
Steam Dryer Lifting Rod C 221.5 deg) tack welds	BWRVIP-139	N/A						
.i2/SDLRD1a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D (318.5 deg) attachment welds	BWRVIP-139	N/A			· .			
.i2/SDLRD1b		N/A	BL	VT-1	95	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) attachment velds	BWRVIP-139	<b>N/A</b> _						
.i2/SDLRD1c		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) attachment velds	BWRVIP-139	N/A						
.i2/SDLRD2a		N/A	BL	VT-1	95	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) attachment velds	BWRVIP-139	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
_i2/SDLRD2b	· · ·	N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) attachment velds	BWRVIP-139	<b>N/A</b>						
_i2/SDLRD3a		N/A	BL	VT-1	70	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D (318.5 deg) attachment welds	BWRVIP-139	<b>N/A</b>				.*	·	
_i2/SDLRD3b		N/A	BL	VT-1	95	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D (318.5 deg) attachment welds	BWRVIP-139	N/A						
i2/SDLRD4a		N/A	BL	VT-1	65	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D (318.5 deg) attachment welds	BWRVIP-139	N/A		.•				
.i2/SDLRD4b		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D (318.5 deg) attachment welds	BWRVIP-139	N/A			-			•
-i2/SDLRDCP		N/A	BL	VT-1	95	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) to coverplate weld	BWRVIP-139	N/A						
i2/SDLRDLE		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) lifting eye velds	BWRVIP-139	N/A					•	
.i2/SDLRDTW	<u> </u>	N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Lifting Rod D 318.5 deg) tack welds	BWRVIP-139	N/A			·			
.i2/SDMWa		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Man Way veld (0 deg side)	BWRVIP-139	N/A						
.i2/SDMWb		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Man Way veld (90 deg side)	BWRVIP-139	N/A						
.i2/SDMWc		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Man Way veld (180 deg side)	BWRVIP-139	N/A						
i2/SDMWd		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Man Way veld (270 deg side)	BWRVIP-139	N/A					· .	

Component ID	Summary #	Category	Exam	Actual		Exam	Insp. Date	Iso Number
Description	Class	Item	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
Li2/SDPP2a		N/A	BL	VT-1	100	NRI	3/16/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	N/A						•
Partition on Hood No. 2 (0 deg side)								
Li2/SDPP2b	·	N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	N/A						
Partition on Hood No. 2 (180 deg side)		·.						
Li2/SDPP3a		N/A	BL	VT-1,	100	NRI	3/16/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	N/A					• •	
Partition on Hood No. 3 (0 deg side)		· .						
Li2/SDPP3b		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	N/A					· ·	·
Partition on Hood No. 3 (180 deg side)								
Li2/SDPP4a		N/A	BL	VT-1	100	NRI	3/15/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	N/A						
Partition on Hood No. 4 (0 deg side)		· . ·						
Li2/SDPP4b		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Plenum Partition on Hood No. 4 (180 deg side)	BWRVIP-139	N/A					· .	
Li2/SDPP5a		N/A	BL	VT-1	100	NRI	3/14/2007	XI-BN-01
Steam Dryer Plenum Partition on Hood No. 5 (0 deg side)	BWRVIP-139	N/A	· .			ı		
Li2/SDPP5b		N/A	BL	VT-1	100	NRI	3/23/2007	XI-BN-01
Steam Dryer Plenum	BWRVIP-139	.N/A		▼ I <sup>-</sup> I			0,20,2001	
Partition on Hood No. 5 (180 deg side)	BWITTEN -100			·			:	
Li2/SDSR	726250	N/A	RE	VT-1	95	RI	3/24/2007	XI-BN-01
Steam Dryer Support Ring	BWRVIP-139	N/A						Several intermittent indications
· · · · · · · · · · · · · · · · · · ·								observed mainly on the support ring top area near cover plate tha are similar to last outage. Previously dispositioned style indications throughout support ring. Ref. INR-Li2R09-IVVI-07-20 and IR# 608667.
Li2/SDTB01		N/A	BL	VT-1	90	NRI	3/19/2007	XI-BN-01
Steam Dryer Tie Bar No. 01 - Hood No. 1 to Hood No. 2	BWRVIP-139	N/A						

Component ID Description	Summary # Class	Category Item	Exam Reason	Actual Exam	Code Coverage	Exam Results	Insp. Date Code Cases	Iso Number Exam Comments
Li2/SDTB02		N/A	BL	VT-1	100	NRI	3/19/2007	XI-BN-01
Steam Dryer Tie Bar No. 02 - Hood No. 1 to Hood No. 2	BWRVIP-139	N/A						
Li2/SDTB03		N/A	BL	VT-1	100	RI	3/20/2007	XI-BN-01
Steam Dryer Tie Bar No. 03 - Hood No. 1 to Hood No. 2	BWRVIP-139	N/A		·		·		INR-Li2R09-IVVI-07-18 identified an indication that appears to be a small area shaved away from the base material. Reference IR# 606565.
Li2/SDTB04		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Tie Bar No. 04 - Hood No. 1 to Hood No. 2	BWRVIP-139	N/A			·			
Li2/SDTB05		N/A	BL	VT-1	100	NRI	3/25/2007	XI-BN-01
Steam Dryer Tie Bar No. 05 - Hood No. 1 to Hood No. 2	BWRVIP-139	N/A						
i2/SDTB08	· · · · · · · · · · · · · · · · · · ·	N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Tie Bar No. 8 - Hood No. 2 to Hood No. 3	BWRVIP-139	N/A	·			• .	·	
i2/SDTB09		N/A	BL.	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Tie Bar No. 99 - Hood No. 2 to Hood No. 3	BWRVIP-139	N/A	•			•		
.i2/SDTB17		N/A	BL	VT-1	100	NRI	3/20/2007	XI-BN-01
Steam Dryer Tie Bar No. 17 - Hood No. 3 to Hood No. 4	BWRVIP-139	N/A						
_i2/SDTB22	· ·	N/A	BL	VT-1	100		2/21/2007	XL DN 04
Steam Dryer Tie Bar No. 22 - Hood No. 4 to Hood No. 5	BWRVIP-139	N/A N/A	DL	VI-1		NRI .	3/21/2007	XI-BN-01
i2/SDTB23	· · · · · · · · · · · · · · · · · · ·	N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Tie Bar No. 23 - Hood No. 4 to Hood No. 5	BWRVIP-139	N/A		·			. ·	
.i2/SDTB24		N/A	BL	VT-1	100	NRI	3/26/2007	XI-BN-01
Steam Dryer Tie Bar No. 24 - Hood No. 4 to Hood No. 5	BWRVIP-139	N/A				·		
.i2/SH/SS	727300	N/A	RE	VT-3	100	NRI	3/19/2007	XI-BN-02
Shroud Head/ Steam Separator Assembly, 48 Shroud Head Bolts, Lugs, Brackets, Welds and Surfaces	N/A	N/A		·				

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Component ID	Summary #	Category	Exam	Actual	Code	Exam	Insp. Date	Iso Number
Description	Class	ltem	Reason	Exam	Coverage	Results	Code Cases	Exam Comments
Li2/SSB 120 Deg Lower	750300	B-N-2	RE	VT-1	90	NRI	3/22/2007	XI-BNN
Surveillance Specimen Bracket Attachment Weld to RPV	BWRVIP-48	B13.20	×.		• •			
Li2/SSB 120 Deg Upper	750400	B-N-2	RE	VT-1	90	NRI	3/22/2007	XI-BNN
Surveillance Specimen Bracket Attachment Weld to RPV	BWRVIP-48	B13.20		. ,				· .
Li2/SSB 300 Deg Lower	750500	B-N-2	RE .	VT-1	90	NRI	3/22/2007	XI-BNN
Surveillance Specimen Bracket Attachment Weld to RPV	BWRVIP-48	B13.20					•	· · · · · · · · · · · · · · · · · · ·
Li2/SSB 300 Deg Upper	750600	B-N-2	RE	VT-1	95	NRI	3/22/2007	XI-BNN
Surveillance Specimen	BWRVIP-48	B13.20					· · · ·	
Bracket Attachment Weld to RPV		. •						
Li2/SSH 030 Deg	749800	N/A	RE	VT-3	100	RI	3/17/2007	XI-BN-12
Surveillance Specimen Holder	N/A	N/A .	·					INR-Li2R09-IVVI-07-14 identified this surveillance holder was not engaged on the lower bracket. It was re-installed per IR# 605442.
Li2/SSH 120 Deg	749900	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-12
Surveillance Specimen Holder	N/A	N/A						
Li2/SSH 300 Deg	750000	N/A	RE	VT-3	100	NRI	3/22/2007	XI-BN-12
Surveillance Specimen Holder	N/A	N/A					2	
Li2/V15		B-N-2	BL	EVT-1	95	NRI	3/23/2007	XI-BN-10
Core Shroud Vertical Weld - Plate to Plate Welds Between H03 And H04 - 135 Deg Az.	BWRVIP-76 / B-N-2	<sub>.</sub> B13.40			• •			Exam was performed on both the ID and OD of the weld.
							<u> </u>	·
Li2/V16 Core Shroud Vertical		B-N-2	BL	EVT-1	95	NRI	3/24/2007	XI-BN-10
Weld - Plate to Plate Welds Between H03 And H04 - 315 Deg Az.	BWRVIP-76 / B-N-2	B13.40		· .				Exam was performed on both the ID and OD of the weld.
							0/04/0007	
Li2/V17 Core Shroud Vertical	BWRVIP-76/	B-N-2 B13.40	BL	EVT-1	95	NRI	3/24/2007	XI-BN-10 Exam was performed on both the
Weld - Plate to Plate Welds Between H04 And H05 - 45 Deg Az.	B-N-2	010.40						ID and OD of the weld.
Li2/V18	er en	B-N-2	BL	EVT-1	90	NRI	3/19/2007	XI-BN-10
Core Shroud Vertical Weld - Plate to Plate Welds Between H04 And	BWRVIP-76 / B-N-2	B13.40						Exam was performed on both the ID and OD of the weld.

Number a	nd Percenta	ae of ISI Examinati	Limerick Unit 2 ons Completed (Third	Interval / First Der	iod / First Outage)
Category	Notes	Exams Completed This Report	Exams Completed To Date	Total Exams in the Interval	Percentage Complete for Interval
B-A		3.66	3.66	31	11.8%
B-D	· ·	16	16	68	23.5%
B-G-1	• • • • • • • • • • • • • • • • • • •	32	32	337	9.4%
B-G-2	]	3	3	. 26	N/A
В-К		0.66	0.66	7	9.4%
B-L-2	1	0	0	1	N/A
B-M-2	1	2	2	21	N/A
B-N-1	4	N/A	N/A	N/A	N/A
B-N-2	4	N/A	N/A	N/A	N/A
B-P	6	1	l	. 5	20%
C-A		0	0	. 4	0.0%
C-B		0	0	4	0.0%
C-C		9	9	55 .	16.3%
C-G		2	. 2	. 22	9.1%
C-H	2	3	3	100	3.0%
D-A .		4	. 4	28	14.8%
D-B <sup>.</sup>	2				7.9%
F-A		55	. 55	277	24.2%
R-A		27	• 27	125	21.6%

#### Limerick Unit 2

	Number and Percentage of CISI Examinations Completed (Second Interval / First Period / First Outage)					
	Category	Notes	Exams Completed This Report	Exams Completed To Date	Total Exams in the Interval	Percentage Complete for Interval
1	1	······································	5728 11. S.G. 1998 -	e i i we alar i a' e e e e e e e e e e e e e e e e e e	BARANGER AND AND A CARD AND AND A CARD	11110000000000000000000000000000000000
	E-A	2,5	0	0	43	0.0%

0

0.0%

9

Note 1- Inspections are only required when components are disassembled.

0

Note 2- Inspections are performed once each inspection period therefore the total number of inspections will be greater than the total number of components.

Note 3- Inspections are performed every 4 years.

3

L-A

Note 4- No counts will be reported for these categories based on Relief Request 13R-03 "Implementation of BWRVIP Guidelines in Lieu of ASME Section XI Requirements on Reactor Pressure Vessel Internals and Component Inspections."

Note 5- The bolting inspections (14) are only required once per interval.

Note 6- Inspections are performed every refueling outage.

## Section 2: Summary of Conditions Observed

As a result of the examinations performed during the Limerick Generating Station Unit 2, Refuel Outage 09, there were no new indications requiring flaw evaluations that are reportable to the NRC, either by ASME Section XI requirements or BWRVIP protocol. Numerous other conditions were recorded and subsequent examinations and/or evaluations determined all conditions to be either non-relevant or geometric in nature.

The following is a summary of the significant indications identified during the inspections.

Component	Reference	Description and Resolution
- in	ST-4-041-950-2	Four CRD flanges experienced minor leakage during the pressure test.
	IR 610203-02	Code Case N-566-2 Corrective Actions for Leakage Identified at
		Bolted Connections was used to evaluate the condition.
	· · ·	
		e Case N-513-1)
Component	Reference	Description and Resolution
HBC-245-02	A1579323	Pinhole leak identified in ESW piping.
	-	Piping was replaced during 2R09.
HBD-250-E010-W1	A1591650	Pinhole leak identified in ESW piping.
<u></u>		Piping was replaced during 2R09.
Visual Inspections		
Component	Reference	Description and Resolution
DCA-201-H004	A1608599-01	Hanger found outside the cold setting. Evaluation determined the
	C0220786-02	condition of the piping was not adversely affected by the as found
		condition of the hanger. Therefore, this hanger was not an ASME In
		Service Inspection failure. The hanger was adjusted to the correct cold
		setting.
DCA-201-H072	C0220809-01	Based on the condition of hanger DCA-201-H004 other hangers were
		inspected on the RWCU line. This extent of condition inspection
		found this hanger was outside the code setting. The hanger was
		adjusted to the correct cold setting.
DCA-201-H066	C0220809-02	Based on the condition of hanger DCA-201-H004 other hangers were
		inspected on the RWCU line. This extent of condition inspection
		found this hanger was outside the code setting. The hanger was
		adjusted to the correct cold setting.
DCA-201-H067	C0220809-03	Based on the condition of hanger DCA-201-H004 other hangers were
		inspected on the RWCU line. This extent of condition inspection
		found this hanger was outside the code setting. The hanger was
		adjusted to the correct cold setting.
DCA-213-H003	C0220809-04	Based on the condition of hanger DCA-201-H004 other hangers were
DCH 215 11005		inspected on the RWCU line. This extent of condition inspection
		found this hanger was outside the code setting. The hanger was
		adjusted to the correct cold setting.
In Vessel Visual Insp	ections (IVVI)	
Component	Reference	Description and Resolution
Jet Pump 20	INR-Li2R09-IVVI-07-01	Additional main wedge wear was identified. Main wedge was
	1	replaced and restrainer bracket resurfaced during this outage.
		Reference operability evaluation, OPE-07-003.
Jet Pump 17	INR-Li2R09-IVVI-07-02	Additional main wedge wear was identified. Main wedge was
		replaced and restrainer bracket resurfaced during this outage.
		Reference operability evaluation, OPE-07-003.
Jet Pump 19	INR-Li2R09-IVVI-07-	Additional main wedge and rod wear was identified and evaluated as
· · · · · ·	·····	· · · · · · · · · · · · · · · · · · ·

	03R1	acceptable per operability evaluation, OPE-07-003.
Jet Pump 02	INR-Li2R09-IVVI-07- 04R1	Additional main wedge and rod wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 11	INR-Li2R09-IVVI-07- 05R1	Additional main wedge and rod wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 04 INR-Li2R09-IVVI-07- 06R1		Additional main wedge was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 01 INR-Li2R09-IVVI-07-07		Additional main wedge wear was identified. Main wedge was replaced and restrainer bracket resurfaced during this outage. Reference operability evaluation, OPE-07-003.
Jet Pump 08	INR-Li2R09-IVVI-07-08	Additional main wedge wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 05	INR-Li2R09-IVVI-07-09	Set screw gap was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 13	INR-Li2R09-IVVI-07- 10R1	Additional main wedge wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 14	INR-Li2R09-IVVI-07-11	Additional main wedge wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 09	INR-Li2R09-IVVI-07- 12R2	New main wedge and rod wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 10	INR-Li2R09-IVVI-07-13	Additional main wedge was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
30 Deg. Surveillance Specimen Holder	INR-Li2R09-IVVI-07-14	RPV 30 Degree Surveillance Specimen Holder was found unlatched from the lower vessel bracket and was reattached. Reference IR#605442.
Jet Pump 07	INR-Li2R09-IVVI-07-15	Set screw gap was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 10	INR-Li2R09-IVVI-07-16	Auxiliary wedge wear was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Jet Pump 12	INR-Li2R09-IVVI-07-17	Set screw gap was identified and evaluated as acceptable per operability evaluation, OPE-07-003.
Steam Dryer	INR-Li2R09-IVVI-07-18	An indication was found on steam dryer tie bar #03 and evaluated as acceptable per IR#606565.
Core Spray Piping	INR-Li2R09-IVVI-07-19	An indication was found on core spray piping weld, P8aC. and evaluated as acceptable per IR#607260.
Steam Dryer	INR-Li2R09-IVVI-07-20	Several indications were re-measured on the steam dryer support ring and evaluated as acceptable per IR#608667.
Core Spray Sparger	INR-Li2R09-IVVI-07- 21R1	One indication was identified on each core spray sparger support bracket, SB08 and SB05, and both were evaluated as acceptable per IR#607418.
Feedwater Sparger	INR-Li2R09-IVVI-07-22	Debris was identified in a feedwater sparger nozzle and was evaluated as acceptable per IR#607889.
Steam Dryer	INR-Li2R09-IVVI-07-23	An indication was found on steam dryer hood seam weld, SDHS4c, and was evaluated as acceptable per IR#608568.
Core Spray Piping	INR-Li2R09-IVVI-07-24	An indication was identified on core spray piping weld, P8aD, and was evaluated as acceptable per IR#608730.
Foreign Material	INR-Li2R09-IVVI-07-25	Foreign material was found in the reactor vessel and was either retrieved or evaluated as acceptable per IR#608624 and IR#610055.

Other items of note: During 2R09, six in-core dry tubes were replaced. New universal style dry tubes were installed at four IRM locations and 2 SRM locations as identified below:

Location	New Component Serial Number
IRM 24-29	Installed dry tube S/N 06S137113 with shuttle tube S/N 06S138581 per PIMS AR A1470100
IRM 24-37	Installed dry tube S/N 06S137114 with shuttle tube S/N 06S138589 per PIMS AR A1470100
IRM 32-29	Installed dry tube S/N 06S137115 with shuttle tube S/N 06S138587 per PIMS AR A1470100
IRM 48-53	Installed dry tube S/N 06S137116 with shuttle tube S/N 06S138584 per PIMS AR A1470100

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IRM 48-53 SRM 16-45 SRM 40-21 Installed dry tube S/N 06S137116 with shuttle tube S/N 06S138584 per PIMS AR A1470100 Installed dry tube S/N 06S137112 with shuttle tube S/N 06S138588 per PIMS AR A1513973 Installed dry tube S/N 06S137111 with shuttle tube S/N 06S138583 per PIMS AR A1513973

Shroud head bolt number 10 was permanently removed during 2R09 due to a damaged window and alignment pin. The removal of this shroud head bolt was performed under work order C0218496 and is acceptable to leave out per ECR LG 01-00903.

Attached in the following pages are two reports being submitted with this summary report to the NRC for information only. The first report is a letter report from GE, GE-NE-0000-0066-2110-R1, dated March 28, 2007, which was provided to Limerick and contain the evaluation and repair recommendations for the various jet pump indications identified in 2R09. The second report is a Limerick structural analysis for the Unit 2 core shroud, which was performed by Structural Integrity Associates, SIR-05-249 R0. Although the data is classified as preliminary; a comparison was completed using the final data and it was determined that the analysis is conservative.

#### Snubbers

Functional testing of snubbers was performed during 2R09 in accordance with Limerick Unit 2 Technical Specifications 4.7.4.e and Surveillance Test ST-1-103-300-2. The initial sample selection included the following:

- 37mechanical snubbers as part of the 37 plan
- 17 Lisega Hydraulic snubbers as part of the 13.3% plan
- 2 compensating struts as part of the 13.3% plan
- 1 retest of a compensating strut due to a previous failure in 2R08

All functional testing was completed satisfactory with no failures.



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September 9, 2005 SIR-05-249, Rev. 0 MLH-05-073

Ms. Michelle Karasek Principal Engineer Limerick Generating Station 3146 Sanatoga Road Pottstown, PA 19464

1)

# Subject: Evaluation of the Limerick Generating Station Unit 2 Core Shroud Welds H1, H2, H3, H4 and H6 for Operation Through Li2R10

References:

BWR Vessel and Internals Project, BWR Core Shroud Inspection and Flaw Evaluation Guidelines, BWRVIP-76, EPRI TR-114232, November 1999.

- E-mail Dave Schmidt (Exelon) to Marcos Herrera (SI), "Single Sided UT Position Paper," 3/14/05, containing the file: "Exelon's Position Paper, One Sided UT Exams of Austenitic Stainless Steel."
- 3) Inspection Results:
  - a. E-mail Dave Schmidt (Exelon) to Marcos Herrera (SI), "LGS Core Shroud H6 Data", 3/14/05.
  - b. E-mail Dave Schmidt (Exelon) to Marcos Herrera (SI), "LGS Li2R08 Shroud Inspection H2 Indication Data," 3/13/05.
  - c. E-mail, Michelle Karasek (Exelon) to Marcos Herrera (SI), "Shroud H4 weld data from Limerick," 3/12/05.
  - d. E-mail, Michelle Karasek (Exelon) to Marcos Herrera (SI), "H3 data for Limerick," 3/12/05.
  - e. E-mail Dave Schmidt (Exelon) to Marcos Herrera (SI), "Limerick Shroud Design Documents," 3/10/05.
- 4) DLL: Distributed Ligament Length Evaluation, Rev. 2.1 (09/19/96).
- 5) GE Report GENE-0000-0006-2250-04a, Rev. 0, DRF 0000-0006-2250, June 2003.
- 6) BWR Vessel and Internals Project, Reactor Pressure Vessel and Internals Examination Guidelines (BWRVIP-03) EPRI-TR-105696.
- 7) E-mail Michelle Karasek (Exelon) to Marcos Herrera (SI), "Evaluation factors for GE H2/H3 technique," 3/12/05.

Dear Ms. Karasek,

Structural Integrity Associates (SI) has completed an evaluation of the UT inspection results for welds H1, H2, H3, H4 and H6 of the Limerick Unit 2 core shroud obtained during the current on-going 2005

refueling outage (Li2R08). The evaluations presented in this report determine the safety factors for the five welds at the end of the Li2R10 operating cycle. In summary, the evaluations performed in this report indicate that Limerick Unit 2 can be operated safely considering the shroud inspection results and inspection coverage through the next two operating cycles (to end of Li2R10) since the resulting safety factors meet the required safety factors per BWRVIP-76. Details of the evaluation are summarized below in this letter report.

#### **INTRODUCTION/APPROACH**

During the Spring 2005 outage at Limerick Unit 2 (Li2R08), UT inspections were performed on the core shroud horizontal welds, H1, H2, H3, H4 and H6. Two-sided inspection of weld H4 was achieved and only one-sided inspection, or limited inspection on the ring side was achieved for welds H2 and H3. Only one-sided inspection of weld H6 was obtained. Welds H1, H2, H3 and H6 were associated with the welded plate rings (shroud head, top guide and core plate).

During these inspections, a sufficient amount of weld length (approximately 60%) was inspected, which resulted in the detection of several flaws. In some weld locations (primarily the welded ring side of the joints) the amount of coverage obtained did not meet the intent of BWRVIP-76 [1], Table 2-1, which requires 50% of both sides of each shroud weld be inspected in order to be able to use the inspection frequencies listed in this Table. Because less than 50% inspection coverage of both sides of some of the welds was not obtained, or essentially only one-side was inspected, a site-specific analysis is required per BWRVIP-76 requirements. The SI analysis was performed in response to the need for the sitespecific analysis.

The analysis performed for the H1, H2, H3 and H6 welds took into consideration the essentially one-sided inspection and incorporated the approach from the Exelon position paper regarding one-sided inspections [2]. The analysis for weld H4 used the two sided inspection results and were performed in compliance with BWRVIP-76 analysis guidelines.

#### **INSPECTION SUMMARY**

Attachments 1 though 5 show the inspection results for each weld [3]. These examination results indicate that cracking exists at each weld location. However, the crack depths do not appear to be significantly deep. Further, these results suggest that at worst, although cracking is expected at some of the locations that could not be inspected, the crack depths of any flaws that may be present are not expected to be significant. All of the inspection results shown in Attachments 1 through 5 indicate that they are preliminary, but were used for the analysis at the direction from Limerick personnel to obtain an initial assessment of the structural integrity of the shroud.

#### ANALYSIS

SI's analysis was performed consistent with BWRVIP guidelines as provided in BWRVIP-76. This section provides the details of the evaluation for each horizontal weld. Of the five welds being considered, only Welds H3 and H4 are subjected to high enough fluence such that LEFM or EPFM must



be considered per BWRVIP-76. The evaluation of Welds H3 and H4, per BWRVIP-76 must include consideration for both limit load and EPFM or LEFM. As described below for Welds H3 and H4, no credit is taken for any wall thickness where the inside surface fluence is  $3 \times 10^{20}$  n/cm<sup>2</sup> (E> 1MeV) or greater. This eliminates the need to perform LEFM and the resulting flaw pattern can be analyzed using only limit load. The other three welds are analyzed using standard limit load methods and the DLL code [4]. In addition, crack growth over the next two operating cycles is considered in the evaluation.

#### APPLIED STRESSES

The applied stresses at the five welds are shown in Table 1 [5]. The primary membrane and primary bending stresses are shown for the normal/upset and emergency/faulted conditions. In performing the structural integrity analysis of the welds, both normal/upset and emergency/faulted conditions must be considered.

#### **CRACK GROWTH**

Crack growth in the depth and length direction was accounted for by adding 4 years of growth to the measured flaws found during the Li2R08 inspection. Limerick Unit 2 has implemented a Hydrogen Water Chemistry system and plans to continue injection of hydrogen in the future. Availability of this system has been greater than 99% over the past year and Limerick expects that this high reliability will be maintained throughout the next operating cycle. BWRVIP-14A, including the NRC SER, allows the use of a reduced K-independent crack growth rate of 1.1x10<sup>-5</sup> in/hr. The crack growth rate of 1.1x10<sup>-5</sup> in/hr was used for the through-wall direction and with the assumption of 100% unit availability over the next two, two-year operating cycle (17,520 hours each cycle). Comparison of the crack depths from the previous inspection shows that the Li2R08 inspection results are consistent with crack growth rates based on HWC injection. This results in total growth of 0.386 inches in the through-wall direction over the next two years. A constant crack growth rate of  $5 \times 10^{-5}$  in/hr was used in the length direction consistent with BWRVIP-76. The crack length change at each end of the flaws is  $5 \times 10^{-5}$ in/hr\*17520=1.752 inches. This amount was added to the ends of all flaws.

#### SIZING UNCERTAINTY

UT sizing uncertainties were considered in the evaluation of the flaws. Both length and depth sizing was considered. Sizing uncertainties were obtained from BWRVIP-03 [6] for the specific shroud demonstration qualification used. For most locations, the uncertainties per BWRVIP-03 UT demonstration 16, scan type 1, were applicable. For length, the 45° shear probe was used which has a 0.336 inch length evaluation factor per BWRVIP-03. The depth angle used 60° longitudinal (access classification is "same"), which has a 0.108 inch uncertainty per BWRVIP-03. For the ring side scans of welds H2 and H3, Reference 7 provided the uncertainties for use in the calculations. These uncertainties were incorporated into the UT inspection results.



#### DISTRIBUTED LIGAMENT DETERMINATION

The determination of the flaw pattern is key to determining the remaining ligament for evaluation using the Distributed Ligament Length (DLL) program. The general procedure is summarized below:

- 1. For welds where the fluence on the inside surface exceeds  $3 \times 10^{20}$  n/cm<sup>2</sup>, postulate through-wall flaws at these locations. This step is applicable to H3 and H4 only (see Sections below for welds H3 and H4).
- 2. Add uncertainties (length and depth) to the flaws (both postulated and detected flaws).
- 3. Add crack growth (length and depth) to all flaws.
- 4. Combine flaws if ligament between any two flaws is less than 2 times the thickness of the shroud thickness at the specific weld location.
- 5. Apply 50% penalty on uncracked inspected regions (for cases where the ring side was not inspected or had limited inspection).
- 6. Reapply proximity check (step 4).
- 7. Postulate through-wall flaws at all uninspected regions.
- 8. Add OD and ID resulting flaws into one ID flaw for input to DLL.

The general procedure discussed above was applied to the five welds of interest. The specific weld evaluations are provided below. Note, Step 8 above involves combing the final results of the OD initiated flaws and ID initiated flaws into a single ID flaw. DLL was developed to handle ID flaws only. For limit load, this assumption is not critical as the results are primarily a function of the remaining ligament.

#### WELD H1

Weld H1 was inspected on the shell side only and the results are shown in Attachment 1. The fluence at Weld H1 is well below that needed above which LEFM or EPFM is required. Exelon is proposing [2] taking a penalty of reducing the inspected length of weld on the shell side of a weld to account for the lack of inspection of the ring side of the weld. This approach appears to be conservative since it not only assumes an equivalent uninspected region of the weld on the ring side, but it also increases the overall uninspected region on the side that was examined. This assumes that there is no overlap in the uninspected regions, a conservative assumption.

#### WELD H2

Weld H2 was inspected from the upper side (with some limitations) and some inspection was performed between azimuths 229.5 and 307 on the lower side. The inspection results are shown in Attachment 2. As with H1, the fluence was well below that needed above which LEFM or EPFM is required. Consistent with the Exelon position paper for one-sided inspections, any inspected region on the shell side that was not flawed, was reduced by 50%.



#### WELD H3

Weld H3 received a full inspection on one side only. The other side (upper ring side) was partly inspected. These results were combined with the inspection results below the weld to include additional conservatism. The inspection results are shown in Attachment 3. Consistent with the Exelon position paper [2], the inspected crack-free regions will be reduced by 50%.

The H3 weld is of special significance because it currently has received a total fluence that is greater than 3 x  $10^{20}$  n/cm<sup>2</sup> (E> 1 MeV) at some of the azimuthal locations. Per the requirements of BWRVIP-76, limit load analyses can be applied for core shroud welds for fluences below 3 x  $10^{20}$  n/cm<sup>2</sup> (E> 1 MeV) due to the excellent toughness of these austenitic stainless steel shroud materials. Additionally, crack growth rates for un-irradiated austenitic stainless steels can be used up to fluences of 5 x  $10^{20}$  n/cm<sup>2</sup> (E> 1 MeV), using the methodology contained within BWRVIP-76. At fluences greater than 3 x  $10^{20}$  n/cm<sup>2</sup> (E> 1 MeV) but less than 1 x  $10^{21}$  n/cm<sup>2</sup> (E> 1 MeV), limit load in addition to elastic-plastic fracture mechanics or linear elastic fracture mechanics (LEFM) methodologies can be used for determining the allowable flaw size at the H3 weld. Above a fluence of 1 x  $10^{21}$  n/cm<sup>2</sup> (E> 1 MeV), limit load and LEFM are used to determine the allowable flaw size at the weld.

Since the fluence exceeds  $3 \times 10^{20}$  n/cm<sup>2</sup> in eight localized locations, through-wall flaws are postulated corresponding to these locations, requiring that only limit load analysis be performed. Attachment 3 shows the coverage for this weld and Table 7 shows the results of the remaining ligament calculations.

The core shroud was inspected at Limerick Unit 2 during the recent 8th<sup>th</sup> refueling outage using state of the art UT technology. As a result of limitations in the inspection volume, full inspection (with some limitations) on one side was performed with only partial inspection on the upper ring side. The full inspection was performed from the shell side of the joint. Of special interest is weld H3, which has elevated fluence and in some cases exceeds the threshold where reduction in fracture toughness is expected per the BWRVIP guidelines. This data was reviewed for the regions examined at the H3 weld at Limerick Unit 2 by SI, in preparation for a site-specific shroud structural evaluation of this weld, in accordance with the requirements of BWRVIP-76.

SI has examined the inspection volume produced by the UT inspection during the 8<sup>th</sup> refueling outage and the projected neutron fluence for weld H3 at the 10<sup>th</sup> outage to determine the approach to be used to determine the structural margin present at this weld. In addition, SI has reviewed the Exelon Position Paper on "One Sided UT Exams of Austenitic Stainless Steel, and the results of the UT exams" [2]. SI plotted the inspection coverage and the fluence thresholds azimuthally for H3 at the 10<sup>th</sup> refueling outage (in 2007). The following paragraphs provide the results of this review.

The BWRVIP has established an approach for evaluating core shroud welds that have been examined on both sides, and for which a minimum coverage has been obtained. At Limerick Unit 2, for the H3 weld, only an essentially one-sided UT inspection was performed during the 8<sup>th</sup> refueling outage.

Exelon is proposing [2] taking a penalty of reducing the inspected length of weld on the shell side of weld H3 to account for the lack of inspection of the ring side of the weld. This approach appears to be



conservative since it not only assumes an equivalent uninspected region of the weld on the ring side, but it also increases the overall uninspected region on the side that was examined. This assumes that there is no overlap in the uninspected regions, a conservative assumption.

SI performed an allowable flaw size analysis for weld H3 with the current uninspected region identified from the shell side of the weld, and as augmented by increasing the effective uninspected crack-free regions by doubling that length also on the shell side of the weld to account for the inability to perform the ring side inspection of weld H3.

In addition to the assumption mentioned above for incorporating the guidance from the Exelon position paper, additional consideration for the fluence levels at H3 is included in the analysis. As mentioned earlier, if the fluence is greater than  $3 \times 10^{20}$  n/cm<sup>2</sup> then limit load and LEFM must be performed to demonstrate the structural integrity of the shroud. An approach used frequently in evaluating core shrouds with material at elevated fluence levels, is to take no credit for material that has been subjected to fluences of  $3 \times 10^{20}$  n/cm<sup>2</sup> or higher. In effect, this approach eliminates the use of LEFM and allows for use of limit load only. Through-wall flaws can be assumed at the locations where the fluence is equal to or greater than  $3 \times 10^{20}$  n/cm<sup>2</sup>. This is conservative because the fluence drops significantly through the wall of the shroud. In locations where the fluence is high on the surface, requiring LEFM, the fluence may drop sharply and part through the wall, the fluence can drop below the threshold and the material could be analyzed using limit load. Also, it should be noted that use of EPFM with consideration of irradiated material properties would also show greater margins than the limit load approach used here in this analysis.

The approach used for the H3 weld was to use the bounding flaw condition defined by combining the Exelon position paper approach and the elimination of material exposed to fluence (on the ID) of  $3 \times 10^{20}$ n/cm<sup>2</sup> or greater. In addition, crack growth over one cycle was added to the ends of the assumed flaw pattern.

Attachment 3 shows the one-sided inspection coverage for Weld H3. The following approach was used to define the remaining ligament for Weld H3.

#### **Exelon** Position Paper

Using the results in Attachment 3, the length of the inspected uncracked regions was divided by 4 (2 for penalty of one-sided inspection and 2 for each end of the ligament). Crack growth for two, two-year cycles was also included in this value. The inspected uncracked ligaments were reduced at each end by the resulting amount.

#### Elimination of Thickness Exposed to Fluence of $>3x10^{20}$ n/cm<sup>2</sup>

Any section (full thickness) that was exposed to fluence >  $3 \times 10^{20}$  n/cm<sup>2</sup> was assumed to be cracked through-wall. The fluence curve for 4 years was used in this calculation.



# *Combination of Exelon Position Paper and Fluence* > $3x10^{20}$ n/cm<sup>2</sup> Approach

Using the results of the two approaches above for defining the remaining ligaments, the remaining ligaments were defined by using the worst combination that would result in the smallest remaining ligaments. Thus, for a given remaining ligament, one end could be defined by one approach and the other end by the second approach. This adds additional conservatism to the calculation. Table 7 shows the results of the remaining ligament calculation.

## WELD H4

Weld H4 received a two-sided inspection. The inspection coverage is shown in Attachment 4. The same procedure to account for fluence greater than  $3x10^{20}$  n/cm<sup>2</sup> was applied to Weld H4. The fluences levels at the H4 weld are higher than those H3. This results in more ligament being removed from consideration and impacts the resulting safety factor. It should be noted that the fluence at the inside surface is used as the measure of whether to remove material for the limit load analysis. This is conservative since the fluence varies through the thickness of the shroud wall. In some cases, the fluence drops below the  $3x10^{20}$  n/cm<sup>2</sup> threshold. More detailed analysis could consider this fluence variation through-wall in order to demonstrate additional margin.

## WELD H6

Weld H6 received a one sided inspection only (lower side). The inspection results are shown in Attachment 5. The evaluation was performed using the Exelon position paper to account for the one-sided inspection.

# LIMIT LOAD CALCULATIONS

The DLL program [4] was used to determine the safety factors after a two, two-year cycles. The DLL cases are shown in Tables 2 through 11. Tables 2 through 6 are the results for the normal and upset condition, and Tables 7 through 11 are the results for the emergency and faulted conditions. Table 12 shows the resulting safety factors for the cases evaluated. As can be seen from the table, even with the conservative assumptions made, the safety factors are well above the required safety factors of 2.77 for normal and upset conditions and 1.39 for emergency and faulted conditions.

# CONCLUSIONS

Based on the results shown in Table 12 and the assumptions used in this evaluation, the structural integrity of the Limerick Unit 2 core shroud for at least the next two operating cycles is assured. Even with significant conservative assumptions, made to compensate for one-sided coverage or less than 50% of weld length coverage. The minimum calculated safety factors were for weld H4 and were 4.51 for normal and upset conditions, and 2.24 for emergency and faulted conditions, which exceed the required safety factors (2.77 for normal/upset and 1.39 for emergency/faulted).

If you have any questions on the content of this report, please do not hesitate to contact me.



Prepared by,

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Approved by:

Marcos Legaspi Herrera, P.E. Senior Associate

Verified by:

Jim Wu Engineer



Tuble I Billouu ffelu Billess Bereis [e]					
	Applied Stress (ksi)				
	Normal	and Upset	Emergency and Faulted		
Weld	Pm	P <sub>b</sub>	Pm	Pb	
H1	334.9	482.6	808.2	813.8	
H2 .	334.9	651.5	808.2	1089.5	
H3	356.0	753.1	858.9	1258.8	
H4	356.0	1165.6	858.9	1985.9	
H6	674.7	2343.9	1203.0	4036.7	

# Table 1 Shroud Weld Stress Levels [5]



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# TABLE 2 Weld H1 DLL

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS:

=======================================
Title: Limerick Unit 2 Shroud, H1 Weld
Angle increment = .1 deg. ( FINE )
Membrane Stress, Pm = 335. psi
Bending Stress, Pb = 483. psi
Safety Factor, SF = 2.77
Mean Radius, Rm = 109.00 inches
Wall Thickness, t = 2.100 inches
Stress Intensity, Sm = 14400. psi
Fluence = $1.0E+20 \text{ n/cm}^2$
(Thus, LEFM evaluation not applicable)

THETA1	THETA2	THICKNESS
[deg.]	[deg.]	[inches]
12.5	13.0	.775
13.0	14.1	.765
14.1	16.4	535
16.4	38.4	.405
51.6	55.0	.375
55.0	60.9	1.236
60.9	65.2	.375
65.2	78.8	.645
78.8	84.0	.375
84.0	95.8	.645
95.8	102.4	.375
102.4	103.8	.725
103.8	107.5	.505
107.5	112.1	1.156
112.1	115.8	.375
115.8	121.2	.575
	122.0	.645
	127.0	.375
	134.3	1.156
	138.4	.375
		.375
		1.156
		.375
		.645
		1.126
		1.126
		1.396
		1.126
		1.156
		.375
		.645
		.375
		1.156
		.375
		1.156
		1.126
		.645
241.5	246.7	1.126
	[deg.] 12.5 13.0 14.1 16.4 51.6 55.0 60.9 65.2 78.8 84.0 95.8 102.4 103.8 107.5 112.1	$ \begin{bmatrix} \deg . \end{bmatrix} & \begin{bmatrix} \deg . 1 \\ & \\ 12.5 & 13.0 \\ 13.0 & 14.1 \\ 14.1 & 16.4 \\ 16.4 & 38.4 \\ 51.6 & 55.0 \\ 55.0 & 60.9 \\ 60.9 & 65.2 \\ 65.2 & 78.8 \\ 78.8 & 84.0 \\ 84.0 & 95.8 \\ 95.8 & 102.4 \\ 102.4 & 103.8 \\ 103.8 & 107.5 \\ 107.5 & 112.1 \\ 112.1 & 115.8 \\ 115.8 & 121.2 \\ 121.2 & 122.0 \\ 122.0 & 127.0 \\ 127.0 & 134.3 \\ 134.3 & 138.4 \\ 192.1 & 193.9 \\ 193.9 & 196.5 \\ 196.5 & 199.2 \\ 199.2 & 201.1 \\ 201.1 & 203.4 \\ 203.4 & 205.8 \\ 205.8 & 208.7 \\ 208.7 & 211.0 \\ 211.0 & 213.0 \\ 213.0 & 215.1 \\ 215.1 & 216.7 \\ 216.7 & 217.9 \\ 217.9 & 218.0 \\ 231.5 & 233.3 \\ 233.3 & 236.1 \\ 236.1 & 237.9 \\ 237.9 & 241.5 \\ \end{bmatrix} $

39	246.7	256.2	1.156
40	256.2	262.3	.375
41	262.3	265.6	.535
42	265.6	270.0	1.126
43	270.0	272.6	2.100
44	272.6	277.9	1.126
45	277.9	278.3	1.246
46	278.3	280.5	1.186
47	280.5	284.5	1.126
48	284.5	290.0	1.156
49	290.0	294.0	.375
50	294.0	296.3	.625
51	296.3	305.3	.375
52	305.3	308.3	.475

LIMIT LOAD RESULTS:

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NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT [in-lbs]	Pb' [psi]	SAFETY FACTOR	RESULT
.0	1.466E+09	18703.	23.27	>ACCEPTABLE
5.0	1.450E+09	18502.	23.03	>ACCEPTABLE
10.0	1.435E+09	18309.	22.79	>ACCEPTABLE
15.0	1.415E+09	18056.	22.48	>ACCEPTABLE
20.0	1.401E+09	17878.	22.27	>ACCEPTABLE
25.0	1.383E+09	17638.	21.97	>ACCEPTABLE
30.0	1.364E+09	17397.	21.68	>ACCEPTABLE
35.0	1.340E+09	17090.	21.30	>ACCEPTABLE
40.0	1.319E+09	16831.	20.99	>ACCEPTABLE
45.0	1.294E+09	16510.	20.59	>ACCEPTABLE
50.0	1.269E+09	16183.	20.19	>ACCEPTABLE
55.0	1.245E+09	15889.	19.83	>ACCEPTABLE
60.0	1.223E+09	15597.	19.48	>ACCEPTABLE
65.0	1.199E+09	15297.	19.11	>ACCEPTABLE
70.0	1.177E+09	15014.	18.76	>ACCEPTABLE
75.0	1.156E+09	14748.	18.44	>ACCEPTABLE
80.0	1.141E+09	14561.	18.21	>ACCEPTABLE
85.0	1.129E+09	14410.	18.03	>ACCEPTABLE
90.0	1.120E+09	14294.	17.88	>ACCEPTABLE
95.0	1.113E+09	14195.	17.76	>ACCEPTABLE
100.0	1.107E+09	14129.	17.68	>ACCEPTABLE
105.0	1.101E+09	14042.	17.58	>ACCEPTABLE
110.0	1.094E+09	13956.	17.47	>ACCEPTABLE
115.0	1.086E+09	13849.	17.34	>ACCEPTABLE
120.0	1.083E+09	13816.	17.30	>ACCEPTABLE
125.0	1.077E+09	13740.	17.21	>ACCEPTABLE
130.0	1.075E+09	13712.	17.17	>ACCEPTABLE
135.0	1.075E+09	13711.	17.17	>ACCEPTABLE
140.0	1.074E+09	13699.	17.16	>ACCEPTABLE
145.0	1.081E+09	13787.	17.26	>ACCEPTABLE
150.0	1.085E+09	13845.	17.33	>ACCEPTABLE
155.0	1.095E+09	13967.	17.48	>ACCEPTABLE
160.0	1.105E+09	14102.	17.65	>ACCEPTABLE
165.0	1.116E+09	14237.	17.81	>ACCEPTABLE
170.0	1.128E+09	14393.	18.00	>ACCEPTABLE



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175.0	1.144E+09	14590.	18.25	>ACCEPTABLE
180.0	1.159E+09	14786.	18.48	>ACCEPTABLE
185.0	1.169E+09	14913.	18.64	>ACCEPTABLE
190.0	1.185E+09	15119.	18.89	>ACCEPTABLE
195.0	1.201E+09	15322.	19.14	>ACCEPTABLE
200.0	1.217E+09	15530.	19.40	>ACCEPTABLE
205.0	1.230E+09	15697.	19.60	>ACCEPTABLE
210.0	1.239E+09	15812.	19.74	>ACCEPTABLE
215.0	1.257E+09	16033.	20.01	>ACCEPTABLE
220.0	1.268E+09	16177.	20.19	>ACCEPTABLE
225.0	1.284E+09	16380.	20.43	>ACCEPTABLE
230.0	1.301E+09	16597.	20.70	>ACCEPTABLE
235.0	1.319E+09	16823.	20.98	>ACCEPTABLE
240.0	1.333E+09	17010.	21.20	>ACCEPTABLE
245.0	1.352E+09	17245.	21.49	>ACCEPTABLE
250.0	1.370E+09	17472.	21.77	>ACCEPTABLE
255.0	1.389E+09	17716.	22.07	>ACCEPTABLE
260.0	1.409E+09	17972.	22.38	>ACCEPTABLE
265.0	1.425E+09	18178.	22.63	>ACCEPTABLE
270.0	1.444E+09	18416.	22.92	>ACCEPTABLE
275.0	1.458E+09	18598.	23.15	>ACCEPTABLE
280.0	1.473E+09	18789.	23.38	>ACCEPTABLE
285.0	1.485E+09	18948.	23.57	>ACCEPTABLE
290.0	1.497E+09	19099.	23.76	>ACCEPTABLE
295.0	1.504E+09	19193.	23.87	>ACCEPTABLE
300.0	1.511E+09	19279.	23.98	>ACCEPTABLE
305.0	1.519E+09	19378.	24.10	>ACCEPTABLE
310.0	1.522E+09	19412.	24.14	>ACCEPTABLE
315.0	1.523E+09	19429.	24.16	>ACCEPTABLE
320.0	1.526E+09	19463.	24.20	>ACCEPTABLE
325.0	1.525E+09	19453.	24.19	>ACCEPTABLE
330.0	1.523E+09	19433.	24.17	>ACCEPTABLE
335.0	1.516E+09	19341.	24.05	>ACCEPTABLE
340.0	1.512E+09	19295.	24.00	>ACCEPTABLE
345.0	1.503E+09	19181.	23.86	>ACCEPTABLE
350.0	1.491E+09	19023.	23.67	>ACCEPTABLE
355.0	1.476E+09	18830.	23.43	>ACCEPTABLE

ACCEPTABLE! MINIMUM SAFETY FACTOR = 17.16 AT 140.0 DEGREES.



