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Exelon Nuclear
10 CFR 50.55a

January 24, 2011

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

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Subject: Submittal of Relief Request I4R-52 Concerning Nozzle-to-Vessel Weld and Inner Radii Examinations (Use of Code Case N-702)

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (a)(3)(i), Exelon Generation Company, LLC (Exelon), is requesting relief from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components." Relief Request I4R-52 proposes an alternative to the requirements contained in Table IWB-2500-1 concerning nozzle-to-vessel weld and nozzle inner radii examination requirements.

This relief applies to the fourth 10-year Inservice Inspection (ISI) interval. The fourth interval for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 began on November 5, 2008, and will conclude November 4, 2018. The fourth 10-year ISI interval complies with the ASME B&PV Code, Section XI, 2001 Edition through 2003 Addenda.

We request your review and approval by January 24, 2012.

No regulatory commitments are contained in this letter.

Should you have any questions concerning this letter, please contact Tom Loomis at (610) 765-5510.

Sincerely,

D. P. Helker

David P. Helker
Manager – Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Relief Request I4R-52

cc: USNRC Region I, Regional Administrator
USNRC Senior Resident Inspector, PBAPS
USNRC Project Manager, PBAPS
R. R. Janati, Bureau of Radiation Protection
S. T. Gray, State of Maryland

ATTACHMENT

Relief Request I4R-52

1. ASME CODE COMPONENTS AFFECTED

Code Class:	1
Component Numbers:	Reactor Vessel Nozzles: N2, N3, N5, N6, N8 (See Enclosure 1 for complete list of nozzle identifications)
Examination Category:	B-D (Inspection Program B)
Item Number:	B3.90 and B3.100
Description:	Alternative to ASME Section XI, Table IWB-2500-1

2. APPLICABLE CODE EDITION AND ADDENDA

The fourth 10-year Inservice Inspection (ISI) program at Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 is based on the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, 2001 Edition through the 2003 Addenda. Additionally, for ultrasonic examinations, ASME Section XI, Appendix VIII, "Performance Demonstration for Ultrasonic Examination Systems," of the 2001 Edition is implemented, as required and modified by 10 CFR 50.55a(b)(2)(xv).

3. APPLICABLE CODE REQUIREMENTS

The applicable requirements are contained in Table IWB-2500-1, "Examination Category B-D, Full Penetration Welded Nozzles in Vessels – Inspection Program B." Class 1 nozzle-to-vessel weld and nozzle inner radii examination requirements are delineated in Item Number B3.90, "Nozzle-to-Vessel Welds," and B3.100, "Nozzle Inside Radius Section." The required method of examination is volumetric. All nozzles with full penetration welds to the vessel shell (or head) and integrally cast nozzles are examined each interval.

All of the nozzle assemblies identified in Enclosure 1 are full penetration welds.

4. REASON FOR REQUEST

Enclosure 1 provides a complete listing of the applicable Reactor Pressure Vessel (RPV) nozzles for PBAPS, Units 2 and 3.

The proposed alternative provides an acceptable level of quality and safety, and the reduction in scope could provide a dose savings of as much as 26 Person-Rem for Unit 2 and 27 Person-Rem for Unit 3 over the remainder of the interval.

5. PROPOSED ALTERNATIVE AND BASIS FOR USE

In accordance with 10 CFR 50.55a(a)(3)(i), relief is requested from performing the required examinations on 100 percent of the nozzle assemblies identified in Tables 5-1 and 5-2 below (see Enclosure 1 for the list of RPV nozzles applicable to this relief request). As an alternative, for all welds and inner radii identified in Tables 5-1 and 5-2, Exelon Generation Company, LLC (Exelon) proposes to examine a minimum of 25 percent of the PBAPS, Units 2 and 3 nozzle-to-vessel welds and inner radii sections, including at least one nozzle from each system and nominal pipe size, in accordance with Code Case N-702 ("Alternative Requirements for Boiling Water Reactor (BWR) Nozzle Inner Radius and Nozzle-to-Shell Welds Section XI, Division 1"). For the nozzle assemblies identified in Enclosure 1, this would mean 25 percent from each of the groups identified below:

Table 5-1
PBAPS, Unit 2 Summary

Group [1,2]	Total Number	Minimum Number to be Examined
Recirculation Inlet (N2)	10	3
Main Steam (N3)	4	1
Core Spray (N5)	2	1
Nozzles On Top Head (N6)	2	1
Jet Pump Instrument (N8)	2	1

Notes to Table 5-1:
[1] The nozzle-to-vessel weld and inner radius examinations are performed together.
[2] The N6 is the only Unit 2 nozzle that has been inspected to date in the fourth ISI interval.

