



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 20, 2013

Mr. Larry Meyer
Site Vice President
NextEra Energy Point Beach, LLC
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 – RELIEF FROM THE REQUIREMENTS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) BOILER AND PRESSURE VESSEL CODE (B&PV CODE), SECTION XI, FOR THE FOURTH 10-YEAR INSERVICE INSPECTION INTERVAL (TAC NOS. MF1148 AND MF1149)

Dear Mr. Meyer:

By letter dated March 19, 2013, as supplemented by letter dated September 5, 2013, NextEra Energy Point Beach, LLC (NextEra, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) a Request for Relief (RR-4L1) from certain ASME B&PV Code, Section XI, 1998 Edition through 2000 Addenda, associated with an inability for 100 percent examination coverage requirements of specific welds due to geometric or design configuration at the Point Beach Nuclear Plant, Units 1 and 2.

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a(g)(6)(i), the licensee requested relief and to use alternative requirements for inservice inspection items on the basis that alternative methods will provide an acceptable level of quality and safety.

The NRC staff has reviewed the request and concludes, as set forth in the enclosed safety evaluation, that NextEra has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(g)(6)(i) based on the impracticality to comply with the ASME Code examination coverage requirements for the subject welds listed in RR-4L1, Parts A through D. The NRC staff determines that based on the volumetric and surface (where required) examination coverage obtained, it is reasonable to conclude that if significant service-induced degradation had occurred, evidence of it would have been detected by the examinations being performed. Furthermore, the staff concludes that the examinations performed to the extent practical provide reasonable assurance of structural integrity of the subject components.

L. Meyer

- 2 -

If you have any questions, please contact Terry Beltz at (301) 415-3049, or via e-mail at Terry.Beltz@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Carlson", with a long horizontal flourish extending to the right.

Robert D. Carlson, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure:
Safety Evaluation

cc w/encl: Distribution via ListServ



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REGARDING RELIEF REQUEST RR-4L1

FOR THE FOURTH 10-YEAR INSERVICE INSPECTION INTERVAL

NEXTERA ENERGY POINT BEACH, LLC

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

TAC NOS. MF1148 AND MF1149

1.0 INTRODUCTION

By letter dated March 19, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML13079A142), as supplemented by letter dated September 5, 2013 (ADAMS Accession Number ML13249A232), NextEra Energy Point Beach, LLC (NextEra, the licensee) submitted request (RR-4L1) for relief from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, *Rules for Inservice Inspection of Nuclear Power Plant Components*, for the Point Beach Nuclear Plant (PBNP), Units 1 and 2. The request applies to the fourth 10-year inservice inspection (ISI) interval, in which PBNP Units 1 and 2 adopted the 1998 Edition through the 2000 Addenda of ASME Code, Section XI as the Code of Record.

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.55a(f)(6)(i), the licensee requested relief from ASME Code requirements on the basis that the code requirements are impractical.

2.0 REGULATORY EVALUATION

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code, which was incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein.

Enclosure

The regulations in 10 CFR 50.55a(g)(5)(iii), state, in part, that licensees may determine that conformance with certain ASME Code requirements is impractical and that the licensee shall notify the Commission and submit information in support of the determination. Determination of impracticality in accordance with this section must be based on the demonstrated limitations experience when attempting to comply with the code requirements during the ISI interval for which the request is being submitted. Requests for relief made in accordance with this section must be submitted to the U.S Nuclear Regulatory Commission (NRC) no later than 12 months after the expiration of the initial 120-month inspection interval or subsequent 120-month inspection interval for which relief is sought.

The regulations in 10 CFR 50.55a(g)(6)(i), state that the Commission will evaluate determinations under paragraph (g)(5) of this section that code requirements are impractical. The Commission may grant such relief and may impose such alternative requirements as it determines is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

The licensee has requested relief from ASME Code requirements pursuant to 10 CFR 50.55a(g)(6)(i). The ASME Code of record for PBNP, Units 1 and 2, fourth 10-year interval ISI program, which ended on July 31, 2012, is the 1998 Edition, including the 2000 Addenda, of Section XI of the ASME Boiler and Pressure Vessel Code.