## TABLE 3 Weld H2 DLL

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS:

Title: Limerick Unit 2	Shroud, H2 Weld
Angle increment =	.1 deg. ( FINE )
Membrane Stress, Pm =	335. psi
Bending Stress, Pb =	652. psi
Safety Factor, SF =	2.77
Mean Radius, Rm 🛛 =	109.00 inches
Wall Thickness, t =	2.100 inches
Stress Intensity, Sm =	14400. psi
Fluence = 1	.0E+20 n/cm^2
(Thus, LEFM evaluation	not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	12.5	14.8	1.294
2	14.8	16.1	1.294
3	16.1	22.6	1.084
4	22.6	27.8	1.294
5	32.1	36.9	1.294
6	36.9	37.9	1.294
7	37.9	38.5	1.294
8	51.6	52.6	1.294
9	52.6	56.2	1.294
10	56.2	60.0	1.294
11	63.2	68.2	1.294
12	68.2	73.2	1.294
13	73.2	88.4	1.294
14	88.4	96.5	1.204
15	96.5	112.1	.591
16	112.1	120.9	1.204
17	120.9	134.4	.591
18	134.4	138.4	1.294
19	192.1	196.5	1.294
20	196.5	200.8	1.234
21	200.8	210.7	1.294
22	231.3	238.0	.591
23	242.2	253.8	.591
24	253.8	259.7	.591
25	259.7	262.6	.591
26	262.6	266.1	1.294
27	274.1	282.8	1.294
28	282.8	285.2	1.294
29	285.2	287.6	1.294

LIMIT LOAD RESULTS:

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NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA	MOMENT	Pb'	SAFETY	
[deg]	[in-lbs]	[psi]	FACTOR	RESULT



.0	1.057E+09	13484.	14.00	>ACCEPTABLE
5.0	1.057E+09	13480.	14.00	>ACCEPTABLE
10.0	1.053E+09	13432.	13.95	>ACCEPTABLE
15.0	1.057E+09	13480.	14.00	>ACCEPTABLE
20.0	1.066E+09	13596.	14.11	>ACCEPTABLE
25.0	1.075E+09	13709.	14.23	>ACCEPTABLE
30.0	1.083E+09	13817.	14.34	>ACCEPTABLE
35.0	1.095E+09	13973.	14.50	>ACCEPTABLE
40.0	1.110E+09	14164.	14.69	>ACCEPTABLE
45.0	1.130E+09	14414.	14.94	>ACCEPTABLE
50.0	1.147E+09	14638.	15.17	>ACCEPTABLE
55.0	1.166E+09	14881.	15.42	>ACCEPTABLE
60.0 65.0	1.186E+09 1.213E+09	15126.	15.66 16.02	>ACCEPTABLE
70.0		15474.		>ACCEPTABLE
75.0	1.237E+09 1.271E+09	15777. 16211.	16.32 16.76	>ACCEPTABLE
80.0	1.308E+09	16684.	17.24	>ACCEPTABLE >ACCEPTABLE
85.0	1.350E+09	17220.	17.79	>ACCEPTABLE
90.0	1.391E+09	17751.	18.32	>ACCEPTABLE
95.0	1.433E+09	18276.	18.86	>ACCEPTABLE
100.0	1.472E+09	18780.	19.37	>ACCEPTABLE
105.0	1.510E+09	19261.	19.85	>ACCEPTABLE
110.0	1.545E+09	19714.	20.31	>ACCEPTABLE
115.0	1.581E+09	20169.	20.77	>ACCEPTABLE
120.0	1.612E+09	20568.	21.18	>ACCEPTABLE
125.0	1.642E+09	20950.	21.10	>ACCEPTABLE
130.0	1.666E+09	21254.	21.87	>ACCEPTABLE
135.0	1.691E+09	21571.	22.19	>ACCEPTABLE
140.0	1.715E+09	21881.	22.51	>ACCEPTABLE
145.0	1.738E+09	22171.	22.80	>ACCEPTABLE
150.0	1.760E+09	22457.	23.09	>ACCEPTABLE
155.0	1.778E+09	22687.	23.32	>ACCEPTABLE
160.0	1.802E+09	22986.	23.63	>ACCEPTABLE
165.0	1.818E+09	23198.	23.84	>ACCEPTABLE
170.0	1.832E+09	23378.	24.02	>ACCEPTABLE
175.0	1.841E+09	23488.	24.14	>ACCEPTABLE
180.0	1.845E+09	23532.	24.18	>ACCEPTABLE
185.0	1.843E+09	23518.	24.17	>ACCEPTABLE
190.0	1.838E+09	23443.	24.09	>ACCEPTABLE
195.0	1.828E+09	23318.	23.96	>ACCEPTABLE
200.0	1.814E+09	23144.	23.79	>ACCEPTABLE
205.0	1.801E+09	22972.	23.61	>ACCEPTABLE
210.0	1.778E+09	22679.	23.32	>ACCEPTABLE
215.0	1.759E+09	22443.	23.08	>ACCEPTABLE
220.0	1.734E+09	22120.	22.75	>ACCEPTABLE
225.0	1.706E+09	21762.	22.39	>ACCEPTABLE
230.0	1.674E+09	21360.	21.98	>ACCEPTABLE
235.0	1.647E+09	21006.	21.62	>ACCEPTABLE
240.0	1.620E+09	20662.	21.27	>ACCEPTABLE
245.0	1.589E+09	20267.	20.87	>ACCEPTABLE
250.0	1.559E+09	19892.	20.49	>ACCEPTABLE
255.0	1.532E+09	19540.	20.14	>ACCEPTABLE
260.0	1.502E+09	19168.	19.76	>ACCEPTABLE
265.0	1.476E+09	18836.	19.42	>ACCEPTABLE
270.0	1.447E+09	18454.	19.04	>ACCEPTABLE
275.0	1.421E+09	18125.	18.70	>ACCEPTABLE
280.0	1.392E+09	17756.	18.33	>ACCEPTABLE
285.0	1.361E+09	17368.	17.94	>ACCEPTABLE



290.0	1.329E+09	16949.	17.51	>ACCEPTABLE
295.0	1.297E+09	16547.	17.10	>ACCEPTABLE
300.0	1.267E+09	16164.	16.72	>ACCEPTABLE
305.0	1.238E+09	15798.	16.35	>ACCEPTABLE
310.0	1.208E+09	15413.	15.96	>ACCEPTABLE
315.0	1.183E+09	15089.	15.63	>ACCEPTABLE
320.0	1.156E+09	14751.	15.28	>ACCEPTABLE
325.0	1.138E+09	14522.	15.05	>ACCEPTABLE
330.0	1.121E+09	14305.	14.83	>ACCEPTABLE
335.0	1.105E+09	14104.	14.63	>ACCEPTABLE
340.0	1.093E+09	13939.	14.46	>ACCEPTABLE
345.0	1.082E+09	13808.	14.33	>ACCEPTABLE
350.0	1.073E+09	13688.	14.21	>ACCEPTABLE
355.0	1.061E+09	13536.	14.05	>ACCEPTABLE

ACCEPTABLE! MINIMUM SAFETY FACTOR = 13.95 AT 10.0 DEGREES.



### **TABLE 4 Weld H3 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS: ========================= Title: Limerick Unit 2 Shroud, H3 Weld Angle increment = .1 deg. ( FINE ) Membrane Stress, Pm = 356. psi Bending Stress, Pb = 753. psi Safety Factor, SF = 2.77 Mean Radius, Rm = 102.56 inches Wall Thickness, t = 2.140 inches Stress Intensity, Sm = 14400. psi Fluence =  $1.0E+20 \text{ n/cm}^2$ (Thus, LEFM evaluation not applicable)

REGION	THETA1 [deg.]	THETA2 [deg.]	THICKNESS [inches]
1	2.7	3.2	.327
2	3.2	3.7	.327
3	3.7	13.4	.167
4	13.4	15.4	.067
5	15.4	18.1	.067
6	18.1	19.5	.237
7	19.5	21.5	.167
8	26.5	26.7	.067
9	26.7	33.0	.912
10	33.0	36.6	.067
11	47.7	52.5	.137
12	52.5	61.1	.982
13	61.1	63.5	.287
14	68.5	70.4	.407
15	70.4	73.1	.457
16	73.1	79.3	.397
17	79.3	80.9	.417
18	80.9	83.3	.287
19	83.3	85.3	1.252
20	85.3	87.7	.407
21	87.7	. 88.3	.527
22	88.3	92.3	.367
23	92.3	94.0	1.212
24	96.4	101.8	.387
25	101.8	102.0	.477
26	102.0	104.4	.437
27	104.4	111.5	.407
28	116.5	117.8	.457
29	117.8	121.3	.067
30	121.7	124.4	.912
31	124.4	126.6	.437
32	182.7	183.9	.067
33	183.9	185.4	.912
34	185.4	186.7	.467
35	186.7	200.5	.107
36	206.5	212.1	.267



37	212.1	213.4	.537
38	213.4	216.6	.497
39	227.7	228.9	.067
40	228.9	243.5	.067
41	248.5	249.7	.237
42	249.7	256.5	.357
43	256.5	262.9	.177
44	262.9	269.5	.187
45	269.5	274.7	.067
46	274.7	278.3	.567
47	278.3	282.2	.217
48	282.2	286.1	.617
49	286.1	288.3	.467
50	288.3	289.6	1.012
51	289.6	291.6	.167
52	296.5	298.5	.257
53	298.5	300.9	.137
54	300.9	302.5	1.312
55	302.5	304.9	.067
56	304.9	306.5	.187
57	306.5	306.6	.067

LIMIT LOAD RESULTS:

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#### NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA	MOMENT	Pb'	SAFETY	RESULT
[deg]	[in-lbs]	[psi]	FACTOR	
				RESULT >ACCEPTABLE
100.0	5.560E+08	7862.	7.41	>ACCEPTABLE
105.0	5.621E+08	7948.	7.49	>ACCEPTABLE
110.0	5.718E+08	8086.	7.61	>ACCEPTABLE
115.0	5.808E+08	8213.	7.73	>ACCEPTABLE
120.0	5.871E+08	8302.	7.81	>ACCEPTABLE
125.0	5.936E+08	8394.	7.89	>ACCEPTABLE
130.0	5.975E+08	8449.	7.94	>ACCEPTABLE
135.0	6.010E+08	8498.	7.98	>ACCEPTABLE
200.0	5.0102.00			



140.0	6.031E+08	8529.	8.01	>ACCEPTABLE
145.0	6.078E+08	8595.	8.07	>ACCEPTABLE
150.0	6.083E+08	8601.	8.08	>ACCEPTABLE
155.0	6.109E+08	8638.	8.11	>ACCEPTABLE
160.0	6.080E+08	8597.	8.07	>ACCEPTABLE
165.0	6.079E+08	8596.	8.07	>ACCEPTABLE
170.0	6.052E+08	8558.	8.04	>ACCEPTABLE
175.0	6.007E+08	8494.	7.98	>ACCEPTABLE
180.0	5.990E+08	8470.	7.96	>ACCEPTABLE
185.0	5.938E+08	8398.	7.89	>ACCEPTABLE
190.0	5.866E+08	8295.	7.80	>ACCEPTABLE
195.0	5.808E+08	8213.	7.73	>ACCEPTABLE
200.0	5.746E+08	8125.	7.65	>ACCEPTABLE
205.0	5.656E+08	7998.	7.53	>ACCEPTABLE
210.0	5.564E+08	7868.	7.42	>ACCEPTABLE
215.0	5.457E+08	7716.	7.28	>ACCEPTABLE
220.0	5.353E+08	7570.	7.15	>ACCEPTABLE
225.0	5.241E+08	7411.	7.00	>ACCEPTABLE
230.0	5.142E+08	7272.	6.88	>ACCEPTABLE
235.0	5.054E+08	7147.	6.77	>ACCEPTABLE
240.0	4.943E+08	6990.	6.62	>ACCEPTABLE
245.0	4.831E+08	6832.	6.48	>ACCEPTABLE
250.0	4.720E+08	6674.	6.34	>ACCEPTABLE
255.0	4.609E+08	6517.	6.20	>ACCEPTABLE
260.0	4.499E+08	6362.	6.06	>ACCEPTABLE
265.0	4.389E+08	6207.	5.92	>ACCEPTABLE
270.0	4.280E+08		5.78	>ACCEPTABLE
275.0	4.182E+08	5914.	5.65	>ACCEPTABLE
280.0	4.095E+08	5791.	5.54	>ACCEPTABLE
285.0	3.987E+08	5638.	5.41	>ACCEPTABLE
290.0	3.904E+08	5521.	5.30	>ACCEPTABLE
295.0	3.856E+08	5452.	5.24	>ACCEPTABLE
300.0	3.787E+08	5355.	5.15	>ACCEPTABLE
305.0	3.703E+08	5237.	5.04	>ACCEPTABLE
310.0	3.641E+08	5149.	4.96	>ACCEPTABLE
315.0	3.624E+08	5125.	4.94	>ACCEPTABLE
320.0 325.0	3.599E+08	5089.	4.91	>ACCEPTABLE
330.0	3.576E+08 3.564E+08	5057. 5039.	4.88 4.87	>ACCEPTABLE
335.0	3.521E+08	4979.		>ACCEPTABLE
340.0	3.551E+08	4979. 5021.	4.81 4.85	>ACCEPTABLE
345.0	3.554E+08			>ACCEPTABLE
350.0	3.571E+08	5025. 5050.	4.85 4.87	>ACCEPTABLE
355.0	3.571E+08 3.629E+08	5050.	4.87 4.95	>ACCEPTABLE >ACCEPTABLE
0.00	J.UZJE+UO	JIJZ.	4.70	>ACCEPIADLE
ACCEPTABLE!	MINIMUM SAFETY	FACTOR =	4.81 AT	335.0 DEGREES.



#### **TABLE 5 Weld H4 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS: Title: Limerick Unit 2 Shroud, H4 Weld Angle increment = .1 deg. (FINE) Membrane Stress, Pm = 356. psi Bending Stress, Pb = 1166. psi Safety Factor, SF = 2.77 Mean Radius, Rm = 102.56 inches Wall Thickness, t = 2.140 inches Stress Intensity, Sm = 14400. psi Fluence = 1.0E+20 n/cm^2 (Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	5.6	6.4	1.012
2	6.4	11.4	1.012
3	11.4	12.5	1.012
4	77.5	88.6	1.182
5	88.6	91.3	1.222
6	91.3	94.3	1.202
7	94.3	98.6	1.222
8	98.6	102.5	1.082
9	185.6	192.5	1.012
10	257.5	282.5	1.012

LIMIT LOAD RESULTS:

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NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT	Pb' [psi]	SAFETY FACTOR	RESULT
.0	4.645E+08	6569.	4.55	>ACCEPTABLE
5.0	4.617E+08	6529.	4.52	>ACCEPTABLE
10.0	4.622E+08	6535.	4.53	>ACCEPTABLE
15.0	4.617E+08	6529.	4.52	>ACCEPTABLE
20.0	4.614E+08	6525.	4.52	>ACCEPTABLE
25.0	4.638E+08	6559.	4.54	>ACCEPTABLE
30.0	4.633E+08	6552.	4.54	>ACCEPTABLE
35.0	4.649E+08	6574.	4.55	>ACCEPTABLE
40.0	4.667E+08	6600.	4.57	>ACCEPTABLE
45.0	4.687E+08	6628.	4.59	>ACCEPTABLE
50.0	4.708E+08	6658.	4.61	>ACCEPTABLE
55.0	4.732E+08	6691.	4.63	>ACCEPTABLE
60.0	4.756E+08	6726.	4.65	>ACCEPTABLE
65.0	4.782E+08	6762.	4.68	>ACCEPTABLE
70.0	4.809E+08	6801.	4.70	>ACCEPTABLE
75.0	4.837E+08	6840.	4.73	>ACCEPTABLE
80.0	4.865E+08	6880.	4.75	>ACCEPTABLE
85.0	4.890E+08	6915.	4.78	>ACCEPTABLE



90.0	4.950E+08	7000.	4.83	>ACCEPTABLE
95.0	4.985E+08	7049.	4.87	>ACCEPTABLE
100.0	5.015E+08	7091.	4.89	>ACCEPTABLE
105.0	5.040E+08	7127.	4.92	>ACCEPTABLE
110.0	5.033E+08	7117.	4.91	>ACCEPTABLE
115.0	5.072E+08	7172.	4.95	>ACCEPTABLE
120.0	5.088E+08	7196	4.96	>ACCEPTABLE
125.0	5.113E+08	7230.	4.98	>ACCEPTABLE
130.0	5.135E+08	7262.	5.01	>ACCEPTABLE
135.0	5.157E+08	7292.	5.02	>ACCEPTABLE
140.0	5.176E+08	7319.	5.04	>ACCEPTABLE
145.0	5.193E+08	7344.	5.06	>ACCEPTABLE
150.0	5.209E+08	7365.	5.07	>ACCEPTABLE
155.0	5.231E+08	7397.	5.09	>ACCEPTABLE
160.0	5.229E+08	7394.	5.09	>ACCEPTABLE
165.0	5.269E+08	7450.	5.13	>ACCEPTABLE
170.0	5.265E+08	7445.	5.13	>ACCEPTABLE
175.0	5.297E+08	7491.	5.16	>ACCEPTABLE
180.0	5.282E+08	7469.	5.14	>ACCEPTABLE
185.0	5.296E+08	7489.	5.15	>ACCEPTABLE
190.0	5.263E+08	7443.	5.12	>ACCEPTABLE
195.0	5.266E+08	7447.	5.13	>ACCEPTABLE
200.0	5.226E+08	7390.	5.09	>ACCEPTABLE
205.0	5.227E+08	7392.	5.09	>ACCEPTABLE
210.0	5.204E+08	7359.	5.07	>ACCEPTABLE
215.0	5.188E+08	7337.	5.05	>ACCEPTABLE
220.0	5.171E+08	7312.	5.04	>ACCEPTABLE
225.0	5.151E+08	7284.	5.02	>ACCEPTABLE
230.0	5.129E+08	7253.	5.00	>ACCEPTABLE
235.0	5.106E+08	7220.	4.98	>ACCEPTABLE
240.0	5.081E+08	7185.	4.95	>ACCEPTABLE
245.0	5.055E+08	7149.	4.93	>ACCEPTABLE
250.0	5.028E+08	7111.	4.91	>ACCEPTABLE
255.0	5.001E+08	7071.	4.88	>ACCEPTABLE
260.0	4.972E+08	7031.	4.85	>ACCEPTABLE
265.0	4.939E+08	6985.	4.82	>ACCEPTABLE
270.0	4.942E+08	6988.	4.83	>ACCEPTABLE
275.0	4.918E+08	6955.	4.80	>ACCEPTABLE
280.0	4.891E+08	6916.	4.78	>ACCEPTABLE
285.0	4.860E+08	6872.	4.75	>ACCEPTABLE
290.0	4.798E+08	6784.	4.69	>ACCEPTABLE
295.0	4.784E+08	6765.	4.68	>ACCEPTABLE
300.0	4.749E+08	6716.	4.65	>ACCEPTABLE
			4.62	>ACCEPTABLE
310.0	4.702E+08		4.60	>ACCEPTABLE
	4.681E+08	6619.	4.58	>ACCEPTABLE
	4.662E+08	6592.	4.57	>ACCEPTABLE
325.0			4.55	>ACCEPTABLE
			4.53	>ACCEPTABLE
335.0	4.629E+08 4.607E+08	6546. 6514. 6557	4.51	>ACCEPTABLE
	4.637E+08	6557.	4.54	>ACCEPTABLE
345.0	4.630E+08			>ACCEPTABLE
350.0	4.633E+08			>ACCEPTABLE
355.0	4.635E+08		4.54	>ACCEPTABLE
ACCEPTABLE!	MINIMUM SAFETY	FACTOR =	4.51 AT	335.0 DEGREES.



### **TABLE 6 Weld H6 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS:

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Title: Limerick Unit 2 Shroud, H6 Weld
Angle increment = .1 deg. ( FINE )
Membrane Stress, Pm = 675. psi
Bending Stress, Pb = 2344. psi
Safety Factor, SF = 2.77
Mean Radius, Rm = 99.38 inches
Wall Thickness, t = 2.140 inches
Stress Intensity, Sm = 14400. psi
Fluence = $1.0E+20 \text{ n/cm}^2$
(Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	5.6	5.9	1.366
2	5.9	39.4	1.436
3	50.6	129.4	1.366
4	185.6	188.7	1.366
5	188.7	194.4	1.406
6	194.4	197.8	1.366
7	197.8	201.5	1.947
8	201.5	204.9	1.366
9	204.9	206.0	1.436
10	206.0	210.3	1.366
11	210.3	219.4	1.436
12	230.6	232.4	1.366
13	232.4	234.9	1.436
14	234.9	240.7	1.366
15	240.7	245.4	1.436
16	245.4	249.2	1.366
17	249.2	253.9	1.947
18	253.9	257.7	1.366
19	257.7	260.8	1.436
20	260.8	266.2	1.366
21	266.2	274.0	1.947
22	274.0	279.4	1.366
23	279.4	309.4	1.416

LIMIT LOAD RESULTS:

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NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT [in-lbs]	Pb' [psi]	SAFETY FACTOR	RESULT
. 0	2.150E+09	32381.	10.95	>ACCEPTABLE
5.0	2.146E+09	32323.	10.93	>ACCEPTABLE
10.0	2.138E+09	32206.	10.89	>ACCEPTABLE



15.0	2.125E+09	31997.	10.82	>ACCEPTABLE
20.0	2.108E+09	31741.	10.74	>ACCEPTABLE
25.0	2.088E+09	31444.	10.64	>ACCEPTABLE
30.0	2.066E+09	31111.	10.53	>ACCEPTABLE
35.0	2.042E+09	30748.	10.41	>ACCEPTABLE
40.0	2.016E+09	30362.	10.28	>ACCEPTABLE
45.0	1.991E+09	29985.	10.16	>ACCEPTABLE
50.0	1.970E+09	29676.	10.05	>ACCEPTABLE
55.0	1.953E+09	29408.	9.96	>ACCEPTABLE
60.0	1.941E+09	29234.	9.91	>ACCEPTABLE
65.0	1.933E+09	29108.	9.87	>ACCEPTABLE
70.0	1.926E+09	29013.	9.83	>ACCEPTABLE
75.0	1.927E+09	29027.	9.84	>ACCEPTABLE
80.0	1.928E+09	29037.	9.84	>ACCEPTABLE
85.0	1.929E+09	29049.	9.85	>ACCEPTABLE
90.0	1.931E+09	29075.	9.85	>ACCEPTABLE
95.0	1.939E+09	29205.	9.90	>ACCEPTABLE
100.0	1.952E+09	29398.	9.96	>ACCEPTABLE
105.0	1.962E+09	29546.	10.01	>ACCEPTABLE
110.0	1.974E+09	29732.	10.07	>ACCEPTABLE
115.0	1.984E+09	29875.	10.12	>ACCEPTABLE
120.0	1.991E+09	29981.	10.15	>ACCEPTABLE
125.0	1.998E+09	30086.	10.19	>ACCEPTABLE
130.0	2.002E+09	30154.	10.21	>ACCEPTABLE
135.0	2.007E+09	30228.	10.24	>ACCEPTABLE
140.0	2.007E+09	30231.	10.24	>ACCEPTABLE
145.0 150.0	2.007E+09	30232.	10.24	>ACCEPTABLE
155.0	2.008E+09	30247.	10.24	>ACCEPTABLE
160.0	2.008E+09	30241.	$10.24 \\ 10.26$	>ACCEPTABLE
165.0	2.012E+09 2.017E+09	30297. 30377.	10.28	>ACCEPTABLE >ACCEPTABLE
170.0	2.022E+09	30451.	10.31	>ACCEPTABLE
175.0	2.028E+09	30537.	10.31	>ACCEPTABLE
180.0	2.028E+09	30584.	10.35	>ACCEPTABLE
185.0	2.028E+09	30547.	10.34	>ACCEPTABLE
190.0	2.020E+09	30457.	10.31	>ACCEPTABLE
195.0	2.012E+09	30295.	10.26	>ACCEPTABLE
200.0	1.998E+09	30096.	10.19	>ACCEPTABLE
205.0	1.985E+09	29890.	10.12	>ACCEPTABLE
210.0	1.968E+09	29633.	10.04	>ACCEPTABLE
215.0	1.949E+09	29347.	9.94	>ACCEPTABLE
220.0	1.931E+09	29086.	9.86	>ACCEPTABLE
225.0	1.913E+09	28804.	9.76	>ACCEPTABLE
230.0	1.897E+09	28572.	9.69	>ACCEPTABLE
235.0	1.888E+09	28431.	9.64	>ACCEPTABLE
240.0	1.886E+09	28410.	9.63	>ACCEPTABLE
245.0	1.886E+09	28407.	9.63	>ACCEPTABLE
250.0	1.893E+09	28505.	9.67	>ACCEPTABLE
255.0	1.905E+09	28688.	9.73	>ACCEPTABLE
260.0	1.916E+09	28859.	9.78	>ACCEPTABLE
265.0	1.928E+09	29033.	9.84	>ACCEPTABLE
270.0	1.945E+09	29296.	9.93	>ACCEPTABLE
275.0	1.964E+09	29583.	10.02	>ACCEPTABLE
280.0	1.989E+09	29950.	10.14	>ACCEPTABLE
285.0	2.011E+09	30292.	10.26	>ACCEPTABLE
290.0	2.030E+09	30578.	10.35	>ACCEPTABLE
295.0	2.050E+09	30878.	10.45	>ACCEPTABLE
300.0	2.068E+09	31149.	10.54	>ACCEPTABLE
305.0	2.084E+09	31385.	10.62	>ACCEPTABLE



310.0	2.097E+09	31583.	10.68	>ACCEPTABLE
315.0	2.107E+09	31735.	10.74	>ACCEPTABLE
320.0	2.114E+09	31839.	10.77	>ACCEPTABLE
325.0	2.117E+09	31887.	10.79	>ACCEPTABLE
330.0	2.123E+09	31978.	10.82	>ACCEPTABLE
335.0	2.126E+09	32020.	10.83	>ACCEPTABLE
340.0	2.133E+09	32123.	10.86	>ACCEPTABLE
345.0	2.137E+09	32177.	10.88	>ACCEPTABLE
350.0	2.144E+09	32291.	10.92	>ACCEPTABLE
355.0	2.149E+09	32359.	10.94	>ACCEPTABLE
			·	
ACCEPTABLE!	MINIMUM SAFET	Y FACTOR =	9.63 AT	245.0 DEGREES.



## **TABLE 7 Weld H1 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

#### SUMMARY OF INPUTS:

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Title: Limerick Unit 2 Shroud, H1 Weld
Angle increment = .1 deg. ( FINE )
Membrane Stress, Pm = 808. psi
Bending Stress, Pb = 814. psi
Safety Factor, SF = 1.39
Mean Radius, Rm = 109.00 inches
Wall Thickness, t = 2.100 inches
Stress Intensity, Sm = 14400. psi
Fluence = $1.0E+20 \text{ n/cm}^2$
(Thus, LEFM evaluation not applicable)

REGION	THETA1 [deg.]	THETA2 [deg.]	THICKNESS [inches]
1	12.5	13.0	.775
2	13.0	13.0 14.1	.765
3	14.1	16.4	.535
4	16.4	38.4	.405
5	51.6	55.0	.375
6	55.0	60.9	1.236
7	60.9	65.2	.375
8	65.2	78.8	.645
9	78.8	84.0	.375
10	84.0	95.8	.645
11	95.8	102.4	.375
12	102.4	103.8	.725
13	103.8	107.5	.505
14	107.5	112.1	1.156
15	112.1	115.8	.375
16	115.8	121.2	.575
17	121.2	122.0	.645
18	122.0	127.0	.375
19	127.0	134.3	1.156
20	134.3	138.4	.375
21	192.1	193.9	.375
22	193.9	196.5	1.156
23	196.5	199.2	.375
24	199.2	201.1	.645
25	201.1	203.4	1.126
26	203.4	205.8	1.126
27	205.8	208.7	1.396
28	208.7	211.0	1.126
29	211.0	213.0	1.156
30	213.0	215.1	.375
31	215.1	216.7	.645
32	216.7	217.9	.375
33	217.9	218.0	1.156
34	231.5	233.3	.375
35	233.3	236.1	1.156
36	236.1	237.9	1.126
37	237.9	241.5	.645



241.5	246.7	1.126
		1.156
256.2	262.3	.375
262.3	265.6	.535
265.6	270.0	1.126
270.0	272.6	2.100
272.6	277.9	1.126
277.9	278.3	1.246
278.3	280.5	1.186
280.5	284.5	1.126
284.5	290.0	1.156
290.0	294.0	.375
294.0	296.3	.625
296.3	305.3	.375
305.3	308.3	.475
	246.7 256.2 262.3 265.6 270.0 272.6 277.9 278.3 280.5 284.5 290.0 294.0 296.3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

LIMIT LOAD RESULTS:

NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT [in-lbs]	Pb' [psi]	SAFETY FACTOR	RESULT
.0	1.400E+09	17867.	11.51	>ACCEPTABLE
5.0	1.383E+09	17644.	11.38	>ACCEPTABLE
10.0	1.370E+09	17474.	11.27	>ACCEPTABLE
15.0	1.353E+09	17262.	11.14	>ACCEPTABLE
20.0	1.334E+09	17020.	10.99	>ACCEPTABLE
25.0	1.317E+09	16802.	10.86	>ACCEPTABLE
30.0	1.299E+09	16566.	10.71	>ACCEPTABLE
35.0	1.274E+09	16255.	10.52	>ACCEPTABLE
40.0	1.255E+09	16008.	10.37	>ACCEPTABLE
45.0	1.228E+09	15668.	10.16	>ACCEPTABLE
50.0	1.206E+09	15392.	9.99	>ACCEPTABLE
55.0	1.182E+09	15084.	9.80	>ACCEPTABLE
60.0	1.157E+09	14762.	9.60	>ACCEPTABLE
65.0	1.136E+09	14497.	9.44	>ACCEPTABLE
70.0	1.116E+09	14233.	9.27	>ACCEPTABLE
75.0	1.096E+09	13979.	9.12	>ACCEPTABLE
80.0	1.077E+09	13741.	8.97	>ACCEPTABLE
85.0	1.066E+09	13596.	8.88	>ACCÉPTABLE
90.0	1.055E+09	13456.	8.79	>ACCEPTABLE
95.0	1.047E+09	13359.	8.73	>ACCEPTABLE
100.0	1.042E+09	13296.	8.70	>ACCEPTABLE
105.0	1.035E+09	13209.	8.64	>ACCEPTABLE
110.0	1.029E+09	13123.	8.59	>ACCEPTABLE
115.0	1.023E+09	13048.	8.54	>ACCEPTABLE
120.0	1.016E+09	12963.	8.49	>ACCEPTABLE
125.0	1.009E+09	12876.	8.44	>ACCEPTABLE
130.0	1.009E+09	12870.	8.43	>ACCEPTABLE
135.0	1.005E+09	12822.	8.40	>ACCEPTABLE
140.0	1.008E+09	12866.	8.43	>ACCEPTABLE
145.0	1.014E+09	12941.	8.48	>ACCEPTABLE
150.0	1.021E+09	13027.	8.53	>ACCEPTABLE
155.0	1.029E+09	13128.	8.59	>ACCEPTABLE
160.0	1.040E+09	13274.	8.68	>ACCEPTABLE
165.0	1.048E+09	13375.	8.74	>ACCEPTABLE



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170.0	1.059E+09	13513.	8.83	>ACCEPTABLE
175.0	1.076E+09	13732.	8.96	>ACCEPTABLE
180.0	1.088E+09	13878.	9.05	>ACCEPTABLE
185.0	1.103E+09	14078.	9.18	>ACCEPTABLE
190.0	1.120E+09	14284.	9.30	>ACCEPTABLE
195.0	1.134E+09	14472.	9.42	>ACCEPTABLE
200.0	1.149E+09	14654.	9.53	>ACCEPTABLE
205.0	1.162E+09	14827.	9.64	>ACCEPTABLE
210.0	1.175E+09	14986.	9.74	>ACCEPTABLE
215.0	1.190E+09	15184.	9.86	>ACCEPTABLE
220.0	1.206E+09	15381.	9.98	>ACCEPTABLE
225.0	1.223E+09	15602.	10.12	>ACCEPTABLE
230.0	1.236E+09	15772.	10.22	>ACCEPTABLE
235.0	1.257E+09	16038.	10.39	>ACCEPTABLE
240.0	1.273E+09	16247.	10.51	>ACCEPTABLE
245.0	1.291E+09	16468.	10.65	>ACCEPTABLE
250.0	1.308E+09	16681.	10.78	>ACCEPTABLE
255.0	1.327E+09	16933.	10.94	>ACCEPTABLE
260.0	1.347E+09	17185.	11.09	>ACCEPTABLE
265.0	1.363E+09	17386.	11.22	>ACCEPTABLE
270.0	1.381E+09	17621.	11.36	>ACCEPTABLE
275.0	1.395E+09	17799.	11.47	>ACCEPTABLE
280.0	1.412E+09	18019.	11.61	>ACCEPTABLE
285.0	1.425E+09	18178.	11.71	>ACCEPTABLE
290.0	1.435E+09	18308.	11.79	>ACCEPTABLE
295.0	1.442E+09	18399.	11.84	>ACCEPTABLE
300.0	1.447E+09	18456.	11.88	>ACCEPTABLE
305.0	1.454E+09	18546.	11.93	>ACCEPTABLE
310.0	1.457E+09	18591.	11.96	>ACCEPTABLE
315.0	1.460E+09	18628.	11.98	>ACCEPTABLE
320.0	1.462E+09	18650.	12.00	>ACCEPTABLE
325.0	1.461E+09	18637.	11.99	>ACCEPTABLE
330.0	1.457E+09	18591.	11.96	>ACCEPTABLE
335.0	1.454E+09	18550.	11.93	>ACCEPTABLE
340.0	1.447E+09	18465.	11.88	>ACCEPTABLE
345.0	1.439E+09	18355.	11.81	>ACCEPTABLE
350.0	1.424E+09	18164.	11.70	>ACCEPTABLE
355.0	1.411E+09	17997.	11.59	>ACCEPTABLE

ACCEPTABLE! MINIMUM SAFETY FACTOR = 8.40 AT 135.0 DEGREES.



### **TABLE 8 Weld H2 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS:

***************
Title: Limerick Unit 2 Shroud, H2 Weld
Angle increment = .1 deg. ( FINE )
Membrane Stress, Pm = 808. psi
Bending Stress, Pb = 1090. psi
Safety Factor, SF = 1.39
Mean Radius, Rm = 109.00 inches
Wall Thickness, t = 2.100 inches
Stress Intensity, Sm = 14400. psi
Fluence = $1.0E+20 \text{ n/cm}^2$
(Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	12.5	14.8	1.294
2	14.8	16.1	1.294
3	16.1	22.6	1.084
4	22.6	27.8	1.294
5	32.1	36.9	1.294
6	36.9	37.9	1.294
7	37.9	38.5	1.294
8	51.6	52.6	1.294
9	52.6	56.2	1.294
10	56.2	60.0	1.294
11	63.2	68.2	1.294
12	68.2	73.2	1.294
13	73.2	88.4	1.294
14	88.4	96.5	1.204
15	96.5	112.1	.591
16	112.1	120.9	1.204
17	120.9	134.4	.591
18	134.4	138.4	1.294
19	192.1	196.5	1.294
20	196.5	200.8	1.234
21	200.8	210.7	1.294
22	231.3	238.0	.591
23	242.2	253.8	.591
24	253.8	259.7	.591
25	259.7	262.6	.591
26	262.6	266.1	1.294
27	274.1	282.8	1.294
28	282.8	285.2	1.294
29	285.2	287.6	1.294

LIMIT LOAD RESULTS: ========================

NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA MOMENT Pb' SAFETY



[deg]	[in-lbs]	[psi]	FACTOR	RESULT
.0	9.922E+08	12659.	7.10	>ACCEPTABLE
5.0	9.856E+08	12575.	7.05	>ACCEPTABLE
10.0	9.895E+08	12624.	7.08	>ACCEPTABLE
15.0	9.937E+08	12677.	7.10	>ACCEPTABLE
20.0	9.956E+08	12701.	7.12	>ACCEPTABLE
25.0	1.010E+09	12881.	7.21	>ACCEPTABLE
30.0	1.020E+09	13011.	7.28	>ACCEPTABLE
35.0	1.033E+09	13177.	7.37	>ACCEPTABLE
40.0	1.048E+09	13371.	7.47	>ACCEPTABLE
45.0	1.065E+09	13581.	7.58	>ACCEPTABLE
50.0	1.082E+09	13810.	7.70	>ACCEPTABLE
55.0	1.104E+09	14087.	7.85	>ACCEPTABLE
60.0 65.0	1.126E+09 1.150E+09	14362.	7.99 8.16	>ACCEPTABLE
70.0	1.179E+09	14671. 15041.	8.35	>ACCEPTABLE >ACCEPTABLE
75.0	1.209E+09	15420.	8.55	>ACCEPTABLE
80.0	1.248E+09	15917.	8.81	>ACCEPTABLE
85.0	1.289E+09	16440.	9.09	>ACCEPTABLE
90.0	1.329E+09	16951.	9.36	>ACCEPTABLE
95.0	1.370E+09	17476.	9.63	>ACCEPTABLE
100.0	1.409E+09	17980.	9.90	>ACCEPTABLE
105.0	1.447E+09	18461.	10.15	>ACCEPTABLE
110.0	1.484E+09	18936.	10.40	>ACCEPTABLE
115.0	1.519E+09	19374.	10.63	>ACCEPTABLE
120.0	1.549E+09	19766.	10.84	>ACCEPTABLE
125.0	1.577E+09	20114.	11.02	>ACCEPTABLE
130.0	1.604E+09	20459.	11.20	>ACCEPTABLE
135.0	1.625E+09	20737.	11.35	>ACCEPTABLE
$140.0 \\ 145.0$	1.651E+09 1.675E+09	21062. 21372.	11.52 11.69	>ACCEPTABLE
145.0	1.694E+09	21617.	11.81	>ACCEPTABLE >ACCEPTABLE
155.0	1.716E+09	21897.	11.96	>ACCEPTABLE
160.0	1.735E+09	22134.	12.09	>ACCEPTABLE
165.0	1.755E+09	22389.	12.22	>ACCEPTABLE
170.0	1.767E+09	22548.	12.31	>ACCEPTABLE
175.0	1.775E+09	22641.	12.35	>ACCEPTABLE
180.0	1.779E+09	22699.	12.39	>ACCEPTABLE
185.0	1.781E+09	22724.	12.40	>ACCEPTABLE
190.0	1.776E+09	22654.	12.36	>ACCEPTABLE
195.0	1.766E+09	22534.	12.30	>ACCEPTABLE
200.0	1.753E+09	22365.	12.21	>ACCEPTABLE
205.0	1.736E+09	22153.	12.10	>ACCEPTABLE
210.0 215.0	1.717E+09	21906.	11.97	>ACCEPTABLE
215.0	1.698E+09 1.672E+09	21658. 21336.	11.84 11.67	>ACCEPTABLE >ACCEPTABLE
220.0	1.646E+09	21005.	11.49	>ACCEPTABLE
230.0	1.616E+09	20614.	11.29	>ACCEPTABLE
235.0	1.589E+09	20273.	11.11	>ACCEPTABLE
240.0	1.561E+09	19919.	10.92	>ACCEPTABLE
245.0	1.531E+09	19533.	10.72	>ACCEPTABLE
250.0	1.503E+09	19175.	10.53	>ACCEPTABLE
255.0	1.471E+09	18765.	10.31	>ACCEPTABLE
260.0	1.442E+09	18401.	10.12	>ACCEPTABLE
265.0	1.415E+09	18048.	9.93	>ACCEPTABLE
270.0	1.385E+09	17675.	9.74	>ACCEPTABLE
275.0	1.355E+09	17292.	9.54	>ACCEPTABLE
280.0	1.329E+09	16950.	9.36	>ACCEPTABLE



285.0	1.298E+09	16562.	9.15	>ACCEPTABLE
290.0	1.266E+09	16156.	8.94	>ACCEPTABLE
295.0	1.234E+09	15743.	8.72	>ACCEPTABLE
300.0	1.203E+09	15341.	8.51	>ACCEPTABLE
305.0	1.174E+09	14981.	8.32	>ACCEPTABLE
310.0	1.143E+09	14586.	8.11	>ACCEPTABLE
315.0	1.115E+09	14226.	7.92	>ACCEPTABLE
320.0	1.094E+09	13956.	7.78	>ACCEPTABLE
325.0	1.069E+09	13633.	7.61	>ACCEPTABLE
330.0	1.053E+09	13436.	7.50	>ACCEPTABLE
335.0	1.036E+09	13220.	7.39	>ACCEPTABLE
340.0	1.027E+09	13105.	7.33	>ACCEPTABLE
345.0	1.017E+09	12971.	7.26	>ACCEPTABLE
350.0	1.004E+09	12813.	7.18	>ACCEPTABLE
355.0	9.971E+08	12721.	7.13	>ACCEPTABLE
ACCEPTABLE!	MINIMUM SAFE	TY FACTOR =	7.05 AT	5.0 DEGREES.