Table 5-2
PBAPS, Unit 3 Summary

Group [1,2]	Total Number	Minimum Number to be Examined
Recirculation Inlet (N2)	10	3
Main Steam (N3)	4	1
Core Spray (N5)	2	1
Nozzles On Top Head (N6)	2	1
Jet Pump Instrument (N8)	2	1

Notes to Table 5-2:
[1] The nozzle-to-vessel weld and inner radius examinations are performed together.
[2] None of the above Unit 3 nozzles have been examined to date in the fourth ISI interval.

The exams in Tables 5-1 and 5-2 will be scheduled in accordance with Table IWB-2412-1, Inspection Program B.

Code Case N-702 stipulates that a VT-1 examination may be used in lieu of the volumetric examination for the inner radii (i.e., Item No. B3.100, "Nozzle Inside Radius Section"). This VT-1 examination is outlined in Code Case N-648-1 ("Alternative Requirements for Inner Radius Examinations of Class 1 Reactor Vessel Nozzles Section XI, Division 1"). However, Exelon is not currently using Code Case N-648-1 at PBAPS for the identified components utilizing enhanced magnification visual examination, and has no plans of using Code Case N-648-1 on those components in the future. Volumetric examinations of all selected nozzle inside radius sections will be completed.

Electric Power Research Institute (EPRI) Technical Report 1003557, "BWRVIP-108: BWR Vessel and Internals Project Technical Basis for the Reduction of Inspection Requirements for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii," provides the basis for Code Case N-702. The evaluation found that failure probabilities at the nozzle blend radius region and nozzle-to-vessel shell weld due to a Low Temperature Overpressure event are very low (i.e., $<1 \times 10^{-6}$ for 40 years) with or without inservice inspection. The report concludes that inspection of 25 percent of each nozzle type is technically justified.

This EPRI report was approved by the NRC in a Safety Evaluation (SE) dated December 19, 2007 (i.e., ADAMS Accession No. ML073600374). Section 5.0,

"Plant-Specific Applicability," of the SE indicates that each licensee who plans to request relief from ASME Code, Section XI requirements for RPV nozzle-to-vessel shell welds and nozzle inner radii sections may reference the BWRVIP-108 report as the technical basis for the use of ASME Code Case N-702 as an alternative. However, each licensee should demonstrate the plant specific applicability criteria from the BWRVIP-108 report to its units in the relief request by showing that all the general and nozzle-specific criteria addressed below are satisfied (i.e., as described in Enclosure 2 to this relief request).

(1) The maximum RPV heatup/cooldown rate is limited to less than 115°F/hour.

PBAPS, Units 2 and 3 Technical Specification (TS) Surveillance Requirement (SR) 3.4.9.1, "RCS Pressure and Temperature (P/T) Limits," provides a Reactor Coolant System (RCS) heatup/cooldown rate of less than or equal to 100°F in any 1-hour period. The heatup/cooldown rate is also referenced in the PBAPS operating procedures.

(2) For the Recirculation Inlet Nozzles, the following criteria must be met:

a. $(pr/t)/C_{RPV}<1.15$; the calculation for the PBAPS, Units 2 and 3 N2 Nozzle results in 1.097, which is less than 1.15.

b. $[p(r_o^2+r_i^2)/(r_o^2-r_i^2)]/C_{NOZZLE}<1.15$; the calculation for the PBAPS, Units 2 and 3 N2 Nozzle results in 0.977, which is less than 1.15.

(3) For the Recirculation Outlet Nozzles, the following criteria must be met:

a. $(pr/t)/C_{RPV}< 1.15$; the calculation for the PBAPS, Units 2 and 3 N1 Nozzle results in 1.311, which is higher than 1.15 and does not meet the requirements.

b. $[p(r_o^2+r_i^2)/(r_o^2-r_i^2)]/C_{NOZZLE}<1.15$; the calculation for the PBAPS, Units 2 and 3 N1 Nozzle results in 0.853, which is less than 1.15.