3.0 TECHNICAL EVALUATION

The information provided by NextEra in support of the request for relief from ASME Code requirements has been evaluated and the basis for disposition is documented below. For clarity, the request has been evaluated in several parts according to ASME Code Examination Category.

3.1 Request for Relief RR-4L1, Part A, ASME Code, Section XI, Examination Category B-A, Item B1.11, Pressure Retaining Welds in Reactor Vessel (Units 1 and 2)

ASME Code Requirement

ASME Code, Section XI, Examination Category B-A, Item B1.11 requires essentially 100 percent volumetric examination, as defined by ASME Code, Section XI, Figure IWB-2500-1, of the length of reactor pressure vessel (RPV) circumferential shell welds. "Essentially 100 percent," as clarified by ASME Code Case N-460, *Alternative Examination Coverage for Class 1 and Class 2 Welds*, Section XI, Division 1 is greater than 90 percent coverage of the examination volume, or surface area, as applicable. ASME Code Case N-460 has been approved for use by the NRC in Regulatory Guide 1.147, Revision 16, *Inservice Inspection Code Case Acceptability* (RG 1.147, Revision 16).

Licensee's ASME Code Relief Request

In accordance with 10 CFR 50.55a(g)(5)(iii), the licensee requested relief from the ASME Code-required volumetric examination for Lower Shell-to-Lower Head Ring Welds RPV-17-683, PBNP, Unit 1 and RPV-17-683, PBNP, Unit 2.

Licensee's Basis for Relief Request (as stated by the licensee)

Examination is limited due to proximity of core barrel anti-rotation lugs.

Licensee's Proposed Alternative Examination:

The licensee did not propose any alternative examinations for the subject welds. However, the licensee's examinations were performed to the maximum extent practical.

NRC Staff Evaluation

The ASME Code requires essentially 100 percent volumetric examination of pressure retaining welds in the RPV. However, the design configuration of the vessel circumferential shell welds limits complete examination due to adjacent appurtenances. In order to effectively increase the examination coverage, the RPV shell welds and adjacent components would require design modifications or replacement. This would place a burden on the licensee; therefore, the ASME Code-required 100 percent volumetric examinations are considered impractical.

As shown in the sketches and technical descriptions included in the licensee's submittals, examinations of the RPV Lower Shell-to-Lower Head Ring Welds, RPV-17-683, PBNP, Unit 1 and RPV-17-683, PBNP, Unit 2 have been performed to the extent practical, with the licensee obtaining coverage of approximately 72.7 percent and 72.1 percent, respectively. Lower shell-to-lower head ring welds were restricted by the proximity of core barrel anti-rotation lugs. The anti-rotation lugs are approximately 8.3-inches by 7.13-inches and are welded to the RPV at 0-, 90-, 180-, and 270-degrees; the weldments increase the distance that examination equipment can be placed from the anti-rotation lug by an additional inch in each direction, further limiting ultrasonic (UT) scanning areas. The UT examinations included 0-degree longitudinal wave, 45- and 55-degree refracted shear wave, and 50- and 70-degree refracted longitudinal wave scans. All of the automated UT examinations were conducted with equipment, procedures, and personnel that were certified by performance demonstration in accordance with ASME Code, Section XI, Appendix VIII. During these examinations, five recordable indications in RPV-17-683, PBNP, Unit 1 were detected and evaluated as being allowable by the acceptance criteria of ASME Code, Section XI, Article IWB-3510.

The licensee has shown that it is impractical to meet the ASME Code-required 100 percent volumetric examination coverage for the subject RPV welds due to their geometrical design and proximity of permanent adjacent appurtenances. Based on the volumetric coverage obtained, in addition to the full examination of other pressure retaining RPV welds, it is reasonable to conclude that if significant service-induced degradation had occurred, evidence of it would have been detected by the examinations that were performed. The NRC staff has further determined based on above that the examinations performed provide reasonable assurance of structural integrity of the subject welds.