#### **TABLE 9 Weld H3 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS: =================== Title: Limerick Unit 2 Shroud, H3 Weld Angle increment = .1 deg. ( FINE ) 859. psi Membrane Stress, Pm = Membrane Stress, Pm = 859. psi Bending Stress, Pb = 1259. psi Safety Factor, SF = 1.39 Mean Radius, Rm = 102.56 inches Wall Thickness, t = 2.140 inches Stress Intensity, Sm = 14400. psi Fluence =  $1.0E+20 \text{ n/cm}^2$ (Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	2.7	3.2	.327
2	3.2	3.7	.327
3	3.7	13.4	.167
4	13.4	15.4	.067
5	15.4	18.1	.067
6	18.1	19.5	.237
7	19.5	21.5	.167
8	26.5	26.7	.067
9	26.7	33.0	.912
10	33.0	36.6	.067
11	47.7	52.5	.137
12	52.5	61.1	.982
13	61.1	63.5	.287
14	68.5	70.4	.407
15	70.4	73.1	.457
16	73.1	79.3	.397
17	79.3	80.9	.417
18	80.9	83.3	.287
19	83.3	85.3	1.252
20	85.3	87.7	.407
21	87.7	88.3	.527
22	88.3	92.3	.367
23	92.3	94.0	1.212
24	96.4	101.8	.387
25	101.8	102.0	.477
26	102.0	104.4	.437
27	104.4	111.5	.407
28	116.5	117.8	.457
29	117.8	121.3	.067
30	121.7	124.4	.912
31	124.4	126.6	.437
32	182.7	183.9	.067
33	183.9	185.4	.912
34	185.4	186.7	.467
35	186.7	200.5	.107
36	206.5	212.1	.267
37	212.1	213.4	.537



38	213.4	216.6	.497
39	227.7	228.9	.067
40	228.9	243.5	.067
41	248.5	249.7	.237
42	249.7	256.5	.357
43	256.5	262.9	.177
44	262.9	269.5	.187
45	269.5	274.7	.067
46	274.7	278.3	.567
47	278.3	282.2	.217
48	282.2	286.1	.617
49	286.1	288.3	.467
50	288.3	289.6	1.012
51	289.6	291.6	. 167
52	296.5	298.5	.257
53	298.5	300.9	.137
54	300.9	302.5	1.312
55	302.5	304.9	.067
56	304.9	306.5	.187
57	306.5	306.6	.067

LIMIT LOAD RESULTS:

NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA MOMENT Pb' SAFETY [deg] [in-lbs] [psi] FACTOR	RESULT
5.03.011E+084259.2.4210.03.083E+084359.2.46	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
25.0         3.295E+08         4659.         2.61            30.0         3.369E+08         4763.         2.65	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
45.0         3.672E+08         5192.         2.86            50.0         3.784E+08         5350.         2.93	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
65.0         4.115E+08         5819.         3.15            70.0         4.227E+08         5977.         3.23	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
85.04.547E+086430.3.4490.04.660E+086590.3.52	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
105.0         4.947E+08         6995.         3.71            110.0         5.002E+08         7073.         3.74	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE
125.0         5.236E+08         7404.         3.90            130.0         5.296E+08         7489.         3.94            135.0         5.304E+08         7501.         3.95	>ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE >ACCEPTABLE



145.0	5.372E+08	7597.	3.99	>ACCEPTABLE
150.0	5.398E+08	7633.	4.01	>ACCEPTABLE
155.0	5.408E+08	7648.	4.02	>ACCEPTABLE
160.0	5.414E+08	7655.	4.02	>ACCEPTABLE
165.0	5.377E+08	7604.	4.00	>ACCEPTABLE
170.0	5.369E+08	7592.	3.99	>ACCEPTABLE
175.0	5.320E+08	7524.	3.96	>ACCEPTABLE
180.0	5.279E+08	7465.	3.93	>ACCEPTABLE
185.0	5.244E+08	7416.	3.91	>ACCEPTABLE
190.0	5.192E+08	7341.	3.87	>ACCEPTABLE
195.0	5.114E+08	7232.	3.82	>ACCEPTABLE
200.0	5.028E+08	7111.	3.76	>ACCEPTABLE
205.0	4.955E+08	7008.	3.71	>ACCEPTABLE
210.0	4.876E+08	6895.	3.66	>ACCEPTABLE
215.0	4.760E+08	6732.	3.58	>ACCEPTABLE
220.0	4.686E+08	6626.	3.53	>ACCEPTABLE
225.0	4.578E+08	6474.	3.46	>ACCEPTABLE
230.0	4.469E+08	6320.	3.39	~>ACCEPTABLE
235.0	4.360E+08	6166.	3.32	>ACCEPTABLE
240.0	4.250E+08	6009.	3.24	>ACCEPTABLE
245.0	4.138E+08	5851.	3.17	>ACCEPTABLE
250.0	4.026E+08	5693.	3.09	>ACCEPTABLE
255.0	3.915E+08	5536.	3.02	>ACCEPTABLE
260.0	3.805E+08	5381.	2.95	>ACCEPTABLE
265.0	3.702E+08	5235.	2.88	>ACCEPTABLE
270.0	3.595E+08	5084.	2.81	>ACCEPTABLE
275.0	3.502E+08	4952.	2.74	>ACCEPTABLE
280.0	3.399E+08	4807.	2.68	>ACCEPTABLE
285.0	3.290E+08	4652.	2.60	>ACCEPTABLE
290.0	3.238E+08	4579.	2.57	>ACCEPTABLE
295.0	3.167E+08	4478.	2.52	>ACCEPTABLE
300.0	3.097E+08	4380.	2.47	>ACCEPTABLE
305.0	3.037E+08	4294.	2.43	>ACCEPTABLE
310.0	2.960E+08	4185.	2.38	>ACCEPTABLE
315.0	2.911E+08	4116.	2.35	>ACCEPTABLE
320.0	2.880E+08	4073.	2.33	>ACCEPTABLE
325.0	2.877E+08	4068.	2.33	>ACCEPTABLE
330.0	2.845E+08	4022.	2.30	>ACCEPTABLE
335.0	2.860E+08	4044.	2.31	>ACCEPTABLE
340.0	2.856E+08	4039.	2.31 2.31	>ACCEPTABLE
345.0	2.845E+08	4024.	2.31	>ACCEPTABLE
350.0 355.0	2.869E+08 2.928E+08	4057. 4141.	2.32	>ACCEPTABLE
332.0	2.9205+00	4141.	2.30	>AUUEPTABLE

ACCEPTABLE! MINIMUM SAFETY FACTOR = 2.30 AT 330.0 DEGREES.



### **TABLE 10 Weld H4 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005

SUMMARY OF INPUTS:

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Title: Limerick Unit 2 Shroud, H4 Weld
Angle increment = .1 deg. ( FINE )
Membrane Stress, Pm = 859. psi
Bending Stress, Pb = 1986. psi
Safety Factor, SF = 1.39
Mean Radius, Rm = 102.56 inches
Wall Thickness, t = 2.140 inches
Stress Intensity, Sm = 14400. psi
Fluence = $1.0E+20 \text{ n/cm}^2$
(Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	5.6	6.4	1.012
2	6.4	11.4	1.012
3	11.4	12.5	1.012
4	77.5	88.6	1.182
5	88.6	91.3	1.222
6	91.3	94.3	1.202
7	94.3	98.6	1.222
8	98.6	102.5	1.082
9	185.6	192.5	1.012
10	257.5	282.5	1.012

LIMIT LOAD RESULTS:

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NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT [in-lbs]	Pb' [psi]	SAFETY FACTOR	RESULT
.0	3.921E+08	5544.	2.25	>ACCEPTABLE
5.0	3.933E+08	5561.	2.26	>ACCEPTABLE
10.0	3.934E+08	5564.	2.26	>ACCEPTABLE
15.0	3.934E+08	5563.	2.26	>ACCEPTABLE
20.0	3.932E+08	5561.	2.26	>ACCEPTABLE
25.0	3.935E+08	5565.	2.26	>ACCEPTABLE
30.0	3.940E+08	5572.	2.26	>ACCEPTABLE
35.0	3.956E+08	5595.	2.27	>ACCEPTABLE
40.0	3.974E+08	5620.	2.28	>ACCEPTABLE
45.0	3.994E+08	5648.	2.29	>ACCEPTABLE
50.0	4.016E+08	5679.	2.30	>ACCEPTABLE
55.0	4.039E+08	5711.	2.31	>ACCEPTABLE
60.0	4.064E+08	5746.	2.32	>ACCEPTABLE
65.0	4.089E+08	5783.	2.33	>ACCEPTABLE
70.0	4.116E+08	5821.	2.35	>ACCEPTABLE
75.0	4.144E+08	5860.	2.36	>ACCEPTABLE
80.0	4.172E+08	5900.	2.38	>ACCEPTABLE



85.0	4.194E+08	5931.	2.39	>ACCEPTABLE
90.0	4.251E+08	6011.	2.41	>ACCEPTABLÉ
95.0	4.288E+08	6063.	2.43	>ACCEPTABLE
100.0	4.317E+08	6105.	2.45	>ACCEPTABLE
105.0	4.343E+08	6141.	2.46	>ACCEPTABLE
110.0	4.377E+08	6190.	2.48	>ACCEPTABLE
115.0	4.378E+08	6191.	2.48	>ACCEPTABLE
120.0	4.396E+08	6216.	2.49	>ACCEPTABLE
125.0	4.420E+08	6250.	2.50	>ACCEPTABLE
130.0	4.443E+08	6282.	2.51	>ACCEPTABLE
135.0	4.464E+08	6312.	2.52	>ACCEPTABLE
140.0	4.483E+08	6340.	2.53	>ACCEPTABLE
145.0	4.500E+08	6364.	2.54	>ACCEPTABLE
150.0	4.516E+08	6386.	2.55	>ACCEPTABLE
155.0	4.537E+08	6415.	2.56	>ACCEPTABLE
160.0	4.573E+08	6467.	2.58	>ACCEPTABLE
165.0	4.570E+08	6462.	2.57	>ACCEPTABLE
170.0	4.563E+08	6453.	2.57	>ACCEPTABLE
175.0	4.594E+08	6496.	2.59	>ACCEPTABLE
180.0	4.591E+08	6492.	2.58	>ACCEPTABLE
185.0	4.593E+08	6495.	2.58	>ACCEPTABLE
190.0	4.562E+08	6451.	2.57	>ACCEPTABLE
195.0	4.567E+08	6459.	2.57	>ACCEPTABLE
200.0	4.570E+08	6463.	2.57	>ACCEPTABLE
205.0	4.533E+08	6410.	2.56	>ACCEPTABLE
210.0	4.512E+08	6380.	2.54	>ACCEPTABLE
215.0	4.496E+08	6357.	2.54	>ACCEPTABLE
220.0	4.478E+08	6332.	2.53	>ACCEPTABLE
225.0	4.458E+08	6304.	2.52	>ACCEPTABLE
230.0	4.436E+08	6273.	2.51	>ACCEPTABLE
235.0	4.413E+08	6241.	2.50	>ACCEPTABLE
240.0	4.388E+08	6206.	2.48	>ACCEPTABLE
245.0	4.363E+08	6169.	2.47	>ACCEPTABLE
250.0	4.336E+08	6131.	2.46	>ACCEPTABLE
255.0	4.308E+08	6092.	2.44	>ACCEPTABLE
260.0	4.280E+08	6052.	2.43	>ACCEPTABLE
265.0	4.244E+08	6001.	2.41	>ACCEPTABLE
270.0	4.242E+08	5999.	2.41	>ACCEPTABLE
275.0	4.221E+08	5969.	2.40	>ACCEPTABLE
280.0	4.194E+08	5931.	2.39	>ACCEPTABLE
285.0	4.163E+08	5886.	2.37	>ACCEPTABLE
290.0	4.142E+08	5857.	2.36	>ACCEPTABLE
295.0	4.090E+08	5783.	2.33	>ACCEPTABLE
300.0	4.056E+08	5736.	2.32	>ACCEPTABLE
305.0	4.032E+08	5702.	2.31	>ACCEPTABLE
310.0	4.009E+08	5669.	2.29	>ACCEPTABLE
315.0	3.988E+08	5640.	2.28	>ACCEPTABLE
320.0	3.969E+08	5612.	2.27	>ACCEPTABLE
325.0	3.951E+08	5588.	2.27	>ACCEPTABLE
330.0	3.936E+08	5566.	2.26	>ACCEPTABLE
335.0	3.932E+08	5561.	2.26	>ACCEPTABLE
340.0	3.917E+08	5539.	2.25	>ACCEPTABLE
345.0	3.908E+08	5526.	2.24	>ACCEPTABLE
350.0	3.946E+08	5580.	2.26	>ACCEPTABLE
355.0	3.904E+08	5521.	2.24	>ACCEPTABLE
ACCEPTABLE!	MINIMUM SAFETY	FACTOR =	2.24 AT	355.0 DEGREES.



#### **TABLE 11 Weld H6 DLL**

DLL: DISTRIBUTED LIGAMENT LENGTH EVALUATION, REV. 2.11 (10/30/99) DATE OF THIS ANALYSIS: 08/09/2005 SUMMARY OF INPUTS:

Title: Limerick Unit 2 Shroud, H6 Weld Angle increment = .1 deg. (FINE) Membrane Stress, Pm = 1203. psi Bending Stress, Pb = 4037. psi Safety Factor, SF = 1.39 Mean Radius, Rm = 99.38 inches Wall Thickness, t = 2.140 inches Stress Intensity, Sm = 14400. psi Fluence = 1.0E+20 n/cm^2 (Thus, LEFM evaluation not applicable)

	THETA1	THETA2	THICKNESS
REGION	[deg.]	[deg.]	[inches]
1	5.6	5.9	1.366
2	5.9	39.4	1.436
3	50.6	129.4	1.366
4	185.6	188.7	1.366
5	188.7	194.4	1.406
6	194.4	197.8	1.366
7	197.8	201.5	1.947
8	201.5	204.9	1.366
9	204.9	206.0	1.436
10	206.0	210.3	1.366
11	210.3	219.4	1.436
12	230.6	232.4	1.366
13	232.4	234.9	1.436
14	234.9	240.7	1.366
15	240.7	245.4	1.436
16	245.4	249.2	1.366
17	249.2	253.9	1.947
18	253.9	257.7	1.366
19	257.7	260.8	1.436
20	260.8	266.2	1.366
21	266.2	274.0	1.947
22	274.0	279.4	1.366
23	279.4	309.4	1.416

LIMIT LOAD RESULTS:

NOTE: THE FOLLOWING LIMIT LOAD RESULTS ASSUME THAT THE FLAWS TAKE COMPRESSION.

ALPHA [deg]	MOMENT [in-lbs]	Pb' [psi]	SAFETY FACTOR	RESULT
.0	2.101E+09	31649.	6.27	>ACCEPTABLE
5.0	2.098E+09	31591.	6.26	>ACCEPTABLE
10.0	2.090E+09	31472.	6.24	>ACCEPTABLE
15.0	2.077E+09	31280.	6.20	>ACCEPTABLE



20.0	2.061E+09	31041.	6.15	>ACCEPTABLE
25.0	2.042E+09	30761.	6.10	>ACCEPTABLE
30.0	2.022E+09	30446.	6.04	>ACCEPTABLE
35.0	1.999E+09	30101.	5.97	>ACCEPTABLE
40.0	1.974E+09	29732.	5.90	>ACCEPTABLE
45.0	1.951E+09	29387.	5.84	>ACCEPTABLE
50.0	1.928E+09	29035.	5.77	>ACCEPTABLE
55.0	1.913E+09	28813.	5.73	>ACCEPTABLE
60.0	1.898E+09	28589.	5.69	>ACCEPTABLE
65.0	1.890E+09	28464.	5.66	>ACCEPTABLE
70.0	1.886E+09	28408.	5.65	>ACCEPTABLE
75.0	1.884E+09	28375.	5.64	>ACCEPTABLE
80.0	1.887E+09	28423.	5.65	>ACCEPTABLE
85.0	1.889E+09	28446.	5.66	>ACCEPTABLE
90.0 95.0	1.893E+09 1.902E+09	28507. 28641.	5.67 5.70	>ACCEPTABLE >ACCEPTABLE
100.0	1.911E+09	28777.	5.70	>ACCEPTABLE
105.0	1.921E+09	28933.	5.72	>ACCEPTABLE
110.0	1.932E+09	29093.	5.78	>ACCEPTABLE
115.0	1.939E+09	29198.	5.80	>ACCEPTABLE
120.0	1.947E+09	29318.	5.82	>ACCEPTABLE
125.0	1.953E+09	29415.	5.84	>ACCEPTABLE
130.0	1.955E+09	29442.	5.85	>ACCEPTABLE
135.0	1.959E+09	29497.	5.86	>ACCEPTABLE
140.0	1.958E+09	29484.	5.86	>ACCEPTABLE
145.0	1.955E+09	29436.	5.85	>ACCEPTABLE
150.0	1.956E+09	29451.	5.85	>ACCEPTABLE
155.0	1.959E+09	29505.	5.86	>ACCEPTABLE
160.0	1.962E+09	29556.	5.87	>ACCEPTABLE
165.0	1.968E+09	29636.	5.89	>ACCEPTABLE
170.0	1.973E+09	29708.	5.90	>ACCEPTABLE
175.0	1.977E+09	29780.	5.91	>ACCEPTABLE
180.0	1.980E+09	29824.	5.92	>ACCEPTABLE
185.0 190.0	1.979E+09 1.972E+09	29805. 29695.	5.92 5.90	>ACCEPTABLE >ACCEPTABLE
190.0	1.962E+09	29555.	5.87	>ACCEPTABLE
200.0	1.953E+09	29407.	5.84	>ACCEPTABLE
205.0	1.938E+09	29183.	5.80	>ACCEPTABLE
210.0	1.921E+09	28931.	5.75	>ACCEPTABLE
215.0	1.906E+09	28703.	5.71	>ACCEPTABLE
220.0	1.888E+09	28440.	5.66	>ACCEPTABLE
225.0	1.872E+09	28191.	5.61	>ACCEPTABLE
230.0	1.857E+09	27971.	5.57	>ACCEPTABLE
235.0	1.847E+09	27822.	5.54	>ACCEPTABLE
240.0	1.846E+09	27805.	5.54	>ACCEPTABLE
245.0	1.846E+09	27796.	5.53	>ACCEPTABLE
250.0	1.852E+09	27894.	5.55	>ACCEPTABLE
255.0	1.863E+09	28059.	5.58	>ACCEPTABLE
260.0	1.877E+09	28275.	5.63	>ACCEPTABLE
265.0	1.890E+09	28461.	5.66	>ACCEPTABLE
270.0	1.904E+09	28680.	5.70	>ACCEPTABLE
275.0	1.926E+09 1.948E+09	29011.	5.77	>ACCEPTABLE
280.0 285.0	1.948E+09 1.969E+09	29337. 29660.	5.83 5.89	>ACCEPTABLE >ACCEPTABLE
285.0	1.990E+09	29966.	5.95	>ACCEPTABLE
295.0	2.008E+09	30249.	6.00	>ACCEPTABLE
300.0	2.025E+09	30503.	605	>ACCEPTABLE
305.0	2.040E+09	30724.	6.09	>ACCEPTABLE
310.0	2.049E+09	30862.	6.12	>ACCEPTABLE



.

315.0	2.058E+09	30998.	6.15	>ACCEPTABLE
320.0	2.064E+09	31086.	6.16	>ACCEPTABLE
325.0	2.069E+09	31162.	6.18	>ACCEPTABLE
330.0	2.072E+09	31198.	6.18	>ACCEPTABLE
335.0	2.078E+09	31296.	6.20	>ACCEPTABLE
340.0	2.081E+09	31344.	6.21	>ACCEPTABLE
345.0	2.089E+09	31454.	6.23	>ACCEPTABLE
350.0	2.092E+09	31514.	6.24	>ACCEPTABLE
355.0	2.099E+09	31614.	6.26	>ACCEPTABLE
ACCEPTABLE!	MINIMUM SAFET	TY FACTOR =	5.53 AT	245.0 DEGREES.



Weld ID	Normal and Upset	Emergency and Faulte			
	(2.77 Required)	(1.39 Required)			
H1	17.16	8.40			
H2	13.95	7.05			
H3	4.81	2.30			
H4	4.51	2.24			
H6	9.63	5.53			

# Table 12 Limit Load Safety Factors

.



# ATTACHMENT 1

# WELD H1 INSPECTION RESULTS



Preliminary

2.10

691.15 1.92



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Shroud Weld H1 Indication Data (Lower Side)

Total Scan Length Examined (Deg.)	219.40	Thickness (in)
Total Scan Length Examined (in)	421.22	Circumference (in)
Percentage of Weld Length Examined	60.9%	Inches per Degree
Percentage of Examined Weld Length Flawed	Note <sup>a</sup>	
Percentage of Total Weld Length Flawed	Note <sup>3</sup>	
Total Flawed Length (Deg.)	Note <sup>3</sup>	
Total Flewed Length (in)	Note <sup>3</sup>	

Ind.	Start	End	Length	Length	Multiple	Depth	Depth	Percent	Side of	Initiating	Length	Depth
No.	Deg.	Deg.	Deg.	in	Scans	Max.in	Pas.Deg.	Thruwall	Weld <sup>2</sup>	Surface	Angle	Angle
			- · · · · ·								-	
1'	11.1*	12.8°	1.7	3.26	N	1.97	12.3°	15.0%	Lower	Inside	45s/80RL	60RL
2	12.9°	14.4°	1.5°	2.88	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
3'	11.1"	11.2	0.1°	0.19	N	<0.21	N/A	<10%	Lower	Outside	80RL	60RL
4	13.11	13.8°	0.7°	1.34	N	< 0.30	N/A	<14.3%	Lower	Outside	458	60RL
5	14.8	16.1"	1.3"	2.50	N	<0.30	N/A	<14.3%	Lower	Outside	459	60RL
6	16.3°	18.2°	1.9°	J.65	N	0.33	18.0*	15.7%	Lower	Outside	45s	60AL
7	19.0°	19.9°	0.9°	1.73	N	0.37	19.4"	17.6%	Lower	Outside	45s	60RL
8	20.5°	21.1°	0.6°	1.15	N	<0.30	N/A	<14.3%	Lower	Outside	45s	60AL
9	21.7	22.6°	0.91	1.73	N	<0.30	N/A	<14.3%	Lower	Outside	458	60RL
10	15.2°	16.2°	1.0"	1.92	N	0.44	15.6°	21.0%	Lower	Inside	45s	60AL
111	19.1	39.9°	20.8*	39.93	Y	0.45	21.5	21.4%	Lower	Inside	45s	60RL
12	24.8°	25.74	0.9°	1.73	N	0.30	25.4"	14.3%	Lower	Outside	45s	60RL
13	26.3	27.6°	1.3"	2.50	N	<0.30	N/A	<14.3%	Lower	Outside	45\$	60RL
14	34.3°	34.8°	0.5"	0.96	N	<0.30	N/A	<14.3%	Lower	Outsida	45s	60AL
15	55.5°	55.9°	0.4°	0.77	N	0.35	58.5°	16.7%	Lower	Outside	456	60RL
16	58.0°	59.1°	3.1°	5.95	N	0.32	58.5	15.2%	Lower	Outside	459	60RL
17	65.4°	67.9°	2.5	4.80	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
18	68.5	69.2°	0.7°	1.34	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
19	69.2°	70. <b>0</b> °	0.8°	1.54	N	<0.21	N/A	<10%	Lower	Inside	45s	60RL
20	72.2°	72.7°	0.5°	0.96	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
21	75.2	78.6	3.4°	6.53	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
22	76.5°	79.8°	3.3°	6.34	N	0.30	7 <b>9</b> .0°	14.3%	Lower	Outside	458	60AL
23	84.2°	84.7	0.5'	0.96	N	<0.21	N/A	<10%	Lower	Inside	45s	60RL
24	86.5	87.4°	0.91	1.73	N	<0.30	N/A	<14.3%	Lower	Outside	458	60RL
25	87.3°	88.2*	0.9°	1.73	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
26	87.6°	91.3°	3.7°	7.10	Y	0.35	88.3°	16.7%	Lower	Outside	45s	60RL
27	91.5	93.9°	2.4~	4.61	N	<0.21	N/A	<10%	Lower	Inside	456	60RL
28	92.8"	\$4.7°	1.9°	3.65	N	0.36	93.7°	17.1%	Lower	Outside	458	60RL
29	98.3°	99.1°	0.8	1.54	N	<0.30	N/A	<14.3%	Lower	Outside	45s	60RL
30	99.3*	100.7°	1.4°	2.69	N	0.37	100.1	17.5%	Lower	Outside	458	60RL
31	102.6°	103.6°	1.0*	1.92	N	<0.21	N/A	<10%	Lower	Inside	45s	60RL
32	101.8°	102.3	0.5°	0.96	N	<0.30	N/A	<14.3%	Lower	Outside	45s	60RL
33	104.0°	106.3°	2.3°	4.42	N	<0.30	N/A	<14.3%	Lower	Outside	458	60RL
34	107.6°	111.2	3.6	6.91	N	0.32	109.7°	15.2%	Lower	Outside	45s	60RL
35	111.3°	127.9	16.5°	31.87	Y	0.45	124.5°	21.4%	Lower	Outside	458	60RL
36	116.0°	120.1	4.1*	7.87	N	0.28	119.6*	13.3%	Lower	Inside	458	60RL
37	121.3°	121.8°	0.5°	0.96	N	<0.21	N/A	<10%	Lower	Inside	45s	60RL
38 '	128.6°	129.9*	1.3"	2.50	N	0.32	129.1*	15.2%	Lower	Outside	45s	60RL
39	199.4*	200.0°	0.6	1.15	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
40	206.0°	206.5*	0.5	0.98	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
41	206.61	208.5°	1.9°	3.65	N	<0.21	N/A	<10%	Lower	Insida	45s	60RL
42	215.3°	216.5°	1.21	2.30	N	<0.21	N/A	<10%	Lower	Inside	45s	60RL

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#### Shroud Weld H1 Indication Data (Lower Side)

43	239.0°	240.4°	1.4°	2.69	N	<0.21	N/A	<10%	Lower	Inside	458	60RL
44	244.3°	245.1°	0.8	1.54	N	0.34	244.8°	16.2%	Lower	Outside	45s	60RL
45	252.8°	253.3°	0.5°	0.96	N	<0.30	N/A	<14.3%	Lower	Outside	458	60RL
46	262.5°	264.5°	2.0°	3.84	N	0.32	264.0°	15.2%	Lower	Inside	458	60RL
47	278.1°	27 <del>9</del> .3°	1.2°	2.30	N	0.36	278.5°	17.1%	Lower	Inside	458	60RL
48	279.4°	280.3°	0.9°	1.73	N	0.42	279.8°	20.0%	Lower	Inside	45s	60RL
49	294.2°	<b>296.6</b> °	2.4°	4.61	N	0.37	295.5°	17.6%	Lower	Inside	458	60RL
50	297.4°	303.9°	<b>8.5°</b>	12.48	N	0.48	301.2°	22.9%	Lower	Inside	<b>45s</b>	60RL
51	295.1°	2 <b>97.7</b> °	2.6°	4.99	N	D.31	297.1°	14.8%	Lower	Outside	45s	60RL
52	298.4°	298.9°	0.5°	0.96	N	<0.30	N/A	<14.3%	Lower	Outside	458	60RL
53 <sup>1</sup>	305.5°	309.9°	4.4°	8.45	N	0.38	306.8°	18.1%	Lower	Inside	458	60RL

#### Indication Comments:

- <sup>1</sup> Flaw extends beyond scan area
- <sup>2</sup> In reference to the weld
- <sup>3</sup> ID and OD flaws overlap
- > Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as noted in inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..
- ^ In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30\*

Areas Not Examined (Azimuth References):						Total Degrees Not Examined By All Three Transducers
0.0	0°	to	12.00°	for	12.00°	Core Spray Downcomers, Guide Pin.
38.9	Ю°	to	51.10°	for	12.20*	LPCI Line
138.	<del>9</del> 0°	to	191.60°	for	52.70°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
218.	50°	to	231.00°	for	12.50°	LPCI Line
308.	80°	to	360.00°	for	51.20°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

#### Additional Comments:

BWRVIP-03 Shroud Demonstration 16, scan type 1

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## **ATTACHMENT 2**

## WELD H2 INSPECTION RESULTS

Structural Integrity Associates, Inc.



Exelon

Limerick - Unit 2 Shroud UT Project - MJD0R March 2005

Shroud Weld H2 Indication Data (Upper Side)

Total Scan Length Examined (Deg.)

# Preliminary

2.10

Thickness (in)

Tota	l Scan Li	angth Ex	amined (i	n)		421.22 Circumference (in)					691.15		
Perc	entage d	f Weld L	ength Exa	amined		60.9%			Inches p	er Degree		1.92	
Perc	entage d	f Examin	ned Weld	Length Fi	lawed	27.4%	27.4%						
Perc	entage d	f Total V	Yeld Leng	th Flawed	1	16.7%							
Total	l Flawed	Length (	'Deg.)			<b>80.20</b>							
Total	l Flawed	Length (	'in)			115.58							
ind.	Start	End	Length	Length	Multiple	Depth	Depth	Percent		Initiating	Length	Depth	
No.	Døg.	Deg.	Deg.	in	Scans	Max.in	Pos.Deg.	Thruwall	Weld <sup>2</sup>	Surface	Angle	Angle	
1	13.1°	13.9°	0.8°	1.54	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
2	14.7°	16.5°	1.8*	3.48	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
3	16.7°	20.7°	4.0°	7.68	N	0.42	17.4°	20.0%	Upper	Inside	45S	60RL	
4	23.8°	24.2°	0.6°	1.15	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
5	35.7	36.3°	0.6°	1.15	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
6	36.6°	37.2°	0.6	1.15	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
7	37.6°	38.7°	1.1°	2.11	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
8	50.1°	51.9°	1.8	3.46	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
9	52.3°	55.6°	3.3°	6.34	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
10	55.9°	57.0°	1.1°	2.11	N	<0.21	N/A	<10%	Upper	Inside	458	60RL	
11	66.2°	67. <b>3</b> °	1.1*	2.11	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
12	68.2°	70.5°	2.3°	4.42	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
13	7 <b>5.0</b> °	80.2°	5.2°	9.98	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
14	89.4°	89.9°	0.5°	0.96	N	<0.30	N/A	<14.3%	Upper	Outside	45S	60RL	
15	90.6*	91.1°	0.5°	0.96	N	<0.30	N/A	<14.3%	Upper	Outside	45S	60RL	
16	102.9°	106.2°	3.3°	6.34	N	<0.21	N/A	<10%	Upper	Inside	458	60AL	
17	126.8°	127.9°	1.1°	2.11	N	<0.21	N/A	<10%	Upper	Inside	45S	60AL	
18	191.3°	196.2°	4.9°	9.41	Y	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
19	197.8°	199.0°	1.2°	2.30	N	0.27	198.5°	12.9%	Upper	Inside	45\$	60RL	
20	201.7*	202.9°	1.2°	2.30	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
21	231.4°	234.5°	3.1	5.95	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
22	245.7°	252.8°	7.1°	13.63	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
23	253.9°	259.2°	5.3°	10.18	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
24	259.2°	260.6°	1.4°	2.69	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
25	261.4°	261.6°	0.2°	0.38	N	<0.30	N/A	<14.3%	Upper	Outside	45S	60RL	
26	279.8°	282.2°	2.6°	4.99	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
27	282.5°	284.4"	1.9*	3.65	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	
28	285.0°	286.6°	1.6°	3.07	N	<0.21	N/A	<10%	Upper	Inside	45S	60RL	

219.40

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Shroud Weld H2 Indication Data (Upper Side)

#### Indication Comments:

- <sup>1</sup> Flaw extends beyond scan area
- <sup>2</sup> In reference to the weld
- > Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as noted in inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..
- ^ In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30\*

#### Areas Not Examined (Azimuth References):

### 140.6° Total Degrees Not Examined By All Three Transducers

0.00°	to	12.00°	for	12.00°	Core Spray Downcomers, Guide Pin.
38.90°	to	51.10°	for	12.20°	LPCI Line
138.90°	to	191.60°	for	52.70°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
218.50°	to	231.00°	for	12.50°	LPCI Line
308.80°	to	360.00°	for	51.20°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

## Additional Comments:

BWRVIP-03 Shroud Demonstration 16, scan type 1

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Preliminary

Exelon Limerick - Unit 2 Shroud UT Project - MJDOR March 2005

## Shroud Weld H2 Indication Data (Lower Side)

		-	amined (l amined (i			77.5° 148.79			Thickne Circumf		2.75 <del>6</del> 91.15		
Total Scan Length Examined (in) Percentage of Weld Length Examined						21.5%			Inches p	1.92			
Perc	entage c	of Examil	ned Weld	Length F	lawod	0.0%							
Percentage of Total Weld Length Flawed						0.0%							
Tota	i Flawed	Length	(Deg.)			0.0°							
Total Flawed Length (in)						0.00							
Ind. No.	Start Deg.	End Deg.	Length Dea.	Length in	Multiple Scans	Depth Max.in	Depth Pos.Deg.	Percent Thruwall		Initiating Surface	Length Anale	Depth Angle	

None Detected

Areas Not Examined (A	zimuth	References	s):	282.5°	Total Degrees Not Examined By All Three Transducers					
0.00°	to	4.50°	for	4.50°	Core Spray Downcomers, Guide Pin.					
4.50°	to	37.00°	for	32.50°	Area Not Scanned					
37.00°	37.00° to 49.50° for				LPCI Line					
49.50°	to	127.00°	for	77, <b>50</b> °	Area Not Scanned					
127.00°	to	184.50°	for	57.50°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin					
184.50°	to	217.00°	for	32.50°	Area Not Scanned					
217.00°	to	229.50°	for	12.50°	LPCI Line					
307.00°	360.00"	for	53.00°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin						

#### Additional Comments:

BWRVIP-03 Shroud Demonstration # has not been published. Reference e-mail from Greg Selby regarding "Evaulation Factors for GE H2/H3 Technique" dated March 12, 2005.



## **ATTACHMENT 3**

## WELD H3 INSPECTION RESULTS





Exelon

Limerick - Unit 2 Shroud UT Project - MJDOR March 2005

Shroud Weld H3 Indication Data (Lower Side)

Total Scan Length Examined (Deg.)	229.6°
Total Scan Length Examined (in)	415.0
Percentage of Weld Length Examined	63.8%
Percentage of Examined Weld Length Flawed	79.2%
Percentage of Total Weld Length Flawed	50,5%
Total Flawed Length (Deg.)	181.8°
Total Flawed Length (in)	328.8

2.14

650.69

1.81

Thickness (in)

Circumference (in)

Inches per Degree

ind. No.	Start Deg.	End Deg.	Length Deg.	Length in	Multiple Scans	Depth Max.in	Depth Pos.Deg.	Percent Thruwall	Side of Weld *	Initiating Surface	Length Angle	Depth Angle
11	2.2°	3.8°	1.6°	2.89	N	0.35	3.1°	16,4%	Lower	Inside	45s/80RL	60RL
2	5.6°	6.9°	1.3°	2.35	N	0.24	6.0°	13.2%	Lower	Inside	45s	60RL
3'	9.2°	37.1°	27.9°	50.43	Y	0.61	21.5°	28.5%	Lower	Inside	45s	50RL
4	4.8°	13.3°	8.5°	15.36	N	0.32	12.9°	15.0%	Lower	Outside	455/80RL	60RL
5	18.3°	20.2°	1.9°	3.43	N	0.25	18.9°	11.7%	Lower	Outside	45s/80RL	60RL
6	20.6°	21.9°	1.3°	2.35	N	0.32	20.9°	15.0%	Lower	Outside	45s/80RL	60RL
7'	47,2°	58.8°	11.6°	20.97	Y	0.54	56.5°	25.2%	Lower	Inside	45s/80RL	60RL
8	59.8°	81.5°	21.7°	39.22	Y	0.39	64.4°	18.2%	Lower	Inside	458	60RL
9	62.0°	64.2°	2.2°	3.98	N	0.30	63.6°	14.0%	Lower	Outside	45s/80RL	60RL
10	67.0°	68.0°	1.0°	1.81	N	0.29	67.6°	13.6%	Lower	Outside	45s/80RL	60RL
11	70.6°	73.4°	2.8°	5.05	N	0.25	72.5°	11.7%	Lower	Outside	45s/80RL	60RL
12	74.2°	<b>76.7°</b>	2.5°	4.52	N	0.31	74.6°	14.5%	Lower	Outside	45s/80RL	60RL
13	79.4°	80.8°	1.4°	2.53	N	0.29	80.4°	13.6%	Lower	Outside	456/80RL	60RL
14	81.9°	83.0°	1.1°	1.99	N	<0.21	N/A	<10%	Lower	Inside	458	N/A
15	84.8°	89.0°	4.2°	7.59	N	0.27	88.4°	12.5%	Lower	Inside	45s	60RL
16	87.8°	<b>88.</b> 1°	0.3°	0.54	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
17	89.3°	90.2°	0.9°	1.63	Ņ	<0.21	N/A	<10%	Lower	inside	45s	N/A
18	90.5°	91.7°	1.2°	2.17	N	0.31	91.3°	14.5%	Lower	Inside	459	60RL
19	100.1*	101.5°	1.4°	2.53	N	0.29	100.7°	13.6%	Lower	Inside	45s	50 RL
20	101.7°	108.5°	<b>6.8°</b>	12.29	N	0.36	103.7°	16.8%	Lower	Inside	458	60RL
21	101.9°	102.8°	0.9°	1.63	N	0.26	102.4°	12,1%	Lower	Outside	45s/80RL	60RL
22	103.1°	104.3°	1.2°	2.17	N	<0.30	N/A	<14.6%	Lower	Outside	45s/80RL	N/A
23	105.9°	110.4°	4.5°	8.13	N	0.33	108.8°	15.4%	Lower	Outside	45s/80RL	60RL
24	109.1°	118.2°	9.1"	18.45	N	0.46	111. <b>4°</b>	21,5%	Lower	Inside	458	60RL
25	113.0°	113.9*	0.9°	1.63	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
26	114.2°	117.7°	3.5°	6.33	N	0.28	116.5°	13.1%	Lower	Outside	45s/80RL	60RL
27'	124.3°	127.1°	2.8*	5.06	N	0.24	126.6°	11.2%	Lower	Inside	45s	60RL
28	186.3°	187.4°	1.1°	1.99	N	<0.21	N/A	<10%	Lower	Inside	45s	N/A
29	187.8°	202.5°	14.7°	26.57	Y	0.38	196.5°	17.8%	Lower	Outside	45s/80RL	60RL
30	1 <b>93.6°</b>	1 <b>94</b> .9°	1.1°	1.99	N	<0.21	N/A	<10%	Lower	Inside	45s	N/A
31	196.7°	198.2°	1.5°	2.71	N	0.42	197.3°	19.6%	Lower	Inside	458	60RL
32	203.9°	206.0°	2.1°	3.90	N	<0.21	N/A	<10%	Lower	Inside	45s	N/A
33	208.4°	211.0°	2.6°	4.70	N	0.41	208.8°	19.2%	Lower	Inside	458	60RL
34	211.5°	215.1°	3.6°	6.51	N	0.26	214.5°	12.1%	Lower	Inside	458	60RL
35	212.2°	212.8°	0.6°	1.08	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80AL	N/A
36 '	214.5°	217.1°	2.6°	4.70	N	0.28	216.4°	13.1%	Lower	Outside	45s/80RL	60AL
37'	215.4°	217.1°	1.7°	3.07	N	0.32	216.2°	15.0%	Lower	Inside	458	60RL

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## Ms. Michelle Karasek SIR-05-249, Rev. 0/MLH-05-073



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## Shroud Weld H3 Indication Data (Lower Side), cont'd

Ind. No.	Start Deg.	End Deg.	Length Deg.	Length In	Multiple Scans	Depth Max.in	Depth Pos.Deg.	Percent Thruwali	Side of Weld *	initiating Surface	Length Angle	Depth Angle
38	229. <b>8</b> °	231.2°	1.4°	2.53	N	0.25	230:5°	11.7%	Lower	Inside	45 <del>s</del>	60RL
39	231.9°	2 <b>3</b> 3.3°	1.4°	2.53	N	0.34	232.7°	15.9%	Lower	Inside	458	60RL
40	229.0°	2 <b>48</b> .6°	19.6°	35.43	Y	0.39	243.7°	18.2%	Lower	Outside	45s/80RL	60RL
41	233.5°	240.1°	6.6°	11.93	N	0.47	239.1°	22.0%	Lower	Inside	458	60RL
42	243.5°	<b>249</b> .2°	5.7"	10.30	N	0.60	245.4°	28.0%	Lower	Inside	458	60RL
43	250.3°	252.2°	1.9°	3.43	N	0.44	251.5°	20.6%	Lower	Inside	458	60RL
44	249.2°	257.4°	8.2°	14.82	Y	0.30	253.5°	14.0%	Lower	Outside	45s/80RL	60RL
45	252.9°	254.0°	1.1°	1.39	N	0.33	253.2°	15.4%	Lower	inside	455	60RL
46	256.2°	258.8°	2.6°	4.70	N	0.32	256.7°	15.0%	Lower	inside	45s	60RL
47	257.6°	261.8°	4.2*	7.59	Y	0.31	258.1°	14.5%	Lower	Outside	45s/80RL	60RL
48	262.0°	262.9°	0.9°	1.63	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
49	263.2°	263.6°	0.4°	9.72	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
50	264.8°	266.2°	1.4°	2.53	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
51	266.3°	269.4°	3.1°	5.60	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
52	272.6°	273.6°	1.0*	1.81	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
53	274.0°	275.2°	1.2"	2.17	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
54	275.3°	277.7°	2.4	4.34	N	0.32	276.9°	15.0%	Lower	Outside	45s/80RL	60RL
55	279.4°	281.1°	1.7°	3.07	N	0.27	280.7°	12.6%	Lower	Outside	45s/80RL	60RL
56	278.6°	279.6°	1.0°	1.81	N	<0.21	N/A	<10%	Lower	Inside	4 <del>5s</del>	N/A
57	281.4°	286.0°	4.6°	8.31	· N	0.27	282.2°	12.6%	Lower	Outside	45s/80RL	60RL
<b>58</b>	285.4°	286.5°	1.1"	1.99	N	<0.21	N/A	<10%	Lower	Inside	458	N/A
59	290.3°	291.8°	1.5°	2.71	N	0.51	291.4°	23.8%	Lower	Inside	458	60RL
60	291.9°	294.6°	2.7°	4.88	N	0.28	293.7°	13.1%	Lower	Outside	45s/80RL	60RL
61	295.4°	298.4°	3.0°	5.42	N	0.54	296.4°	25.2%	Lower	Inside	45s	60RL
62	296.4°	298.4°	2.0°	3.61	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A
63	301.5°	302.5°	1,0°	1.81	N	<0.21	N/A	<10%	Lower	Inside	455	N/A
64	305.0°	306.4°	1.4°	2.53	N	<0.30	N/A	<14.0%	Lower	Outside	45s/80RL	N/A

Indication Comments:

- <sup>1</sup> Flaw extends beyond scan area
- \* In reference to the weld
- > Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as
- noted in Inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..

^ In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30"

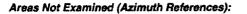
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Shroud Weld H3 Indication Data (Lower Side), cont'd



	to	2.2°	for	2.2°
37.1°	to	47.2°	for	10.1°
127.1°	to	182.2*	for	55.1°
217.1°	to	227.2°	for	10.1°
307.1°	to	360.0°	for	52.9°

130.4° Total Degrees Not Examined By At Least One Detection Angle

Core Spray Downcomers, Guide Pin.
LPCI Line
LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
LPCI Line
LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

Preliminary

#### Additional Comments:

BWRVIP-03 Shroud Demonstration 16, scan type 1



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Shroud Weld H3 Indication Data (Upper Side)

Total Scan Length Examined (Deg.) Total Scan Length Examined (in) Percentage of Weld Length Examined Percentage of Examined Weld Length Flawed Percentage of Total Weld Length Flawed Total Flawed Length (Deg.) Total Flawed Length (in)						77.50 140.08 21.5% 1.7% 0.4%				2.75 650.69 1.81		
						1.30 2.35						
Ind.	Start	End	Length	Length	Multiple	Depth	Depth	Percent		Initiating	Length	Depth
No.	Deg.	Deg.	Deg.	in	Scans	Max.in	Pos.Deg.	Thruwall		Surface	Angle	Angle
1	266.2°	266.8°	0.6°	1.08	N	0.12	266.5	4.4%	Upper	Outside	35s	35\$
2	272.6°	273.3°	0.7°	1.27	N	0.42	272.8	15.3%	Upper	Outside	35s	35s

Indication Comments:

Areas Not Examined (Azimuth References):

282.5" Total Degrees Not Examined

0.00°	to	4.50°	for	4.50°	Core Spray Downcomers, Guide Pin.
4.50°	to	37.00°	for	32.50"	Area Not Scanned
37.00°	to	49.50°	for	12.50°	LPCI Line
49.50°	to	127.00°	for	77.50°	Area Not Scanned
127.00°	to	184.50°	for	57.50°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
184.50°	to	217.00°	for	32.50*	Area Not Scanned
217.00°	to	229.50°	for	12.50°	LPCI Line
307.00°	to	360.00°	for	53.00°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

Additional Comments:

BWRVIP-03 Shroud Demonstration # has not been published, reference letter ?????

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Preliminary



## **ATTACHEMENT 4**

## WELD H4 INSPECTION RESULTS





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Shroud Weld H4 Indication Data (Lower Side)

Total Scan Length Examined (Deg.)	228.80	Thickness (in)	2.14
Total Scan Longth Examined (in)	409.67	Circumference (in)	650.69
Percentage of Weld Length Examined	62.9%	Inches per Degree	1.81
Percentage of Examined Weld Length Flawed	27.3%		
Percentage of Total Weld Length Flawed	17.2%		
Total Flawed Length (Deg.)	81.9*		
Total Flawed Longth (in)	111.88		

ind. No.	Start Deg.	End Deg.	Length Deg.	Length in	Muläpie Scans	Depth Max.in	Depth Pos.Deg.	Percent Thruwall	Side of Weld *	initiating Surface	Length Angle	Depth Angle
1	10.8°	11.4°	Ø.5°	0.90	N/A	N/A	N/A	NA	Lower	Outside	45s/80RL	N/A
2	50.1°	51.8°	1.7°	3.07	N/A	N/A	N/A	N/A	Lower	Outside	455/80Ři.	NA
3	53.4°	59.1°	5.7*	10.30	N	0.48	57.80	21.4%	Lower	Outside	45s/80RL	60 RL
4	64.3°	69.3°	5.0°	9.04	N	0.38	66.60	17.7%	Lower	Outside	45s/80RL	<b>50 RL</b>
5	73.4°	76.0°	2.6°	4.70	N	0.47	75.40	21.9%	Lower	Outside	45\$/80RL	60 RL
6	76.1°	83.2°	7.1°	12.83	N	0.34	80.70	15.8%	Lower	Outside	45s/80RL	60 RL
7	83.3°	88.1°	4.8"	8.58	N	0.34	85.60	15.8%	Lower	Outside	45s/80RL	60 RL
8	88.2°	90.9°	2.7°	4.88	N	<0.30	89.30	<14%	Lower	Outside	45s/80RL	60 RL
9	99.7°	109.6°	9.9°	17.89	N	0.44	106.40	20.5%	Lower	Outside	45s/80RL	60 RL
10	112.6*	113.0°	0.4*	0.72	N	<0.30	113.00	<14%	Lower	Outside	455/80RL	60 RL
11	113.1*	118.3°	5.2°	8.40	N	0.32	118.10	14.9%	Lower	Outside	45s/80RL	60 RL
12	118.4°	128.4°	10.0°	18.07	N	0.39	123.40	38.2%	Lower	Outside	45#/80RL	60 RL
13	185.1°	186.6°	1.5°	2.71	N	0.33	186.10°	18.4%	Lower	Outside	45s/80RL	60 RL
14	268,9*	269.9°	1.0°	1.81	N/A	NIA	N/A	N/A	Lower	Outside	451/80RL	N/A
15	284.7°	286.9°	2.20	3.98	N	0.26	285.80	12.1%	Lower	Outside	45s/80RL	60 RL
16	291.2*	292.8°	1.8°	2.89	N	0.33	291.60	15.4%	Lower	Outside	45s/80RL	60 RL

#### Indication Comments:

<sup>1</sup> Flaw extends beyond acan area

\* In reference to the weld

- > Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as
- noted in inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..