Based upon the above information, all PBAPS RPV nozzle-to-vessel shell full penetration welds and nozzle inner radii sections, with the exception of the Recirculation Outlet Nozzles, meet the general and nozzle-specific criteria in BWRVIP-108. The Recirculation Outlet (N1) Nozzles are not included in this relief request, and both nozzles will be examined during the fourth ISI interval.

Therefore, the use of Code Case N-702 provides an acceptable level of quality and safety in accordance with 10 CFR 50.55a(a)(3)(i) for all the RPV nozzle-to-vessel shell full penetration welds and nozzle inner radii sections, with the exception of the Recirculation Outlet Nozzles.

In the response to a request for additional information for Limerick Generating Station (LGS), Units 1 and 2 (letter from D. P. Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information – Submittal of Relief Request I3R-14 Concerning Nozzle-to-Vessel Weld

and Inner Radii Examinations," dated July 27, 2010) the NRC had requested a synopsis of the inspections that have been performed on the components for which the alternative was requested and the indications that were found and how these indications were dispositioned. This information for PBAPS, Units 2 and 3 is included in Enclosure 3 to this relief request. As also provided in this response for LGS, Units 1 and 2, the NRC requested that LGS, Units 1 and 2 confirm that the single set of values (e.g., nozzle radii, nozzle thicknesses, etc.) used in the BWRVIP-108 computation are correct and applicable to both LGS, Units 1 and 2. In the case of PBAPS, Units 2 and 3, the single set of values (e.g., nozzle radii, nozzle thicknesses, etc.) in Enclosure 2 ("Plant Specific Applicability") are correct and applicable to PBAPS, Units 2 and 3. These values are minimum design values.

6. DURATION OF PROPOSED ALTERNATIVE

The fourth interval for PBAPS, Units 2 and 3 began on November 5, 2008 and will conclude November 4, 2018. The proposed alternative will be used for the remainder of the fourth 10-year interval of the PBAPS ISI program.

7. PRECEDENTS

1. Letter from H. K. Chernoff (U.S. Nuclear Regulatory Commission) to M. J. Pacilio (Exelon Generation Company, LLC), "Limerick Generating Station, Units 1 and 2 – Proposed Alternative Request RR-I3R-14, Nozzle-to-Vessel Weld and Inner Radii Examinations (TAC NOS. ME3306 and ME3307)," dated September 9, 2010.

2. Letter from L. James (U.S. Nuclear Regulatory Commission) to R. L. Anderson (Duane Arnold Energy Center), "Duane Arnold Energy Center – Safety Evaluation for Request for Alternative to Reactor Pressure Vessel Nozzle to Vessel Weld and Inner Radius Examinations (TAC NO. MD8193)," dated August 29, 2008.

3. Letter from R. Gibbs (U.S. Nuclear Regulatory Commission) to M. B. Bezilla (FirstEnergy Nuclear Operating Company), "Perry Nuclear Power Plant, Unit No. 1 – Request for Relief Related to Inservice Inspection Relief Request IR-054 (TAC NO. MD8458)," dated December 29, 2008.