3.2 Request for Relief RR-4L1, Part B, ASME Code, Section XI, Examination Category B-D, Items B3.90 and B3.110, Full Penetration Welded Nozzles in Vessels (Units 1 and 2)

ASME Code Requirement

ASME Code, Section XI, Examination Category B-D, Items B3.90 and B3.110 require 100 percent volumetric examination, as defined by ASME Code, Section XI, Figures IWB-2500-7 (a) through (d), as applicable, of full penetration ASME Code, Class 1 RPV and pressurizer (PZR) nozzle-to-vessel welds. ASME Code Case N-460, as an alternative approved for use by the NRC in RG 1.147, Revision 16, states that a reduction in examination coverage due to part geometry or interference for any Class 1 and 2 weld is acceptable provided that the reduction is less than 10 percent, i.e., greater than 90 percent examination coverage is obtained.

Licensee's ASME Code Relief Request

In accordance with 10 CFR 50.55a(g)(5)(iii), the licensee requested relief from the ASME Code-required volumetric examinations for the RPV and PZR nozzle-to-vessel welds listed below in Tables 3.2.1 (Unit 1) and 3.2.2 (Unit 2).

Table 3.2.1- ASME Code, Section XI, Examination Category B-D (Unit 1)			
ASME Code Item	Weld ID	Weld Type	Coverage Obtained Percent
B3.90	RPV-02-686-A	Outlet Nozzle-to-Shell at 28.5 degrees	76.6
B3.90	RPV-02-686-C	Outlet Nozzle-to-Shell at 208.5 degrees	76.2
B3.90	RPV-687-01-A	Safety Injection Nozzle-to-Shell at 288.5 degrees	67.9
B3.90	RPV-687-01-B	Safety Injection Nozzle-to-Shell at 108.5 degrees	65.0
B3.110	PZR-SPRAYNOZ-IRS	Inside Radius Section (IRS)	73.3
B3.110	PZR-SAFNOZ-1-IRS	IRS	81.6
B3.110	PZR-SAFNOZ-2-IRS	IRS	81.6

Table 3.2.2- ASME Code, Section XI, Examination Category B-D (Unit 2)			
ASME Code Item	Weld ID	Weld Type	Coverage Obtained Percent
B3.90	RPV-02-686-A	Outlet Nozzle-to-Shell at 28.5 degrees	80.2
B3.90	RPV-02-686-C	Outlet Nozzle-to-Shell at 208.5 degrees	80.8
B3.90	RPV-687-01-A	Safety Injection Nozzle-to-Shell at 288.5 degrees	63.0
B3.90	RPV-687-01-B	Safety Injection Nozzle-to-Shell at 108.5 degrees	63.0
B3.110	PZR-SPRAYNOZ-IRS	IRS	73.3
B3.110	PZR-SAFNOZ-1-IRS	IRS	81.6
B3.110	PZR-SAFNOZ-2-IRS	IRS	81.6

Licensee's Basis for Relief Request (as stated by the licensee)

RPV Nozzle-to-Vessel Welds (Units 1 and 2)

Examination is limited due to proximity of nozzle integral extension.

PZR Spray Inside Radius Section (Units 1 and 2)

Examination is limited due to permanent insulation straps (14.7 percent) and raised lettering (cast-in) on head (12 percent).

PZR Safety Inside Radius Section (Units 1 and 2)

Examination is limited due to permanent insulation straps.

Licensee's Proposed Alternative Examination

The licensee did not propose any alternative examinations for the subject welds. However, the licensee's examinations were performed to the maximum extent practical.

NRC Staff Evaluation

The ASME Code requires 100 percent volumetric examination of ASME Code, Class 1 nozzle-to-vessel welds and inside radius sections. However, the design configurations of the subject welds and the proximity of surrounding appurtenances limit access for ultrasonic scanning. In order to effectively increase the examination coverage, the nozzle-to-vessel welds would require design modifications and removal of adjacent components. This would place a burden on the

licensee; thus, 100 percent ASME Code-required volumetric examinations are considered impractical.