^ In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30"

Areas Not Examined (Azimuth References):

#### 133.4° Total Degrees Not Examined By At Least One Detection Angle

Preliminary

0.0*	to	5.1°	for	5.1°	Core Spray Downcomers, Guide Pin.
38.3°	to	39.9*	for	1.6*	No Contact
39.9°	to	50.1*	for	10.2°	LPCI Line
129.9*	to	185.1°	for	55.2°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
219.9°	to	230.1°	for	10.2°	LPCI Line
308.9*	to	360.0°	for	61.1°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

Additional Comments:

BWRVIP-03 Shroud Demonstration 16, scan type 1

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Shroud Weid H4 Indication Data (Upper Side)

Total Scan Length Examined (Deg.) Total Scan Length Examined (In) Percentage of Weld Length Examined Percentage of Examined Weld Length Flawed Percentage of Total Weld Length Flawed Total Flawed Length (Deg.)	216.30 391.88 60.2% 47.7% 28.7% 160.7° 182.01	Thickness (in) Circumference (in) inches per Degree	2.14 650.69 1.81
Total Flawed Length (In)	182.01		

Preliminary

ind. No.	Start Deg.	End Deg.	Length Deg.	Length in	Muttiple Scans	Depth Max.In	Depth Pos.Deg.	Percent Thruwali	Side of Weld *	initiating Surface	Length Angle	Depth Angle
1'	6.1°	5.4°	0.3°	0.84	N	N/A	N/A	N/A	Upper	Outside	465/20RL	N/A
2	6.5°	10.6°	4.10	7.41	N	N/A	N/A	NA	Upper	Outside	45±/80RL	N/A
3	11.3°	15.5°	4.2*	7.69	N	N/A	₩/A	N/A	Upper	Outside	48s/80RL	N/A
4	16.1°	17.1°	1.0°	1.B1	N	N/A	N/A	N/A	Upper	Outside	45s/80RL	N/A
б.	20.3°	21.70	1.4°	2.63	N	NIA	NA	NA	Upper	inside	46s	N/A.
đ	23.7°	28.5°	4.8"	8,68	N	N/A	N⁄A	N/A	Upper	Inside	455	N/A
7	29.6°	32.1°	2.5°	4.52	N	N/A	N/A	N/A	Upper	Inside	465	N/A
8	22.6°	26.4°	3.8"	\$,87	N	N/A	N/A	N/A	Upper	Outside	45s/80RL	NA
<b>9</b> 1	35.2°	38.9*	1.7°	3.07	N	N/A	N/A	N/A	Upper	Inside	46s	N/A
10	63.1*	63.9°	0.80	1.45	N	<0.30	53.40°	<14%	Upper	Outside	45s/80RL	60 RL
11	54.2°	55.2°	1.0*	1.81	N	<0.30	64.70°	<14%	Upper	Outside	45s/80RL	60 RL
12	57.4°	57.9°	0.ð°	0,90	N	<0.30	57.40°	<14%	Upper	Outside	45=	60 RL
13	60.9°	71.0°	10.1°	18.25	N	0.47	62.90°	21.9%	Upper	Outside	45s/20RL	60 RL.
14	74.7°	76.8°	2.1*	3.80	N	0.45	75.80°	21.0%	Upper	Outside	465/80RL	60 RL
15	80.2°	81.8°	1.6°	2.89	N	<0.30	80.60°	<14%	Upper	Outside	45s/80RL	60 RL
15	87.0°	88.1°	1.1"	1.99	N	<0.30	87.30"	<14%	Upper	Outside	48s/80RL	80 RJ.
17	28.5°	89.8*	1.3*	2.35	N	0.34	88.70°	18.8%	Upper	Outside	45s/20Rt.	60 RL
18	90.8°	91.7°	0.9*	1.63	N	<0.30	91.10°	<14%	Upper	Outside	45s/20RL	60 RL
19	91.9°	53.1°	1.2"	2.17	N	0.32	92.50°	14.9%	Upper	Outside	45s/80RL	60 RL
20	94.6°	96.5°	3.9°	7.96	N	<0.30	98.40°	<14%	Upper	Outside	45s/\$0RL	60 RL
21	103.2°	103.8°	0.6°	1.08	N	<0.30	103.39°	<14%	Upper	Outside	45s/80RL	60 RL
22	105.1°	108.1°	3.0°	5.42	N	<0.30	106.30°	<14%	Upper	Outside	45±/80RL	60 RL
23	108.3*	108.7°	0.4"	0.72	N	0.61	108.30°	23.8%	Upper	Outside	45s/80RL	60 RL
24'	129.2°	129.8°	0.8°	1.08	N	N/A	NA	NA	Upper	Outside	45s/80RL	N/A
25 '	186.1°	185.4°	Ø.3°	0.54	N	N/A	N/A	N/A	Upper	Outside	46s/80RL	NA
26	186.6°	198.9°	13.4"	24.27	N	N/A	N/A	N/A	Upper	Outside	45s/80RL	N/A
27	205.3°	211.0°	8.7°	10.30	N	N/A	N/A	N/A	Upper	Outside	461/80RL	NVA
28 1	230.1*	232.6°	2.5°	4.52	N	N/A	N/A	N/A	Upper	Outside	45s/20RL	NA
29	235.9°	240.8*	4.8°	8.31	N	N/A	N/A	N/A	Upper	Outside	465/80RL	NA
30	243.8°	246.3°	2.5°	4.52	N	N/A	N/A	NA	Upper	Outside	45s/80RL	N/A
31	247.3"	249.0*	1.7*	3.07	N	N/A	N/A	N/A	Upper	Outside	46s/80RL	NA
32	252.8°	269.3°		11.78	N	N/A	N/A	N/A	Upper	Outside	46s/80RL	NA
33	269.7°	261.6°		3.28	N	N/A	N/A	N/A	Upper	Outside	451/80RL	N/A
34	262.0°	263.1°		1.99	N	N/A	N/A	N/A	Upper	Outside	46s/80RL	NA
36	266.4°	267.3°		1.53	N	N/A	N/A	N/A	Upper	Outside	45s/80RL	NA
36	267.8*	268.3°	6. <b>5</b> °	0.90	N	N/A	N/A	N/A	Upper	Outside	465/80RL	N/A N/A
37	289.1°	270.1°	1.0*	1.81	N	NA	N/A	NYA	Upper	Outside Outside	466/80RL 455/80RL	NA NA
38	276.6°	277.4°		1.45	N	N/A	N/A	N/A	Upper	Outside	465/80RL	N/A N/A
39	278.7°	283.8°		9.22	N	N/A	N/A	N/A	Upper	Outside	465/80RL	N/A
40	286.7°	287.3°	0.8*	1.08	N	N/A	N/A	N/A	Upper	Outside	465/80RL	NA
41	291.6°	293.1*		2.71	N	N/A	N/A	N/A N/A	Upper	Outside	451/80RL	N/A
42	297.5°	298.3°		1.46	N	N/A	N/A		Upper	Outside	485/80RL	NA
43	298.3*	301.0°	1.7"	3.07	N	N/A	N/A	N/A	Upper	CREMOR	-03/001(1,	I W PA

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Preliminary

Exelon Limerick - Unit 2 Shroud UT Project – MJDOR March 2005

Shroud Weld H4 Indication Data (Upper Side)

### Indication Comments:

- <sup>1</sup> Flaw extends beyond scan area
- \* In reference to the weld

Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as noted in inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..

A In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30"

#### Areas Not Examined (Azimuth References):

#### 143.2° Total Degrees Not Examined By All Three Transducers

0.0°	to	5.1°	for	5.1°	Core Spray Downcomers, Guide Pin.
39.9°	to	50.1°	for	10.2°	LPCI Line
121.0°	to	123,5°	for	2.5°	Missed
129.9°	to	186.1*	for	66.2°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
211.0°	to	219.9°	for	\$.8°	No Contact
219.9°	to	230,1*	for	10.2°	LPCI Line
308.9*	to	360.0°	for	51.1°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

#### Additional Comments:

BWRVIP-03 Shroud Demonstration 16, scan type 1

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Ms. Michelle Karasek SIR-05-249, Rev. 0/MLH-05-073

## **ATTACHMENT 5**

## WELD H6 INSPECTION RESULTS





Exelon

Limerick - Unit 2 Shroud UT Project - MJDOR March 2005

Shroud Weld H6 Indication Data (Lower Side)

Total Scan Length Examined (Deg.)	229.2°
Total Scan Length Examined (in)	401.5
Percentage of Weld Length Examined	63.7%
Percentage of Examined Weld Length Flawed	58.6%
Percentage of Total Weld Length Flawed	37.3%
Total Flawed Length (Deg.)	134.4*
Total Flawed Length (in)	235.5



2.14

630.68

1.75168

Thickness (in)

Circumference (in)

Inches per Degree

Ind. No.	Start Deg.	End Deg.	Length	Length in	Multiple Scans	Depth Max.in	Depth Pos.Deg.	Percent Thruwall	Side of Weld *	Initiating	Length	Depth
NO.	Deg.	veg.	Deg.		Scans	MAX.111	Pos.Deg.	Inruwaii	waia -	Surface	Angle	Angle
1'	6.1°	13.4°	7.3°	12.79	N	<0.21	N/A	<10%	Lower	Inside	45s	
2	13.2°	15.1°	1.9°	3.33	N	<0.21	N/A	<10%	Lower	Inside	45s	
3	15.2°	20.3°	5.1°	8.93	N	<0.21	N/A	<10%	Lower	Inside	458	
4	22.3°	25.7°	3.4°	5.98	N	<0.21	N/A	<10%	Lower	Inside	458	
51	25.8°	39.9°	14.1*	24.70	Y	<0.21	N/A	<10%	Lower	Inside	45s	
6	50.7°	54.0°	3.3°	5.78	N	<0.21	N/A	<10%	Lower	Inside	45s	
7	54.1°	55.4°	1.3°	2.28	N	<0.21	N/A	<10%	Lower	Inside	45s	
8	56.1°	59.2°	3.1°	5.43	N	0.23	57.1"	10.7%	Lower	Inside	45s	
9	59.3°	60.4°	1.1°	1.93	N	<0.21	N/A	<10%	Lower	Inside	45s	
10	61.1°	64.2°	3.1°	5.43	N	<0.21	N/A	<10%	Lower	Inside	45s	
11	66.9°	69.5°	2.6°	4.55	N	0.28	67.7°	13.1%	Lower	Inside	455	
12	71.0°	73.4°	2.4°	4.20	N	<0.21	N/A	<10%	Lower	Inside	456	
13	74.2°	77.2°	3.0°	5.26	Y	0.24	76.5°	11.2%	Lower	Inside	455	
14	77.5°	78.4°	0.9°	1.58	N	<0.21	N/A	<10%	Lower	Inside	45s	
15	79.0°	81.5°	2.5	4.38	N	<0.21	N/A	<10%	Lower	Inside	45s	
16	84.1°	88.3°	4.2°	7.36	N	<0.21	N/A	<10%	Lower	Inside	458	
17	88.3°	90.2°	1.9°	3.33	N	<0.21	N/A	<10%	Lower	Inside	45s	
18	93.0°	96.0°	3.0°	5.26	N	<0.21	N/A	<10%	Lower	Inside	45s	
19	97.0°	99.1°	2.1°	3.68	N	0.24	97.4°	11.2%	Lower	Inside	458	
20	99.9°	101.8°	1.9°	3.33	N	<0.21	N/A	<10%	Lower	Inside	45s	
21	102.4°	105.9°	3.5°	8.13	N	<0.21	N/A	<10%	Lower	Inside	456	
22	108.1°	111.2°	5.1°	8.93	N	<0.21	N/A	<10%	Lower	Inside	45s	
23	111.3°	112.3°	t.0°	1.75	N	<0.21	N/A	<10%	Lower	Inside	458	
24	112.6°	119.3°	6.7°	11.74	N	<0.21	N/A	<10%	Lower	Inside	458	
25	119.5°	126.4°	6.9°	12.09	Y	<0.21	N/A	<10%	Lower	Inside	45s	
26 '	128.4*	129.9°	1.5°	2.63	N	<0.21	N/A	<10%	Lower	Inside	45s	
27	188.9°	190.8*	1.9°	3.33	N	<0.21	N/A	<10%	Lower	Inside	45s	
28	191.7"	194.2°	2.5°	4.38	N	0.24	193.1°	11.2%	Lower	Inside	45s	
29	205.1°	205.8°	0.7°	1.23	N	<0.21	N/A	<10%	Lower	Inside	45s	
30	210.5°	216.0°	5.5°	9.64	N	<0.21	N/A	<10%	Lower	Inside	45s	
31 '	216.5°	219.2°	2.7°	4.73	N	<0.21	N/A	<10%	Lower	Inside	45s	
32	232.6°	234.7°	2.1	3.66	N	<0.21	N/A	<10%	Lower	Inside	455	
33	240.9°	242.0°	1.1°	1.93	N	<0.21	N/A	<10%	Lower	Inside	45s	
34	243.6°	245.2°	1.6*	2.80	N	<0.21	N/A	<10%	Lower	Inside	45s	
35	257.9°	260.6°	2.7°	4.73	N	<0.21	N/A	<10%	Lower	Inside	45s	
36	279.6°	289.7°	10.1°	17.69	Y	<0.21	N/A	<10%	Lower	Inside	45s	
37	291.4°	293.6°	2.2°	3.85	N	<0.21	NA	<10%	Lower	Inside	45s	

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Preliminary

Exelon Limerick - Unit 2 Shroud UT Project -- MJDOR March 2005

#### Shroud Weld H6 Indication Data (Lower Side), cont'd

Ind. No.	Start Deg.	End D <del>eg</del> .	Length Deg.	Length in	•	•	Depth Pos.Deg.			Initiating Surface	Length Angle	Depth Angle
38	297.0°	<b>299</b> .3°	2.3°	4.03	N	0.23	279.9"	10.7%	Lower	Inside	453	
39	302.0°	303.9°	1.9°	3.33	N	<0.21	N/A	<10%	Lower	Inside	458	
40	304.5°	308.7°	4.2°	7.36	Ŷ	<0.21	N/A	<10%	Lower	Inside	45s	

#### Indication Comments:

- <sup>1</sup> Flaw extends beyond scan area
- \* In reference to the weld
- Indication depth is measured from initiation surface, either I.D. or O.D., as applicable. Indication length as noted in inches refers to O.D. measurements, regardless of whether the indication is I.D. or O.D..

In the absence of 60° RL and 45° shear wave flaw tip data, the following shall apply. For inside surface-connected flaws, document the flaw as less than 10% through-wall. For outside surface-connected flaws, document the through-wall dimension as the bounding capability of the 60° RL primary beam in relation to the location of the flaw. Typically, this dimension is 0.30"

Areas Not Examined (Azimuth References):

130.8° Total Degrees Not Examined By At Least One Detection Angle

0.0°	to	5.1°	for	5.1*	Core Spray Downcomers, Guide Pin.
39.9°	to	50.1°	for	10.2°	LPCI Line
129.9°	to	185.1°	for	55.2°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin
219.9°	to	230.1°	for	10.2°	LPCI Line
309.9°	to	360.0°	for	50.1°	LPCI Line, Lifting Lug, CS Downcomers, Guide Pin

Additional Comments:

BWRVIP-03, 4.4.18 Shroud Demonstration 16, scan type 1

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## Section 3: Summary of ASME Section XI Repairs and Replacements

## SYSTEM-011 EMERGENCY SERVICE WATER (UNIT 2)

R0926676	011-2009, Replaced 6" Check valve hinge pin & hinge pin plug.	
	Repaired stuffing box in accordance with Exelon ECR 07-00127.	
C0217406	011-2025D, Replaced 2" gate valve bonnet-disc assembly.	
C0210296	011-2026C, Replaced 2" valve and adjacent piping.	
C0210297	011-2026E, Replaced 2" valve and adjacent piping.	
C0212760	HV-011-201D, Replaced 2" globe valve and adjacent piping.	
C0215130	HV-011-201H, Replaced 2" globe valve and adjacent piping.	
C0212980	HBC-239-3 and HBC-248-4, A-Loop ESW pipe replacement.	
C0211783	HBC-239-1 and HBC-248-2, B-Loop ESW pipe replacement.	
C0219418	HBC-245-2, Three inch ESW HBC-245-2 pipe replacement.	
C0219572	SP-HBC-250-E10, Replaced 2" and 3" ESW piping.	

## SYSTEM-041 MAIN STEAM ISOLATION VALVES (UNIT 2)

C0217646	HV-041-2F022A, Replaced HCC-232 instrument gas piping	
C0217647	HV-041-2F022B, Replaced HCC-232 instrument gas piping	·
C0217648	HV-041-2F022C, Replaced HCC-232 instrument gas piping	
C0217649	HV-041-2F022D, Replaced HCC-232 instrument gas piping	

## SYSTEM-041 MAIN STEAM RELIEF VALVES (UNIT 2)

C0213363	PSV-041-2F013B, Replaced MSRV body S/N 175 and pilot S/N 21 with reworked body S/N
	174 and pilot S/N 27
R0930463	PSV-041-2F013C, Replaced MSRV body S/N 150 and pilot S/N 022 with reworked body
	S/N 158 and pilot S/N 006
R0997010	PSV-041-2F013D, Replaced MSRV body S/N 166 and pilot S/N 001 with reworked body
	S/N 164 and pilot S/N 031
C0213291	PSV-041-2F013K, Replaced MSRV body S/N 148 and pilot S/N 020 with reworked body S/N
	171 and pilot S/N 014
C0215202	PSV-041-2F013K, Replaced MSRV body S/N 171 and pilot S/N 014 with reworked body S/N
	176 and pilot S/N 029
R0998259	PSV-041-2F013L, Replaced MSRV body S/N 161 and pilot S/N 002 with reworked body S/N
	186 and pilot S/N 044
C0213935	PSV-041-2F013S, Replaced MSRV body S/N 165 and pilot S/N 041 with reworked body S/N
	190 and pilot S/N 017

## SYSTEM-043 REACTOR RECIRCULATION (UNIT 2)

R0870403	2B-P201, Replaced Reactor Recirculation Pump mechanical seal
C0218209	043-2F030 and 043-2F032, Replaced 2" DCA-213 & HBB-243 valves & piping

## SYSTEM-044 REACTOR WATER CLEAN-UP (UNIT 2)

C0217934	044-2029, Replaced 4" globe valve disc.	
C0217939	044-2063, Replaced 4" check valve disc in accordance with ECR 05-00309.	
C0220684	HV-C-044-2F033, Replaced 4" globe valve inner valve	
R0722844	DCD-211, Replaced PSV-044-206A inlet piping	

## SYSTEM-047 CONTROL ROD DRIVES (UNIT 2)

C0210966	XV-047-2F181, Replaced 2" globe valve plug
R0997991	CRD Exchange- core locations- 10-23, 10-35, 18-19, 22-31, 26-11, 26-15, 26-35 (Drive and Piston Tube), 30-11, 30-19, 30-23, 30-27, 30-31, 30-47, 34-23, 34-27, 38-31 (Drive and Piston Tube), 42-55 (Drive and Piston Tube), 54-19, and 58-31

## SYSTEM-048 STAND-BY LIQUID CONTROL (UNIT 2)

R0870948	XV-048-2F004B, Replaced primer chamber and inlet fitting on SLC explosive valve
R1032702	XV-048-2F004B, Replaced primer chamber and inlet fitting on SLC explosive valve
R0927395	XV-048-2F004C, Replaced primer chamber and inlet fitting on SLC explosive valve

## SYSTEM-049 RCIC PUMP & TURBINE (UNIT 2)

C0220583 049-2F014 Replaced 6" check valve disc

## SYSTEM-051 RESIDUAL HEAT REMOVAL (UNIT 2)

C0218633	HV-051-2F014B, Replace 20" gate valve wedge & wedge guides
C0211739, C0211839, C0213102	HV-051-2F016B, Replaced 16" RHR gate valve and adjacent piping
C0202517, C0220366	HV-051-2F050B, Replaced 12" Check valve and adjacent pipe stubs ECR 00-01118
R0896043	2B-E205, Replaced RHR heat exchanger channel cover studs & nuts

## SYSTEM-052 CORE SPRAY (UNIT 2)

C0218821	052-2F030A, Replaced 2" check valve and adjacent pipe
C0220827	PSV-052-2F012B, Replaced relief valve and adjacent piping

## SYSTEM-055 HPCI (UNIT 2)

R0929172	PSE-056-2D003, Replaced HPCI rupture disc
R0929171	PSE-056-2D004, Replaced HPCI rupture disc

## SYSTEM-092 DIESEL GENENATORS (UNIT 2)

C0212070	2A-E506, Replaced diesel generator lube oil heat exchanger water box channels and flange bolting
C0212058	2A-E507, Replaced diesel generator jacket water heat exchanger water box channels and flange bolting – ECR 00-01284 & 05-00052
C0210185	2B-E507, Replaced diesel generator jacket water heat exchanger water box channels and flange bolting.
C0207821	2C-E507, Replaced diesel generator jacket water heat exchanger water box channels and flange bolting.
C0214290	2C-E586, Replaced diesel generator intercooler stationary water box channel and flange bolting.
C0205396	2D-E506, Replaced diesel generator lube oil heat exchanger water box channels and flange

	bolting
1	2D-E507, Replaced diesel generator jacket water heat exchanger water box channels and flange bolting
C0216865, C0207265	2D-P535, Replaced diesel generator lube oil circulation pump

## SYSTEM-103 SNUBBERS (UNIT 2)

A1564990	GBD-203 and XRE-2XH, Replaced mechanical shock arrester snubbers
A1607628	STG-2MS-H004 and H007, Replaced mechanical shock arrester snubber
C0218420	EBB-206-H006(B), Replaced mechanical shock arrester snubber
C0220641	DCA-418-H004, Replaced mechanical shock arrester snubber
R0987072, C0220666	STG-2MS-H010, Replaced mechanical shock arrester snubber with a hydraulic snubber.

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## ISI Summary Report Limerick Generating Station Unit 2 Refueling Outage: 2R09 Commercial Service Date: January 8, 1990

Examination Dates March 19, 2005 to April 4, 2007

## Book 2 of 2

## Form NIS-2 Owner's Reports for Repairs and Replacements

_				
1.	Owner _	Exelon Generation Company, LLC	Date March	30, 2007
	-	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	.2
2.	Plant	Limerick Generating Station Name	Unit	2
	_	3146 Sanatoga Road, Pottstown PA 19464 Address		r # R0926676 P.O. No., Job No. etc.
3.	Work Pe	erformed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp	N/A N/A
	_	3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identifica	ation of System : Emergency Service Water (System-011)	Line No. HBC-243	Valve 011-2009

5. (a) Applicable Construction Code <u>ASME III</u> <u>19 71</u> Edition, <u>Summer 1971</u> Addenda, <u>1516, 1567 and 1622</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: <u>2001 edition with addenda through 2003</u>.
(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Valve Hinge Pin Plug	Flowserve	Heat Code 57543	N/A	* 114-77343 PO# 257797- 333	N/A	Replacement	No
Valve Hinge Pin	Flowserve	Heat Code Q2083-G10 TR No.20401	N/A	* 114-77342 PO# 257797- 348162	N/A	Replacement	No
Valve Stuffing Box	Anchor / Darling	Heat No. 630931 (existing)	N/A	N/A, existing part	N/A	Repaired	No
Valve Stuffing Box Spacer	Flowserve	Heat Code G3616 TR No.21407	N/A	* 114-77312 PO# 257797- 442	N/A	Replacement	No
	L						

\* Traceability per Exelon part code number.

7. Description of Work : Replaced 6" valve hinge pin and hinge plug. Repaired existing stuffing box.

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure Other Pressure 112 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

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This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

Work Order# R0926676 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Valve stuffing box repaired in accordance with Exelon design change ECR 07-00127</u>. Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPL	IANCE
We certify that the stateme ASME Code, Section XI Type Code Symbol Stamp	nts made in the report are correct and this	<u>repair and replacement</u> conforms to the rules of the
Certificate of Authorization No.	NA	Expiration Date NA
Signed <u>Gome V. R</u> Owner or Own	J.H. Kramer, site weld administrato her's Designee, Title	r Date <u>March 30</u> , <u>2007</u>

#### **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 \_and employed by\_ or Province of\_\_\_ Pennsylvania HSBCT of have inspected the components described Hartford, CT \_, and state that in this Owner's Report during the period 31 JUL 06 to 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 PA-2497 I,N & A, C National Board, State, Province, and Endorsements 18 MAY 2007 Date

(12/82)

1.	Owner	Exelon Generation Company, LLC Name	DateJa	nuary 23, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant _	Limerick Generating Station Name	Unit	2
	_	3146 Sanatoga Road, Pottstown, PA 19464 Address		der # C0217406 on P.O. No., Job No. etc.
3.	Work Po	erformed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4.	Identific	ation of System : <u>Emergency Service Water (System-011)</u>	Line No. HBC-241	Valve 011-2025D
5.	(b) Ap	plicable Construction Code <u>ASME III</u> 1974 Edition pplicable Edition of Section XI Utilized for Repairs or Replacements pplicable Section XI Code Case(s) <u>N/A</u>		ldenda, <u>N/A</u> Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve 011-2025D Bonnet-Disc Assembly	Vogt Valve company	2-217462	N/A	* 114-77680 PO# 162759	1998	Replacement	Yes
t Trocochility on							

\* Traceability per Exelon part code number.

7. Description of Work Replaced 2" gate valve bonnet-disc assembly.

8.	Tests conducted:	Hydrostatic	Pneuma	atic 🗆	Nominal Operating	Pressure	
		Other	Pressure _	112 PSI	Test Temp.	N/A	°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

Work Order# C0217406 Sheet 2 of 2

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## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

The bonnet-disc assembly was removed from complete valve S/N 2-217462.

	CERTIFICATE OF COM	PLIANCE		·
We certify that the stateme ASME Code, Section XI Type Code Symbol Stamp	nts made in the report are correct and	this <u>replacement</u> (repair or replacem	conforms to the rules of the ent)	
Certificate of Authorization No	NA		_ Expiration Date	NA
Signed <u>James H. K.</u> Owner or Own	J.H. Kramer, Site W	eld Administrator Date	January 23 , 2007	

CERTIFICATE OF INSERVICE INSPECTION								
or Province of	I, holding a valid commission <u>Pennsylvania</u> and e Hartford, CT	mployed by	HSBCT	have inspected the compone	of ents described			
	eport during the period knowledge and belief, the Ow			30 JAN 07				
By signing this c examinations and	accordance with the requiren certificate neither the Inspecto corrective measures describe ny manner for any personal ir	or nor his employer make ed in this Owner's Repor	es any warran t. Furthermore	, neither the Inspector nor his	s employer			
1 aul	pector's Signature	Commissions		PA-2497 I,N & A, C ard, State, Province, and Enc	dorsements			
Date	30 JAN 20 07	_						

(12/82)

1. Owner	Exelon Generation Company, LLC Name	DateJu	uly 5, 2006
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2. Plant	Limerick Generating Station Name	Unit	2
	3146 Sanatoga Road , Pottstown, PA 19464 Address		ler # C0210296 n P.O. No., Job No. etc.
3. Work I	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp _ Authorization No	
	3146 Sanatoga Road, Pottstown, PA 19464	Expiration Date	N/A
4. Identifi	Address ication of System : <u>Emergency Service Water (System-011)</u>	Line No. HBC-250	Valve 011-2026C
	pplicable Construction Code <u>ASME III</u> 1974 Edit		enda, <u>N/A</u> Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

(c) Applicable Section XI Code Case(s) N-416-

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve 011-2026C	Flowserve	16 BBX	N/A	* 114-99233 PO# 257797- 308	2005	Replacement	Yes
(2) Feet 2" NPS Pipe	Michigan Seamless Tube	Heat No. 1M35684	N/A	* 114-90045 PO# 009825- 001780	N/A	Replacement	No
(1) 2" NPS 150# Raised Face Flange	Western Forge & Flange Co.	Heat No. 3M40774 Lot No. 8689	· N/A	* 114-90527 PO# 009825- 001847	N/A	Replacement	No
(1) 2" NPS 90 Degree Elbow	Bonney Forge	Lot No. 76150	N/A	*114-90818 PO# 009825- 001917	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work <u>Replaced 2" globe valve and adjacent piping.</u>

8. Tests conducted: Hydrostatic ↔ Pneumatic → Nominal Operating Pressure ■ Other \_\_\_\_ Pressure \_\_\_\_15 PSI \_\_\_ Test Temp. \_\_\_N/A \_\_\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

Work Order# C0210296 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Valve 011-2026C constructed in accordance with ASME III, 1974 edition, Summer 1975 addenda.

CERTIFICATE OF COMPL	IANCE
We certify that the statements made in the report are correct and this ASME Code, Section XI Type Code Symbol StampNA	replacement conforms to the rules of the (repair or replacement)
Certificate of Authorization NoNA	Expiration Date NA
Signed J.H. Kramer, Site Weld A Owner or Owner's Designee, Title	Administrator Date July 5, 2006

	C	ERTIFICATE OF INSE	RVICE INSPECTIO	N	
	Pennsylvaniaar	id employed by	HSBCT	and Pressure Vessel inspec	of
in this Owner's Re	Hartford, C1	23 MAY (	25 to	ave inspected the component	nts described , and state that
Owner's Report in By signing this o examinations and shall be liable in ar	accordance with the requi certificate neither the Inspector corrective measures desc	irements of the ASME ( ector nor his employer r ribed in this Owner's Re	Code, Section XI. nakes any warranty eport. Furthermore,	aken corrective measures de v. expressed or implied, conc neither the Inspector nor his y kind arising from or conne	cerning the s employer
	henant	Commission		PA-2497 I,N & A, C	
Ins	spector's Signature		National Boa	rd, State, Province, and End	lorsements
Date	15 AUG 2006	2			

(12/82)

1.	Owner Exelon Generation Company, LLC	Date July 5, 2006
	Name	
	200 Exelon Way, Kennett Square, PA 19	348 Sheet1 of2
	Address	
2.	Plant Limerick Generating Station	Unit 2
	Name	
	3146 Sanatoga Road, Pottstown, PA 194	64 Work Order # C0210297
	Address	Repair Organization P.O. No., Job No. etc.
З.	Work Performed by	Type Code Symbol Stamp N/A
	Name	Authorization No N/A
	3146 Sanatoga Road, Pottstown, PA 194	64 Expiration Date <u>N/A</u>
	Address	
4.	Identification of System : Emergency Service Water (System)	m-011) Line No. HBC-250 Valve 011-2026E
5.	(a) Applicable Construction Code <u>ASME III</u> 19	
	(b) Applicable Edition of Section XI Utilized for Repairs or Re	placements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Applicable Section XI Code Case(s) <u>N-416-2</u>

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve 011-2026E	Flowserve	17 BBX	N/A	* 114-99233 PO# 257797- 308	2005	Replacement	Yes
(3) Feet 2" NPS Pipe	Michigan Seamless Tube	Heat No. 1M35684	N/A	* 114-90045 PO# 009825- 001780	N/A	Replacement	No
(1) 2" NPS 150# Raised Face Flange	Western Forge & Flange Co.	Heat No. 3M40774 Lot No. 8689	N/A	* 114-90527 PO# 009825- 001847	N/A	Replacement	No
(2) 2" NPS 90 Degree Elbow	Bonney Forge	Lot No. 76150	N/A	*114-90818 PO# 009825- 001917	N/A	Replacement	No

\* Traceability per Exelon part code number.

(C)

7. Description of Work <u>Replaced 2" globe valve and adjacent piping.</u>

8. Tests conducted: Hydrostatic :: Pneumatic :: Nominal Operating Pressure ■ Other \_\_\_\_ Pressure \_\_115 PSI \_\_\_ Test Temp. \_\_N/A\_\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300 .

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Work Order# C0210297 Sheet 2 of 2

### FORM NIS-2 (BACK)

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9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Valve 011-2026E constructed in accordance with ASME III, 1974 edition, Summer 1975 addenda.

CERTIFICATE OF COM	IPLIANCE
We certify that the statements made in the report are correct and ASME Code, Section XI Type Code Symbol StampNA	this <u>replacement</u> conforms to the rules of the (repair or replacement)
Certificate of Authorization No. NA Signed J.H. Kramer, Site W. Owner or Owner's Designee, Title	Expiration Date

#### **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 Pennsylvania \_and employed by\_ HSBCT of have inspected the components described Hartford, CT 23 MAY 05 in this Owner's Report during the period 15 AUG 06 \_, and state that to 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. ullena Commissions PA-2497 I,N & A, C Inspector's Signature National Board, State, Province, and Endorsements 15 AUG 20 06 Date

(12/82)

1.	Owner	Exelon Generation Company, LLC Name	Date Februar	y 12, 2007
	_	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road , Pottstown, PA 19464 Address		er <u># C0216760</u> P.O. No., Job No. etc.
3.	Work Per	formed by <u>Exelon Nuclear</u>	Type Code Symbol Stamp Authorization No	
	_	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4.	Identificat	ion of System : Emergency Service Water (System-011)	Line No. HBC-241	Valve HV-011-201D
5.	(a) Appli	cable Construction Code ASME III19_74	Edition, Winter 1974Adde	nda, <u>N/A</u> Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>.89</u>
 (c) Applicable Section XI Code Case(s) <u>N-416-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve HV-011-201A	Flowserve	99 BEM	N/A	* 114-85129 PO# 257797- 359	2006	Replacement	Yes
(3) Feet 2" NPS Pipe	Michigan Seamless Tube	Heat No. 001M40221	N/A	* 114-90045 PO# 009825- 2407	N/A	Replacement	No
(1) 2" NPS 150# Raised Face Flange	Western Forge & Flange Co.	Heat No. 3M40774 Lot# 8689	N/A	* 114-90527 PO# 009825- 481536	N/A	Replacement	No
(1) 2" NPS 90 Degree Elbow	Bonney Forge	Lot# 76259	N/A	* 114-90818 PO# 009825- 2334	N/A	Replacement	No
SP-HBC-241- E10-H1 pipe restraint	Bergen-Power	PS-1010-2	N/A	*114-92636 PO# LS386535- 000150	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work <u>Replaced 2" valve, adjacent piping and pipe support.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_ Pressure <u>112 PSI</u> Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

Work Order# C0216760 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Valve HV-011-201D constructed in accordance with ASME III, 1974 edition, Summer 1975 addenda.

Work completed in accordance with Exelon design ECR 05-00444.

CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to ASME Code, Section XI (repair or replacement) Type Code Symbol Stamp <u>NA</u>	the rules of the
Certificate of Authorization No NA Expiration Date	NA
Signed J.H. Kramer, site weld administrator Date February 12, 2007 Owner or Owner's Designee, Title	

#### **CERTIFICATE OF INSERVICE INSPECTION**

	Hartford, C					have inspe	ected the co	mponen	ts described	
	er's Report during the period		APR		to	12	FEB		_, and state the	at
to the best of	of my knowledge and belief, the	Owner ha	s performe	d exam	inations and	taken corre	ective meas	ures des	scribed in this	
Owner's Rep	port in accordance with the requ	uirements o	f the ASM	E Code,	Section XI.					
By signing	this certificate neither the Insp	ector nor h	is employe	er make	s any warrai	nty, express	sed or implie	d, conce	erning the	
	s and corrective measures des									
shall be liable	e in any manner for any persor	nal injury or	property d	amage	or a loss of a	any kind ari	ising from or	connec	ted with this	
inspection.	1	-		-		-	÷			
	// //	$\sim$								
	/ // Accord									
	ujnenan	$\times$ $\sim$	_Commiss	ions		P/	A-2497 I,N 8	A, C		
	Inspector's Signature	/			National Bo	oard, State,	Province, a	nd Endo	prsements	
	18 500 0									
Date	12 FEB 200	/								

(12/82)

			•	
1.	Owner	Exelon Generation Company, LLC Name	Date Februar	y 1, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant _	Limerick Generating Station	Unit	2
	_	3146 Sanatoga Road , Pottstown, PA 19464 Address		r # C0215130 P.O. No., Job No. etc.
		Addless	nepair Organization	P.O. NO., JOD NO. ElC.
3.	Work Pe	erformed byExelon Nuclear	Type Code Symbol Stamp	
		Name	Authorization No.	<u>N/A</u>
		3146 Sanatoga Road, Pottstown, PA 19464	Expiration Date	N/A
		Address		
4.	Identific	ation of System : <u>Emergency Service Water</u> (System-011)	Line No. HBC-241	Valve HV-011-201H
5.		plicable Construction Code <u>ASME III</u> 19 <u>74</u> Editio plicable Edition of Section XI Utilized for Repairs or Replacements		da, <u>N/A</u> Code Case

(c) Applicable Section XI Code Case(s) <u>N-416-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve HV-011-201H	Flowserve	28 BCY	N/A	* 114-85129 PO# 257797- 276	2005	Replacement	Yes
(3) Feet 2" NPS Pipe	Michigan Seamless Tube	Heat No. 001M40221	N/A	* 114-90045 PO# 009825- 2407	N/A	Replacement	No
(1) 2" NPS 150# Raised Face Flange	Western Forge & Flange Co.	Heat No. 3M407.74 Lot# 8689	N/A	* 114-90527 PO# 009825- 2275	N/A	Replacement	No
(1) 2" NPS 90 Degree Elbow	Bonney Forge	Lot# 75187	N/A	* 114-90818 PO# 009825- 348182	N/A	Replacement	No
SP-HBC-241- E9-H2 pipe restraint	Bergen-Power	PS-1010-2	N/A	*114-92636 PO# LS386535- 000150	N/A	Replacement	No
SP-HBC-241- E9-H3 pipe restraint	Exelon	N/A	N/A	N/A	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work Replaced 2" valve, adjacent piping and pipe support. Relocated pipe support SP-HBC-241-E9-H3

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure Other Pressure <u>112 PSI</u> Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

Work Order# C0215130 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Work completed in accordance with Exelon design change ECR 05-00444.

Valve HV-011-201H constructed in accordance with ASME III, 1974 edition, Summer 1975 addenda.

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C	ERTIFICATE OF COMPLI	ANCE	
We certify that the statements made in the I ASME Code, Section XI Type Code Symbol Stamp <u>NA</u>	•	(repair or replacement	
Certificate of Authorization NoNA			Expiration Date
1			
Signed J.H. Kr Owner or Owner's Designee, T	<u>'amer, site weld administra</u> Fitle	tor Date <u>February</u>	1, 2007
			······································
CERTIF	FICATE OF INSERVICE IN	ISPECTION	
I, the undersigned, holding a valid commission is			re Vessel Inspectors and the State
or Province of <u>Pennsylvania</u> and emp Hartford, CT	ployed by	HSBCT have inspect	of ed the components described
in this Owner's Report during the period	28 APR 06	_to6 F	EB 07, and state that
to the best of my knowledge and belief, the Owner Owner's Report in accordance with the requireme			tive measures described in this
By signing this certificate neither the Inspector			d or implied, concerning the
examinations and corrective measures described			
shall be liable in any manner for any personal inju inspection.	ry or property damage or a	loss of any kind ansir	ig from of connected with this
100 0			
Vauldenged.	Commissions		
Inspector's Signature	CommissionsNa	PA-2 tional Board, State, P	2497 I,N & A, C rovince, and Endorsements
Van Herrand.	CommissionsNa	PA-2 tional Board, State, P	2497 I.N & A, C rovince, and Endorsements

(12/82)

1.	Owner	Exelon Generation Company, LLC Name	Date April	28, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	5
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Orde Repair Organization P	r No. C0212980 .O. No., Job No. etc.
3.	Work Performed by	y <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	None Not applicable
		<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address	Expiration Date	Not applicable
4.	Identification of Sys	stem Emergency Service Water (System 011)	Line No. HBC-239-3 and HBC	-248-4 A-Loop ESW

5. (a) Applicable Construction Code ASME III 1974 Edition, Winter 1974 Addenda, None Code Case Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 2001 edition with addenda through 2003 (b) Applicable Section XI Code Case(s) \_\_\_\_\_N/A\_\_ (C)

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-239-3 (22 feet) 4" NPS Pipe	TUBACEX	Heat No. 33655	N/A	* 114-56231 PO# 009825-1670	N/A	Replacement	No
HBC-239-3 (18 feet) 4" NPS Pipe	TUBACEX	Heat No. 33721	N/A	* 114-56231 PO# 009825-1670	<b>N/A</b>	Replacement	No
HBC-239-3 (50 feet) 4" NPS Pipe	SANYO Special Steel	Heat No. 709430	N/A	* 114-56231 PO# 009825-2575	N/A	Replacement	No
HBC-239-3 (3) 4" NPS Flanges	WFI Nuclear	Heat Code 3754 ANE1	N/A	* 114-56323 PO# 009825-2575	N/A	Replacement	No
HBC-239-3 (1) 4" NPS 45 Deg Elbow	Taylor Forge	Heat Code LXTF-1	N/A	* 114-56239 PO# 009825-2366	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: \_ Replaced carbon steel Emergency Service Water piping with stainless steel.

Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Exempt □ Other □ 105 psi Test Temp. N/A °F. 8. Tests conducted:

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

1.	Owner	Exelon Generation Company, LLC Name	<u> </u>	Date A	pril 28, 2007
		200 Exelon Way, Kennett Square, Address	<u>, PA 19348</u>	Sheet <u>2</u> of	5
2.	Plant	Limerick Generating Station Name		Unit	2
		3146 Sanatoga Road, Pottstown, F	PA 19464	Work O	rder No. C0212980
		Address		Repair Organization	n P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name		Type Code Symbol Stamp _ Authorization No.	
	<u> </u>	<u>3146 Sanatoga Road, Pottstown,</u> Address	PA 19464	Expiration Date	Not applicable
4.	Identification of Sys	tem_Emergency Service Water	(System 011)	Line No. HBC-239-3 and HI	BC-248-4 A-Loop ESW

 (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u>
 (b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u> \_Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-239-3 (6) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MDWS-2	N/A	* 114-56238 PO# 009825-1670	N/A	Replacement	No
HBC-239-3 (2) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MJUS-1	N/A	* 114-56238 PO# 009825-2470	N/A	Replacement	No
HBC-239-3 (1) 4" NPS Tee	Taylor Forge	Heat Code MJUS-1	N/A	* 114-56230 PO# 009825-2470	N/A	Replacement	No
HBC-239-3 (4) 5/8" Threaded Flange Studs	Nova Machine	Trace Code 347C	N/A	* 114-37655 PO# 180864-2072	N/A	Replacement	No
HBC-239-3 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code E717	N/A	* 114-18638 PO# 180864- 348461	N/A	Replacement	No
HBC-239-3 (12) 5/8" Threaded Flange Studs	Nova Machine	Heat Code SSZ	N/A	* 114-92558 PO# 159325- 348895	N/A	Replacement	No
HBC-239-3 (32) 5/8" Nuts	Nova Machine	Heat Code Z657	N/A	* 116-12090 PO# 180864-2111	N/A	Replacement	No
HBC-239-H6 1" Steel Shim Plate	Nucor Steel	Heat No. 6107136-02	N/A	* 114-92860 PO# 001897-582	N/A	Replacement	No

\* Traceability per Exelon stock code number.

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1. Owner	Exelon Generation Company, LLC Name	Date	April 28, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	_ Sheet <u>3</u> of	5
2. Plant	Limerick Generating Station Name	_ Unit	2
	3146 Sanatoga Road, Pottstown, PA 19464 Address		Nork Order No. C0212980 Inization P.O. No., Job No. etc.
3. Work Perform	ned by <u>Exelon Nuclear</u> Name		tamp <u>None</u> Not applicable
<del></del>	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4. Identification	of System Emergency Service Water (System 011)	Line No. HBC-239-3	and HBC-248-4 A-Loop ESW

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

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
(c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-248-4 (10 feet) 4" NPS Pipe	TUBACEX	Heat No. 33721	N/A	* 114-56231 PO# 009825-1670	N/A	Replacement	No
HBC-248-4 (82 feet) 4" NPS Pipe	SANYO Special Steel	Heat No. 709430	N/A	* 114-56231 PO# 009825-2575	N/A	Replacement	No
HBC-248-4 (3) 4" NPS Flanges	WFI Nuclear	Heat Code 3754 ANE1	N/A	* 114-56323 PO# 009825-2575	N/A	Replacement	No
HBC-248-4 (1) 4" NPS 45 Deg Elbow	Taylor Forge	Heat Code LXTF-1	N/A	* 114-56239 PO# 009825-2366	N/A	Replacement	No
HBC-248-4 (4) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MDWS-2	N/A	* 114-56238 PO# 009825-1670	N/A	Replacement	No
HBC-248-4 (3) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MJUS-1	N/A	* 114-56238 PO# 009825-2470	N/A	Replacement	No
HBC-248-4 (1) 4" NPS Tee	Taylor Forge	Heat Code MJUS-1	N/A	* 114-56230 PO# 009825-2470	N/A	Replacement	No

\* Traceability per Exelon stock code number.