Enclosure 1
Applicable PBAPS, Unit 2 Nozzles

Component ID	Category Number	Item Number	System	Nominal Pipe Size
N2A	B-D	B3.90	Recirc Inlet	12”
N2A-IRS	B-D	B3.100	Recirc Inlet	12”
N2B	B-D	B3.90	Recirc Inlet	12”
N2B-IRS	B-D	B3.100	Recirc Inlet	12”
N2C	B-D	B3.90	Recirc Inlet	12”
N2C-IRS	B-D	B3.100	Recirc Inlet	12”
N2D	B-D	B3.90	Recirc Inlet	12”
N2D-IRS	B-D	B3.100	Recirc Inlet	12”
N2E	B-D	B3.90	Recirc Inlet	12”
N2E-IRS	B-D	B3.100	Recirc Inlet	12”
N2F	B-D	B3.90	Recirc Inlet	12”
N2F-IRS	B-D	B3.100	Recirc Inlet	12”
N2G	B-D	B3.90	Recirc Inlet	12”
N2G-IRS	B-D	B3.100	Recirc Inlet	12”
N2H	B-D	B3.90	Recirc Inlet	12”
N2H-IRS	B-D	B3.100	Recirc Inlet	12”
N2J	B-D	B3.90	Recirc Inlet	12”
N2J-IRS	B-D	B3.100	Recirc Inlet	12”
N2K	B-D	B3.90	Recirc Inlet	12”
N2K-IRS	B-D	B3.100	Recirc Inlet	12”
N3A	B-D	B3.90	Main Steam	26”
N3A-IRS	B-D	B3.100	Main Steam	26”
N3B	B-D	B3.90	Main Steam	26”
N3B-IRS	B-D	B3.100	Main Steam	26”
N3C	B-D	B3.90	Main Steam	26”
N3C-IRS	B-D	B3.100	Main Steam	26”
N3D	B-D	B3.90	Main Steam	26”
N3D-IRS	B-D	B3.100	Main Steam	26”
N5A	B-D	B3.90	Core Spray	10”
N5A-IRS	B-D	B3.100	Core Spray	10”
N5B	B-D	B3.90	Core Spray	10”
N5B-IRS	B-D	B3.100	Core Spray	10”
CH-NA (N6A)	B-D	B3.90	Head Spray	6”
CH-NA-IRS (N6A)	B-D	B3.100	Head Spray	6”
CH-NC (N6B)	B-D	B3.90	Head Spray	6”
CH-NC-IRS (N6B)	B-D	B3.100	Head Spray	6”
N8A	B-D	B3.90	Jet Pump Instrumentation	4”
N8A-IRS	B-D	B3.100	Jet Pump Instrumentation	4”
N8B	B-D	B3.90	Jet Pump Instrumentation	4”
N8B-IRS	B-D	B3.100	Jet Pump Instrumentation	4”

Note: The N6A (CH-NA and CH-NA-IRS) was examined in the fourth ISI interval.

* IRS - Inner Radius Section

Enclosure 1
Applicable PBAPS, Unit 3 Nozzles

Component ID	Category Number	Item Number	System	Nominal Pipe Size
N2A	B-D	B3.90	Recirc Inlet	12”
N2A-IRS	B-D	B3.100	Recirc Inlet	12”
N2B	B-D	B3.90	Recirc Inlet	12”
N2B-IRS	B-D	B3.100	Recirc Inlet	12”
N2C	B-D	B3.90	Recirc Inlet	12”
N2C-IRS	B-D	B3.100	Recirc Inlet	12”
N2D	B-D	B3.90	Recirc Inlet	12”
N2D-IRS	B-D	B3.100	Recirc Inlet	12”
N2E	B-D	B3.90	Recirc Inlet	12”
N2E-IRS	B-D	B3.100	Recirc Inlet	12”
N2F	B-D	B3.90	Recirc Inlet	12”
N2F-IRS	B-D	B3.100	Recirc Inlet	12”
N2G	B-D	B3.90	Recirc Inlet	12”
N2G-IRS	B-D	B3.100	Recirc Inlet	12”
N2H	B-D	B3.90	Recirc Inlet	12”
N2H-IRS	B-D	B3.100	Recirc Inlet	12”
N2J	B-D	B3.90	Recirc Inlet	12”
N2J-IRS	B-D	B3.100	Recirc Inlet	12”
N2K	B-D	B3.90	Recirc Inlet	12”
N2K-IRS	B-D	B3.100	Recirc Inlet	12”
N3A	B-D	B3.90	Main Steam	26”
N3A-IRS	B-D	B3.100	Main Steam	26”
N3B	B-D	B3.90	Main Steam	26”
N3B-IRS	B-D	B3.100	Main Steam	26”
N3C	B-D	B3.90	Main Steam	26”
N3C-IRS	B-D	B3.100	Main Steam	26”
N3D	B-D	B3.90	Main Steam	26”
N3D-IRS	B-D	B3.100	Main Steam	26”
N5A	B-D	B3.90	Core Spray	10”
N5A-IRS	B-D	B3.100	Core Spray	10”
N5B	B-D	B3.90	Core Spray	10”
N5B-IRS	B-D	B3.100	Core Spray	10”
CH-NA (N6A)	B-D	B3.90	Head Spray	6”
CH-NA-IRS (N6A)	B-D	B3.100	Head Spray	6”
CH-NC (N6B)	B-D	B3.90	Head Spray	6”
CH-NC-IRS (N6B)	B-D	B3.100	Head Spray	6”
N8A	B-D	B3.90	Jet Pump Instrumentation	4”
N8A-IRS	B-D	B3.100	Jet Pump Instrumentation	4”
N8B	B-D	B3.90	Jet Pump Instrumentation	4”
N8B-IRS	B-D	B3.100	Jet Pump Instrumentation	4”