The RPV nozzle-to-vessel welds and PZR inside radius sections shown in Tables 3.2.1 and 3.2.2 above are constructed of carbon steel material with stainless steel inside diameter cladding. The welds on the subject nozzles extend the full thickness of the vessel shell/head. These nozzles are of the "set-in" design which essentially makes the welds concentric rings aligned parallel with the nozzle axes in the through-wall direction of the vessel. This nozzle design geometry limits ASME Code-required UT angle beam examinations to be performed primarily from the vessel side of the welds. Other interferences that caused scanning limitations were the RPV nozzle integral extensions and permanent insulation straps and cast-in raised lettering on the PZR head.

As shown on the sketches and technical descriptions included in the licensee's submittals, examinations of the subject RPV nozzle-to-vessel welds and PZR inside radius sections have been completed to the extent practical with volumetric coverage ranging from approximately 63 percent to 81.6 percent (see Tables 3.2.1 and 3.2.2 above), of the ASME Code-required volumes. The examination volumes typically included the weld and base materials near the inside surface of the weld joint, which are the highest regions of stress, and where one would expect degradation sources to be manifested should they occur. The RPV nozzle-to-vessel weld automated UT examinations were conducted with equipment, procedures, and personnel that were certified to the process outlined in ASME Code, Section XI, Appendix VIII using 0-degree longitudinal wave, 45- and 55-degree refracted shear wave, and 50- and 70-degree refracted longitudinal wave examinations. In addition 35- to 45-degree refracted shear wave phased array UT was used for all RPV nozzles, 5- to 40-degree refracted longitudinal wave phased array UT was used for the RPV outlet nozzle welds, and 0- to 30-degree refracted longitudinal wave phased array UT was used for the RPV safety injection nozzles. The PZR inside radius section examinations were performed with manual UT techniques in accordance with the applicable requirements of the ASME Code Section V, Article 4, using 58-degree refracted shear waves. There were three subsurface indications detected on the RPV nozzles that were evaluated to be acceptable according to ASME Code, Section XI, Article IWB-3512.

Although UT scans were primarily limited to the vessel side, recent studies have found that inspections conducted through carbon steel are equally effective whether the ultrasonic waves have only to propagate through the base metal, or have to also propagate through the carbon steel weldment¹. Therefore, it is expected that the UT techniques employed by the licensee would detect structurally significant flaws that might occur on either side of the subject welds due to the fine-grained carbon steel microstructures.

The licensee has shown that it is impractical to meet the ASME Code-required 100 percent volumetric examination coverage for the subject nozzle-to-vessel welds due to their design and adjacent component obstructions. Based on the volumetric coverage obtained for the subject welds, and considering the licensee's performance of ultrasonic techniques employed to maximize this coverage, it is reasonable to conclude that if significant service-induced

1 P. G. Heasler, and S. R. Doctor, 1996. *Piping Inspection Round Robin*, NUREG/CR-5068, PNNL-10475, U. S. Nuclear Regulatory Commission, Washington, DC.

degradation had occurred, evidence of it would have been detected by the examinations that were performed. The NRC staff has further determined based on above that the examinations performed provide reasonable assurance of structural integrity of the subject welds.

3.3 Request for Relief RR-4L1, Part C, ASME Code, Section XI, Examination Category B-K, Item B10.10, Integral Attachments for ASME Code, Class 1 Vessels, Piping, Pumps, and Valves (Units 1 and 2)

ASME Code Requirement

ASME Code, Section XI, Examination Category B-K, Item B10.10, requires essentially 100 percent surface examination, as defined by ASME Code, Section XI, Figures IWB-2500-13, -14, and -15, as applicable, of the length of selected integrally welded attachments to Class 1 pressure vessels. "Essentially 100 percent," as clarified by ASME Code Case N-460, is greater than 90 percent coverage of the examination volume, or surface area, as applicable. ASME Code Case N-460 has been approved for use by the NRC in RG 1.147, Revision 16.