1.	Owner	Exelon Generation Company, LLC Name	DateApr	ril 28, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>4</u> of	5
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address		er No. C0212980 P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp	None Not applicable
	<u> </u>	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sys	tem Emergency Service Water (System 011)	Line No. HBC-239-3 and HBC	C-248-4 A-Loop ESW

 5. (a) Applicable Construction Code <u>ASME III</u> 19<u>74</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u>
 (b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u> \_Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-248-4 (16) 5/8" Threaded Flange Studs	Nova Machine	Trace Code 347C	N/A	* 114-37655 PO# 180864-2072	N/A	Replacement	No
HBC-248-4 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code E717	N/A	* 114-18638 PO# 180864- 348461	N/A	Replacement	No
HBC-248-4 (32) 5/8" Nuts	Nova Machine	Heat Code Z657	N/A	* 116-12090 PO# 180864-2111	N/A	Replacement	No
HBC-248-H23 (5) Feet W4 x 13 Beam	Nucor Steel Berkley	Heat No. 2507199	N/A	* 114-93009 PO# 001897-544	N/A	Replacement	No
HBC-248-H29 (1) 1/2 " Nut	Nova Machine	Heat No. 7420694	N/A	* 116-12074 PO# 180864-1792	N/A	Replacement	No

\* Traceability per Exelon stock code number.

W/O No. C0212980

Sheet 5 of 5

## FORM NIS-2 (BACK)

9. Remarks <u>Pipe replacement completed in accordance with Exelon design change ECR 03-00705.</u> Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of the ASME Code, Section XI. (repair or replacement) Type Code Symbol Stamp <u>NA</u>
Certificate of Authorization NoNA
Signed
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> have increased the pennsylvania described and the second of the pennsylvania and the pennsylvania between the pennsylvania and the pennsylvania between the pennsylvani
or Province of <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described in this Owner's Report during the period <u>IONOV OG</u> to <u>2 MAY O7</u> , 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     National Board, State, Province, and Endorsements       Date     2 MAY     20 07

(12/82)

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				•	
1.	Owner	Exelon Generation Company, LLC Name	Date	April 28, 200	7
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	5	-
2.	Plant	Limerick Generating Station Name	Unit	2	
		3146 Sanatoga Road, Pottstown, PA 19464 Address		Work Order No. C0 anization P.O. No.,	and the state of the second se
3.	Work Performed by	y <u>Exelon Nuclear</u> Name	Type Code Symbol S Authorization No.		applicable
		<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address	Expiration Date	Not	applicable
4.	Identification of Sys	stem Emergency Service Water (System 011)	Line No. HBC-239-1	1 and HBC-248-2	B-Loop ESW

 5. (a) Applicable Construction Code <u>ASME III</u> 1974 Edition, <u>Winter 1974</u> Addenda, <u>None</u>
 (b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 2001 edition with addenda through 2003 Code Case Applicable Section XI Code Case(s) \_\_\_\_N/A (C)

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-239-1 (68 feet) 4" NPS Pipe	TUBACEX	Heat No. 33721	N/A	* 114-56231 PO# 009825-1670	N/A	Replacement	No
HBC-239-1 (3) 4" NPS Flanges	WFI Nuclear	Heat Code 3754 ANE1	N/A	* 114-56323 PO# 009825-2575	N/A	Replacement	No
HBC-239-1 (1) 4" NPS Tee	Taylor Forge	Heat Code MGZD-1	N/A	* 114-56230 PO# 009825-2575	N/A	Replacement	No
HBC-239-1 (4) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MKRN-1	N/A	* 114-56238 PO# 009825-2575	N/A	Replacement	No
HBC-239-1 (4) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MKRN-2	N/A	* 114-56238 PO# 009825-2575	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: <u>Replaced carbon steel Emergency Service Water piping with stainless steel.</u>

8. Tests conducted: Hydrostatic 
Pneumatic Nominal Operating Pressure 
Exempt Oth

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

1.	Owner	Exelon Generation Company, LLC Name		Date April 28, 2007
		200 Exelon Way, Kennett Square, PA Address	19348	Sheet of 5
2.	Plant	Limerick Generating Station Name		Unit 2
		3146 Sanatoga Road, Pottstown, PA 19	9464	Work Order No. C0211783
		Address		Repair Organization P.O. No., Job No. etc.
3.	Work Performed by	/ <u>Exelon Nuclear</u> Name		Type Code Symbol Stamp         None           Authorization No.         Not applicable
		3146 Sanatoga Road, Pottstown, PA 1 Address	19464	Expiration Date Not applicable
4.	Identification of Sys	stem Emergency Service Water (S)	ystem 011)	Line No. HBC-239-1 and HBC-248-2 B-Loop ESW

 5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u>
 (b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u> \_Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-239-1 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code 0J12	N/A	* 114-18638 PO# 180864-2326	N/A	Replacement	No
HBC-239-1 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code R785	N/A	* 114-92558 PO# 180864-1774	N/A	Replacement	No
HBC-239-1 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code X877	N/A	* 114-92558 PO# 180864-2081	N/A	Replacement	No
HBC-239-1 (32) 5/8" Nuts	Nova Machine	Trace Code Z657	N/A	* 116-12090 PO# 180864-2111	N/A ,	Replacement	No
HBC-239-H32 (2) 1/2" Nuts	Nova Machine	Trace Code X178	N/A	* 116-12074 PO# 180864-1792	N/A	Replacement	No
HBC-239-H53 Pipe U-Strap	Bergan Power	Bergan Part No. 86313	N/A	* 114-59905 PO# 182789-147	N/A	Replacement	No

\* Traceability per Exelon stock code number.

1.	Owner	Exelon Generation Company, LLC Name	Date Apr	il 28, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>3</u> of	5
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Orde Repair Organization F	er No. C0211783 P.O. No., Job No. etc.
3.	Work Performed by	y <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sys	stem Emergency Service Water (System 011)	Line No. HBC-239-1 and HBC	-248-2 B-Loop ESW

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
(c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-248-2 (17 feet) 4" NPS Pipe	TUBACEX	Heat No. 33687	N/A	* 114-56231 PO# 009825-1670	N/A	Replacement	No
HBC-248-2 (53 feet) 4" NPS Pipe	TUBACEX	Heat No. 33721	N/A	* 114-56231 PO# 009825-1670	N/A	Replacement	No
HBC-248-2 (3) 4" NPS Flanges	WFI Nuclear	Heat Code 3754 ANE1	N/A	* 114-56323 PO# 009825-2575	<b>N/A</b>	Replacement	No
HBC-248-2 (1) 4" NPS 45 Deg Elbow	Taylor Forge	Heat Code LZZU-1	N/A	* 114-56239 PO# 009825-2366	N/A	Replacement	No
HBC-248-2 (1) 4" NPS Tee	Taylor Forge	Heat Code MGZD-1	N/A	* 114-56230 PO# 009825-2575	N/A	Replacement	No
HBC-248-2 (2) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MKRN-1	N/A	* 114-56238 PO# 009825-2575	N/A	Replacement	No
HBC-248-2 (4) 4" NPS 90 Deg Elbow	Taylor Forge	Heat Code MKRN-2	N/A	* 114-56238 PO# 009825-2575	N/A	Replacement	No

\* Traceability per Exelon stock code number.

1.	Owner	Exelon Generation Company, LLC Name	D	Date April 28, 2007
		200 Exelon Way, Kennett Square, PA 193 Address	<u>48 </u> SI	Sheet of5
2.	Plant	Limerick Generating Station Name	U	Unit 2
		<u>3146 Sanatoga Road, Pottstown, PA 1946</u> Address	1	Work Order No. C0211783 Repair Organization P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name		Type Code Symbol Stamp <u>None</u> Authorization No. <u>Not applicable</u>
		3146 Sanatoga Road, Pottstown, PA 1940 Address	<u>34                                    </u>	Expiration Date Not applicable
4.	Identification of Syst	em Emergency Service Water (Syste	<u>m 011) Li</u>	Line No. HBC-239-1 and HBC-248-2 B-Loop ESW

5. (a) Applicable Construction Code <u>ASME III</u> <u>19\_74</u> Edition, <u>Winter 1974</u> Addenda, <u>None</u>
(b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
(c) Applicable Section XI Code Case(s) <u>N/A</u> Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HBC-248-2 (8) 5/8" Threaded Flange Studs	Nova Machine	Trace Code 0J12	N/A	* 114-18638 PO# 180864-2326	N/A	Replacement	No
HBC-248-2 (16) 5/8" Threaded Flange Studs	Nova Machine	Trace Code X877	N/A	* 114-92558 PO# 180864-2081	N/A	Replacement	No
HBC-248-4 (32) 5/8" Nuts	Nova Machine	Heat Code Z657	N/A	* 116-12090 PO# 180864-2111	N/A	Replacement	No
HBC-248-H10 (2) Feet C4 x 5.4 Channel	Roanoke (Siskin Steel)	Heat No. JE 7460	N/A	* 114-92794 PO# 001897-466	N/A	Replacement	No

\* Traceability per Exelon stock code number.

W/O No. C0211783

Sheet 5 of 5

# FORM NIS-2 (BACK)

9. Remarks <u>Pipe replacement completed in accordance with Exelon design change ECR 03-00705.</u> Applicable Manufacturer's Data Reports to be attached

We certify that the statements made in the report are correct and thiseplacementconforms to the rules of the ASME Code, Section XINA			F COMPLIANCE		
igned       J.H. Kramer (site weld administrator)       Date       April 28,, 2007         Owder 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 St or Province of	SME Code, Section XI.	•			s to the rules of the
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 SI or Province of	ertificate of Authorization No	NA	·	Expiration	Date
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the St or Province of <u>Pennsylvania</u> and employed by <u>HSBCT</u> <u>Hartford, CT</u> have inspected the components describ 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.H. Kramer (site we nee, Title	Id administrator) Date	April 28,	, 20 <u>07</u>
Hartford, CT have inspected the components described in this Owner's Report during the period <u>14 NOV 06</u> to <u>3 MAY 07</u> , and state the 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.					
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.		id commission issued by the Na	tional Board of Boiler and	l Pressure Vessel Insp	
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. PA-2497 I,N & A, C	or Province of Pennsylvar	id commission issued by the Na niaand employed by	tional Board of Boiler and HSBCT		c
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.	or Province of <u>Pennsylvar</u> h in this Owner's Report during the	id commission issued by the Na niaand employed by Hartford, CT e periodi4001	tional Board of Boiler and HSBCT	have inspected the color 3 MAY 07	mponents describe
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.	or Province of <u>Pennsylvar</u> in this Owner's Report during the to the best of my knowledge and Owner's Report in accordance w	id commission issued by the Na niaand employed by Hartford, CT e periodi4 NON belief, the Owner has performe ith the requirements of the ASM	tional Board of Boiler and HSBCT VO6 to d examinations and take E Code, Section XI.	have inspected the co <u>3 MAY 07</u> n corrective measures	mponents describe , and state thats described in this
Aundenni Commissions PA-2497 I, N & A, C	or Province of <u>Pennsylvar</u> in this Owner's Report during the to the best of my knowledge and Owner's Report in accordance w By signing this certificate nei	id commission issued by the Na niaand employed by Hartford, CT e periodi4 NON t belief, the Owner has performe ith the requirements of the ASM ither the Inspector nor his emplo	tional Board of Boiler and HSBCT VO6 to d examinations and take E Code, Section XI. yer makes any warranty,	have inspected the co. <u>3</u> <u>MAY 07</u> n corrective measures expressed or implied,	c mponents describe , and state that a described in this , concerning the
CommissionsPA-2497 I,N & A, C Inspector's SignatureNational Board, State, Province, and Endorsements	or Province of <u>Pennsylvar</u> in this Owner's Report during the to the best of my knowledge and Owner's Report in accordance w By signing this certificate nei examinations and corrective mea shall be liable in any manner for	id commission issued by the Na niaand employed by Hartford, CT e periodi 4 NON t belief, the Owner has performe ith the requirements of the ASM ither the Inspector nor his emplo asures described in this Owner's	tional Board of Boiler and HSBCT to to examinations and take E Code, Section XI. yer makes any warranty, Report. Furthermore, ne	have inspected the co. <u>3</u> <u>MAY 07</u> n corrective measures expressed or implied, ither the Inspector nor	 mponents describe , and state that described in this , concerning the r his employer
Inspector's Signature Commissions National Board, State, Province, and Endorsements	or Province of <u>Pennsylvar</u> in this Owner's Report during the to the best of my knowledge and Owner's Report in accordance w By signing this certificate nei examinations and corrective mea shall be liable in any manner for	id commission issued by the Na niaand employed by Hartford, CT e periodi 4 NON t belief, the Owner has performe ith the requirements of the ASM ither the Inspector nor his emplo asures described in this Owner's	tional Board of Boiler and HSBCT to to examinations and take E Code, Section XI. yer makes any warranty, Report. Furthermore, ne	have inspected the co. <u>3</u> <u>MAY 07</u> n corrective measures expressed or implied, ither the Inspector nor	 mponents describe , and state that described in this , concerning the r his employer
	or Province of <u>Pennsylvar</u> in this Owner's Report during the to the best of my knowledge and Owner's Report in accordance w By signing this certificate nei examinations and corrective mea shall be liable in any manner for	id commission issued by the Na niaand employed by Hartford, CT e period4 NON d belief, the Owner has performe ith the requirements of the ASM ither the Inspector nor his emplo asures described in this Owner's any personal injury or property d	tional Board of Boiler and HSBCT to to d examinations and take E Code, Section XI. yer makes any warranty, Report. Furthermore, ne amage or a loss of any k	have inspected the co <u>3</u> MAY 07 n corrective measures expressed or implied, ither the Inspector nor ind arising from or cor	mponents described , and state that described in this concerning the r his employer nected with this

				·
1.	Owner	Exelon Generation Company, LLC	Date	March 28, 2007
		Name		
		200 Exelon Way, Kennett Square, PA 19348	Sheet of	2
		Address		
2.	Plant	Limerick Generating Station	Unit	2
		Name		
		3146 Sanatoga Road, Pottstown PA 19464		k Order No. C0219418
		Address	Repair Organiz	ation P.O. No., Job No. etc.
З.	Work Performed by	Exelon Nuclear	Type Code Symbol Starr	N/A
		Name	Authorization No.	N/A
	<u></u>	3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identification of Syst	em_Emergency Service Water(System 011)	Line No. HBC-245-2	(011-2439)

5. (a) Applicable Construction Code <u>ASME III</u> <u>19\_74</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(2) Feet 3" NPS pipe	USS Tubular Products	Heat# A82089	N/A	* 114-90060 PO# 009825- 1847	N/A	Replacement	No
(1) 3" NPS flange	Western Forge & Flange	Heat # 3M40774	N/A	* 114-91439 PO# 009825- 2920	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replaced 3" HBC-245-2 Emergency service water piping.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

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# FORM NIS-2 (BACK)

9. Remarks None

# Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	ANCE		
We certify that the statements ASME Code, Section XI. Type Code Symbol Stamp	made in the report are correct and this _	replacement (repair or replaceme		o the rules of the
Certificate of Authorization No	NA		_ Expiration Date	NA
Signed H. Kh Wher or Owner's Designee,	J.H. Kramer (site weld administra	utor) Date <u>N</u>	March 28,	, 20 <u>07</u>

		CERTIFICATE O	F INSERVICE INS	PECTION			
1, the undersigned	l, holding a valid com	mission issued by th	ne National Board o	f Boiler and	Pressure Vesse	el Inspectors	and the Stat
or Province of	Pennsylvania	and employed by	<u> </u>	BCT		_	o
	Hartfor	1, CT		r	ave inspected the	ne componei	nts described
in this Owner's Re	port during the perio	1 .3 JA	N 07	to 16	APR O	7	and state tha
to the best of my	knowledge and belief	the Owner has per	formed examination	s and taker	n corrective mea	sures descri	bed in this
	accordance with the						
	certificate neither th				evoressed or im	plied conce	mina the
	corrective measures						
shall be listle in a	conective measures	described in this Ov	viters neport. Futur		inter the inspect		unith this
	y manner for any pe	rsonal injury or prop	eny damage or a lo	ss of any ki	nu ansing nom o	or connected	i with this
nspection.		$\sim$					
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1 au	. VA DAAB						
[] ([[[[	1 Neria	Con Con	nmissions		PA-2497 I,N	<u>&amp; A, C</u>	
Ins	pector's Signature		Natio	nal Board, S	State, Province,	and Endorse	ements
		•		· · · · ·	. ,		
Date	IL APR 20	07					

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1.	Owner	Exelon Generation Company, LLC Name	Date March	28, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	Plant	Limerick Generating Station Name	Unit 2	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Work Order	No. C0219572
3.	Work Performed b	y <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identification of Sy	stem Emergency Service Water (System 011)	Line No. SP-HBC-250-E10	(2D-V211)

5. (a) Applicable Construction Code <u>ASME III</u> 19<u>74</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

(c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

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Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(1) Feet 2" NPS pipe PC# 7	Vision Metals Gulf States Tube	Heat No. 710144	N/A	* 114-90045 PO# 009825- 348899	N/A	Replacement	No
(1) 3" NPS flange PC# 16	Western Forge & Flange	Heat No. 3M40774	N/A	* 114-91439 PO# 009825- 2807	N/A	Replacement	No
(1) 3" x 2" reducer PC# 10	Taylor Forge	Heat No. MKRD-2	N/A	* 114-98055 PO# 009825- 2754	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replaced 3" and 2" Emergency service water piping.

8. Tests conducted: Hydrostatic 🗆 Pneumatic 🗆 Nominal Operating Pressure

Other D 104 & 114 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

# FORM NIS-2 (BACK)

9. Remarks	None
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Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMP	LIANCE		
We certify that the stateme ASME Code, Section XI. Type Code Symbol Stamp	nts made in the report are correct and this	s <u>replac</u> (repair or repla		ms to the rules of the
Certificate of Authorization No	NA		Expiration Da	teNA
Signed V. V.	J.H. Kramer (site weld administer, Title	trator) Date	March 28,	, 20 <u>07</u>

		CERTIFICATE OF	INSERVICE INSPEC	TION	
I, the undersigned				iler and Pressure Vessel Inspe	ctors and the State
or Province of	Pennsylvania	and employed by	HSBC	Τ	0
	Hartfo			have inspected the complexity	ponents described
in this Owner's R	eport during the period	od O	2 FEB 2007 to	- OZ APR 2007	, and state tha
to the best of my	knowledge and belie			nd taken corrective measures d	lescribed in this
By signing thi examinations and shall be liable in a	s certificate neither to corrective measures	described in this Own	nployer makes any wa er's Report. Furtherm	<ol> <li>arranty, expressed or implied, c ore, neither the Inspector nor h of any kind arising from or connert</li> </ol>	is employer
inspection.	Hena	<u>Comr</u>	nissions	PA-2497 I,N & A, C	
In	spector's Signature		National	Board, State, Province, and En	dorsements

(12/82)

1

1. Owner	Exelon Generation Company, LLC Name	DateAr	oril 3, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2. Plant	Limerick Generating Station Name	Unit	2
	3146 Sanatoga Road, Pottstown, PA 19464 Address		n No. C0217646 nn P.O. No., Job No. etc.
3. Work Perform	ned by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4. Identification	of System Nuclear Boiler (System 041)	Line No. HCC-232	MSIV No. HV-041-2F022A

 5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements : <u>2001 edition with addenda through 2003.</u>

 Code Case

(c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(5) Feet 1-1/2" NPS Sch 40 Pipe	SANYO	Heat No. 800766	N/A	* 114-90020 PO# 009825- 002595	N/A	Replacement	No
(1) Feet 1-1/2" NPS Sch 80 Pipe	KOBE Steel	Heat No. V40407	N/A	* 114-90025 PO# 167002	N/A	Replacement	No
(10) 1-1/2 " Socket Weld Flanges	Western Forge & Flange	Heat Code CWL-B Heat No. 31223 Lot No. 792	N/A	* 114-91519 PO# 009825- 002595	N/A	Replacement	No
(2) 1-1/2 " Socket Weld Couplings	Alloy Stainless Products	Heat Code HCB Heat No. L31351	N/A	* 114-92840 PO# LS628642	N/A	Replacement	No
(20) 1/2 " Studs	Nova Machine	Trace Code X878 Heat No. 230113	N/A	* 114-92554 PO# 180864- 002081	N/A	Replacement	No
(40) 1/2 " Nuts	Nova Machine	Trace Code 108F Heat No. 299963	N/A	* 114-58484 PO# 180864- 002072	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced MSIV instrument gas piping and unions with flanged piping.

8. Tests conducted: Hydrostatic Pneumatic 🗆 Nominal Operating Pressure Test Temp. <u>N/A</u>°F. Other Pressure <u>100</u>psi

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

W/O No. C0217646 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Work completed in accordance with Exelon Design Change ECR 06-00119.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	NCE	
We certify that the statemer ASME Code, Section XI. Type Code Symbol Stamp	ts made in the report are correct and this	replacement repair or replacement	_ conforms to the rules of the
Certificate of Authorization No.	NA	Expi	ration Date <u>NA</u>
Signed , K	J.H. Kramer, Site Weld Administrator	Date <u>April 3</u>	, 2007

#### **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 Pennsylvania \_and employed by\_ HSBCT of have inspected the components described 24 APR 07, and state that Hartford, CT in this Owner's Report during the period 12 JAN 07 to 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. UU AUUA Commissions PA-2497 I,N & A, C Inspector's Signature National Board, State, Province, and Endorsements 24 APR 2007 Date

1.	Owner	Exelon Genera	ition Company, L	TC		Date		April 3,	2007	
		Nan								
_		200 Exelon Wa Addro	ay, Kennett Squa	<u>ire, PA 193</u>	48	Sheet	<u>1</u> of	2	2	
2.	Plant	Limerick Gene				Unit		2		
		Nan	10							
		3146 Sanatoga	Road, Pottstow	n. PA 1946	4		Work	Order No.	C0217647	
		Addro			-	F	Repair Organ			
З.	Work Performed by	Exelon Nuclea	ır		<u> </u>		e Symbol Sta			
		Nan	ne			Authorizati	ion No		Not ap	plicable
		3146 Sanatoga	Road, Pottstowr	<u>n, PA 1946</u>	4	Expiration	Date		Not ap	plicable
		Addro	ess							
4.	Identification of Syst	em_Nuclear B	oiler	(System	041)	Line No.	HCC-232	M	SIV No. HV	-041-2F022B
5.	(a) Applicable Con	struction Code	ASME III	19 74	Edition.	Winter 1974	4 Addenda.		N/A	Code Case

(a) Applicable Construction Code <u>ASME III</u> 1974 Edition, <u>Winter 1974</u> Addenda, <u>N/A</u>
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements : <u>2001 edition with addenda through 2003.</u>
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(3) Feet 1-1/2" NPS Sch 40 Pipe	SANYO	Heat No. 800766	N/A	* 114-90020 PO# 009825- 002595	N/A	Replacement	No
(1) Feet 1-1/2" NPS Sch 80 Pipe	KOBE Steel	Heat No. V40407	N/A	* 114-90025 PO# 167002	N/A	Replacement	No
(6) 1-1/2 " Socket Weld Flanges	Western Forge & Flange	Heat Code CWL-B Heat No. 31223 Lot No. 792	N/A	* 114-91519 PO# 009825- 002595	N/A	Replacement	No
(12) 1/2 " Studs	Nova Machine	Trace Code X878 Heat No. 230113	N/A	* 114-92554 PO# 180864- 002081	N/A	Replacement	No
(24) 1/2 " Nuts	Nova Machine	Trace Code 351C Heat No. 299963	N/A	* 114-58484 PO# 180864- 002072	N/A	Replacement	No

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\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced MSIV instrument gas piping and unions with flanged piping.

- 8. Tests conducted:
- Hydrostatic 
  Pneumatic 
  Hydrostatic 
  Pressure <u>100</u>psi
- Nominal Operating Pressure Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

### FORM NIS-2 (BACK)

9. Remarks: <u>Work completed in accordance with Exelon Design Change ECR 06-00119.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	NCE			
We certify that the stateme ASME Code, Section XI. Type Code Symbol Stamp	nts made in the report are correct and this		ement eplacement	conforms	to the rules of the
Certificate of Authorization No	NA		Expirat	ion Date	N
Signed J , L where or Owner's Design	J.H. Kramer, Site Weld Administrator nee, Title	Date _	April 3,		2007

CERTIFICATE OF INSERVICE INSPECTION							
or Province of <u>Pennsylvania</u> and employed by <u>Hartford, CT</u> in this Owner's Report during the period <u>12.57</u> to the best of my knowledge and belief, the Owner has perfor Owner's Report in accordance with the requirements of the As By signing this certificate neither the Inspector nor his em examinations and corrective measures described in this Owner	National Board of Boiler and Pressure Vessel Inspectors and the State <u>HSBCT</u>						
	nissionsPA-2497 I.N & A, C						
Inspector's Signature / Date24 APR 2007	National Board, State, Province, and Endorsements						

W/O No. C0217648 Sheet 2 of 2

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### FORM NIS-2 (BACK)

9. Remarks: <u>Work completed in accordance with Exelon Design Change ECR 06-00119</u>. Applicable Manufacturer's Data Reports to be attached

		NCE	
We certify that the stateme ASME Code, Section XI. Type Code Symbol Stamp	nts made in the report are correct and this	replacement repair or replacement	_ conforms to the rules of the
Certificate of Authorization No.	NA	Expira	tion DateNA
Signed V , V Gwner or Owner's Design	J.H. Kramer, Site Weld Administrator ee, Title	Date <u>April 3,</u>	, 2007

### **CERTIFICATE OF INSERVICE INSPECTION**

or Frovince of	Pennsylvania				SBCT		
	Hartfo			~ ~ ~	nave insp	ected the com	ponents describe
in this Owner's Re	eport during the perio	od / 7	NOV	<u>06_</u> to	<u>24</u> A	<u>KOL</u>	, and state tha
to the best of my	knowledge and belie	of, the Owner has p	erformed exa	minations and	taken correctiv	/e measures d	lescribed in this
Owner's Report in	accordance with the	requirements of th	he ASME cod	e, Section XI.			
	s certificate neither t				antv. expresse	d or implied, c	oncernina the
	corrective measures						
ehali ho liahlo in a	ny manner for any n	ereonal iniun/ or nr	onertv damao	e or a loss of a	ny kind arising	1 from or conne	ected with this
	ny manner for any p	ersonal injury or pro	operty damag	e or a loss of a	any kind arising	g from or conne	ected with this
	ny manner for any p	ersonal injury or pro	operty damag	e or a loss of a	any kind arising	g from or conne	ected with this
	ny manner for any p	ersonal injury or pro	operty damag	e or a loss of a	any kind arising	from or conne	ected with this
	ny manner for any p	$\overline{\mathcal{A}}$		je or a loss of a			
	Lena	$\overline{\mathcal{A}}$	operty damag commissions_		PA-24	197 I,N & A, C	
	ny manner for any p	$\overline{\mathcal{A}}$				197 I,N & A, C	

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1.	Owner	Exelon Generation Company, LLC Name	Date Apr	il 3, 2007
_		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address		No. C0217648 1 P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sys	tem Nuclear Boiler (System 041)	Line No. HCC-232	MSIV No. HV-041-2F022C

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements : <u>2001 edition with addenda through 2003</u>,
(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(2) Feet 1-1/2" NPS Sch 40 Pipe	SANYO	Heat No. 800766	N/A	* 114-90020 PO# 009825- 002595	N/A	Replacement	No
(1) Feet 1-1/2" NPS Sch 80 Pipe	KOBE Steel	Heat No. V40407	N/A	* 114-90025 PO# 167002	N/A	Replacement	No
(4) 1-1/2 " Socket Weld Flanges	Western Forge & Flange	Heat Code CWL-B Heat No. 31223 Lot No. 792	N/A	* 114-91519 PO# 009825- 002595	N/A	Replacement	No
(2) 1-1/2 " Socket Weld Flanges	Ideal Forging	Heat No. 79605 / C3239	N/A	* 114-91519 PO# LS659404	N/A	Replacement	No
(12) 1/2 " Studs	Nova Machine	Trace Code X175 & R376 Heat No. 230113	N/A	* 114-92554 PO# 180864- 1647 & 1794	N/A	Replacement	No
(24) 1/2 " Nuts	Nova Machine	Trace Code 351C & 441A Heat No. 299963	N/A	* 114-58484 PO# 180864- 002072	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced MSIV instrument gas piping and unions with flanged piping.

8. Tests conducted: Hydrostatic Other

Pressure <u>100</u> psi Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

1.	Owner	Exelon Generation Company, I		Date	Apr	il 3, 2007
		Name				
		200 Exelon Way, Kennett Squa Address	are, PA 19348	Sheet <u>1</u>	of	3
2.	Plant	Limerick Generating Station Name		Unit		2
		3146 Sanatoga Road, Pottstow	/n, PA 19464		Work Order	No. C0217649
		Address		Rep	air Organizatior	P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear		Type Code S	ymbol Stamp	None
		Name		Authorization	No	Not applicable
_		3146 Sanatoga Road, Pottstown	n, PA 19464	Expiration Da	ite	Not applicable
		Address				
4.	Identification of Sys	tem Nuclear Boiler	(System 041)	Line No. H	CC-232	MSIV No. HV-041-2F022D

5. (a) Applicable Construction Code <u>ASME\_III</u> 1974 Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements : <u>2001 edition with addenda through 2003</u>.
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(3) Feet 1-1/2" NPS Sch 40 Pipe	SANYO	Heat No. 800766	N/A	* 114-90020 PO# 009825- 002595	N/A	Replacement	No
(1) Feet 1-1/2" NPS Sch 80 Pipe	KOBE Steel	Heat No. V40407	N/A	* 114-90025 PO# 167002	N/A	Replacement	No
(2) 1-1/2 " Socket Weld Flanges	Western Forge & Flange	Heat Code CJB-B Heat No. 32334 Lot No. 720	N/A	* 114-91519 PO# 009825- 002155	N/A	Replacement	No
(2) 1-1/2 " Socket Weld Flanges	Western Forge & Flange	Heat Code AWX Heat No. 131990 Lot No. 1956	N/A	* 114-91519 PO# 009825- 002155	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced MSIV instrument gas piping and unions with flanged piping.

8. Tests conducted: Hydrostatic 
Pneumatic 
Pressure 100 ps

Pressure <u>100</u> psi Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

1. Owner	Exelon Generation Company, LLC Name	Date Ap	ril 3, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	3
2. Plant	Limerick Generating Station Name	Unit	2
	3146 Sanatoga Road, Pottstown, PA 19464 Address		<u>No. C0217649</u> n P.O. No., Job No. etc.
3. Work Performe	d by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
<u> </u>	<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address	Expiration Date	Not applicable
4. Identification of	System Nuclear Boiler (System 041)	Line No. HCC-232	MSIV No. HV-041-2F022D

5. (a) Applicable Construction Code <u>ASME III</u> 19\_74 Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case
(d) Applicable Edition of Section XI Utilized for Repairs or Replacements : <u>2001 edition with addenda through 2003.</u>
(e) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(1) 1-1/2 " Socket Weld Flange	Western Forge & Flange	Heat Code CTG-B Heat No. H3976 Lot No. 5184	N/A	* 114-91519 PO# 009825- 002155	N/A	Replacement	No
(1) 1-1/2 " Socket Weld Flange	WFI Nuclear	Heat Code 3747 ANE	N/A	* 114-91519 PO# 009825- 002595	N/A	Replacement	No
(12) 1/2 " Studs	Nova Machine	Trace Code X175 & X878 Heat No. 230113	N/A	* 114-92554 PO# 180864- 1794 & 2081	N/A	Replacement	No
(24) 1/2 " Nuts	Nova Machine	Trace Code 441A Heat No. 299963	N/A	* 114-58484 PO# 180864- 001887	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

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# FORM NIS-2 (BACK)

9. Remarks: <u>Work completed in accordance with Exelon Design Change ECR 06-00119.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	NCE	
We certify that the statemer ASME Code, Section XI. Type Code Symbol Stamp	ts made in the report are correct and this	replacement repair or replacement	conforms to the rules of the
Certificate of Authorization No.		Expir	ration Date <u>NA</u>
Signed	J.H. Kramer, Site Weld Administrator	Date April 3,	, 2007

a commission issued by the Natio and employed by artford, CT period <u>17 NON</u> belief, the Owner has performed h the requirements of the ASME of her the Inspector nor his employe sures described in this Owner's R	HS 206 to examinations and code, Section XI. r makes any warra	Ave inspected the 24 APR of taken corrective measu	components described components described , and state that res described in this ed, concerning the
artford, CT period <u>17 NON</u> belief, the Owner has performed h the requirements of the ASME of her the Inspector nor his employe sures described in this Owner's R	examinations and code, Section XI. r makes any warra	have inspected the 24 APR O taken corrective measu anty, expressed or implie	components described , and state that res described in this ed, concerning the
period <u>17 NON</u> belief, the Owner has performed h the requirements of the ASME of her the Inspector nor his employe sures described in this Owner's R	examinations and code, Section XI.	taken corrective measu anty, expressed or implie	, and state that res described in this ed, concerning the
belief, the Owner has performed of h the requirements of the ASME of her the Inspector nor his employe sures described in this Owner's R	examinations and code, Section XI.	anty, expressed or impli	res described in this ed, concerning the
h the requirements of the ASME of her the Inspector nor his employe sures described in this Owner's R	code, Section XI. r makes any warra	anty, expressed or impli	ed, concerning the
ny personal injury or property dan			
		PA-2497 I,N & ard, State, Province, an	
		Commissions National Bo	

1.	Owner	Exelon Generation Company, L Name	LC		DateJur	ne 19, 2006	
_		200 Exelon Way, Kennett Squa Address	re, PA 1934	8	Sheet <u>1</u> of	2	
2.	Plant	Limerick Generating Station Name			Unit	2	
		3146 Sanatoga Road, Pottstown	n, PA 19464	<u> </u>		r No. C0213363	
		Address			Repair Organizatio	on P.O. No., Job No.	etc.
3.	Work Performed by	Exelon Nuclear			Type Code Symbol Stamp		
		Name			Authorization No.	Not applica	able
		3146 Sanatoga Road, Pottstown	. PA 19464		Expiration Date	Not applica	ble
		Address					
4.	Identification of Syst	tem Nuclear Boiler	(System 0	41)	Line No. APE-2MS	PSV-041-2F013B	
5.	(a) Applicable Con	struction Code <u>ASME_III</u>	19 <u>_68</u>	_Edition,	Summer 1970_Addenda,	N/A	_Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>89</u>
 (c) Applicable Section XI Code Case(s) <u>None</u>

(c) Applicable Section Al Code Case(s) \_\_\_\_\_

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV PILOT ASSEMBLY	TARGET ROCK	027	N/A	* 114-18880 PO# 013269	N/A	REPLACEMENT	YES
MSRV BODY	TARGET ROCK	174	N/A	* 114-18880 PO# 013269	N/A	REPLACEMENT	YES

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No. 175 and pilot No. 27 with reworked body No. 174 and pilot No. 027.

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other □ Pressure 1040\_psi Test Temp. <u>516</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

# FORM NIS-2 (BACK)

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). Remarks: MSRV body No. 174 and r	bilot No. 27 were previously installed at PS Applicable Manufacturer's Data Reports			ed in 2R08 u	nder work order
R0937540.	· · · · · · · · · · · · · · · · · · ·		-		
	·				
MSRV assembly replaced in mid-cycle	maintenance outage 2M36.				<u> </u>
Draceure testing completed with white					
Pressure testing completed with nuclea	ar steam.	• • • •			
		ICE			
We certify that the statements ASME Code, Section XI.	s made in the report are correct and this	replace repair or rep		_ conforms to	o the rules of the
Type Code Symbol Stamp	NA				
Certificate of Authorization No	NA		Expira	tion Date	NA
Signed Gan D. Knam	J.H. Kramer, Site Weld Administrator	Date	<u>June 19,</u>		, <u>2006</u>
Owner or Owner's Designee					
	CERTIFICATE OF INSERVICE INS	PECTION			
or Province of Pennsylvania	commission issued by the National Board o and employed by	HSBCT		•	of

	Report in accordance with the re		ode. Section XI.
			makes any warranty, expressed or implied, concerning the
			port. Furthermore, neither the Inspector nor his employer
		sonal injury or property dam	age or a loss of any kind arising from or connected with this
inspection	·		
		6/	
¥ a	UU Alexilu	Commission	s PA-2497 I,N & A, C
•	Inspector's Signature		National Board, State, Province, and Endorsements
Date	<b>Z3 JUNE</b> 20	06	

1.	Owner	Exelon Generation Company, LLC Name	Date April	18, 2007
_	ana an tha a tha a	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2,	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order N Repair Organization	o. R0930463 P.O. No., Job No. etc.
3.	Work Performed by	/ Exelon Nuclear Name	Type Code Symbol Stamp	
	·	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sys	tem Nuclear Boiler (System 041)	Line No. APE-2MS	PSV-041-2F013C
5.	(a) Applicable Cor	nstruction Code ASME III 1968 Edition	Summer 1970 Addenda.	N/A Code Case

5. (a) Applicable Construction Code <u>ASME III</u> 19 <u>68</u> Edition, <u>Summer 1970</u> Addenda, <u>N/A</u> C
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003.</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV Pilot Assembly	Target Rock	158	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
MSRV Body Assembly	Target Rock	006	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
Main seat	Target Rock	96	N/A	* 114-76024 PO# 204066- 000120	N/A	Replacement	No
						·	

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No.150 and pilot No.022 with reworked body No.158 and pilot No.006.

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_\_\_ Pressure \_\_1047\_psi Test Temp. \_\_173\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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)

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9. Remarks: <u>Manufacturers Data Reports are traceable by Exelon Work Order package.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	NCE		
We certify that the statement ASME Code, Section XI. Type Code Symbol Stamp	s made in the report are correct and this		lacement or replacem	conforms to the rules of the nent
Certificate of Authorization No				Expiration DateNA
Signed <u>Jonne</u> H. Kum owner or Owner's Designed	J.H. Kramer, site weld administrator e, Title	_ Date _	April 18,	, 2007

	CER	TIFICATE OF INSERVICE I	INSPECTION	
I, the undersigne	d, holding a valid commission	issued by the National Boa	rd of Boiler and Pressure Vessel Inspectors an	d the Sta
or Province of	Pennsylvania and e	mployed by	HSBCT	
	Hartford, CT		have inspected the components	describe
in this Owner's R	eport during the period	02 PEC 06	to 14 MAY 07 , and	I state th
to the best of my	knowledge and belief, the Ow		ations and taken corrective measures describe	l in this
	accordance with the requiren			
By signing th	is certificate neither the Insper	ctor nor his employer makes	s any warranty, expressed or implied, concernir	ng the
examinations and	corrective measures describe	ed in this Owner's Report. Fr	urthermore, neither the Inspector nor his emplo	vyer
shall be liable in a	iny manner for any personal ir	jury or property damage or	a loss of any kind arising from or connected wi	th this
nspection.	100			
		<b>7</b> ·		
A		/		
Jai	Menant	Commissions	PA-2497 I,N & A, C	
<u>Pau</u>			PA-2497 I,N & A, C lational Board, State, Province, and Endorsem	ents
<u><u><u></u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u>	spector's Signature			ents

1.	Owner	Exelon Generation Com Name	pany, LLC	Date	Aj	oril 18, 2007
_		200 Exelon Way, Kennet Address	t Square, PA 19348	Sheet <u>1</u>	of	2
2.	Plant	Limerick Generating Stat Name	lion	Unit	<u> </u>	2
		3146 Sanatoga Road, Po Address	ottstown, PA 19464	Rej		er No. R0997010 on P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name			Symbol Stamp	
-		<u>3146 Sanatoga Road, Po</u> Address	ottstown, PA 19464	Expiration Da	ate	Not applicable
4.	Identification of Sys	tem <u>Nuclear Boiler</u> (	System 041)	<u>Line No. Al</u>	PE-2MS	PSV-041-2F013D

 5. (a) Applicable Construction Code <u>ASME III</u> 19.68 Edition, <u>Summer 1970</u> Addenda, <u>N/A</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 edition with addenda through 2003.

 Code Case (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Target Rock	164	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
Target Rock	031	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
Target Rock	4700	N/A	* 114-76023 PO# 204066- 000120	2006	Replacement	Yes
Target Rock	95	N/A	* 114-76024 PO# 204066- 000120	N/A	Replacement	No
	Manufacturer Target Rock Target Rock Target Rock	ManufacturerSerial No.Target Rock164Target Rock031Target Rock4700	ManufacturerSerial No.Board No.Target Rock164N/ATarget Rock031N/ATarget Rock4700N/A	Manufacturer         Serial No.         Board No.         Identification           Target Rock         164         N/A         * 114-58337 PO# 018049           Target Rock         031         N/A         * 114-58337 PO# 018049           Target Rock         031         N/A         * 114-58337 PO# 018049           Target Rock         031         N/A         * 114-58337 PO# 018049           Target Rock         4700         N/A         * 114-76023 PO# 204066- 000120           Target Rock         95         N/A         * 114-76024 PO# 204066-	Manufacturer         Serial No.         Board No.         Identification           Target Rock         164         N/A         *114-58337 PO# 018049         N/A           Target Rock         031         N/A         *114-58337 PO# 018049         N/A           Target Rock         031         N/A         *114-58337 PO# 018049         N/A           Target Rock         4700         N/A         *114-76023 PO# 204066- 000120         2006           Target Rock         95         N/A         *114-76024 PO# 204066-         N/A	Name of ManufacturerManufacturer Serial No.National Board No.Other IdentificationYear BuiltReplaced, or ReplacementTarget Rock164N/A* 114-58337 PO# 018049N/AReplacementTarget Rock031N/A* 114-58337 PO# 018049N/AReplacementTarget Rock031N/A* 114-76023 PO# 204066- 0001202006ReplacementTarget Rock95N/A* 114-76024 PO# 204066- 00120N/AReplacement

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No.166 and pilot No.001 with reworked body No.164 and pilot No.031.

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure Other \_\_\_\_\_ Pressure 1047 psi Test Temp. 173 °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

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# FORM NIS-2 (BACK)

9.	Remarks: Manufacturers Data Reports are traceable by Exelon Work Order package.
	Applicable Manufacturer's Data Reports to be attached
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CERTIFICATE OF	COMPLIANCE
We certify that the statements made in the report are correct ASME Code, Section XI. Type Code Symbol Stamp NA	and this <u>replacement</u> conforms to the rules of the repair or replacement
Certificate of Authorization No. NA	Expiration DateNA
Signed <u>J.H. Kramer, site weld admini</u> Gwner or Owner's Designee, Title	strator Date April 18, , 2007

### **CERTIFICATE OF INSERVICE INSPECTION**

or Province of	f <u>Pennsylvania</u> Hartfo	and employed by rd. CT		HSBC		e components describe
in this Owner	s Report during the period	· · · · · · · · · · · · · · · · · · ·	DEC O	a to 1-	144407	, and state th
to the best of	my knowledge and belie	f, the Owner has per	formed exami	nations and take	n corrective measu	ures described in this
	ort in accordance with the					
By signing	g this certificate neither t	he Inspector nor his	emplover make	es anv warrantv.	expressed or impli	ied, concerning the
Dy orgining			empleje man	,		
examinations	and corrective measures	described in this Ov	wher's Report.	Furthermore, ne	ither the Inspector	nor his employer
examinations a shall be liable	and corrective measures in any manner for any p	described in this Ov	wher's Report.	Furthermore, ne	ither the Inspector	nor his employer
examinations a shall be liable	and corrective measures	described in this Ov	wher's Report.	Furthermore, ne	ither the Inspector	nor his employer
examinations	and corrective measures	described in this Ov	wher's Report.	Furthermore, ne	ither the Inspector	nor his employer
examinations a shall be liable	and corrective measures	e described in this Oversonal injury or prop	wher's Report. berty damage o	Furthermore, ne	ither the Inspector ind arising from or	nor his employer connected with this
examinations a shall be liable	and corrective measures	e described in this Oversonal injury or prop	wher's Report. berty damage of mmissions	Furthermore, ne r a loss of any k	ither the Inspector	nor his employer connected with this A, C

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1.	Owner	Exelon Generation Company, L Name			DateJul	y 25, 2005
		200 Exelon Way, Kennett Squa Address	re, PA 19348		Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station			Unit	2
_		<u>3146 Sanatoga Road, Pottstow</u> Address	n, PA 19464			<u>5. C0213291 (2F33)</u> n P.O. No., Job No. etc.
3.	Work Performed by	<u>Exelon Nuclear</u> Name			Type Code Symbol Stamp _ Authorization No	
		<u>3146 Sanatoga Road, Pottstowr</u> Address	n, PA 19464		Expiration Date	Not applicable
4.	Identification of Sys	tem Nuclear Boiler	(System 041)	)	Line No. APE-2MS	PSV-041-2F013K
5.	(a) Applicable Con	struction Code ASME III	19 68 Ed	lition,	Summer 1970 Addenda,	N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

Name of Component	Name of Manufacturer	Manufacturer Serial No.			Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV PILOT ASSEMBLY	TARGET ROCK	014			N/A	REPLACEMENT	YES
MSRV BODY	TARGET ROCK	171	N/A	* 114-18879 PO# 013269	N/A	REPLACEMENT	YES
MSRV MAIN DISC	TARGET ROCK	4630	N/A	* 114-76023 PO# 204066- 481103	2004	REPLACEMENT	YES
MSRV MAIN SEAT INSERT	TARGET ROCK	69	N/A	* 114-76024 PO# 204066- 481103	N/A	REPLACEMENT	NO

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body and pilot with reworked body No. 171 and pilot No. 014

8. Tests conducted: Hydrostatic Development Pressure Nominal Operating Pressure Other Pressure <u>1042</u> psi Test Temp. <u>549</u> °F.