* IRS - Inner Radius Section

Enclosure 2
Plant Specific Applicability

(1) The maximum Reactor Pressure Vessel (RPV) heatup/cooldown rate is limited to less than 115°F/hour.

PBAPS, Units 2 and 3 Technical Specification (TS) Surveillance Requirement (SR) 3.4.9.1, "RCS Pressure and Temperature (P/T) Limits," provides a Reactor Coolant System (RCS) heatup/cooldown rate of less than or equal to 100°F in any 1-hour period. The heatup/cooldown rate is also referenced in the PBAPS operating procedures.

For Recirculation Inlet Nozzles (N2)

(2) $(pr/t)/C_{RPV} < 1.15$

$p=RPV_{\text{Normal Operating Pressure}}$	1035 psi
$r=RPV_{\text{inner radius}}$	125.5 in.
$t=RPV_{\text{wall thickness}}$	6.125 in.
$C_{RPV}=$	19332

$(pr/t)/C_{RPV} = 1.097 < 1.15$

(3) $[p(r_o^2 + r_i^2)/(r_o^2 - r_i^2)]/C_{NOZZLE} < 1.15$

$p=RPV_{\text{Normal Operating Pressure}}$	1035 psi
$r_o=$ nozzle outer radius	12.5 in.
$r_i=$ nozzle inner radius	5.784 in.
C_{NOZZLE}	1637

$[p(r_o^2 + r_i^2)/(r_o^2 - r_i^2)]/C_{NOZZLE} = 0.977 < 1.15$

For Recirculation Outlet Nozzles (N1)

(4) $(pr/t)/C_{RPV} < 1.15$

$p=RPV_{\text{Normal Operating Pressure}}$	1035 psi
$r=RPV_{\text{inner radius}}$	125.5 in.
$t=RPV_{\text{wall thickness}}$	6.125 in.
$C_{RPV}=$	16171

$(pr/t)/C_{RPV} = 1.311 > 1.15$

Note: Requirement not satisfied for the PBAPS N1 Nozzles, which are not included in this relief request.

(5) $[p(r_o^2 + r_i^2)/(r_o^2 - r_i^2)]/C_{NOZZLE} < 1.15$

$p=RPV_{\text{Normal Operating Pressure}}$	1035 psi
$r_o=$ nozzle outer radius	26.5 in.
$r_i=$ nozzle inner radius	12.97 in.
C_{NOZZLE}	1977

$[p(r_o^2 + r_i^2)/(r_o^2 - r_i^2)]/C_{NOZZLE} = 0.853 < 1.15$

Enclosure 3
PBAPS, Unit 2 Nozzle-to-Vessel and Nozzle Inner Radius Inspection Results

The following tables identify the inspection results (Recordable Indications (RI) and No-Recordable Indications (NRI)). All the indications were evaluated as acceptable per ASME Section XI.