Licensee's ASME Code Relief Request

In accordance with 10 CFR 50.55a(g)(5)(iii), the licensee requested relief from the ASME Code-required volumetric examination of ASME Code, Class 1 Regenerative Heat Exchanger Welded Attachment #1, Welds RHE-IWA-1 (for Unit 1) and RHE-IWA-1 (for Unit 2).

Licensee's Basis for Relief Request (as stated by the licensee)

Examination limited ½ inch on either end of the top attachment due to excessive bleed-out from non-welded portions (attachment is welded on front and back only).

Licensee's Proposed Alternative Examination

The licensee did not propose any alternative examinations for the subject welds. However, the licensee's examinations were performed to the maximum extent practical.

NRC Staff Evaluation

The ASME Code requires essentially 100 percent surface examination of Class 1 pressure vessel integral attachment welds. However, surface examination for the subject weld is limited due to the pressure vessel welded support design configuration. In order for the licensee to obtain 100 percent of the ASME Code-required surface examination coverage, the integral attachment weld would have to be redesigned and modified. This would place a burden on the licensee; therefore, the ASME Code examination requirements are considered impractical.

As shown on the sketch and technical descriptions included in the licensee's submittals, the liquid penetrant surface examinations of the stainless steel Regenerative Heat Exchanger Welded attachment #1, Welds RHE-IWA-1 (Unit 1) and RHE-IWA-1 (Unit 2), have been performed to the extent practical, with the licensee obtaining approximately 75.0 percent coverage of the ASME Code-required surface area. The regenerative heat exchanger

attachment welds are three inches long, but only the middle two inches can be examined from each side of the partially welded plate. This partially welded configuration allows penetrant to bleed-out from each end, potentially masking flaws, should they exist, on each ½ -inch long end portion of the welds. No unacceptable indications were detected during the surface examination.

The licensee has shown that it is impractical to meet the ASME Code-required surface examination coverage for the subject ASME Code, Class 1 regenerative heat exchanger integral attachment welds. However, based on the level of surface coverage obtained, it is reasonable to conclude that, if significant service-induced degradation had occurred, evidence of it would have been detected by the examinations that were performed. The NRC staff has further determined based on above that the examinations performed provide reasonable assurance of structural integrity of the subject welds.

3.4 Request for Relief RR-4L1, Part D, ASME Code, Section XI, Examination Category C-B, Item C2.21, Pressure Retaining Nozzle Welds in Vessels (Unit 1)

ASME Code Requirement

ASME Code, Section XI, Examination Category C-B, Item C2.21, requires 100 percent volumetric and surface examination, as defined by ASME Code, Section XI, Figure IWC-2500-4(a) or (b), as applicable, of nozzle-to-shell (or head) welds in ASME Code Class 2 vessels. ASME Code Case N-460, as an alternative approved for use by the NRC in RG 1.147, Revision 16, states that a reduction in examination coverage due to part geometry or interference for any Class 1 and 2 weld is acceptable provided that the reduction is less than 10 percent, i.e., greater than 90 percent examination coverage is obtained.

Licensee's ASME Code Relief Request

In accordance with 10 CFR 50.55a(g)(5)(iii), the licensee requested relief from the ASME Code-required 100 percent volumetric examination of Steam Generator Shell-to-Main Steam Nozzle Weld SG-B-7.

Licensee's Basis for Relief Request (as stated by the licensee)

Examination limited due to configuration.

100 percent coverage obtained in 1 axial direction, and 54.9 percent coverage obtained in CW/CCW direction.

Licensee's Proposed Alternative Examination:

The licensee did not propose any alternative examinations for the subject welds. However, the licensee's examinations were performed to the maximum extent practical.