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NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

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(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturers Data Reports are traceable by Exelon work order package</u>. Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COM	PLIANCE	
We certify that the statements made in the report are correct and the ASME Code, Section XI. Type Code Symbol Stamp NA	nis <u>replacement</u> repair or replacement	conforms to the rules of the
Certificate of Authorization No. NA	Expi	ration DateNA
Signed J.H. Kramer, Engineer Date	9July 25,	, 2005
CERTIFICATE OF INSERVICI	pard of Boiler and Pressure Ve	essel inspectors and the State
or Province of <u>Pennsylvania</u> and employed by Hartford, CT	have inspect	ed the components described
in this Owner's Report during the period 21 MAR 05	to 4 AUG C	, and state that
to the best of my knowledge and belief, the Owner has performed exami Owner's Report in accordance with the requirements of the ASME code,		neasures described in this
By signing this certificate neither the Inspector nor his employer mak		implied, concerning the
examinations and corrective measures described in this Owner's Report.		
shall be liable in any manner for any personal injury or property damage of inspection.	or a loss of any kind ansing inc	m or connected with this
shall be liable in any manner for any personal injury or property damage of inspection.	, ,	
shall be liable in any manner for any personal injury or property damage of inspection.	PA-2497	I,N & A, C
shall be liable in any manner for any personal injury or property damage of inspection.	, ,	I,N & A, C

1.	Owner				Date		June 19, 2006	
		Name						
		200 Exelon Way, Kennett Squ Address	are, PA 193	348	Sheet	1 of	2	
2.	Plant	Limerick Generating Station			Unit	-	2	
		Name						
		3146 Sanatoga Road, Pottsto	wn, PA 1940	54		Work Ore	der No. C0215202	
		Address				Repair Organiza	ation P.O. No., Job No	o. etc.
3.	Work Performed by	<u>Exelon Nuclear</u>			Type Cod	le Symbol Stam		
		Name			Authoriza	tion No	Not appli	cable
_		3146 Sanatoga Road, Pottstov	vn, PA 1946	4	Expiratior	Date	Not appli	cable
		Address						
4.	Identification of Sys	stem Nuclear Boiler	(System	041)	Line No.	APE-2MS	PSV-041-2F013	к
5	(a) Applicable Cor	nstruction Code ASME U	19.68	Edition	Summer 1	970 Addenda	N/A	Code Case

(a) Applicable Construction Code <u>ASME III</u> 19.68 Edition, <u>Summer 1970</u> Addenda, <u>N/A</u>Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19.89 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV PILOT ASSEMBLY	TARGET ROCK	029	N/A	* 114-18879 PO# 013269	N/A	REPLACEMENT	YES
MSRV BODY	TARGET ROCK	176	N/A	* 114-18879 PO# 013269	N/A	REPLACEMENT	YES

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No. 171 and pilot No. 14 with reworked body No. 176 and pilot No. 029.

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other □ Pressure <u>1040</u> psi Test Temp. <u>516</u> °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

# FORM NIS-2 (BACK)

9.	Remarks:	MSRV body No. 176 and pilot No. 29 were previously installed at PSV-041-2F013E and removed in 2R08 under work order
		Applicable Manufacturer's Data Reports to be attached

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MSRV assembly replaced in mid-cycle maintenance outage 2M36.

Pressure testing completed with nuclear steam.

	CERTIFICATE OF COMPLIA	NCE			
We certify that the stateme ASME Code, Section XI. Type Code Symbol Stamp	nts made in the report are correct and this		ement eplacement	_ conforms to the ru	les of the
Certificate of Authorization No	NA		Expira	ation Date	NA
Signed <u>Jan J. K</u> Winer or Owner's Design	J.H. Kramer, Site Weld Administrator ee, Title	Date _	June 19,	, <u>2006</u>	

		CERTIFICATE OF INS	ERVICE INSPECT	ION	
				er and Pressure Vessel Inspectors and	he State
or Province of	Pennsylvania	_and employed by	<u> </u>	ISBCT	of
	Hartford	, CT		have inspected the components d	escribed
in this Owner's Re	eport during the period	5.TUL	<b>.Y O.5</b> to	23 JUNE OG , and s	tate that
			examinations and	I taken corrective measures described in	n this
		equirements of the ASME			
				anty, expressed or implied, concerning	the
				e, neither the Inspector nor his employe	
shall be liable in ai	ny manner for any per	sonal injury or property da	amage or a loss of	any kind arising from or connected with	this
inspection.	Henn	Commissi	-	PA-2497 I.N & A. C	
1 and	neran	Commissi			
Ins	spector's Signature		, National Be	pard, State, Province, and Endorsemen	ts
Date	23 JUNE 20	~ /			

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1. Owner	Exelon Generation Company, LLC Name	_ Date April	18, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2. Plant	Limerick Generating Station Name	Unit	2
	3146 Sanatoga Road, Pottstown, PA 19464 Address		lo. R0998259 P.O. No., Job No. etc.
3. Work Perfe	ormed by <u>Exelon Nuclear</u> Name	_ Type Code Symbol Stamp Authorization No	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4. Identification	on of System Nuclear Boiler (System 041)	Line No. APE-2MS	PSV-041-2F013L

5. (a) Applicable Construction Code <u>ASME III</u> 19<u>68</u> Edition, <u>Summer 1970</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003.</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV Pilot Assembly	Target Rock	186	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
MSRV Body Assembly	Target Rock	044	N/A	* 114-58337 PO# 018049	N/A	Replacement	Yes
Main Disc	Target Rock	4697	N/A	* 114-76023 PO# 204066- 000120	2006	Replacement	Yes
Main seat	Target Rock	94	N/A	* 114-76024 PO# 204066- 000120	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No.161 and pilot No.002 with reworked body No.186 and pilot No.044.

8. Tests conducted: Hydrostatic Deneumatic Nominal Operating Pressure Pressure 1047 psi Test Temp. 173 °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

W/O No. R0998259 Sheet 2 of 2

# FORM NIS-2 (BACK)

9.	Remarks:	Manufacturers Data	Reports are	traceable by	' Exelon	Work Order	package.
	•		Арр	licable Manu	facturer's	s Data Repor	ts to be attached

CERTIFICATE OF COMPLIANCE							
We certify that the statemen ASME Code, Section XI.	ts made in the report are correct and this _		lacement				
Type Code Symbol Stamp	NA	· · · · ·					
Certificate of Authorization No	NA			Expiration DateNA			
Signed <u>Jan H. Kum</u> Wwner or Owner's Designer	J.H. Kramer, site weld administrator	Date	April 18	,, 2007			
	-,						

	CERTI	FICATE OF INSERVIC	E INSPECTIO	DN	
I, the undersigned, holding				•	ectors and the Stat
or Province of Penns	<u>ylvania</u> and em	ployed by	HS	BCT	c
	Hartford, CT	47 054 0	,	have inspected the co	•
in this Owner's Report durin		OZDECO		MAYOT	, and state tha
to the best of my knowledge				aken corrective measures	described in this
Owner's Report in accordance					
By signing this certificat	e neither the Inspecto	or nor his employer ma	ikes anv warra	nty, expressed or implied.	concerning the
examinations and corrective		in this Owner's Repor	t. Furthermore	, neither the Inspector nor	his employer
examinations and corrective shall be liable in any manne		in this Owner's Repor	t. Furthermore	, neither the Inspector nor	his employer
examinations and corrective shall be liable in any manne		in this Owner's Repor	t. Furthermore	, neither the Inspector nor	his employer
examinations and corrective shall be liable in any manne		in this Owner's Repor	t. Furthermore	, neither the Inspector nor	his employer
examinations and corrective shall be liable in any manne		in this Owner's Repor ry or property damage	t. Furthermore	, neither the Inspector nor ny kind arising from or con	his employer nected with this
examinations and corrective shall be liable in any mannel nspection.	r for any personal inju	in this Owner's Repor	t. Furthermore or a loss of a	, neither the Inspector nor ny kind arising from or con PA-2497 I,N & A,	his employer nected with this C
examinations and corrective shall be liable in any manner inspection.	r for any personal inju	in this Owner's Repor ry or property damage	t. Furthermore or a loss of a	, neither the Inspector nor ny kind arising from or con	his employer nected with this C

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1.	Owner	Exelon Generation Company Name	<u>LLC</u>	_ DateJu	ne 19, 2006	
_		200 Exelon Way, Kennett Sq Address	uare, PA 19348	_ Sheet1_ of	2	-
2.	Plant	Limerick Generating Station		Unit	2	
		Name				
		3146 Sanatoga Road, Pottsto	own, PA 19464		No. C0213935	
		Address		Repair Organizatio	on P.O. No., Job No. etc.	
З.	Work Performed b	y _Exelon Nuclear		Type Code Symbol Stamp		
		Name		Authorization No.	Not applicable	_
_		3146 Sanatoga Road, Pottsto	wn, PA 19464	Expiration Date	Not applicable	_
		Address				
4.	Identification of Sy	vstem Nuclear Boiler	(System 041)	Line No. APE-2MS	PSV-041-2F013S	
5	(a) Annlicable Co	postruction Code ASME III	19.68 Edition	Summer 1970 Addenda	N/A Code Cas	e

(a) Applicable Construction Code <u>ASME III</u> 19<u>68</u> Edition, <u>Summer 1970</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>89</u>
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MSRV PILOT ASSEMBLY	Target Rock	017	N/A	* 114-18879 PO# 013269	N/A	Replacement	Yes
MSRV BODY	Target Rock	190	N/A	* 114-18879 PO# 013269	N/A	Replacement	Yes
(1) 1-1/8" 12 Point Bolt	Dyson Corp.	Heat No. 3-6171 Lot No. ENK	N/A	Target Rock IR No. 90786, Part No. 204842-2	N/A	Replacement	No

\* Traceability per Exelon Part Code Number.

7. Description of Work: Replaced main steam relief valve main body No. 165 and pilot No. 41 with reworked body No. 190 and pilot No. 017.

8. Tests conducted: Hydrostatic Deneumatic Nominal Operating Pressure Other Pressure 1040 psi Test Temp. 516 °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

# FORM NIS-2 (BACK)

# 9. Remarks: <u>MSRV body No. 190 and pilot No. 17 were previously installed at PSV-041-2F013D and removed in 2R08 under work order</u> Applicable Manufacturer's Data Reports to be attached

R0930754.

MSRV assembly replaced in mid-cycle maintenance outage 2M36.

Pressure testing completed with nuclear steam.

	CERTIFICATE OF COMPLIA	NCE		
We certify that the stateme ASME Code, Section XI. Type Code Symbol Stamp	ents made in the report are correct and this	replacement repair or replacement	conforms to the rule	es of the
Certificate of Authorization No.	NA	Ехрі	ration Date	NA
Signed, Gwner or Owner's Design	J.H. Kramer, Site Weld Administrator nee, Title	Date <u>June 19,</u>	., 2006	<u></u>

	CERTIFICATE OF INSERVICE INSPECTION						
		mission issued by the Natior		r and Pressure Vessel Inspe	ctors and the State		
or Province of		and employed by	H	BCT	o		
	Hartford			have inspected the corr	ponents described		
in this Owner's Re	eport during the perior		<u>25 to </u>	23 JUNE 06	, and state that		
to the best of my	knowledge and belief	, the Owner has performed e	examinations and	taken corrective measures c	lescribed in this		
		requirements of the ASME c					
		e Inspector nor his employer		anty expressed or implied o	oncerning the		
		described in this Owner's Re					
		rsonal injury or property dam					
		rsonal injury of property dam	aye of a loss of a	ny kina ansing nom or conn			
inspection.	1 10						
		$\langle \rangle$					
In	1 Yena						
<u>y</u> uu	<u>i noria</u>	Commission	s	<u>PA-2497 I,N &amp; A, C</u>			
ins ins	spector's Signature	/	National Bo	ard, State, Province, and En	dorsements		
	23 JUNE 20						

1.	Owner	Exelon Generation Company, LLC Name	Date <u>April</u>	10, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	_2
2.	Plant	Limerick Generating Station Name	Unit	2
	<u></u>	3146 Sanatoga Road, Pottstown PA 19464 Address		er No. R0870403 P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identification of Sys	tem Reactor Recirculation Pump (System 043)	Line No. VRR-2RD	Pump 2B-P201

 5. (a) Applicable Construction Code <u>ASME III</u> 19.89 Edition, <u>N/A</u> Addenda, <u>N</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

 N/A Code Case (c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2B-P201 Recirc Pump Mechanical Seal	Borg-Warner	311085 B-W Job No. 94-EP-3751	N/A	* 114-98951 PO# LS-696633	1994	Replacement	Yes
2B-P201 Recirc Pump Mechanical Seal	Borg-Warner	311084 B-W Job No. 94-EP-3750	N/A	* 114-98951 PO# LS-696633	1994	Replaced	Yes
						·	

\* Traceability per Exelon stock code number.

Description of work: <u>Replaced reactor recirculation pump mechanical seal cartridge.</u>
 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other □ <u>1047</u> psi Test Temp. <u>173</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

W/O No. R0870403 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturers data reports are traceable by purchase order and work order package</u> Applicable Manufacturer's Data Reports to be attached

Mechanical seal S/N 311085 was removed from recirc pump 1B-P201 in 1R11 under work order R0838581 and rebuilt under work order

R0873403, prior to installation.

	CERTIFICATE OF COMPLIAN	ICE	
We certify that the statements ma ASME Code, Section XI. Type Code Symbol Stamp <u>N</u>		repair or replacement)	
Certificate of Authorization No	NA		Expiration DateNA
Signed <u>Jac </u> <i>H</i> . K <u></u> Owner or Owner's Designee, Titl	J.H. Kramer (site weld administrator le	r) Date <u>Apri</u>	110, 20 <u>07</u>
· · · · · · · · · · · · · · · · · · ·	CERTIFICATE OF INSERVICE INSP	PECTION	
I, the undersigned, holding a valid comr or Province of <u>Pennsylvania</u> Hartford	and employed by HS	BCT	. of
Hartford in this Owner's Report during the period to the best of my knowledge and belief, Owner's Report in accordance with the r	the Owner has performed examination	s and taken corrective on XI.	$\underline{YOZ}_{,}$ and state that measures described in this

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.

AU Inspector's Signature Commissions

22 MAY 2007.

PA-2497 1,N & A, C National Board, State, Province, and Endorsements

(12/82)

Date

1.	Owner	Exelon Generation Company, LLC Name	Date April 1	, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	3
2.	Plant	Limerick Generating Station Name	Unit:	2
		3146 Sanatoga Road , Pottstown, PA 19464 Address	Work Order # Repair Organization P.	
3.	Work I	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4.	Identifi	cation of System: Reactor Recirculation (System-043)	Line No. DCA-213 & HBB-243	Valve 043-2F030 & 2F032
5.	(a) A	oplicable Construction Code See remarks on page 3 19	_Edition,Addenda,	<u>N/A</u> Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003.</u>

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2" Valve 043-2F030	Flowserve	10BGF	N/A	* 114-83125 PO# 257797-381	2006	Replacement	Yes
2" Valve 043-2F032	Borg-warner	97EP0313	N/A	* 114-83125 PO# 257803- 348015	1997	Replacement	Yes
(2) Feet 2" NPS SS Pipe	Sandvik	Heat No. 8324H	N/A	* 114-90030 PO# 178390	N/A	Replacement	No
(1) 2" NPS large tongue flange	Western Forge & Flange Co.	Heat No. 34811	N/A	* 114-91826 PO# 009825- 2920	N/A	Replacement	No
(1) 2" NPS large groove flange	Western Forge & Flange Co.	Heat No. 34811	N/A	* 114-91842 PO# 009825- 2918	N/A	Replacement	No
W4 x 13 W Shape	Siskin – Chaparral Steel	Heat No. 22235870	N/A	* 114-93009 PO# 001897- 234	N/A	Replacement	No
PS-1010 pipe restraint	Bergen- Paterson	N/A	N/A	* 114-92636 PO# 386535- 150	N/A	Replacement	No
5/8" steel plate	ISG Plate	Heat No. T5183/8B	N/A	* 111-09625 PO# 001897- 486	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work: <u>Replaced 2" RPV drain valve and installed 2" valve, drain piping and supports.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_ Pressure <u>1047</u> psi Test Temp. <u>173</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

1. Owner	Exelon Generation Company, LLC	Date April 1	, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	3
2. Plant	Limerick Generating Station Name	Unit	2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order # Repair Organization P.	
3. Work	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	N/A N/A
	3146 Sanatoga Road, Pottstown, PA 19464	Expiration Date	N/A
4. Identif	Address ication of System: <u>Reactor Recirculation (System-043)</u>	Line No. DCA-213 & HBB-243	Valve 043-2F030 & 2F032

5. (a) Applicable Construction Code <u>See remarks on page 3</u> 19 Edition, <u>Addenda</u>, <u>N/A</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003.</u>
(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
(5) Feet 2" NPS CS Pipe	Michigan Seamless Tube	Heat No. 00A053486	N/A	* 114-90045 PO# 009825- 2506	N/A	Replacement	No
(2) 2" NPS raised face flanges	N/A	N/A	N/A	* 119-82412	N/A	Replacement	No
FG-043-265 2" NPS Flow Indicator	OPW Engineered Systems	1500 Series	_ N/A	* 114-60745	N/A	Replacement	No
(2) 2" NPS elbows	Bonney Forge	Lot No. 75971 & 76259	N/A	* 114-90818 PO# 009825- 2407 & 2936	N/A	Replacement	No
(1) 2" NPS coupling	Bonney Forge	Lot No. 9209	N/A	* 114-90782 PO# 009825- 2930	N/A	Replacement	No
(8) 7/8" flange studs	Nova Machine Products	Heat No. 245182 Trace 0G10	N/A	* 114- 92944 PO# 180864- 2292	N/A	Replacement	No
(16) 7/8" flange nuts	Nova Machine Products	Heat No. 50035737 Trace P671	N/A	* 116- 12116 PO# 180864- 1622	N/A	Replacement	No
(4) 5/8" flange studs	Nova Machine Products	Heat No. 230111 Trace R711	N/A	* 114- 37655 PO# 180864- 1761	N/A	Replacement	No
(8) 5/8" flange nuts	Nova Machine Products	Heat No. 425940 Trace 0F63	N/A	* 116- 12090 PO# 180864- 2281	N/A	Replacement	No

\* Traceability per Exelon part code number.

Valves were manufactured to ASME III, 1974 edition with addenda through Summer 1975.

2" HBB-243 piping on the downstream side of valve 043-2F032 is non-ASME, non-safety related but within the ASME XI boundary.

\_2" DCA-213 piping was installed in accordance with ASME III, 1974 edition with addenda through Winter 1974.\_\_

2" HBB-243 piping was installed in accordance with ANSI B31.1, 1973 edition with addenda through Summer 1973.

DCA-213-E3-H1 pipe support was installed to ANSI B31.7, 1969 edition with addenda through March 1971.

HBB-243-E31-H1 pipe support was installed to ANSI B31.1, 1973 edition with addenda through Winter 1974.

	CERTIFICATE OF CO	MPLIANCE	
We certify that the statements m ASME Code, Section XI Type Code Symbol Stamp <u>N</u>	ade in the report are correct and	d this <u>replacement</u> conforms to the rules of the (repair or replacement)	
Certificate of Authorization No	NA	Expiration Date	NA
Signed <u>Jan H. K.</u> Owner or Owner's I	J.H. Kramer, site weld a Designee, Title	administrator Date April 1, 2007	_

		CERTIFICA	TE OF INSE	RVICE I	NSPECTI	ION		
I, the undersigned or Province of	l, holding a valid com Pennsylvania Hartfor	and employe			d of Boile HSBCT			ectors and the State of nents described
in this Owner's Re	port during the perio		MAR	07	to	25 AP	R 07	, and state that
to the best of my l	knowledge and belief	, the Owner has	s performed	examina	tions and	taken corrective	e measures	described in this
examinations and	certificate neither the corrective measures hy manner for any period	described in thi	s Owner's R	leport. Fu	urthermor	e, neither the In	spector nor l	nis employer
Jaule	Contraction of the sector's Signature	h	_Commissio		ational Br	PA-24 pard, State, Prov	97 I,N & A, C	
Date	25 APR 21	07		110	alional Du	Jaru, Slale, Fro	nnce, and Ei	luorsements

9. Remarks: <u>Manufacturers data reports are traceable by purchase order and work order package.</u> Applicable Manufacturer's Data Reports to be attached

Disc replacement completed in accordance with Exelon design change ECR 05-00309.

	CERTIFICATE OF COMPLIANC	E			
ASME Code, Section XI.	ade in the report are correct and this (re	replac pair or repla		to the rules	s of the
Certificate of Authorization No	NA		Expiration Date_		NA
Signed <u>Game</u> D. Hu Owner or Owner's Designee, T	J.H. Kramer (site weld administrator) tte	Date	March 30,	, 20 <u>07</u>	

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	5			and Pressure Vessel Insp	
or Province of Per		oloyed by	HSBCT		c
	Hartford, CT	011100	,	have inspected the co	•
in this Owner's Report d		<u>_30 AUG O</u>		<u>II APRO/</u>	, and state that
to the best of my knowle	dge and belief, the Owne	r has performed exam	inations and t	aken corrective measures	s described in this
Owner's Report in accord	lance with the requirement	nts of the ASME Code	Section XL		
				nty, expressed or implied,	concerning the
				, neither the Inspector nor	
	iner for any personal injui	y or property damage	or a loss of ar	ny kind arising from or cor	nnected with this
inspection.	1 11 -				
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	rennon	Commissions		PA-2497 I.N & A.	c
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9 and	la Cianatura				
Inspector	's Signature		National Boa	ard, State, Province, and I	Endorsements

1.	Owner	Exelon Generation Company, LLC Name	Date <u>March</u>	30, 2007
	·	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	<u>.</u>
2.	Plant	Limerick Generating Station Name	Unit2	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Work Order Repair Organization P.C	No. C0217934
3.	Work Performed b	y <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identification of Sy	stem_Reactor Water Clean-up (System 044)	Line No. DBB-205	044-2029

5. (a) Applicable Construction Code <u>ASME III</u> 19<u>74</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
4" Globe Valve Disc	Flowserve	Heat No. 90784-1	N/A	* 114-59797 PO# 257797- 441	2007	Replacement	Yes

\* Traceability per Exelon stock code number.

7. Description of work: Replace 4" globe valve disc.

8. Tests conducted: Hydrostatic 
Pneumatic Nominal Operating Pressure 
Other 
N/A psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

X

1. Ov	vner	Exelon Generation Company, LLC Name		Date		Ma	arch 30, 2007
		200 Exelon Way, Kennett Square, P Address	PA 19348	Sheet	<u>1</u> of		2
2. Pla	ant	Limerick Generating Station Name	<u> </u>	Unit			2
		3146 Sanatoga Road, Pottstown PA Address	19464	R			rder No. C0217939 n P.O. No., Job No. etc.
3. Wo	ork Performed by	Exelon Nuclear Name		Type Code Authorizati			N/A N/A
		<u>3146 Sanatoga Road, Pottstown PA</u> Address	A 19464	Expiration	Date		N/A
4. Ide	entification of Sys	tem <u>Reactor Water Clean-up</u> (S	System 044)	Line No. D	BB-205		044-2063

5. (a) Applicable Construction Code <u>ASME III</u> <u>19.71</u> Edition, <u>Summer 1973</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Content XI Code Case

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
4" Check Valve Disc	Velan Valve	7962 Heat No. M6460	N/A	* 114-59792 PO# 019946	2006	Replacement	Yes
		· ·					

\* Traceability per Exelon stock code number.

7. Description of work: Replace 4" check valve disc.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure 
Exempt 
Cother 
N/A psi Test Temp. 
N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

9.	Remarks:	Manufacturers	data reports	are tracea	<u>ole by</u>	purchase	order an	<u>d work (</u>	<u>order pac</u>	kage.
				Applicable	Manu	ufacturer's	Data Re	ports to	be attach	ned

Replacement completed in accordance with Exelon design change ECR 05-00309.

	CERTIFICATE OF COMPLIAN	ICE		
We certify that the statements ASME Code, Section XI. Type Code Symbol Stamp	made in the report are correct and this(	replac repair or repla		ms to the rules of th
Certificate of Authorization No	NA		Expiration Da	ateN
Signed	J.H. Kramer (site weld administrato Title	<u>r)</u> Date	March 30,	, 20 <u>07</u>

	CER	TIFICATE OF INSERV	CE INSPECTI	NC	
I, the undersigned, h	olding a valid commission	issued by the National	Board of Boile	and Pressure Vessel Insp	ectors and the Stat
or Province of	Pennsylvania and e	employed by	HSBCT		0
	Hartford, CT			have inspected the_con	nponents described
in this Owner's Repo	rt during the period	6 MAR 07	to to	18 MAY 07	, and state tha
to the best of my know	wledge and belief, the Ov			taken corrective measures	described in this
	cordance with the requirer				
				unty, expressed or implied,	concerning the
				, neither the Inspector nor	
				ny kind arising from or con	
inspection.	~	· · · · · · · · · · · · · · · · · · ·		.,	
	100 1	$\frown$			
	KI G				
KIAW	Mann	Commissions		PA-2497 I,N & A, C	2
	20000200				
Inspe	ctor's Signature				
Inspe	ctor's Signature		National Do	aru, State, Frovince, anu E	ndorsements
Inspe	IS MAY 2007		National Do	ard, State, Frovince, and E	

1.	Owne	r Exelon Generation Company, LLC Name	Date March 3	30, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	Plant	Limerick Generating Station Name	Unit 2	
		3146 Sanatoga Road, Pottstown PA 19464	Work Order N	lo. C0220684
	_	Address	Repair Organization P.C	. No., Job No. etc.
З.	Work	Performed by Exelon Nuclear	Type Code Symbol Stamp	N/A
		Name	Authorization No.	N/A
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identi	fication of System Reactor Water Clean-up (System 044)	Line No. ECC-203	HV-C-044-2F033

5. (a) Applicable Construction Code <u>ASME III</u> <u>1971</u> Edition, <u>N/A</u> Addenda, <u>N/A</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
4" Control Valve Inner Valve	Flowserve	Trace No. 16169-1-3 Serial No. 1	N/A	* 114-00567 PO# 257797- 348136	2003	Replacement	Yes
				·			

\* Traceability per Exelon stock code number.

7. Description of work: Replace 4" control valve inner valve.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure 
Other 
N/A psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

I.

# FORM NIS-2 (BACK)

9.	Remarks:	Manufacturers data reports are traceable by purchase order and work order package.
	-	Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIAN	NCE			
We certify that the statements ASME Code, Section XI. Type Code Symbol Stamp	made in the report are correct and this( NA	replace (repair or repla		ms to the rules	of the
Certificate of Authorization No	NA		Expiration Da	ate	NA
Signed J, Kus Owner or Owner's Designee,	J.H. Kramer (site weld administrate	or) Date	March 30,	, 20 <u>07</u>	

<ol> <li>the undersigned, holdi</li> </ol>	ng a valid comn	nission issued by the Nati	onal Board of Boile	r and Pressure Vessel Inspe	ectors and the Sta
or Province ofPer			HSBCT	•	
	Hartford	СТ		have inspected the com	ponents describe
in this Owner's Report d					, and state th
to the best of my knowle	dge and belief,	the Owner has performed	examinations and	taken corrective measures of	described in this
Owner's Report in accord	lance with the re	equirements of the ASME	Code. Section XI.		
•		•	,	and a subsect of the first second	
Description of the second state of the second of the second state of the second sta					
		Inspector nor his employ			
examinations and correc	tive measures d	escribed in this Owner's I	Report. Furthermor	e, neither the Inspector nor h	nis employer
examinations and correc shall be liable in any mar	tive measures d	escribed in this Owner's I	Report. Furthermor		nis employer
examinations and correc	tive measures d	escribed in this Owner's I	Report. Furthermor	e, neither the Inspector nor h	nis employer
examinations and correc shall be liable in any mar	tive measures d	escribed in this Owner's I	Report. Furthermor	e, neither the Inspector nor h	nis employer
examinations and correc shall be liable in any mar	tive measures d	escribed in this Owner's I	Report. Furthermor	e, neither the Inspector nor h	nis employer
examinations and correc shall be liable in any mar	tive measures d	lescribed in this Owner's f sonal injury or property da	Report. Furthermori mage or a loss of a	e, neither the Inspector nor h any kind arising from or conn	nis employer nected with this
examinations and correc shall be liable in any mar	tive measures d	escribed in this Owner's I	Report. Furthermori mage or a loss of a	e, neither the Inspector nor h	nis employer nected with this
examinations and correc shall be liable in any mar inspection.	tive measures d	lescribed in this Owner's f sonal injury or property da	Report. Furthermore image or a loss of a bons	e, neither the Inspector nor h any kind arising from or conn	nis employer nected with this

1.	Owner	Exelon Generation Company, LLC Name	Date April 3, 2007	
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	_
2.	Plant	Limerick Generating Station Name	Unit 2	
		<u>3146 Sanatoga Road, Pottstown PA 19464</u> Address	Work Order No. R0722844 Repair Organization P.O. No., Job No. etc.	_
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp     N/A       Authorization No.     N/A	<u> </u>
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration DateN/A	
4.	Identification of Syst	em_Reactor Water Clean-up (System 044)	Line No. DCD-211	

5. (a) Applicable Construction Code <u>ANSI B31.1</u> <u>19.73</u> Edition, <u>N/A</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(1) foot 1-1/2" NPS Pipe	N/A	N/A	N/A	* 119-82653	N/A	Replacement	No
(1) 1-1/2" NPS Flange	N/A	N/A	N/A	* 119-82356	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replace 1-1/2" relief valve inlet piping.

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other □ 300 & 1048 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

9.	Remarks:	Relief valve inlet piping is Non-ASME III, non-safety related, but within the ASME XI boundary.	
	-	Applicable Manufacturer's Data Reports to be attached	

	CERTIFICATE	E OF COMPLIANCE		
We certify that the sta ASME Code, Section XI. Type Code Symbol Stamp	atements made in the report are co	prrect and this <u>replac</u> (repair or repl	conforms to the r acement)	rules of the
Certificate of Authorization N	NoNA		Expiration Date	NA
Signed Q. V. V. Owner or Owner's D		weld administrator) Date	April 3,, 20 <u>07</u>	
	CERTIFICATE OF I	INSERVICE INSPECTION	*	<u> </u>
I, the undersigned, holding	a valid commission issued by the l	National Board of Boiler and F	Pressure Vessel Inspectors and the	ne State
	sylvania and employed by	HSBCT		of

<u></u>			
Hartford, CT			have inspected the components described
in this Owner's Report during the period	21 MAR	07 to	8 JUN 07, and state that
to the best of my knowledge and belief, the Ow	ner has performed ex	caminations and	taken corrective measures described in this
Owner's Report in accordance with the requirem	nents of the ASME Co	ode, Section XI.	
By signing this certificate neither the Inspec	tor nor his employer	makes any warra	anty, expressed or implied, concerning the
examinations and corrective measures describe			
shall be liable in any manner for any personal in	jury or property dama	age or a loss of a	any kind arising from or connected with this
inspection.		•	, .
1 Kan In	み		
Jun Juny	Commissions	3	PA-2497 I,N & A, C
Inspector's Signature		National Bo	ard, State, Province, and Endorsements
a Tour			
Date <b>D JUN</b> _2007.			

1.	Owner	Exelon Generation Company, LLC Name	DateN	Narch 30, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		<u>3146 Sanatoga Road, Pottstown PA 19464</u> Address		<u>Order No. C0210966</u> on P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identification of Syst	em_Control Rod Drives (System 047)	Line No. EBB-242	HV-047-2F181

5. (a) Applicable Construction Code <u>ASME III</u> <u>1977</u> Edition, <u>Winter 1977</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2" Globe Valve Plug	Anchor/Darling Valve Co.	Heat No. J8334	N/A	* 114-32403 PO# 279702- 210	1989	Replacement	Yes

\* Traceability per Exelon stock code number.

7. Description of work: Replace 2" CRD Globe valve plug.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure Exempt 
Cother 
N/A psi Test Temp. 
N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

W/O No. C0210966 Sheet 2 of 2

# FORM NIS-2 (BACK)

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9. Remarks <u>Manufacturers data reports are traceable by purchase order and work order package</u>. Applicable Manufacturer's Data Reports to be attached

	CERTIFICAT	E OF COMPLIANCE						
We certify that the statemen ASME Code, Section XI. Type Code Symbol Stamp	· .		replace air or replac		ns to the rules of th			
Certificate of Authorization No	NA			Expiration Dat	teN			
Signed X. K Coviner or Owner's Designe	J.H. Kramer (site v e, Title	veld administrator)	Date	March 30,	, 20 <u>07</u>			
I, the undersigned, holding a valid or Province of <u>Pennsylvania</u>	and employed by	HSBC	<u>, ד</u>		of			
to the best of my knowledge and to to the best of my knowledge and to Owner's Report in accordance with By signing this certificate neith	period <u>21 AL</u> pelief, the Owner has perfor in the requirements of the AS	med examinations a SME Code, Section 3	18. .nd taken cc XI.		, and state that scribed in this			
examinations and corrective meas shall be liable in any manner for ar inspection.	ures described in this Owne	r's Report. Furtherm	nore, neithei	the Inspector nor his	employer			
Jaulalina Inspector's Signatu		issions National		PA-2497 I,N & A, C e, Province, and End	orsements			
Date 18 MAY	2007.							

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(12/82)

1.		neration Co., LLC ame	Date <u>June 13, 2007</u>	
		ay, Kennett Square, PA 19348	Sheet <u>1</u> of	2
2.	· · · · ·	erating Station	Unit2	_
		oad, Pottstown, PA 19464 dress	Work Order No. R0997991 Repair Organization F	P.O. No., Job No. Etc.
3.	·	neration Co., LLC ame	Type Code Symbol Stamp Authorization No	
		Kennett Square, PA 19348 dress	Expiration Date	N/A
4.	Identification of System 04	7 CONTROL ROD DRIVE	Line No. 20-S299-10-23	
_				

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1971
 Addenda, S'73
 Code Case 1361-2

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case 1361-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A4410	N/A	N/A	1986	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

# 20-5299-10-23

Sheet 2 of 2

# FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificate of Authorization No. NA Expiration Date NA Signed Active Designed Title Date, CO2607
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described In this Owner's Report during the period <u>PACE OCO</u> to <u>27 JUL O7</u> , 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. <u>MacMadMadMadMadMadMadMadMadMadMadMadMadMadM</u>
Date 27 JUN 07

1.	OwnerE	xelon Generation Co., LLC Name	Date June 13, 2007	
	200 E	xelon Way, Kennett Square, PA 19348 Address	Sheet of 2	
2.	Plant <u>Lim</u>	erick Generating Station Name	Unit2	
	<u>3146 Sa</u>	natoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O.	No., Job No. Etc.
3.	Work Performed by	xelon Generation Co., LLC Name	Type Code Symbol Stamp Authorization No	
	200 Exe	on Way, Kennett Square, PA 19348 Address	Expiration Date	N/A
4.	Identification of System	047 CONTROL ROD DRIVE	Line No. 20-S299-10-35	

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1968
 Addenda, w' 69
 Code Case 1361-1

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case 1361-1

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	5167	N/A	N/A	1973	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-10-35

Sheet 2 of 2

4/21/07

# FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificaterof Authorization, No. NA Expiration Date NA Signed OT
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 <u>Pennsylvania</u> and employed by <u>HSBCT of</u> <u>Hartford, CT</u> have inspected the components described
In this Owner's Report during the period <u>14 AUG OC</u> to <u>27 DUD 07</u> , 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.
CommissionsPA-2497 I, N, A & C
Inspector's Signature     National Board, State, Province, and Endorsements       Date     27 JUN 07



1.	Owner <u>Exel</u> c	n Generation Co., LLC Name	Date June 13, 2007	
	200 Exelo	on Way, Kennett Square, PA 19348 Address	Sheet of 2	
2.	Plant Limerick	<u>Generating Station</u> Name	Unit2	
	3146 Sanato	ga Road, Pottstown, PA 19464 Address	<u>Work Order No. R0997991</u> Repair Organization P.O. No., Job No. E	Etc.
3.	Work Performed by _ Exelo	<u>n Generation Co., LLC</u> Name	Type Code Symbol Stamp         N/A           Authorization No.         N/A	
	200 Exelon \	Nay, Kennett Square, PA 19348 Address	Expiration DateN/A	
4.	Identification of System	047 CONTROL ROD DRIVE	Line No. 20-S299-18-19	

5. (a) Applicable Construction Code ASME III Edition, <u>1974</u> Addenda, <u>w' 75</u> Code Case <u>N207 1361-2</u> (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8565	N/A	N/A	1988	Replacement	Yes
	······································	*****	<u></u>				
	- -						

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-18-19

Sheet 2 of 2 4 27 07

# FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp NA
Certificate of Authorization No. NA Expiration Date NA Signed Control Designer, Title Date, Control
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
In this Owner's Report during the period 14 AUG Obto27 JUN 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 magner for any personal injury or property damage or a loss of any kind arising from or connected with this
Inspection.
And Mercaria Commissions PA-2497! N. A & C
Inspector's Signature National Board, State, Province, and Endorsements
Date 27 JUN 07



1.	Owner Exelon Generation Co., LLC Name	Date <u>June 13, 2007</u>	
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of2	
2.	Plant Limerick Generating Station	Unit2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job I	No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name		/A /A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration Date N	/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-22-31	

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>None</u> Code Case <u>1361-1</u> (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	9285	N/A	N/A	1977	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-22-31

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Sheet 2 of 2

# FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificate of Authorization No. NA Expiration Date NA Signed Owner or Owners pesignee, title
CERTIFICATE OF INSERVICE INSPECTION
Or Province of <u>Pennsylvania</u> and employed by <u>He National Board of Bolief and Pressule vessel inspectors and the State</u>
Hartford, CT In this Owner's Report during the period <u>HAOG OG</u> to <u>27 JUN O7</u> , 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. <u>Commissions</u> PA-2497 I, N, A & C Inspector's Signature National Board, State, Province, and Endorsements
Date <u>27 JUN 07</u>

1.		eneration Co., LLC Name	Date June 13, 2007	
		Vay, Kennett Square, PA 19348	Sheet of	2
2.	Plant Limerick Ge	enerating Station Name	Unit2	-
		Road, Pottstown, PA 19464	<u>Work Order No. R0997991</u> Repair Organization F	P.O. No., Job No. Etc.
3.	· · · · · · · · · · · · · · · · · · ·	eneration Co., LLC Name	Type Code Symbol Stamp Authorization No	
		/, Kennett Square, PA 19348 ddress	Expiration Date	N/A
4.	Identification of System	047 CONTROL ROD DRIVE	Line No. 20-S299-26-11	
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5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>w' 75</u> Code Case <u>N207 1361-2</u> (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8550	N/A	N/A	1988	Replacement	Yes
				· · · · · · · · · · · · · · · · · · ·		-	

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-26-11 Sheet 2 of 2 4/27/07

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp NA
Certificate of Authorization No. NA Expiration Date NA Signed Date, Date
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State Or Province of <u>Pennsylvania</u> and employed by <u>HSBCT</u> of
Hartford, CT have inspected the components described
In this Owner's Report during the period <u>14 AUG OC</u> to <u>27 JUN 07</u> , 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.
PA-2497 I, N, A & C
Inspector's Signature National Board, State, Province, and Endorsements
Date 27 JUN 07

1.	Owner Exelon Generation Co., LLC Name	Date <u>June 13, 2007</u>	-
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	Plant Limerick Generating Station Name	Unit2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	<u>Work Order NoR0997991</u> Repair Organization P.O. No	., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp	N/A N/A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration Date	N/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-26-15	

 5. (a) Applicable Construction Code
 ASME III
 Edition, <u>1974</u>
 Addenda, <u>w' 75</u>
 Code Case <u>N207 1361-2</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>
 Code Case <u>N207 1361-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8476	N/A	N/A	1988	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-26-15

A Sheet 2 of 2 0/27/07

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9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificate of Authorization No NA Expiration Date NAC
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 <u>Pennsylvania</u> and employed by <u>HSBCT of</u> <u>Hartford, CT</u> have inspected the components described
In this Owner's Report during the period
Inspection. <u>Inspector's Signature</u> <u>Inspector's Signature</u> <u>Commissions</u> <u>PA-2497 I, N, A &amp; C</u> <u>National Board, State, Province, and Endorsements</u>
Date27 JUN 07

(12/82)

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1.	Owner Exelon Generation Co., L	LC	Date June 13, 2007	
	Name			
	200 Exelon Way, Kennett Squ	uare, PA 19348	Sheet of	2
	Address			
0	Diant Limerial Constating Station		Unit 2	
۷.	Plant Limerick Generating Station Name			
	Name			
	3146 Sanatoga Road, Pottstown	. PA 19464	Work Order No. R099799	91
	Address			on P.O. No., Job No. Etc.
			5	
З.	Work Performed byExelon Generation Co., L		Type Code Symbol Stamp	N/A
	Name		Authorization No.	N/A
	200 Exelon Way, Kennett Squar	e, PA 19348	Expiration Date	N/A
	Address			
4	Identification of System 047 CONTROL E		Line No. 20-S299-26	25
4.	Identification of System 047 CONTROL F		Line No. 20-3299-20	-55
E	(a) Applicable Construction Code ASME III	Edition 1074	Addonda SIZE	Codo Caso 1361 1

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1974
 Addenda, S'76
 Code Case 1361-1

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case 1361-1

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	9402	N/A	N/A	1977	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

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20-5299-26-35

NB 427/07

Sheet 2 of 2

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp NA
Certificate of Authorization Ng. NA Expiration Date NA Signed A comparison Designee, Title Date, Comparison
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described In this Owner's Report during the period <u>HARCE OCE</u> to <u>27 JUNIOT</u> , 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. Mathematical Commissions PA-2497 I, N, A & C
Inspector's Signature National Board, State, Province, and Endorsements
Date 27 JUN 07



1.	Owner Exelon Generation Co., LLC Name	Date June 13, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheetof2
2.	Plant Limerick Generating Station	Unit2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	_ Type Code Symbol Stamp N/A Authorization No N/A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-26-35
~		74 Addanda ud 75 Ocda Occa N007 1001 O

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1974
 Addenda, w' 75
 Code Case N207 1361-2

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case N207 1361-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Piston Tube Assembly	Gen. Electric	0095	N/A	N/A	2007	Replacement	Yes

7. Description of Work: <u>REPLACED PISTON TUBE ASSEMBLY FOR CRD 25-35, CRD SERIAL # 9402.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure \_\_\_\_1053\_\_\_psi Test Temp. \_\_\_\_192\_\_\_°F.