Unit	Component ID	Outage	Interval	Period	Results
2	CH-NA (N6A)	2R14	3	1	NRI
2	CH-NA (N6A)	2R18	4	1	NRI
2	CH-NA-IRS (N6A)	2R14	3	1	NRI
2	CH-NA-IRS (N6A)	2R18	4	1	NRI
2	CH-NC (N6B)	2R14	3	1	NRI
2	CH-NC-IRS (N6B)	2R14	3	1	NRI
2	N2A	2R14	3	1	NRI
2	N2A-IRS	2R14	3	1	NRI
2	N2B	2R14	3	1	NRI
2	N2B-IRS	2R14	3	1	NRI
2	N2C	2R14	3	1	NRI
2	N2C-IRS	2R14	3	1	NRI
2	N2D	2R15	3	2	NRI
2	N2D-IRS	2R15	3	2	NRI
2	N2E	2R16	3	3	NRI
2	N2E-IRS	2R16	3	3	NRI
2	N2F	2R15	3	2	NRI
2	N2F-IRS	2R15	3	2	NRI
2	N2G	2R16	3	3	NRI
2	N2G-IRS	2R16	3	3	NRI
2	N2H	2R15	3	2	NRI
2	N2H-IRS	2R15	3	2	NRI
2	N2J	2R16	3	3	NRI
2	N2J-IRS	2R16	3	3	NRI
2	N2K	2R16	3	3	NRI
2	N2K-IRS	2R16	3	3	NRI
2	N3A	2R17	3	3	NRI
2	N3A-IRS	2R17	3	3	NRI
2	N3B	2R17	3	3	NRI
2	N3B-IRS	2R17	3	3	NRI
2	N3C	2R16	3	3	NRI
2	N3C-IRS	2R16	3	3	NRI
2	N3D	2R16	3	3	NRI
2	N3D-IRS	2R16	3	3	NRI
2	N5A	2R17	3	3	NRI
2	N5A-IRS	2R17	3	3	NRI
2	N5B	2R17	3	3	NRI

Unit	Component ID	Outage	Interval	Period	Results
2	N5B-IRS	2R17	3	3	NRI
2	N8A	2R14	3	1	NRI
2	N8A-IRS	2R14	3	1	NRI
2	N8B	2R16	3	3	NRI
2	N8B-IRS	2R16	3	3	NRI

Enclosure 3
PBAPS Unit 3, Nozzle-to-Vessel and Nozzle Inner Radius Inspection Results

The following tables identify the inspection results (Recordable Indications (RI) and No-Recordable Indications (NRI)). All the indications were evaluated as acceptable per ASME Section XI.

Unit	Component ID	Outage	Interval	Period	Results	Misc.
3	CH-NA (N6A)	3R13	3	1	NRI	
3	CH-NA-IRS (N6A)	3R13	3	1	NRI	
3	CH-NC (N6B)	3R13	3	1	NRI	
3	CH-NC-IRS (N6B)	3R13	3	1	NRI	
3	N2A	3R14	3	2	NRI	
3	N2A-IRS	3R14	3	2	NRI	
3	N2B	3R14	3	2	RI	Recordable indications identified – acceptable per ASME Section XI.
3	N2B-IRS	3R14	3	2	NRI	
3	N2C	3R14	3	2	NRI	
3	N2C-IRS	3R14	3	2	NRI	
3	N2D	3R13	3	1	NRI	
3	N2D-IRS	3R13	3	1	NRI	
3	N2E	3R13	3	1	NRI	
3	N2E-IRS	3R13	3	1	NRI	
3	N2F	3R13	3	1	NRI	
3	N2F-IRS	3R13	3	1	NRI	
3	N2G	3R14	3	2	RI	Recordable indication identified – acceptable per ASME Section XI.
3	N2G-IRS	3R14	3	2	NRI	
3	N2H	3R16	3	3	NRI	
3	N2H-IRS	3R16	3	3	NRI	
3	N2J	3R16	3	3	NRI	
3	N2J-IRS	3R16	3	3	NRI	
3	N2K	3R16	3	3	NRI	
3	N2K-IRS	3R16	3	3	NRI	
3	N3A	3R13	3	1	NRI	
3	N3A-IRS	3R13	3	1	NRI	
3	N3B	3R13	3	1	NRI	
3	N3B-IRS	3R13	3	1	NRI	
3	N3C	3R16	3	3	NRI	
3	N3C-IRS	3R16	3	3	NRI	
3	N3D	3R16	3	3	NRI	

Unit	Component ID	Outage	Interval	Period	Results	Misc.
3	N3D-IRS	3R16	3	3	NRI	
3	N5A	3R14	3	2	NRI	
3	N5A-IRS	3R14	3	2	NRI	
3	N5B	3R15	3	3	NRI	
3	N5B-IRS	3R15	3	3	NRI	
3	N8A	3R13	3	1	NRI	
3	N8A-IRS	3R13	3	1	NRI	
3	N8B	3R16	3	3	NRI	
3	N8B-IRS	3R16	3	3	NRI	