NRC Staff Evaluation

The ASME Code requires 100 percent volumetric and surface examinations of ASME Code, Class 2 nozzle-to-shell (or head) welds. However, for the subject steam generator nozzle-to-shell weld, complete examination is limited due to the nozzle configuration. In order to achieve greater volumetric coverage, the nozzle and vessel would have to be redesigned and modified. This would place a burden on the licensee, therefore the ASME Code volumetric examination is considered impractical.

As shown on the sketch and technical descriptions included in the licensee's submittal, examinations of the SA-302 Grade B carbon steel Steam Generator Main Steam Nozzle Outlet-to-Shell Weld SG-B-7 were performed to the extent practical, with the licensee obtaining approximately 77.5 percent of the required examination volume, including 60-degree longitudinal wave scans from primarily the shell side of the weld. The nozzle's "set-in" design essentially makes the weld a concentric ring aligned parallel with the nozzle axis. For this reason, no scans could be performed from the nozzle side of the weld. All of the UT examinations were conducted with equipment, procedures, and personnel that were certified by performance demonstration in accordance with ASME Code, Section XI, Appendix VIII, Supplements 4 and 6. The licensee completed the ASME Code-required surface examinations on the subject weld with no limitations. No unacceptable indications were noted during the volumetric and surface examinations.

The licensee has shown that it is impractical to meet the ASME Code-required 100 percent volumetric examination coverage for the subject nozzle-to-shell weld due to the nozzle design configuration. However, based on the volumetric and full surface coverage obtained, it is reasonable to conclude that, if significant service-induced degradation had occurred, evidence of it would have been detected by the examinations performed. The NRC staff has further determined based on above that the examinations performed provide reasonable assurance of structural integrity of the subject welds.

4.0 CONCLUSION

As set forth above, the NRC staff has reviewed the licensee's submittals and determines that the ASME Code examination coverage requirements are impractical for the subject welds listed in Request for Relief RR-4L1, Parts A through D. Accordingly, the staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(g)(5), and is in compliance with the requirements of 10 CFR 50.55a with the granting of these reliefs.

The NRC staff has concluded that based on the volumetric and surface (where required) examination coverage obtained, it is reasonable to conclude that if significant service-induced degradation had occurred, evidence of it would have been detected by the examinations that were performed. Furthermore, the staff concluded that the examinations performed to the extent practical provide reasonable assurance of structural integrity of the subject components.

The NRC staff has determined that granting relief for RR-4L1, Parts A through D, in accordance with 10 CFR 50.55a(g)(6)(i) is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest given due consideration to

the burden upon the licensee that could result if the requirements were imposed on the facility. Therefore, the NRC staff grants relief for the subject examinations of the components contained in Request for Relief RR-4L1, Parts A through D, for the fourth inservice inspection interval at the Point Beach Nuclear Plant, Units 1 and 2.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in the subject requests for relief remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributors: T. McLellan
M. Audrain

Date: December 20, 2013

L. Meyer

- 2 -

If you have any questions, please contact Terry Beltz at (301) 415-3049, or via e-mail at Terry.Beltz@nrc.gov.

Sincerely,

/RA/

Robert D. Carlson, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure:
Safety Evaluation

cc w/encl: Distribution via ListServ

DISTRIBUTION:

PUBLIC
Branch Reading
RidsNrrDorIDpr Resource
RidsNrrDorILpl3-1 Resource
RidsNrrLAMHenderson Resource
B. Rini, EDO RIII

RidsNrrDeEpn Resource
RidsNrrDeEvib Resource
RidsAcrcAcnw_MailCTR Resource
RidsRgn3MailCenter Resource
RidsNrrPMMonticello Resource

ADAMS Accession No. ML13329A031

*via memo

OFFICE	LPL3-1/PM	LPL3-1/LA	EVIB/BC *	EPNB/BC*	LPL3-1/BC
NAME	TBeltz	MHenderson	SRosenberg	TLupold	RCarlson
DATE	11/29/13	12/04/13	11/12/13	11/12/13	12/20/13

OFFICIAL RECORD COPY