20-5299-26-35 Sheet 2 of 2 Roton Tube De la lon

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE						
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement						
Type Code Symbol StampNA						
Certificate of Authorization No. NA Expiration Date NA Signed Contract of Owner or Owner's pesignee 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 <u>Pennsylvania</u> and employed by <u>HSBCT of</u>						
Hartford, CT         In this Owner's Report during the period       14 AUG OG       to       27 JUN O7       and state that         To the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this       ovner'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. <u> </u>						
Date 27 JUN 07						

1.	Owner Exelon Generation Co., LLC Name	Date <u>June 13, 2007</u>	
	200 Exelon Way, Kennett Square Address	e, PA 19348 Sheet <u>1</u> of <u>2</u>	
2.	Plant Limerick Generating Station Name	Unit 2	
	3146 Sanatoga Road, Pottstown, PA Address	<u>A 19464</u> Work Order No. R0997991 Repair Organization P.O	No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp Authorization No	
	200 Exelon Way, Kennett Square, P Address	A 19348 Expiration Date	N/A
4.	Identification of System 047 CONTROL ROD	DRIVE Line No. 20-S299-30-11	<u> </u>

 5. (a) Applicable Construction Code
 ASME III
 Edition, <u>1974</u>
 Addenda, <u>w' 75</u>
 Code Case <u>N207 1361-2</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>
 Code Case <u>N207 1361-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8909	N/A	N/A	1991	Replacement	Yes
		Man - Lor					

### 7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299 - 30-11

-

6/27/07 Sheet 2 of 2

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE							
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section KI. Repair or replacement							
Type Code Symbol StampNA							
Certificate of Authorization No. NA Expiration Date NA Signed							
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described							
In this Owner's Report during the period <u>IM AUG OG</u> to <u>27 JUN 07</u> , 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 PA-2497 I. N. A & C							
Total         Commissions         PA-2497 I, N, A & C           Inspector's Signature         National Board, State, Province, and Endorsements							
Date 27 JUN 07							



1.	Owner Exelon	Generation Co., LLC Name	Date June 13, 2007	
	200 Exelor	Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	PlantLimerick	Generating Station	Unit2	
	3146 Sanatog	a Road, Pottstown, PA 19464 Address	<u>Work Order No. R0997991</u> Repair Organization P.C	D. No., Job No. Etc.
3.	Work Performed by _ Exelon	Generation Co., LLC Name	Type Code Symbol Stamp Authorization No	
	200 Exelon W	ay, Kennett Square, PA 19348 Address	Expiration Date	N/A
4.	Identification of System	047 CONTROL ROD DRIVE	Line No. 20-S299-30-19	_
_				

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1968</u> Addenda, <u>w' 69</u> Code Case <u>1361-1</u> (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	5237	N/A	N/A	1973	Replacement	Yes
(1) Screw Cap 1"-8 x 5.50	See Remarks	See Remarks	N/A	N/A	N/A	Replacement	NO

7. Description of Work: REPLACED ONE CONTROL ROD DRIVE AND 1 CAP SCREW

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-30-19 Sheet 2 of 2 4/27/07

## 9. Remarks MANUFACTURER DATA SHEET ATTACHED

### WORK ORDER DOES NOT IDENTIFY WHICH VENDORS MATERIAL WAS USED. IR WRITTEN 644203.

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp     NA       Certificate of Authorization Dot     NA   Expiration DateNA
Signed <u>Autor</u> Date, <u>(a)2607</u> 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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of
Hartford, CT have inspected the components described In this Owner's Report during the period <u>14 AUG OC</u> to <u>27 JUN</u> of 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.
and the second sec
Inspector's Signature         Commissions         PA-2497 I, N, A & C           Inspector's Signature         National Board, State, Province, and Endorsements
Date <u>27 JUN 07</u>

1.	Owner Exelon Generation Co., LLC Name	Date June 13, 2007	
	200 Exelon Way, Kennett Square, PA 19348 Address	3 Sheet <u>1</u> of <u>2</u>	
2.	Plant Limerick Generating Station Name	Unit2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc	<b>)</b> .
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp N/A Authorization No N/A	
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration Date N/A	
4.	Identification of System047 CONTROL ROD DRIVE	Line No. 20-S299-30-23	
E	(a) Applicable Construction Code ASME III Editi	ion 1071 Addende S'79 Code Case 1961 9	

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1971</u> Addenda, <u>S'73</u> Code Case <u>1361-2</u> (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	7851	N/A	N/A	1986	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-30-23



Sheet 2 of 2

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

	CERTIFICATE OF COMPLIANCE
We certify that the (I.	statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section Repair or replacement
Type Code Symbol	StampNA
Certificate of Author Signed	rization No. NA Expiration Date NA Construction Date NA Construction Date, Construction D
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersigne Or Province of	d, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described
To the best of m	report during the period <u>14 AOG OG</u> to <u>27 JUN O7</u> , and state that y knowledge and belief, the Owner has performed examinations and taken corrective measures described in this n accordance with the requirements of the ASME Code. Section XI.
By signing t Examinations an Shall be liable in	his certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the d corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer any manner for any personal injury or property damage or a loss of any kind arising from or connected with this
Inspection.	Commissions PA-2497 I, N, A & C
	Aspector's Signature National Board, State, Province, and Endorsements

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

1.	Owner Exelon Generation Name	Co., LLC	Date <u>June 13, 2007</u>	
	200 Exelon Way, Kenne Address	ett Square, PA 19348	Sheet of 2	
2.	Plant Limerick Generating S Name	tation	Unit1	
	3146 Sanatoga Road, Pott Address	stown, PA 19464	Work Order No. R0997991 Repair Organization P.0	D. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation</u> Name	Co., LLC	Type Code Symbol Stamp Authorization No	
	200 Exelon Way, Kennett Address	Square, PA 19348	Expiration Date	N/A
4.	Identification of System047 CONTI	ROL ROD DRIVE	Line No. 20-S299-30-27	

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1968
 Addenda, w' 69
 Code Case 1361-1

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case 1361-1

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	5117	N/A	N/A	1975	Replacement	Yes
(1) Screw Cap 1"-8 x 5.50	See Remarks	See Remarks	N/A	N/A	N/A	Replacement	NO

7. Description of Work: REPLACED ONE CONTROL ROD DRIVE AND 1 CAP SCREW

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

Sheet 2 of 2 WZZ 07

# 9. Remarks MANUFACTURER DATA SHEET ATTACHED

# WORK ORDER DOES NOT IDENTIFY WHICH VENDORS MATERIAL WAS USED. IR WRITTEN 644203.

CERTIFICATE OF COMPLIANCE							
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement							
Type Code Symbol Stamp NA							
Certificate of Authorization No. NA Expiration Date NA Signed ULINA Date, Le 2607							
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described In this Owner's Report during the period <u>HALGEOCE</u> to <u>27</u> <u>TULL</u> OT , 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 Inspector's Signature Commissions <u>PA-2497 I, N, A &amp; C</u> National Board, State, Province, and Endorsements							
Date 27 JUN 07							

1.	Owner Exelon	Generation Co., LLC	Date June 13, 2007	
		Name		
	200 Exelon	Way, Kennett Square, PA 19348	Sheet <u>1</u> of <u>2</u>	
		Address		
_				
2.	Plant Limerick G	enerating Station	Unit2	
		Name		
	3146 Sapatora	Road, Pottstown, PA 19464	Work Order No. R0997991	
			Repair Organization P.O	No. Joh No. Eta
		Address	Repair Organization P.O	. NO., JOD NO. E.C.
3.	Work Performed by Exelon	Generation Co., LLC	Type Code Symbol Stamp	N/A
•		Name	Authorization No.	
	200 Exelon Wa	y, Kennett Square, PA 19348	Expiration Date	N/A
		Address		
4.	Identification of System	047 CONTROL HOD DRIVE	Line No. 20-S299-30-31	_
-	(a) Applicable Construction Co			Case N007 1261 0

(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>w' 75</u> Code Case <u>N207 1361-2</u>
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8589	N/A	N/A	1988	Replacement	Yes
					<u> </u>		

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-30-51

Sheet 2 of 2

2/28 4/27/07

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificaterof Authorization No. NA Expiration Date NA Signed Owner's Designed Title
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State Or Province of Pennsylvania and employed by HSBCT of
Hartford CT bave inspected the components described
In this Owner's Report during the period 14 AU(+ O6 to J1 JUN 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.
CIUNCINAL A Commissions PA-2497 I, N, A & C
Inspector's Signature National Board, State, Province, and Endorsements
77 - 500 07
Date

	Description Operation Operation	Data luna 10,0007	
1.	Owner Exelon Generation Co., LLC Name	Date <u>June 13, 2007</u>	
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of2	
2.	Plant Limerick Generating Station	Unit 2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	<u>Work Order No. R0997991</u> Repair Organization P.O. No., Job No. Etc.	
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp <u>N/A</u>	_
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A	
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-30-47	
5	(a) Applicable Construction Code ASME III Edition	1974 Addenda None Code Case 1361-1	

(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>None</u> Code Case <u>1361-</u>
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	6869	N/A	N/A	1978	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299- 30-47

Sheet 2 of 2 4/27/07

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp NA
Certificate of Authorization No AA Expiration Date NA Signed Date,
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 <u>Pennsylvania</u> and employed by <u>HSBCT of</u> Hartford, CT have inspected the components described
In this Owner's Report during the period <u>14 AUG OG</u> to <u>27 JUN 07</u> , 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.
Auchengier Commissions PA-2497 I, N, A & C
Inspector's Signature National Board, State, Province, and Endorsements
Date 27 JUN 07

(12/82)



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1.	Owner Exelon Generation Co., LLC Name	Date MAY 02, 2007	
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of2	
2.	Plant Limerick Generating Station Name	2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	<u>Work Order No. R0997991</u> Repair Organization P.O. No., J	lob No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	_ Type Code Symbol Stamp Authorization No	N/A N/A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration Date	N/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-34-23	
5.	<ul> <li>(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u></li> <li>(b) Applicable Edition of Section XI Utilized for Repairs or Replacement</li> </ul>		1361-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A9041	N/A	N/A	1991	Replacement	Yes
:							
· · · · · · · · · · ·							

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u> °F.

20-5299- 34-23 App Sheet 2 of 2 4/27/01

## FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

	CE	RTIFICATE OF COM	PLIANCE		
We certify that the statements I.	made in the report are	correct and this <u>REPL</u> Repair or repla		rms to the rules of the	ASME Code, Sectio
Type Code Symbol Stamp	NA				
Certificate of Authorization No Signed Owner or Owner of	Thurd.	Expiration I	Date <u>NA</u> e, <u>626(</u>	17	
				<u> </u>	
	CERTIFI	CATE OF INSERVICI	E INSPECTION		
In this Owner's Report duri To the best of my knowled Owner's Report in accorda	And employment Hartford, CT ang the period and belief, the Owner ace with the requirement ate neither the Inspector e measures described in	oyed by	HSBCT have to 2 nations and take Section XI. kes any warranty, Furthermore, ne	of inspected the compor 7ONOZ corrective measures expressed or implied, ther the Inspector nor	ents described a and state that described in this concerning the his employer
Inspection.	lenas A	Commissions		PA-2497 I, N, A & State, Province, and E	C
~					

1.	Owner Exelon Generation Co., LLC Name	Date June 13, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of 2
2.	Plant <u>Limerick Generating Station</u> Name	Unit2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp     N/A       Authorization No.     N/A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-34-27
5.	(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u>	Addenda, <u>w' 75</u> Code Case <u>N207 1361-2</u>

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>w' 75</u> Co (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8483	N/A	N/A	1988	Replacement	Yes

7. Description of Work: REPLACED ONE CONTROL ROD DRIVE

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u>psi Test Temp. <u>192</u>°F.

20-5299-34-27

Sheet 2 of 2

200 6/27/07

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol Stamp NA
Certificate of Authorization No. NA Expiration Date NA Signed Owner or Owner's Designer, 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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described
In this Owner's Report during the period <u>HADG OG</u> to <u>27 50N 07</u> , 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.
and the second sec
A C     A
Date

1.	Owner Exelon Generation Co., LLC Name	Date <u>MAY 02, 2007</u>	
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	
2.	Plant Limerick Generating Station Name	Unit2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	<u>Work Order No. R0997991</u> Repair Organization P.O. No., Job No. Et	tc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol StampN/AN/	
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A	
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-38-31	
5.	<ul> <li>(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u></li> <li>(b) Applicable Edition of Section XI Utilized for Repairs or Replacements</li> </ul>		1-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8919	N/A	N/A	1991	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-32-31 Sheet 2 of 2 4/0 4/21/07

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE					
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement					
Type Code Symbol StampNA					
Certificate of Authorization No. NA Expiration Date NA Signed Owner or Owner Spesignee, Title Date, <u>62607</u>					
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of					
Hartford, CT have inspected the components described In this Owner's Report during the period <u>IMADE OLO</u> to <u>27</u> JDN O7, 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 PA-2497 I, N, A & C National Board, State, Province, and Endorsements					
Inspector's Signature     National Board, State, Province, and Endorsements       Date					

1.	Owner Exe	on Generation Co., LLC Name	Date June 13, 2007	-
	200 Exe	lon Way, Kennett Square, PA 19348 Address	Sheet of2	
2.	Plant Limeric	k Generating Station Name	Unit2	
	3146 Sana	loga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No.	, Job No. Etc.
3.	Work Performed by <u>Exe</u>	on Generation Co., LLC Name	Type Code Symbol Stamp Authorization No	N/A N/A
	200 Exelon	Way, Kennett Square, PA 19348 Address	Expiration Date	N/A
4.	Identification of System	047 CONTROL ROD DRIVE	Line No. 20-S299-38-31	
_				

 5. (a) Applicable Construction Code
 ASME III
 Edition, <u>1974</u>
 Addenda, <u>w' 75</u>
 Code Case <u>N207 1361-2</u>

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u>
 Code Case <u>N207 1361-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PISTON TUBE ASSEMBLY	Gen. Electric	0100	N/A	N/A	2007	Replacement	Yes

7. Description of Work: <u>REPLACED PISTON TUBE ASSEMBLY FOR 38-31, SERIAL # A8919.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-38-31 ADD Piston Tube 6/27/07 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE						
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section Repair or replacement						
Type Code Symbol StampNA						
Certificate of Authorization No NA Expiration Date NA Signed Owner or Owner Designee, Title Date, 62607						
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described In this Owner's Report during the period <u>HADG OG</u> to <u>27 JDN O7</u> , 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         PA-2497 I, N, A & C           National Board, State, Province, and Endorsements         National Board, State, Province, and Endorsements						
Date <u>27 JUN 07</u>						

1.	Owner Exelon Generation Co., LLC Name	Date _MAY 02, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of2
2.	Plant Limerick Generating Station Name	Unit2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp <u>N/A</u> Authorization No. <u>N/A</u>
	200 Exelon Way, Kennett Square, PA 19348 Address	_ Expiration Date N/A
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299- 42-55
_	(a) Applicable Opportunities Opda AOME III Edition 1074	

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1974
 Addenda, w' 75
 Code Case N207 1361-2

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case N207 1361-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A9124	N/A	N/A	1991	Replacement	Yes
	-						
	L						

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u> \_\_\_\_°F.

20-5299-42-55 Sheet 2 of 2 422/07

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FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE				
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement				
Type Code Symbol StampNA				
Certificate of Authorization No. NA Expiration Date NA Signed Owner's Designee, Nitle Date, U 2607				
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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described				
In this Owner's Report during the period <u>14</u> AUG OL to 27 JON OZ, 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.				
<u>Inspector's Signature</u> <u>Alexandre</u> Commissions <u>PA-2497 I, N, A &amp; C</u> <u>National Board, State, Province, and Endorsements</u>				
Date <u>27 JUN 07</u>				

(12/82)

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

1.	Owner Exelon Generation Co., LLC Name	Date June 13, 2007
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of2
2.	Plant Limerick Generating Station Name	Unit 2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp       N/A         Authorization No.       N/A
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A
4.	Identification of System047 CONTROL ROD DRIVE_	Line No. 20-S299-42-55
5.	(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u>	Addenda, w/ 75 Code Case N207 1361-2

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Add (b) Applicable Edition of Section XI Utilized for Repairs or Replacements <u>2001 / 03</u> Addenda, <u>w' 75</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PISTON TUBE ASSEMBLY	Gen. Electric	0083	N/A	N/A	2007	Replacement	Yes
	······································						
· · · · · · · · · · · · · · · · · · ·							

7. Description of Work: REPLACED PISTON TUBE ASSEMBLY FOR CRD 42-55, CRD SERIAL # A9124.

8. Tests conducted: Hydrostatic 🗆 Pneumatic 🛛 Nominal Operating Pressure: Other x: Pressure 1053 psi Test Temp. 192 °F.

20-5299-42-55 Piston Tebe 290 21/27/07 W/O No: R0927571 Sheet 2 of 2

## FORM NIS-2 (BACK)

## 9. Remarks MANUFACTURER DATA SHEET ATTACHED

	CERI	TIFICATE OF COMPLIANCE
We certify that the st I.	atements made in the report are co	rrect and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Sec Repair or replacement
Type Code Symbol S	StampNA	
Certificate of Authori Signed Owner or O	zation No. NA	Expiration Date <u>NA</u> Date, <u>62607</u>
	V	·
	CERTIFICA	ATE OF INSERVICE INSPECTION
L the undersigned	holding a valid commission issued	· · · · · · · · · · · · · · · · · · ·
		by the National Board of Boiler and Pressure Vessel Inspectors and the Stat
Or Province of	Pennsylvaniaand employ Hartford, CT	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stat ed by <u>HSBCT of</u> have inspected the components described
Or Province of In this Owner's Re	Pennsylvaniaand employ Hartford, CT port during the periodi2	I by the National Board of Boiler and Pressure Vessel Inspectors and the State ed by <u>HSBCT of</u> have inspected the components described AUG OG to 27 JUN 07, and state that
Or Province of In this Owner's Re To the best of my	Pennsylvania and employ Hartford, CT port during the period 12 knowledge and belief, the Owner ha	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by
Or Province of In this Owner's Re To the best of my Owner's Report in	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI.
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th	Pennsylvania and employ Hartford, CT port during the period if a knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector ne	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the his Owner's Report. Furthermore, neither the Inspector nor his employer
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and Shall be liable in a	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the his Owner's Report. Furthermore, neither the Inspector nor his employer
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and Shall be liable in a	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the his Owner's Report. Furthermore, neither the Inspector nor his employer
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and Shall be liable in a	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT</u> of <u>have inspected the components described</u> to <u>27</u> JUN O7, and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the his Owner's Report. Furthermore, neither the Inspector nor his employer or property damage or a loss of any kind arising from or connected with this
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and Shall be liable in a Inspection.	Pennsylvania and employ Hartford, CT port during the period if knowledge and belief, the Owner ha accordance with the requirements is certificate neither the Inspector no corrective measures described in the	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by <u>HSBCT of</u> have inspected the components described <b>AUG OG</b> to <b>27 JUN 07</b> , and state that as performed examinations and taken corrective measures described in this of the ASME Code, Section XI. or his employer makes any warranty, expressed or implied, concerning the his Owner's Report. Furthermore, neither the Inspector nor his employer
Or Province of In this Owner's Re To the best of my Owner's Report in By signing th Examinations and Shall be liable in a Inspection.	Pennsylvania and employ Hartford, CT port during the period 12 knowledge and belief, the Owner ha accordance with the requirements of is certificate neither the Inspector no corrective measures described in the ny manner for any personal injury of	I by the National Board of Boiler and Pressure Vessel Inspectors and the Stated by

1.	Owner Exelon Generation Co., LLC Name	Date <u>MAY 02, 2007</u>
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of 2
2.	Plant Limerick Generating Station	Unit 2
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp <u>N/A</u>
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A
4.	Identification of System047 CONTROL ROD DRIVE	Line No. 20-S299-54-19
5.	(a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u>	Addenda, <u>w 75</u> Code Case <u>N207 1361-2</u>

5. (a) Applicable Construction Code <u>ASME III</u> Edition, <u>1974</u> Addenda, <u>w' 75</u> Co
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 / 03

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A9165	N/A	N/A	1991	Replacement	Yes
			L				

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u> °F.

20-5299-59-19

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Sheet 2 of 2

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FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement
Type Code Symbol StampNA
Certificate of Authorization No NA Expiration Date NA Signed ULLING Council Date, 62607 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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described In this Owner's Report during the period <u>HADG</u> to <u>ACC</u> <u>ACC</u> , 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. <u>National Board, State, Province, and Endorsements</u>
Date 27 JUN 07

1.	Owner Exelon Generation Co., LLC Name	Date June 13, 2007	
	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of 2	
2.	Plant Limerick Generating Station Name	Unit 2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. R0997991 Repair Organization P.O. No., Job No. Etc.	
3.	Work Performed by <u>Exelon Generation Co., LLC</u> Name	Type Code Symbol Stamp N/AN/AN/A	_
	200 Exelon Way, Kennett Square, PA 19348 Address	Expiration DateN/A	_
4.	Identification of System 047 CONTROL ROD DRIVE	Line No. 20-S299-58-31	
_			

 5. (a) Applicable Construction Code
 ASME III
 Edition, 1974
 Addenda, w' 75
 Code Case N207 1361-2

 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements
 2001 / 03
 Code Case N207 1361-2

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Control Rod Drive	Gen. Electric	A8623	N/A	N/A	1988	Replacement	Yes

7. Description of Work: <u>REPLACED ONE CONTROL ROD DRIVE</u>

 Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure: Other <u>x</u>: Pressure <u>1053</u> psi Test Temp. <u>192</u>°F.

20-5299-58-31

Sheet 2 of 2

290 127/07

FORM NIS-2 (BACK)

9. Remarks MANUFACTURER DATA SHEET ATTACHED

CERTIFICATE OF COMPLIANCE					
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> conforms to the rules of the ASME Code, Section XI. Repair or replacement					
Type Code Symbol Stamp NA					
Certificate of Authorization No. NA Expiration Date NA Signed Owner of Owner 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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of <u>Hartford, CT</u> have inspected the components described					
In this Owner's Report during the periodHAUGOGtoTONOT, 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 PA-2497 I. N. A & C					
Inspector's Signature     National Board, State, Province, and Endorsements       Date     77 JUN 07					

1.	Owner	Exelon Generation Company, LLC Name	Date	May 20 , 2005
	_	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address		rder # R0870948 on P.O. No., Job No. etc.
3.	Work Perf	ormed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	None
4.	Identification	on of System Stand By Liquid Control (System-048)	Line NoECB-214	Valve XV-048-2F004B
5.		cable Construction Code <u>ASME III</u> 19 <u>68</u> able Edition of Section XI Utilized for Repairs or Replacem		nda, <u> </u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
INLET FITTING	IST CONAX	7128	7128	* 114-77023 PO# 009139	2004	REPLACEMENT	NO
TRIGGER BODY	IST CONAX	7130	7130	* 114-77023 PO# 009139	2004	REPLACEMENT	NO
	· <u> </u>						

\* Traceability per Exelon part code number.

7. Description of Work <u>Replaced explosive valve inlet fitting and trigger body.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_ Pressure 1220 \_psi Test Temp. \_N/A \_\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

Work Order# R0870948 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Inlet fitting and trigger body fabricated in accordance with ASME III, 1977 edition with summer 1977 addenda.

	CERTIFICATE OF COMPLIAN	CE	
	made in the report are correct and this	replacement conforms to the rules o	f the
ASME Code, Section XI Type Code Symbol Stamp	NA	·	
Certificate of Authorization No.		Expiration Date	NA
Signed Cham H. K	J.H. Kramer ,engineer Date		
	s Designee, Title	vay 20, 2005	
	CERTIFICATE OF INSERVICE INSE	PECTION	
I, the undersigned, holding a valid c	ommission issued by the National Board of	Boiler and Pressure Vessel Inspectors and th	e State
	and employed byHS		_of
Hart	ford, CT	have inspected the components describ	
		to <b>24_MAY 05</b> , and sta	
		s and taken corrective measures described in	this
Owner's Report in accordance with t	he requirements of the ASME Code, Section	on 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.

Jan Kenan	Commissions_	PA-2497 I,N & A, C	
Inspector's Signature		National Board, State, Province, and Endorsements	
Date24 MAY_20_0	5		

1.	Owner	Exelon Generation Company, LLC	Date March 3	81, 2007
		Name		
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station	Unit	2
		Name		
		3146 Sanatoga Road, Pottstown, PA 19464	Work order	# R1032702
		Address	Repair Organization	P.O. No., Job No. etc.
З.	Work Perform	ed by Exelon Nuclear	Type Code Symbol Stamp	None
		Name	Authorization No.	
		3146 Sanatoga Road, Pottstown, PA 19464	Expiration Date	None
4	Idontification -	Address	Line No. ECR 014	Value XV 048 0E004B
4.	identification o	f System Stand By Liquid Control (System-048)	Line No. ECB-214	Valve XV-048-2F004B
5.		e Construction Code <u>ASME III</u> 19 <u>77</u> I le Edition of Section XI Utilized for Repairs or Replacem		

6. Identification of Components Repaired or Replaced and Replacement Components

Applicable Section XI Code Case(s) \_\_\_\_None\_\_

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
INLET FITTING	IST CONAX	7405	7405	* 114-77023 PO# 019608	2007	Replacement	Yes
TRIGGER BODY	IST CONAX	7407	7407	* 114-77023 PO# 019608	2007	Replacement	Yes
* T	r Exelon part code nu						

Traceability per Exelon part code number.

7. Description of Work <u>Replaced explosive valve inlet fitting and trigger body.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_ Pressure 1220 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

(c)

This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield N.J. 07007-2300

Work Order# R1032702 Sheet 2 of 2

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## FORM NIS-2 (BACK)

# 9. Remarks: <u>Manufacturer's data reports are traceable by Exelon purchase order and work order package.</u> Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF C	OMPLIANCE						
We certify that the statements made in the report are correct a ASME Code, Section XI Type Code Symbol StampNA	nd this <u>replacement</u> conforms to the rules of the						
Certificate of Authorization NoNA	Expiration DateNA						
Signed Jr. K. J.H. Kramer ,Site weld administrat Owner or Owner's Designee, Title	or Date March 31, 2007						
I, the undersigned, holding a valid commission issued by the Nation or Province of <u>Pennsylvania</u> and employed by	HSBCT of						
Hartford, CT in this Owner's Report during the period	have inspected the components described						
in this Owner's Report during the period	06 to 07 MAY 07 , and state that						
to the best of my knowledge and belief, the Owner has performed e							
Owner's Report in accordance with the requirements of the ASME C							
By signing this certificate neither the Inspector nor his employer m examinations and corrective measures described in this Owner's Re							
shall be liable in any righner for any personal injury or property dama							
inspection.	5						
HALLACTION Commission	PA-2497 J.N & A, C						
Inspector's Signature	National Board, State, Province, and Endorsements						

(12/82)

Date\_

07 MAY 20 07

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1.	Owner Exelon Generation Company, LLC Name	Date January 12, 2007
	Name	
	200 Exelon Way, Kennett Square, PA 19	348 Sheet <u>1</u> of <u>2</u>
	Address	
2.	Plant Limerick Generating Station	Unit 2
	Name	
	3146 Sanatoga Road, Pottstown, PA 194	64 Work order # R0927395
	Address	Repair Organization P.O. No., Job No. etc.
З.	Work Performed by Exelon Nuclear	Type Code Symbol Stamp None
	Name	Authorization NoNone
	3146 Sanatoga Road, Pottstown, PA 194	64 Expiration Date None
	Address	· · · · · · · · · · · · · · · · · · ·
4.	Identification of System <u>Stand By Liquid Control</u> (System-04	3) Line No. ECB-214 Valve XV-048-2F004C
5.	(a) Applicable Construction Code <u>ASME III</u> 19.6 (b) Applicable Edition of Section XI Utilized for Repairs or Re	

6. Identification of Components Repaired or Replaced and Replacement Components

(c) Applicable Section XI Code Case(s) None

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
INLET FITTING	IST CONAX	7197	7197	* 114-77023 PO# 013546	2005	Replacement	Yes
TRIGGER BODY	IST CONAX	7195	7195	* 114-77023 PO# 013546	2005	Replacement	Yes

\* Traceability per Exelon part code number.

7. Description of Work <u>Replaced explosive valve inlet fitting and trigger body.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_\_\_ Pressure \_\_\_\_\_psi Test Temp. \_\_\_\_\_N/A \_\_\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., 22 Law Drive, Box 2300, Fairfield N.J. 07007-2300

Work Order# R0927395 Sheet 2 of 2

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# FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Inlet fitting and trigger body fabricated in accordance with ASME III, 1977 edition with summer 1977 addenda.

	CERTIFICATE OF COM	<i>I</i> PLIANCE
We certify that the statement ASME Code, Section XI	s made in the report are correct and th	this <u>replacement</u> conforms to the rules of the
Type Code Symbol Stamp	NA	
Certificate of Authorization No	NA	Expiration Date N
Signed Jan H.K.	.H. Kramer, Site weld administrator	Date January 12, , 2007
Owner or Owne	r's Designee, Title	
	·····	
	CERTIFICATE OF INSERVICE	E INSPECTION

or Province of	Pennsylvania	_and employed by	<u>HSBCT</u>		of
	Hartford,			ave inspected the compor	nents described
	port during the period			12 JAN 07	, and state tha
to the best of my k	knowledge and belief, t	he Owner has performed ex	caminations and ta	ken corrective measures	described in this
Owner's Report in a	accordance with the re	equirements of the ASME Co	ode, Section XI.		
By signing this c	ertificate neither the In	spector nor his employer ma	akes any warranty	, expressed or implied, co	ncerning the
		escribed in this Owner's Rep			
shall be liable in ar	ly manner for any pers	onal injury or property dama	age or a loss of an	y kind arising from or conr	nected with this
nspection.	)		•		
	00		•		
		</td <td></td> <td></td> <td></td>			
	117. 1				
Jaur	Almas	Commissions	)	PA-2497 I.N & A. C	2
haun	pector's Signature	Commissions		PA-2497 I,N & A, C d, State, Province, and Er	
Jaun	pector's Signature	Commissions			

(12/82)

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	•		<b>.</b>	
1.	Owner	Exelon Generation Company, LLC Name	Date May	17, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464 Address		er No. C0220583 P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear	Type Code Symbol Stamp	N/A
		Name	Authorization No.	N/A
		<u>3146 Sanatoga Road, Pottstown PA 19464</u> Address	Expiration Date	N/A
4.	Identification of Sys	tem_RCIC (System 049)	Line No. EBB-235	049-2F014

5. (a) Applicable Construction Code <u>ASME Pump & Valve Draft</u> 19<u>68</u> Edition, <u>N/A</u> Addenda, <u>N/A</u> Code Case (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003 (c) Applicable Section XI Concerned to the section of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
6" Check Valve Disc	Anchor/Darling Valve	Heat No. A588A S/N 1	N/A	* 114-86325 PO# 350387- 348100	1994	Replacement	Yes

\* Traceability per Exelon stock code number.

7. Description of work: <u>Replace 6" check valve disc.</u>

8. Tests conducted: Hydrostatic 🗆 Pneumatic 🗆 Nominal Operating Pressure

Other D 1020 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

W/O No. C0220583 Sheet 2 of 2

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## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturers data reports are traceable by purchase order and work order package.</u> Applicable Manufacturer's Data Reports to be attached

Disc replacement completed in accordance with Exelon design change ECR 94-07320.

Disc manufactured to ASME III, 1989 edition.

	CERTIFICATE OF COM	PLIANCE			
We certify that the statements ASME Code, Section XI. Type Code Symbol Stamp	made in the report are correct and the NA	nis <u>replace</u> (repair or repla	· · · · · · · · · · · · · · · · · · ·	forms to the rule	s of the
Certificate of Authorization No	NA		Expiration	Date	
Signed <u>Jewy</u> , <u>H</u> Owner or Owner's Designee	J.H. Kramer (site weld admin Title	istrator) Date	May 18,	, 20 <u>07</u>	

		CERTIFICATE OF IN	SERVICE INSPECT	ON	
•				r and Pressure Vessel Inspec	tors and the State
or Province of		and employed by	HSBCT		of
	Hartfor	d, CT		have inspected the comp	onents described
in this Owner's Re	port during the peric	d <u>16 MA</u>	<b>4<u>07</u></b> to	29 MAY 07	, and state that
to the best of my l	knowledge and belie	f, the Owner has perform	ed examinations and	taken corrective measures de	escribed in this
By signing this examinations and	certificate neither th corrective measures	described in this Owner's	oyer makes any warra s Report. Furthermore	anty, expressed or implied, co e, neither the Inspector nor hi ny kind arising from or conne	s employer
_# (UU	en en a	Commis	sions	PA-2497 I,N & A, C	
Ins	pector's Signature		National Bo	ard, State, Province, and End	lorsements
Date	29 LAN ~			``	

1.	Owne	r Exelon Generation Company, LLC Name	_ Date March	30, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheetof2	2
2.	Plant	Limerick Generating Station Name	_ Unit2	2
		3146 Sanatoga Road, Pottstown PA 19464	Work Order	No. C0218633
	_	Address	Repair Organization P.	O. No., Job No. etc.
З.	Work	Performed by	_ Type Code Symbol Stamp	N/A
		Name	Authorization No.	
		3146 Sanatoga Road, Pottstown PA 19464 Address	_ Expiration Date	N/A
4.	Identi	fication of System_ <u>RHR &amp; RHRSW</u> (System 051)_	Line No. GBC-204	HV-051-2F014B

5. (a) Applicable Construction Code <u>ASME III</u> 19 71 Edition, <u>Summer 1971</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
20" Gate valve disc	Anchor/Darling Valve	Heat No. V5459 S/N 4	N/A	* 114-26275 PO# 350387-32	1992	Replacement	Yes

\* Traceability per Exelon stock code number.

7. Description of work: Replaced 20" RHRSW gate valve disc. Replace valve wedge guides.

8. Tests conducted: Hydrostatic D Pneumatic D Nominal Operating Pressure D

Other D <u>N/A</u>psi Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

# FORM NIS-2 (BACK)

9. Remarks: <u>Replacement disc manufactured to ASME III, 1971 edition, no addenda</u>. <u>Refer to Exelon A/R A1558553-02 for</u> Applicable Manufacturer's Data Reports to be attached

Code reconciliation.			-
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	CERTIFICATE OF COMPLIANCE	E	
We certify that the statements m	ade in the report are correct and this	replacement	conforms to the rules of the

We certify that the statements	replacement		conforms to the rules of th		
ASME Code, Section XI. Type Code Symbol Stamp	NA	(repair or repla	acement)		
Type Code Symbol Stamp					
Certificate of Authorization No.	NA		Expiratio	n Date	NA
Signed Q J. K	J.H. Kramer (site weld administra	tor) Date	March 30,	, 20 <u>07</u>	
Owner or Owner's Designee	, Títle				

CERTIFICATE OF INSERVICE INSPECTION							
I, the undersigned, holding	a valid commission	issued by the Nationa	Board of Boiler a	nd Pressure Vessel Inspe	ctors and the Stat		
or Province of Penns	sylvaniaand e	mployed by	HSBCT	·	0		
	Hartford, CT			have inspected the com	ponents described		
in this Owner's Report duri	ng the period	02 OCT 20	06 to 0	2. APR 2007	, and state tha		
to the best of my knowledg	e and belief, the Ov	ner has performed ex	aminations and tak	en corrective measures c	described in this		
Owner's Report in accorda							
				, expressed or implied, c	oncerning the		
	te neither the Inspec	ctor nor his employer n	nakes any warrant				
By signing this certifica	te neither the Inspec e measures describe	ctor nor his employer n ed in this Owner's Rep	nakes any warrant ort. Furthermore, r	either the Inspector nor h	is employer		
By signing this certifica examinations and corrective	te neither the Inspec e measures describe	ctor nor his employer n ed in this Owner's Rep	nakes any warrant ort. Furthermore, r	either the Inspector nor h	is employer		
By signing this certifica examinations and corrective shall be liable in any manne	te neither the Inspec e measures describe	ctor nor his employer n ed in this Owner's Rep	nakes any warrant ort. Furthermore, r	either the Inspector nor h	is employer		
By signing this certifica examinations and corrective shall be liable in any manne	te neither the Inspec e measures describe	ctor nor his employer n ed in this Owner's Rep	nakes any warrant ort. Furthermore, r	either the Inspector nor h	is employer		
By signing this certifica examinations and corrective shall be liable in any manne	te neither the Inspec e measures describe	ctor nor his employer n ed in this Owner's Rep	nakes any warrant ort. Furthermore, r	either the Inspector nor h	is employer		
By signing this certifica examinations and corrective shall be liable in any manne	te neither the Inspece e measures describe er for any personal ir	ctor nor his employer n ed in this Owner's Rep njury or property dama	nakes any warrant ort. Furthermore, r ge or a loss of any	either the Inspector nor h kind arising from or conn	is employer ected with this		

1. Owner	Exelon Generation Company, L Name	LC	DateJ	uly 28,2005
	200 Exelon Way, Kennett Squar Address	re, PA 19348	Sheet <u>1</u> of	2
2. Plant	Limerick Generating Station Name	<u> </u>	Unit	2
	<u>3146 Sanatoga Road, Pottstown</u> Address	, PA 19464		9, C0211839 and C0213102 on P.O. No., Job No. etc.
3. Work Perform	ned by <u>Exelon Nuclear</u> Name		Type Code Symbol Stamp Authorization No.	
	3146 Sanatoga Road, Pottstown Address	n, PA 19464	Expiration Date	None
4. Identification	of System Residual Heat Removal	(System-051)	Line No. GBB-205	Valve HV-051-2F016B
	le Construction Code <u>ASME III</u> 19 e Edition of Section XI Utilized for Repair			N-416-2Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
16" Valve HV-051-2F016B	Flowserve	AY 237	N/A	* 114-53705 PO# 257797- 481275	2005	Replacement	Yes
(3) Feet of 16" Pipe	United States Steel	Heat No. RY5576	N/A	* 114-57228 PO# 009825- 001779	N/A	Replacement	No
(2) Pipe Half Couplings	WFI Nuclear	Heat No. 3156ANB	N/A	* 114-92668 PO# 009825- 001754	N/A	Replacement	No
GBB-205-H033 4" x 4" x 3/4" Angle	Bayou Steel	Heat No. 25906	N/A	* 114-92751 PO# 009825- 001910	N/A	Replacement	No
GBB-205-H033 3/4" Plate	ISG Plate	Heat No. T5569	N/A	* 114-04934 PO# 009825- 001911	N/A	Replacement	No

\* Traceability per Exelon part code number.

1.212

7. Description of Work Replaced 16" RHR gate valve, adjacent piping and pipe support.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure 
Other Pressure 226 psi Test Temp. 68 °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

Revision 1: Add Work Order C0211839 to Repair Organization Job No.

Work Orders# C0211739, C0211839 and C0213102 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

NDE completed in accordance with ASME III, 1992 edition (code case N-416-2)

Pressure testing completed in accordance with ASME XI, 1992 edition (code case N-416-2)

Valve S/N AY237 manufactured in accordance with ASME III, 1974 edition, Summer 1974 addenda and code cases 1516-1, 1567 & 1682.

Work completed in accordance with Exelon design changes ECR 04-00360 and ECR 05-00136.

:

CERTIFICATE OF COMPLIANCE	
 We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp <u>NA</u>	
Certificate of Authorization NoNA Expiration DateN	NA
Signed J.H. Kramer ,engineer Date July 28 , 2005	-

CERTIFICATE OF INSERVICE INSPECTION							
or Province of <u>Pennsylvania</u> an Hartford, CT	d employed by	HSBCTh	and Pressure Vessel Inspectors and the State of nave inspected the components described				
in this Owner's Report during the period to the best of my knowledge and belief, the	<u>5 FEB 05</u>	to					
Owner's Report in accordance with the requi By signing this certificate neither the Inspe examinations and corrective measures desc shall be liable in any manner for any persona inspection.	ector nor his employer mak ribed in this Owner's Repo	es any warranty t. Furthermore,	neither the Inspector nor his employer				
Inspector's Signature	Commissions	National Boa	PA-2497 I,N & A, C rd, State, Province, and Endorsements				
Date 28 July 20 05	<u> </u>						

(12/82)

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Revision 1: Add Work Order C0211839 to Repair Organization Job No. on page 1.

, <b>1</b> .	Owner	Exelon Generation Company, LLC Name	Date March	25, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No. C02 Repair Organization P	
3.	Work Performed b	y <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	None Not applicable
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sy	stem Residual Heat Removal (System 051)	Line No. DCA-204	Valve HV-051-2F050B

5. (a) Applicable Construction Code <u>ASME III</u> 1974 & 1980 Edition, <u>Summer 1974 & Winter 1981</u> Addenda, <u>N/A</u> Code Case (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 Edition and 2003 addenda

(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
12" Valve HV-051- 2F050B	Weir Valves, Atwood & Morrill	1-53215-A	N/A	* 114-15108 PO# 257796- 000296	2007	Replacement	Yes
12" SCH 80 PIPE DCA-204-1	IXP	7254-3-1	N/A	* 114-15373 PO# 019683	N/A	Replacement	No
12" SCH 120 PIPE DCA-204-1	Swepco Tube LLC	Heat No. 603541	N/A	* 114-15375 PO# 019683	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replaced 12" check valve and adjacent pipe stubs.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure 
Other 
<u>1047</u> psi Test Temp. <u>173</u> °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

## FORM NIS-2 (BACK)

9. Remarks<u>Manufacturers data reports are traceable by work order package</u> Applicable Manufacturer's Data Reports to be attached

Valve S/N 1-53215-A constructed to ASME III, 1974 edition, summer 1974 addenda.

Work completed in accordance with Exelon design change ECR 00-01118.

CERTIFICATE OF COMPLIANCE

 We certify that the statements made in the report are correct and this \_\_\_\_\_\_\_ replacement \_\_\_\_\_\_ conforms to the rules of the ASME Code, Section XI. \_\_\_\_\_\_\_ (repair or replacement)

 Type Code Symbol Stamp\_\_\_\_\_\_\_ NA

Certificate of Authorization No	NA			Expiration Date	NA
Signed CS Sill, Owner or Owner's Design	MANUT SUPT MOUR	_ Date _	6/12_	, 20 <u>07</u>	

### **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 <u>Pennsylvania</u> and employed by <u>HSBCT</u> of

Hartford, CT					have inspected the components described
in this Owner's Report during the period	. 19	MAR	07	to	i9 JUN 07 , and state that
to the best of my knowledge and belief, the Owr	er has	berformed	examin	ations and	taken corrective measures described in this
Owner's Report in accordance with the requirem	ents of t	he ASME	Code, S	ection XI.	
By signing this certificate neither the Inspect					
examinations and corrective measures described	d in this	Owner's R	eport. F	urthermor	e, neither the Inspector nor his employer
shall be liable in any manner for any personal inj	ury or pi	roperty dar	nage or	a loss of a	any kind arising from or connected with this
inspection.		7			
( dul Alman	<b>X</b> .				· · · · · · · · · · · ·
- o ma voul		Commissio			PA-2497 I.N & A. C
Inspector's Signature			N	lational Bo	pard, State, Province, and Endorsements
19 11/1 07					
Date20_0/					

1.	Owne	r <u>Exelon Generation Company, LLC</u> Name	Date	April 5, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant	Limerick Generating Station	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464		Drder No. R0896043
		Address	Hepair Organizati	on P.O. No., Job No. etc.
3.	Work	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identif	fication of System Residual Heat Removal, RHR (System 051)	Line No. GBB-217	RHR Heat exchanger 2B-E205

5. (a) Applicable Construction Code <u>ASME VIII</u> 19.68 Edition, <u>N/A</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(64) 1-1/8" Channel Flange Studs	Nova Machine	Heat No. 15192 / J641 & 8992181 / M948	N/A	* 114-12072 PO No's 031128-692 & 180864-481406	N/A	Replacement	No
(128) 1-1/8" Channel Flange Nuts	Nova Machine	Heat No. 223469 Heat code J858	N/A	* 114-14402 PO No. 031128- 692	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replaced RHR heat exchanger 2B-E205 channel flange studs and nuts.

8. Tests conducted: Hydrostatic Pneumatic Nominal Operating Pressure Exempt Cother N/A psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

W/O No. R0896043 Sheet 2 of 2

# FORM NIS-2 (BACK)

9. Remarks: None

Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLI	ANCE	
We certify that the statements made ASME Code, Section XI. Type Code Symbol Stamp <u>NA</u>	e in the report are correct and this	replacement (repair or replacement)	conforms to the rules of the
Certificate of Authorization No	NA	E	Expiration DateNA
Signed H. H Owner or Owner's Designee, Title	J.H. Kramer (site weld administra	ator) Date <u>April</u>	<u>5,         </u> , 20 <u>07        </u>

	CERTIFICATE OF INSERVICE INSPECTION							
I, the undersigne	d, holding a valid commissior	n issued by the Nationa	I Board of Boiler	and Pressure Vessel Inspectors and the Sta				
or Province of	Pennsylvaniaand e	employed by	HSBCT					
	Hartford, CT			have inspected the components describe				
in this Owner's R	eport during the period	24 MAR C	27 to	OT MAY OT , and state the				
to the best of my	knowledge and belief. the Ov	wher has performed exa	aminations and	taken corrective measures described in this				
examinations and	corrective measures describ	ed in this Owner's Rep	ort. Furthermore	Inty, expressed or implied, concerning the e, neither the Inspector nor his employer ny kind arising from or connected with this				
19/111	lento	Commissions		PA-2497 I.N & A. C				
In	spector's Signature			ard, State, Province, and Endorsements				

1.	Owner	Exelon Generation Company, LL Name	<u>C</u>	Date	March 28, 2007
		200 Exelon Way, Kennett Square Address	e, PA 19348	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station Name		Unit	2
		3146 Sanatoga Road, Pottstown	PA 19464	Work	Order No. C0218821
		Address		Repair Organiza	tion P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name		Type Code Symbol Stam Authorization No	pN/A N/A
	<u></u>	<u>3146 Sanatoga Road, Pottstown</u> Address	PA 19464	Expiration Date	N/A
4.	Identification of Sys	tem_Core Spray	(System 052)	Line No. EBB-232-E01	Valve 052-2F030A

 5. (a)
 Applicable Construction Code <u>ASME III</u>
 19 74
 Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case

 (b)
 Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 Code Case

 (c)
 Applicable Section XI Code Case(s) <u>None</u>
 None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(2) Feet 2" NPS pipe PC No. 4 & 7	USS Tubular Products	Heat# A42035	N/A	* 114-90039 PO# 169202	N/A	Replacement	No
2" Check Valve 052-2F030A	Edward Vogt Valve Co.	85 ASH	N/A	* 114-98110 PO# 257797- 348101	2001	Replacement	Yes

Traceability per Exelon stock code number.

7. Description of work: Replaced 2" check valve 052-2F030A and adjacent pipe.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

### FORM NIS-2 (BACK)

9. Remarks <u>Manufacturers data reports are traceable by purchase order and work order package.</u> Applicable Manufacturer's Data Reports to be attached

Valve S/N 85 ASH constructed to ASME III, 1974 edition, Summer 1975 addenda.

CERTIFICATE OF COMPLIA	ANCE
We certify that the statements made in the report are correct and this _ ASME Code, Section XI. Type Code Symbol StampNA	replacement conforms to the rules of the (repair or replacement)
Certificate of Authorization NoNA	Expiration Date NA
Signed, K J.H. Kramer (site weld administra Ovper or Owner's Designee, Title	<u>ator)</u> Date <u>March 28,</u> , 20 <u>07</u>
CERTIFICATE OF INSERVICE IN	l of Boiler and Pressure Vessel Inspectors and the State
or Province of <u>Pennsylvania</u> and employed by <u>Hartford, CT</u> in this Owner's Report during the period <u>12 MAR 07</u> to the best of my knowledge and belief, the Owner has performed examination Owner's Report in accordance with the requirements of the ASME Code, Sec By signing this certificate neither the Inspector nor his employer makes a examinations and corrective measures described in this Owner's Report. Fur	have inspected the components described to <u>23 APR 07</u> , and state that ons and taken corrective measures described in this ction XI. any warranty, expressed or implied, concerning the thermore, neither the Inspector nor his employer
shall be liable in any manner for any personal injury or property damage or a inspection.	
Inspector's Signature Commissions Nat	PA-2497 I,N & A, C tional Board, State, Province, and Endorsements
Date23APR2007.	

(12/82)

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#### Exelon Generation Company, LLC Date \_\_\_\_\_April 4, 2007 1. Owner \_\_\_\_\_ Name 200 Exelon Way, Kennett Square, PA 19348 Sheet \_\_\_\_\_ of \_\_\_\_\_ 2 Address Unit \_\_\_\_\_ 2 2. Plant \_\_\_\_\_ Limerick Generating Station Name Work Order No. C0220827 3146 Sanatoga Road, Pottstown PA 19464 Repair Organization P.O. No., Job No. etc. Address Type Code Symbol Stamp 3. Work Performed by Exelon Nuclear N/A Name Authorization No. N/A N/A 3146 Sanatoga Road, Pottstown PA 19464 Expiration Date Address 4. Identification of System Core Spray (System 052) Line No. GBB-212-003E Valve PSV-052-2F012B

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

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1974</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 edition with addenda through 2003
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PSV-052- 2F012B	Anderson Greenwood Crosby	N99912-00- 0001	N/A	* 114-58584 PO# 181365- 127	2006	Replacement	Yes
(1) Foot 1-1/2" NPS pipe	Quanex	Heat No. 294072	N/A	* 114-90044 PO# LS656925	N/A	Replacement	No
(1) 2" x 1" Reducing Insert	Capitol Manufacturing	Heat Code 020M	N/A	* 114-93829 PO# 607237	N/A	Replacement	No
(1) 2" NPS Raised Face Flange	Western Forge and Flange	Heat No. 3M40774 WFF Heat Code BPQ-A-2	N/A	* 114-90662 PO# 009825- 2284	N/A	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: Replaced relief valve and inlet piping.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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<u>Manufacturers data reports are traceable by purchase order and work order package</u>. Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules ASME Code, Section XI. (repair or replacement) Type Code Symbol Stamp <u>NA</u>	of the
Certificate of Authorization No NA	NA
Signed <u>Jan H. Kramer (site weld administrator)</u> Date <u>April 4</u> , , 20 <u>07</u> 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 St or Province of Pennsylvania and employed by HSBCT	ate of

or Province of	Pennsylvania	and employed by	HSBCT		of
	Hartford	J, CT		have inspected the comp	onents described
in this Owner's Re	eport during the perio	1 <u>29 MAR</u>	<u>07</u> to	23 APR 07	, and state that
to the best of my	knowledge and belief	, the Owner has performed	examinations and t	aken corrective measures de	escribed in this
Owner's Report in	accordance with the	requirements of the ASME	Code, Section XI.		
By signing this	s certificate neither th	e Inspector nor his employe	r makes any warra	nty, expressed or implied, co	ncerning the
				, neither the Inspector nor his	
shall be liable in a	ny manner for any pe	rsonal injury or property dar	nage or a loss of a	ny kind arising from or conne	cted with this
inspection.	100		-		
1 Paris	Kan (	$\sim$			
Haun	AMAIX	Commissio	ns	PA-2497 I,N & A, C	
Ins	spector's Signature		National Boa	ard, State, Province, and End	lorsements
	07 100				
Date	WAPK 20	07.			

1.	Owner	Exelon Generation Company, LLC Name	Date Ap	ril 19, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant	Limerick Generating Station	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order No Repair Organizatio	o. R0929172 on P.O. No., Job No. etc.
3.	Work Performed by	n <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp	
	<u></u>	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Sys	tem High pressure coolant injection (System 055)	Line No. HBB-213	PSE-056-2D003

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Summer 1974</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PSE-056-2D003 Rupture Disc and Vacuum support	Continental Disc	8071134A	N/A	* 114-34521 PO# 018643	2006	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: <u>Replace HPCI rupture disc and vacuum support holder.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Exempt □ Other □ 960 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

## FORM NIS-2 (BACK)

9.	Remarks	Manufacturers data reports are traceable by work order package.
	-	Applicable Manufacturer's Data Reports to be attached

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	CERTIFICATE OF COMPL	IANCE		
SME Code, Section XI.	nade in the report are correct and this	(repair or rep	acement)	s to the rules of the
Type Code Symbol Stamp	NA			
Certificate of Authorization No	NA		Expiration	Date
Signed J. K Owner or Owner's Designee, 1	J.H. Kramer (site weld administrator) Title	_ Date	April 19 ,	, 20 <u>07</u>
······	CERTIFICATE OF INSERVICE I	NSPECTION		
I, the undersigned, holding a valid co	mmission issued by the National Boar	d of Boiler and I	Pressure Vessel Insp	
or Province of Pennsylvania	and employed by	HSBCT		of
or Province of <u>Pennsylvania</u> Hartfor in this Owner's Report during the peri	and employed by ord, CT iod <b>01 JULY 06</b>	HSBCT ha	ve inspected the cor	of mponents described 7, and state that
or Province of <u>Pennsylvania</u> Hartfor in this Owner's Report during the peri to the best of my knowledge and belie	and employed by ord, CT iod <u>OI_JULY_OG</u> ef, the Owner has performed examina	HSBCTha	ve inspected the cor	of mponents described 7, and state that
or Province of <u>Pennsylvania</u> Hartfor in this Owner's Report during the peri to the best of my knowledge and belin Owner's Report in accordance with the By signing this certificate neither	and employed by ord, CT iod <b>OI_JULY OG</b> ef, the Owner has performed examina e requirements of the ASME Code, So the Inspector nor his employer makes	HSBCT ha to // /////////////////////////////////	ve inspected the con T MAY OF corrective measures xpressed or implied,	of mponents described , and state that described in this concerning the
or Province of <u>Pennsylvania</u> Hartfor in this Owner's Report during the peri to the best of my knowledge and belin Owner's Report in accordance with the By signing this certificate neither examinations and corrective measure	and employed by ord, CT iod <b>OI_JULY_OG</b> ef, the Owner has performed examina e requirements of the ASME Code, So the Inspector nor his employer makes as described in this Owner's Report. Fo	HSBCT to tions and taken ection XI. any warranty, e urthermore, neitl	ve inspected the con or MAY or corrective measures xpressed or implied, her the Inspector nor	of mponents described , and state that described in this concerning the his employer
or Province of <u>Pennsylvania</u> Hartfor in this Owner's Report during the peri to the best of my knowledge and belin Owner's Report in accordance with the By signing this certificate neither	and employed by ord, CT iod <b>OI_JULY_OG</b> ef, the Owner has performed examina e requirements of the ASME Code, So the Inspector nor his employer makes as described in this Owner's Report. Fo	HSBCT to tions and taken ection XI. any warranty, e urthermore, neitl	ve inspected the con or MAY or corrective measures xpressed or implied, her the Inspector nor	of mponents described , and state that described in this concerning the his employer
or Province of <u>Pennsylvania</u> Hartfo in this Owner's Report during the peri to the best of my knowledge and belie Owner's Report in accordance with the By signing this certificate neither the examinations and corrective measure shall be liable in any manner for any p	and employed by ord, CT iod <b>OI_JULY_OG</b> ef, the Owner has performed examina e requirements of the ASME Code, So the Inspector nor his employer makes as described in this Owner's Report. Fo	HSBCT to tions and taken ection XI. any warranty, e urthermore, neitl	ve inspected the con or MAY or corrective measures xpressed or implied, her the Inspector nor	of mponents described , and state that described in this concerning the his employer
or Province of <u>Pennsylvania</u> Hartfo in this Owner's Report during the peri to the best of my knowledge and belie Owner's Report in accordance with the By signing this certificate neither the examinations and corrective measure shall be liable in any manner for any p	and employed by ord, CT iod <b>OI JULY OG</b> ef, the Owner has performed examina e requirements of the ASME Code, S the Inspector nor his employer makes as described in this Owner's Report. For bersonal injury or property damage or	tions and taken ection XI. any warranty, e urthermore, neitt a loss of any kin	ve inspected the co <b>THAY</b> corrective measures xpressed or implied, her the Inspector nor d arising from or cor	of mponents described , and state that s described in this concerning the his employer nnected with this
or Province of <u>Pennsylvania</u> Hartfo in this Owner's Report during the peri to the best of my knowledge and belie Owner's Report in accordance with the By signing this certificate neither the examinations and corrective measure shall be liable in any manner for any p	and employed by ord, CT iod <b>DIDLY OG</b> ef, the Owner has performed examina e requirements of the ASME Code, S the Inspector nor his employer makes as described in this Owner's Report. For bersonal injury or property damage or Commissions	HSBCT tions and taken ection XI. any warranty, e urthermore, neitt a loss of any kin	ve inspected the con or MAY or corrective measures xpressed or implied, her the Inspector nor	of mponents described , and state that s described in this concerning the his employer nnected with this C

1.	Owner	Exelon Generation Company, LLC Name	Date	April 19, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown, PA 19464	•	der No. R0929171
		Address	Repair Organ	nization P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol St Authorization No.	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	Not applicable
4.	Identification of Syst	em High pressure coolant injection (System 055)	Line No. HBB-213	PSE-056-2D004

5. (a) Applicable Construction Code <u>ASME III</u> 1974 Edition, <u>Summer 1974</u> Addenda, <u>N/A</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs / Replacement Activity 20<u>01 edition with addenda through 2003</u>
(c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
PSE-056-2D004 Rupture Disc and Vacuum support	Continental Disc	8071134A	N/A	* 114-34521 PO# 018643	2006	Replacement	No

\* Traceability per Exelon stock code number.

7. Description of work: <u>Replace HPCI rupture disc and vacuum support holder.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Exempt □ Other □ <u>960</u> psi Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

This Form (E00030) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300

## FORM NIS-2 (BACK)

9.	Remarks	Manufacturers data i	reports are traceable by	work order	package.	
	_		Applicable Mar	nufacturer's l	Data Reports	to be attached

	CERTIFICATE OF COMPLI	ANCE	
We certify that the statem ASME Code, Section XI. Type Code Symbol Stamp	ents made in the report are correct and this _ NA	replacement (repair or replacement	conforms to the rules of the )
Certificate of Authorization No			Expiration Date NA
Signed	J.H. Kramer (site weld administrator) nee, Title	Date <u>April 1</u>	<u>9 ,                                    </u>

CERTIFICATE OF INSERVI	CE INSPECTION
I, the undersigned, holding a valid commission issued by the National	
or Province of Pennsylvaniaand employed by	O
Hartford, CT	have inspected the components described
in this Owner's Report during the period OI JULY C	6 to 07 MAY 07 , and state that
to the best of my knowledge and belief, the Owner has performed exa	
Owner's Report in accordance with the requirements of the ASME Coo	e, Section XI.
By signing this certificate neither the Inspector nor his employer m	
examinations and corrective measures described in this Owner's Repo	
shall be liable in any manner for any personal injury or property damag	
inspection.	
1 north Olil Per & Commission	
Commissions_	PA-2497 I,N & A, C
Inspector's Signature	National Board, State, Province, and Endorsements
يسور المدام المستحد	
Date20	
••••••••	

1.	Owner	Exelon Generation Company, LLC Name	Date Jur	e 26, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	2
2.	Plant	Limerick Generating Station Name	Unit	_2
		3146 Sanatoga Road, Pottstown PA 19464 Address		er # C0212070 NP.O. No., Job No. etc.
3.	Work I	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp _ Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identifi	ication of System : Emergency Diesel Generator (System-092)	Line No. 2AG-LUBE	2A-E506
5.	(a) A	oplicable Construction Code ASME III 19 74 Edit	ion. Winter 1975 Addenda	N/A Code Case

(a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1975</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>89</u>
 (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel		050346	1826	* 114-57638 PO# 013103	2005	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050345	1825	* 114-57637 PO# 013103	2005	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 230111	N/A	* 116-66003 PO# 180864- 1628	N/A	Replacement	No
(30) 5/8" Nuts	Nova Machine Products	Heat# 7224333 Heat Code S637	N/A	* 116-12213 PO# 180864- 1568	N/A	Replacement	No
(34) 5/8" Nuts	Nova Machine Products	Heat Code M765 & S523	N/A	* 116-12090 PO# 180864- 1554 & 481365	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : <u>Replaced diesel generator lube oil heat exchanger flanged water box channels, studs and nuts.</u>

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure Other Pressure 105 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0212070 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE O	F COMPLIANCE			
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp <u>NA</u>					
Certificate of Authorization No	NA	Expiration Date NA			
Signed Jan J. Krenner's		Neld Administrator Date June 26, 2006			

CERTIFICATE OF INSERVICE INSPECTION					
I, the undersigned, holding a valid commission issued by the Nation	•				
or Province of <u>Pennsylvania</u> and employed by Hartford. CT					
	have inspected the components described				
to the best of my knowledge and belief, the Owner has performed e					
Owner's Report in accordance with the requirements of the ASME (	Code, Section XI.				
By signing this certificate neither the Inspector nor his employer n	nakes any warranty, expressed or implied, concerning the				
examinations and corrective measures described in this Owner's Re					
shall be liable in any manner for any personal injury or property dam	tage or a loss of any kind ansing from or connected with this				
inspection.					
$\mathcal{N}\mathcal{N}$					
Mill Menanto Commission	ns PA-2497 I.N & A. C				
Inspector's Signature	National Board, State, Province, and Endorsements				
inspector s Signature	National Duard, State, Flovince, and Endorsements				
m7 007 0/					
Date2002000_2000_2000_2000_2000000					

1.	Owner	Exelon Generation Company, LLC Name	DateJ	une 30, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant	Limerick Generating Station Name.	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464 Address		er # C0212058 n P.O. No., Job No. etc.
3.	Work Performed by	/ <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp	
		3146 Sanatoga Road, Pottstown PA 19464	Expiration Date	N/A
4.	Identification of Sys	Address stem <u>: Emergency Diesel Generator (System-092)</u>	Line No. 2AG-JW	2A-E507
5.		nstruction Code <u>ASME III</u> 19 <u>74</u> Editi lition of Section XI Utilized for Repairs or Replacements	on, <u>Winter 1975</u> Addenda 3 19 <u>89</u>	, <u>N/A</u> Code Case

(b) Applicable Edition of Section XI Utilized for Hepairs of H (c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel	ITT Industries	930428-03-4	N/A	* 114-14543 PO# 167610- 481613	2004	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050348	1828	* 114-57640 PO# 013103	2005	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 224938 & 7404456	N/A	* 116-66003 PO# 180864- 481007 & 481308	N/A	Replacement	No
(28) 5/8" Nuts	Nova Machine Products	Heat# 7220464 Heat Code M950	N/A	* 116-12090 PO# 180864- 481406	N/A	Replacement	No
(36) 5/8" Nuts	Nova Machine Products	Heat# B87035 Heat Code H112 & D382	N/A	* 116-12090 PO# 180864- 348503 & 348810	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : <u>Replaced diesel generator jacket water heat exchanger flanged water box channels, studs and nuts.</u>

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure Other Pressure <u>125</u> psi Test Temp. <u>N/A</u> °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0212058 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Heat exchanger floating head water box S/N 930428-03-4 was manufactured and "U" stamped to ASME VIII, 2001 edition, 2003

addenda, in accordance with Exelon design change ECR 00-01284 and generic letter 89-09.

	CERTIFICATE OF COMPLIAN	CE	
ASME Code, Section XI	ade in the report are correct and this	replacement conforms to the rules of the	
Certificate of Authorization No	NA	Expiration Date	NA
Signed H. Krossen Owner or Owner's	J.H. Kramer, Site Weld Administra Designee, Title	ator_Date June 30 , 2006	

		CERTIFICATE OF IN	ISERVICE INSPEC	NON		
	I, holding a valid comm	,			essel Inspecto	rs and the State
or Province of		_and employed by	HSBC1			Of
in this Ormania De	Hartford,		170 65	have inspected th		
	port during the period		PR 05 0			_, and state that
	knowledge and belief, t				neasures des	cribed in this
Owner's Report in	accordance with the re	equirements of the ASM	ME Code, Section X			
By signing this o	certificate neither the In	spector nor his employ	ver makes anv warra	inty, expressed or i	mplied, conce	rnina the
	corrective measures de					
	ny manner for any pers					
	12 mariner for any pers	onal injury or property	uamage of a loss of	any kind anoing ite		
nspection.		$\frown$				
	119					
11an	Ware .	$\sim$				
* / / / / / / /	IN UNIN	Z Commis	sions	PA-2497	<u>I,N &amp; A, C</u>	
2 man						
Ins	pector's Signature	/	National E	loard, State, Provin	ce, and Endo	rsements
Ins	pector's Signature		National E	oard, State, Provin	ce, and Endo	rsements

1.	Owner	Exelon Generation Company, LLC	Date Jun	e 20, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant _	Limerick Generating Station Name	Unit	2
	-	3146 Sanatoga Road, Pottstown PA 19464 Address		# C0210185 P.O. No., Job No. etc.
3.	Work F	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identifi	ication of System : Emergency Diesel Generator (System-092)	Line No. 2BG-JW	2B-E507
5.		pplicable Construction Code <u>ASME III</u> 19 <u>74</u> Edition pplicable Edition of Section XI Utilized for Repairs or Replacements		N/ACode Case

(c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel	ITT Industries	930428-03-3	N/A	* 114-14543 PO# 167610- 481613	2004	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050347	1827	* 114-57640 PO# 013103	2005	Replacement	Yes
(16) 5/8" Studs	Nova Machine Products	Heat# 7404456 Heat Code H450	N/A	* 114-14881 PO# 180864- 481985	N/A	Replacement	No
(16) 5/8" Studs	Nova Machine Products	Heat# 224938 Heat Code M566	N/A	* 114-14881 PO# 180864- 481342	N/A	Replacement	No
(64) 5/8" Nuts	Nova Machine Products	Heat# 722064 Heat Code M950	N/A	* 116-12090 PO# 180864- 481406	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : Replaced diesel generator jacket water heat exchanger flanged water box channels, studs and nuts.

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure Other Pressure 135 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0210185 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Heat exchanger floating head water box S/N 930428-03-3 was manufactured and "U" stamped to ASME VIII, 2001 edition, 2003

addenda, in accordance with Exelon design change ECR 00-01284 and generic letter 89-09.

	CERTIFICATE C			
We certify that the statement ASME Code, Section XI Type Code Symbol Stamp	nts made in the report are corre	ect and this <u>replacement</u>	conforms to the rules of the	
Certificate of Authorization No.	NA		Expiration Date	N
Signed y, V Owner or Own	J.H. Kramer, Site V er's Designee, Title	<u> Veld Administrator</u> Date <u>June 2</u>	20 , 2006	

		CERTIFICATE	OF INSERVI	CE INSPECT	NON		
	d, holding a valid com			Board of Boil	er and Pressure Ves	ssel Inspecto	rs and the State
or Province of	Pennsylvania	and employed I	by	<u>HSBCT</u>			of
	Hartfor				have inspected the	e component	s described
in this Owner's R	eport during the perio	d2	ZAPR	05 to	- 03 CC		, and state that
to the best of my	knowledge and belie			minations and	taken corrective m	easures des	cribed in this
	accordance with the						
	certificate neither the					nlied conce	ming the
	corrective measures						
	iny manner for any pe						
inspection.		social injury or pro	speny uamay	e or a 1055 Of	any kinu ansing nor	IT OF COTINECT	
inspection.	1 1 1						
/./		$\zeta$					
Inn	Anna						
<u>2 avq</u>	<u>perai</u>	<u>u ya</u> c	ommissions_		PA-2497 1		- ·
In	spector's Signature			National B	oard, State, Provinc	e, and Endo	rsements
		- 1					

1.	Owner	Exelon Generation Company, LLC Name	DateJu	ne 20, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464 Address		er # C0207821 P.O. No., Job No. etc.
3.	Work Perfo	rmed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown PA 19464	Expiration Date	N/A
4.	Identificatio	Address n of System : Emergency Diesel Generator (System-092)	Line No. 2CG-JW	2C-E507

5. (a) Applicable Construction Code <u>ASME III</u> <u>1974</u> Edition, <u>Winter 1975</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>89</u>
 (c) Applicable Section XI Code Case(s) <u>N-416-2</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel	AEROFIN	050361	1841	* 114-57639 PO# 013103	2005	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050364	1844	* 114-57640 PO# 013103	2005	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 230111 Lot# 50056739	N/A	* 116-66003 PO# 180864- 1808	N/A	Replacement	No
(23) 5/8" Nuts	Nova Machine Products	Heat# 217100 Heat Code X176	N/A	* 116-12090 PO# 180864- 1792	N/A	Replacement	No
(25) 5/8" Nuts	Nova Machine Products	Heat# B87035 Heat Code D953	N/A	* 116-12090 PO# 180864- 348780	N/A	Replacement	No
(16) 5/8" Nuts	Nova Machine Products	Heat# 7220464 Heat Code M275	N/A	* 116-12090 PO# 180864- 481295	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work :\_Replaced diesel generator jacket water heat exchanger flanged water box channels, studs and nuts.

8. Tests conducted: Hydrostatic D Pneumatic Nominal Operating Pressure D Other Pressure 120 psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

2) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

Work Order# C0207821 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Heat exchanger water box channels installed in accordance with Exelon design change ECR 05-00052

	CERTIFICATE OF COM	IPLIANCE	
We certify that the stateme ASME Code, Section XI Type Code Symbol Stamp	ents made in the report are correct and t	his <u>replacement</u> conforms to the rules of the	
Certificate of Authorization No.	NA	Expiration Date	NA
Signed Winer or Ow	<u>J.H. Kramer, site weld ac</u> ner's Designee, Title	Iministrator Date June 20, 2006	

### **CERTIFICATE OF INSERVICE INSPECTION**

	<u>Pennsylvania</u> ar Hartford. CT	d employed by	HSBCT	we inspected the component	nts described
in this Owner's R	eport during the period	16 DEC		13 OCT 06	, and state that
to the best of my	knowledge and belief, the	Owner has performed ex	kaminations and ta	ken corrective measures de	scribed in this
	accordance with the requ				
				expressed or implied, cond	emina the
				neither the Inspector nor his	
				kind arising from or connect	
nspection.			ago or a loos or any	And along for or connect	
	1 00				
		1~/			
/ >		N/X		_	
	UNA ONTA	Commissions	•		
	<u>IM // CM//</u> spector's Signature	Commissions		PA-2497 I,N & A, C d, State, Province, and End	oroomonto

1.	Owner _	Exelon Generation Company, LLC Name	Date July	5, 2006
	-	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464	Work order	# C0214290
		Address	Repair Organization F	
З.	Work Pe	rformed by Exelon Nuclear	Type Code Symbol Stamp	N/A
		Name	Authorization No.	
	_	3146 Sanatoga Road, Pottstown PA 19464	Expiration Date	N/A
4.	Identifica	Address tion of System : Emergency Diesel Generator (System-092)	Line No. 2CG-COOL	2C-E586

5. (a) Applicable Construction Code <u>ASME III</u> <u>19.74</u> Edition, <u>Winter 1975</u> Addenda, <u>N/A</u> Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19<u>89</u>
(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Stationary Water Box Channel	ITT Industries	930428-02-2	N/A	* 114-72819 PO# 167610- 481601	2004	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 230111	N/A	* 116-66003 PO# 180864-1808	N/A	Replacement	No
(32) 5/8" Nuts	Nova Machine Products	Heat# 217100 Heat Code R710	N/A	* 116-12090 PO# 180864-1761	N/A	Replacement	No
(32) 5/8" Nuts	Nova Machine Products	Heat# 217100 Heat Code X582	N/A	* 116-12090 PO# 180864-1931	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : <u>Replaced diesel generator intercooler flanged stationary water box channel, studs and nuts.</u>

8. Tests conducted: Hydrostatic Deneumatic Nominal Operating Pressure Other Pressure 120 psi Test Temp. N/A\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0214290 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

Heat exchanger floating head water box S/N 930428-02-2 was manufactured and "U" stamped to ASME VIII, 2001 edition, 2003

addenda, in accordance with Exelon design change ECR 00-01284 and generic letter 89-09.

	CERTIFICATE OF COMPLIAN	CE	
We certify that the statements m ASME Code, Section XI Type Code Symbol StampN	ade in the report are correct and this	replacement conforms to the	rules of the
Certificate of Authorization No	NA	Expiration Date	<u>NA</u>
Signed Jan H. K. Owner or Owner's I	J.H. Kramer, Site Weld Administra Designee, Title	<u>ator</u> Date <u>July 5</u> , <u>2006</u>	

or Province of	Pennsylvania	_and employed	by	HSBCT			of
	Hartford	<u>, CT</u>			have inspected	the compone	ents described
in this Owner's Re	port during the period	29	NOV OF	<u>5</u> to	<u>03 OCT</u>	06	, and state tha
to the best of my k	nowledge and belief,	the Owner has p	performed exan	ninations and	taken corrective	measures de	escribed in this
	accordance with the r						
	ertificate neither the I				nty, expressed or	implied, con	cernina the
	corrective measures of						
	ny man <u>ne</u> r for any per						
shan be hable in a	iy mannor tor any per	sonai injary or pr	openty damage	01 11 10 33 01 1	any kind anoing i		lotod with this
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inspection.	/ 11		>				
inspection.	] ]]	67	>				
inspection.	- Andrew		>		<b>DA</b> 040		
Jan	pector's Signature	not a	Commissions		PA-249 pard, State, Provi	71,N&A,C	

1.	Owner	Exelon Generation Company, LLC Name	Date	luly 5, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet1 of	2
2.	Plant _	Limerick Generating Station Name	Unit	2
	-	3146 Sanatoga Road, Pottstown PA 19464 Address		der # C0205396 on P.O. No., Job No. etc.
3.	Work P	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identific	cation of System : Emergency Diesel Generator (System-092)	Line No. 2DG-LUBE	2D-E506
	(a) Aş	pplicable Construction Code <u>ASME III</u> 19 <u>74</u> Edit pplicable Edition of Section XI Utilized for Repairs or Replacements		a, <u>N/A</u> Code Case

(c) Applicable Section XI Code Case(s) <u>None</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel	AEROFIN	050358	1838	* 114-57638 PO# 013103	2005	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050354	1834	* 114-57637 PO# 013103	2005	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 230111 Lot# 50031402	N/A	* 116-66003 PO# 180864- 1571	N/A	Replacement	No
(64) 5/8" Nuts	Nova Machine Products	Heat# 217100 Heat Code R710	N/A	* 116-12090 PO# 180864- 1761	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : Replaced diesel generator lube oil heat exchanger flanged water box channels, studs and nuts.

8. Tests conducted: Hydrostatic 
Pneumatic 
Nominal Operating Pressure 
Pressure <u>125</u> psi Test Temp. <u>N/A</u> °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0205396 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package.</u> Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COM	PLIANCE	
We certify that the statements n ASME Code, Section XI	nade in the report are correct and th	is <u>replacement</u> conforms to the rules of the	
	NA		
Certificate of Authorization No	NA	Expiration Date	NA
Signed J. K		dministrator Date July 5, 2006	

		CERTIFICATE OF IN	SERVICE INSPECTION		
			lational Board of Boiler an	d Pressure Vessel Insp	pectors and the State
or Province of		and employed by	HSBCT		of
	<u>Hartfo</u>	<u>'d, CT</u>	hav	e inspected the compo	orgents described
in this Owner's Re	eport during the period	d07,TU	LY 05 to	03 OCT O	6 , and state that
to the best of my	knowledge and belie	f, the Owner has perform	ned examinations and take	en corrective measures	s described in this
		requirements of the AS			
			yer makes any warranty, e	avpressed or implied o	oncerning the
			's Report. Furthermore, ne		
	ny manner for any pe	ersonal injury or property	damage or a loss of any	kind ansing from or cor	inected with this
inspection.	1 1 1				
	1 121	$\langle \rangle$	r		
1 San	Mon.				
1000	<u>acuna</u>	Commis	ssions	PA-2497 I.N & A,	C
Ins	spector's Signature		National Board	State, Province, and E	Endorsements
		-			
	D2 0/2				
Date		$) \cap \mathcal{O}$			

1.	Owner	Exelon Generation Company, LLC Name	DateJu	ıly 5, 2006
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of	2
2.	Plant .	Limerick Generating Station Name	Unit	2
		3146 Sanatoga Road, Pottstown PA 19464 Address		r # C0205395 P.O. No., Job No. etc.
3.	Work <del>I</del>	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp	
		3146 Sanatoga Road, Pottstown PA 19464	Expiration Date	N/A
4.	Identifi	Address ication of System : Emergency Diesel Generator (System-092)	Line No. 2DG-JW	2D-E507
5.	(a) Ar	oplicable Construction Code ASME III 19 74 Editi	on. Winter 1975 Addenda.	N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19.89

(c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Floating Water Box Channel	AEROFIN	050359	1839	* 114-57639 PO# 013103	2005	Replacement	Yes
Stationary Water Box Channel	AEROFIN	050363	1843	* 114-57640 PO# 013103	2005	Replacement	Yes
(32) 5/8" Studs	Nova Machine Products	Heat# 230111 Lot # 50053473	N/A	* 116-66003 PO# 180864-1779	N/A	Replacement	No
(64) 5/8" Nuts	Nova Machine Products	Heat# 217100 Heat Code X176	N/A	* 116-12090 PO# 180864-1792	N/A	Replacement	No

\* Traceability per Exelon part code number.

7. Description of Work : Replaced diesel generator jacket water heat exchanger flanged water box channels, studs and nuts.

8. Tests conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure ■ Other \_\_ Pressure \_\_125 \_\_psi Test Temp. \_\_N/A \_\_°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0205395 Sheet 2 of 2

## FORM NIS-2 (BACK)

9. Remarks: <u>Manufacturer's data reports are traceable by Exelon work order package</u> . Applicable Manufacturer's Data Reports to be attached	
	······································
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> confo	orms to the rules of the
ASME Code, Section XI	
Type Code Symbol Stamp NA	
Certificate of Authorization No NA Expiratio	n Date NA
Signed J.H. Kramer, Site Weld Administrator Date July 5, 2006	
······································	
CERTIFICATE OF INSERVICE INSPECTION	
L the undersigned helding a valid commission issued by the National Beard of Bailer and Breesure Viscos	Increators and the State
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vesse or Province of <u>Pennsylvania</u> and employed by <u>HSBCT</u>	of
Hartford CT bave inspected the cr	omponents described
in this Owner's Report during the period 22 APR 05 to 0.3 OCT C	, and state that
to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measured	sures 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 impli examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspecto	ea, concerning the
shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from o	
inspection.	r connected with this
Mark None X	
Inspector's Signature Commissions PA-2497 I.N.	<u>&amp; A, C</u>
Inspector's Signature / National Board, State, Province, a	and Endorsements
Date 03 OCT 20 06	

1.	Owner	Exelon Generation Company, LLC Name	Date January	y 23 , 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet of	2
2.	Plant .	Limerick Generating Station Name	Unit	2
	-	3146 Sanatoga Road, Pottstown PA 19464 Address		P.O. No., Job No. etc.
3.	Work F	Performed by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No.	
		3146 Sanatoga Road, Pottstown PA 19464 Address	Expiration Date	N/A
4.	Identifi	ication of System : Emergency Diesel Generator (System-092)	Line No. 2DG-LUBE	2D-P535
5.		Applicable Construction Code <u>Manufacturer's Standard</u>	_19 <u>N/A</u> Edition, <u>N/A_</u> Ad 19 89	denda, <u>N/A</u> Code Case

(c) Applicable Section XI Code Case(s) None

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2D-P535 Circulating Oil Pump	Colt Industries	1401193	N/A	* 114-79515	N/A	Replacement	No
2D-P535 Circulating Oil Pump	Colt Industries	10240087	N/A	* 114-79615	N/A	Replaced	No

\* Traceability per Exelon part code number and manufacturer's serial number.

7. Description of Work : Replaced emergency diesel generator lube oil circulation pump.

8. Tests conducted: Hydrostatic 
Pneumatic
Nominal Operating Pressure
Other \_\_\_\_ Pressure 4.5 " oil level psi Test Temp. N/A °F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

Work Order# C0216865 & C0207265 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: Lube oil pump S/N 1401193 was supplied by Colt industries with diesel generator 2D-G501-DR during initial construction. Applicable Manufacturer's Data Reports to be attached

Lube oil pump S/N 1401193 was removed from 2D-P535 location and rebuilt under Exelon work order C0207265 in 2004.

No pressure boundary parts were repaired or replaced.

Lube oil pump S/N 1401193 was re-installed at 2D-P535 location under Exelon work order C0216865.

	CERTIFICATE OF CO	DMPLIANCE
We certify that the stateme ASME Code, Section XI Type Code Symbol Stamp	nts made in the report are correct an	d this <u>replacement</u> conforms to the rules of the
Certificate of Authorization No	NA	Expiration Date
Signed } K Owner or Ow	J.H. Kramer, site Welc ner's Designee, Title	Administrator Date January 23, 2007

		CERTIFICAT	E OF INSERVIC		ION	
I, the undersigned or Province of				oard of Boile HSBCT	er and Pressure Vessel Ins	pectors and the State
	Hartford,	СТ	,		have inspected the comp	onents described
in this Owner's Re	port during the period		MAROG	to	- 24 JAN 07	, and state that
			performed exam	inations and	taken corrective measure	s described in this
	accordance with the re					
				-	nty, expressed or implied, o	concerning the
					e, neither the Inspector no	
					any kind arising from or co	
		onal injury of p	hopeny damage	01 2 1055 01 6	any kinu ansing norm of co	
inspection.	100					
Kan	Vdama	$\langle \mathbf{\nabla} \rangle$	<b>O</b>			•
<u></u> Muq	1 sound	777.	Commissions		PA-2497 I,N & A,	
- Ins	pector's Signature			National Bo	pard, State, Province, and	Endorsements
Date	<u>24 JAN 20</u>	<u> 27</u>				

1.	Owner	Exelon Generation Company, LLC Name	Date April 12, 2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>
2.	Plant	Limerick Generating Station Name	Unit 2
		<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address	A/R A1564990 Repair Organization P.O. No., Job No. etc.
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp     N/A       Authorization No.     N/A
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration DateN/A
4.	Identification of Syste	m Snubbers (System 103)	Line No. GBD-203 and XRE-2XH
_	(-) <b>A</b> Parable <b>O</b>		Mista 4077 Addanda Mith Orda Ora

5. (a) Applicable Construction Code <u>ASME III</u> 1977\_Edition, <u>Winter 1977</u>\_Addenda, <u>N/A</u>\_Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 edition with addenda through 2003
 (c) Applicable Section XI Code Case(s) <u>N/A</u>\_\_\_\_\_

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
GBD-203-H052(B) Mechanical Snubber	BASIC-PSA	42716 PSA-3	N/A	* 114-72867 PO# 016762	N/A	Replacement	No
XRE-2XH-H001 Mechanical Snubber	BASIC-PSA	42309 PSA-10	N/A	* 114-72887 PO# 006292 & 020769	N/A	Replacement	No
XRE-2XH-H008 Mechanical Snubber	BASIC-PSA	42294 PSA-10	N/A	* 114-72887 PO# 003518 & 020769	N/A	Replacement	No
XRE-2XH-H015 Mechanical Snubber	BASIC-PSA	42904 PSA-10	N/A	* 114-72887 PO# 016762	N/A	Replacement	No

\* Traceability per Exelon stock code number

7. Description of Work: Replaced mechanical shock arrester snubbers.

8. Tests 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 8 1/2 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.

A/R A1564990 Sheet 2 of 2

# FORM NIS-2 (BACK)

9. Remarks: None

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Applicable Manufacturer's Data Reports to be attached

r	
CERTIFICATE OF COMPLI	ANCE
We certify that the statements made in the report are correct and this _ ASME Code, Section XI. Type Code Symbol StampNA	replacement conforms to the rules of the repair of replacement
Certificate of Authorization No. NA	Expiration DateNA
Signed J. H. Kramer, Site weld administrato Owner or Owner's Designee, Title	r Date <u>April 12, , 2007</u>

CERTIFICATE OF INSEF	RVICE INSPECTION
I, the undersigned, holding a valid commission issued by the Nation or Province of <u>Pennsylvania</u> and employed by Hartford, CT	al Board of Boiler and Pressure Vessel Inspectors and the State HSBCTof have inspected the components described
	506 to 15 MAYO7 , and state that
to the best of my knowledge and belief, the Owner has performed e	
Owner's Report in accordance with the requirements of the ASME (	
By signing this certificate neither the Inspector nor his employe	
examinations and corrective measures described in this Owner's Re	
shall be liable in any manner for any personal injury or property dam	
	lage of a loss of any kind ansing norm of connected with this
inspection.	
<u>Man Contractor</u> Commission	IS PA-2497 I,N & A, C
Inspector's Signature	National Board, State, Province, and Endorsements
Date $15MAY_{20}OT$	

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1. Owner	Exelon Generation Company, LLC Name	Date April 12, 2	007
, 	200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2. Plant	Limerick Generating Station Name	Unit 2	
	3146 Sanatoga Road, Pottstown, PA 19464 Address	Action Request A Repair Organization P.O	
3. Work Performe	d by <u>Exelon Nuclear</u> Name	Type Code Symbol Stamp Authorization No	N/A N/A
-	3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4. Identification of	System Snubbers (System 103)	Line No. STG-2MS	

5. (a) Applicable Construction Code <u>ASME III</u> 19.77 Edition, <u>Winter 1977</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
STG-2MS-H004 Mechanical Snubber	BASIC-PSA	42131 PSA-100	N/A	* 114-72868 PO# 189058	N/A	Replacement	No
STG-2MS-H007 Mechanical Snubber	BASIC-PSA	42486 PSA-100	N/A	* 114-79175 PO# 013633	N/A	Replacement	No

\* Traceability per Exelon stock code number

7. Description of Work: Replaced mechanical shock arrester snubbers .

8. Tests conducted: Hydrostatic Deneumatic Nominal Operating Pressure Exempt Conter\_\_\_\_\_ Pressure <u>N/A</u>psi Test Temp. <u>N/A</u>°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E.47th St., New York, N.Y. 10017

### FORM NIS-2 (BACK)

9. Remarks: Refer to Exelon work orders C0220664 and C0220665 for work documentation. Applicable Manufacturer's Data Reports to be attached

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CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of the ASME Code, Section XI. repair of replacement Type Code Symbol Stamp NA
Certificate of Authorization No NA Expiration Date NA
Signed, K J. H. Kramer, Site weld administrator DateApril 12,, 2007 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 Pennsylvania and employed by HSBCT of
Hartford, CT       have inspected the components described         in this Owner's Report during the period       19 MAR O'7 to       15 MAY O7, and state that         to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this
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 PA-2497 I,N & A, C      Inspector's Signature     National Board, State, Province, and Endorsements
Date 15 MAY 20 07

1.	Owner	Exelon Generation Company, LLC Name	Date April 18, 2	2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	Plant	Limerick Generating Station Name	Unit2	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Order C02 Repair Organization P.O	
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4.	Identification of Syst	em Snubbers (System 103)	Line No. EBB-206-H006(B)	
5.		struction Code <u>ASME III</u> 19 <u>77</u> Edition, ion of Section XI Utilized for Repairs or Replacemer		

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
EBB-206-H006(B) Mechanical Snubber	Pacific Scientific	9037 PSA-35	N/A	* 114-72849 PO# 386558	N/A	Replacement	Yes
		-		· · · · · · · · · · ·			
t Turseehiliberen Fr							

\* Traceability per Exelon stock code number

7. Description of Work: Replaced mechanical shock arrester snubber.

8. Tests conducted: Hydrostatic D 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 8 1/2 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.

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## FORM NIS-2 (BACK)

9. Remarks: None

# Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	ANCE			
We certify that the statemen ASME Code, Section XI. Type Code Symbol Stamp	ts made in the report are correct and this	replacement repair of replaceme	conforms to the	ne rules of the	
Certificate of Authorization No	NA		Expiration Date		NA
Signed <u>Y. K</u> Owner or Ov	J. H. Kramer, Site weld administrator vner's Designee, Title	r_ Date <u>April 16,</u>		, <u>2007</u>	, <del></del> -

		CERTIFICATE OF INS	SERVICE INSPECT	ON	
I, the undersigned	l, holding a valid com		tional Board of Boile	r and Pressure Vessel Inspe	ectors and the State
or Province of	Pennsylvania	and employed by	HSBC	<u>CT</u>	of
	Hartford			have inspected the comp	ponents described
in this Owner's Re	eport during the period		<u>CT 06 to</u>	<u>07 MAY 07</u>	, and state that
to the best of my	knowledge and belief,	the Owner has performe	ed examinations and	taken corrective measures of	described in this
		requirements of the ASM			
				ranty, expressed or implied,	concerning the
				e, neither the Inspector nor h	
				any kind arising from or conn	
inspection.	iy manner for any per	sonal injury of property c	amage of a loss of a	any kind ansing norm of comm	
	~ ^/				
	Sect A OAA	10 estra	•		
70	woord	Commiss		<u>PA-2497 I,N &amp; A, C</u>	
lng ing	spector's Signature		National Bo	pard, State, Province, and Er	ndorsements

1.	Owner	Exelon Generation Company, LLC Name	Date April 18, 2	2007
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>	
2.	Plant	Limerick Generating Station Name	Unit2	
		<u>3146 Sanatoga Road, Pottstown, PA 19464</u> Address	Work Order C02 Repair Organization P.C	
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp Authorization No	
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A
4.	Identification of Syste	em Snubbers (System 103)	Line No. DCA-418-H004	
F	(a) Applicable Conc	truction Code ASME III 10.77 Edition	Winter 1977 Addenda	N/A Code Case

5. (a) Applicable Construction Code <u>ASME III</u> 19.77 Edition, <u>Winter 1977</u> Addenda, <u>N/A</u> Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 20<u>01 edition with addenda through 2003</u>
 (c) Applicable Section XI Code Case(s) <u>N/A</u>

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
DCA-418-H004 Mechanical Snubber	Pacific Scientific	12928 PSA-35	N/A	* 114-72849 PO# 386558	N/A	Replacement	Yes
						<u> </u>	
						L	
* Tracability par Ex		L					

\* Traceability per Exelon stock code number

7. Description of Work: Replaced mechanical shock arrester snubber.

8. Tests conducted: Hydrostatic 
Pneumatic
Nominal Operating Pressure
Exempt
Other
N/A
psi
Test Temp.
N/A
°F.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size 8 1/2 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.

(12/82)

## FORM NIS-2 (BACK)

9. Remarks : None
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## Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIA	ANCE		
We certify that the statemen ASME Code, Section XI. Type Code Symbol Stamp	ts made in the report are correct and this	replacement repair of replaceme	conforms to the rules of the ent	
Certificate of Authorization No.	NA		Expiration Date	NA
Signed <u> </u>	J. H. Kramer, Site weld administrato vner's Designee, Title	<u>r _</u> Date <u>April 16,</u>	, 2007	

			al Board of Boiler and Pressure Vessel Inspe	
or Province of	Pennsylvania Hartford	and employed by	have inspected the com	0
to the best of my Owner's Report i By signing th	n accordance with the his certificate neither the corrective measures	the Owner has performed ex requirements of the ASME C le Inspector nor his employer described in this Owner's Rep	aminations and taken corrective measures o ode, Section XI makes any warranty, expressed or implied, port. Furthermore, neither the Inspector nor h	concerning the his employer
shall be liable in a inspection.	iny manner for any pe	isonal injury or property dama	age or a loss of any kind arising from or conn	iected with this

(12/82)

			,			
1.	Owner	Exelon Generation Company, LLC Name	Date May 2, 2	007		
		200 Exelon Way, Kennett Square, PA 19348 Address	Sheet <u>1</u> of <u>2</u>			
2.	Plant	Limerick Generating Station Name	Unit 2			
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Work Orders R0987072 and C0220666 Repair Organization P.O. No., Job No. etc.			
3.	Work Performed by	Exelon Nuclear Name	Type Code Symbol Stamp			
		3146 Sanatoga Road, Pottstown, PA 19464 Address	Expiration Date	N/A		
4.	Identification of Syste	em Snubbers (System 103)	Line No. STG-2MS			
5.	(a) Applicable Cons	truction Code ASME III 19 77 Edition,	Winter 1977 Addenda,	N/A Code Case		

Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 edition with addenda through 2003 (b) Applicable Section XI Code Case(s) \_\_\_\_N/A (C)

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
STG-2MS-H010 Hydraulic Snubber	LISEGA	30600170 / 015	N/A	* 114-00462 PO# 275207-6	N/A	Replacement	No
STG-2MS-H010 Rear Bracket Load Pin	Colonial Machine	Heat No. 1G8401 Heat code N4022	N/A	* 114-73879 PO# 177803	N/A	Replacement	No

\* Traceability per Exelon stock code number

7. Description of Work: <u>Replaced mechanical shock arrester snubber with a hydraulic snubber.</u>

8. Tests conducted: Hydrostatic D 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 8 1/2 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.

Work Orders C0220666 and R0987072 Sheet 2 of 2

### FORM NIS-2 (BACK)

9. Remarks: Replacement completed in accordance with Exelon design change ECR 04-00216. Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE									
We certify that the statem ASME Code, Section XI. Type Code Symbol Stamp	•	correct and this <u>replacemen</u> repair of replac	t conforms to the rules of the ended of the	he					
Certificate of Authorization No	NA		Expiration Date	NA					
Signed <b>Jan J. K</b> Owner or	J. H. Kramer, Site w Owner's Designee, Title	veld administrator Date <u>Mayl</u>	2,, 2007						
				<b>a</b>					
I, the undersigned, holding a va or Province of <u>Pennsylva</u>			essure Vessel Inspectors and the	of					
	Hartford, CT	have	inspected the components descr						
in this Owner's Report during t	he period <u>12 P</u>	<u>AR 07 to 07</u>	MAY 07, and state						
Owner's Report in accordance			rrective measures described in th	lis					
			pressed or implied, concerning the	e					
		ner's Report. Furthermore, neithe							
	r any personal injury or prope	erty damage or a loss of any kind	arising from or connected with this	5					
inspection.	$\sim$								
<u>Maa Me</u>	Com		PA-2497 I,N & A, C						
Inspector's Sign	nature	National Board, Sta	e, Province, and Endorsements						
Date OT M	AY 20 07								