

B. H. Whitley  
Director  
Regulatory Affairs

Southern Nuclear  
Operating Company, Inc.  
42 Inverness Center Parkway  
Birmingham, AL 35242



March 18, 2016

Docket Nos.: 52-025  
52-026

ND-16-0282  
10 CFR 50.55a

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

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Units 3 and 4  
Request for Alternative:  
Preservice Inspection Requirements for Core Makeup Tanks (VEGP 3&4-PSI-ALT-04)

Ladies and Gentlemen:

Pursuant to 10 CFR 50.55a(z)(1), Southern Nuclear Operating Company hereby requests NRC authorization to use an alternative to the requirements of ASME Section XI, IWB-2500, of the ASME Boiler and Pressure Vessel Code, 2007 Edition through 2008 Addenda. The ASME Code Class 1 Core Makeup Tanks (CMTs) are not addressed in the current ASME code of record. This request proposes the use of ASME Section XI requirements for pressurizers to perform inspections of the CMTs. The proposed request for alternative is applicable to preservice inspection of CMTs.

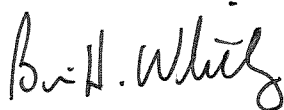
The details of the 10 CFR 50.55a(z)(1) request are contained in the enclosure. Approval is requested by September 30, 2016, to support inspections of the CMTs, currently scheduled during the month of November 2016.

This letter contains no regulatory commitments. Should you have any questions, please contact Mr. Corey Thomas at (205) 992-5221.

Mr. Brian H. Whitley states that: he is the Regulatory Affairs Director of Southern Nuclear Operating Company; he is authorized to execute this oath on behalf of Southern Nuclear Operating Company; and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



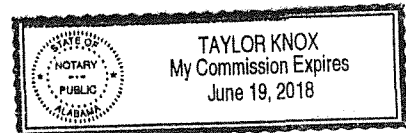
Brian H. Whitley

BHW/BCT/ljs

Sworn to and subscribed before me this 18 day of MARCH, 2016

Notary Public: Taylor Knox

My commission expires: 6/19/18



Enclosure: Vogtle Electric Generating Plant (VEGP) Units 3 and 4 – Proposed Alternative VEGP 3&4-PSI-ALT-04 in Accordance with 10 CFR 50.55a(z)(1) Regarding Preservice Inspection Requirements for Core Makeup Tanks

cc:

Southern Nuclear Operating Company / Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosure)

Mr. M. D. Rauckhorst

Mr. D. G. Bost (w/o enclosure)

Mr. M. D. Meier (w/o enclosure)

Mr. J. T. Gasser (w/o enclosure)

Mr. D. H. Jones (w/o enclosure)

Ms. K. D. Fili (w/o enclosure)

Mr. D. L. McKinney (w/o enclosure)

Mr. T.W. Yelverton (w/o enclosure)

Mr. B. H. Whitley

Mr. C. R. Pierce

Mr. D. L. Fulton

Mr. M. J. Yox

Mr. J. C. Haswell

Mr. T. R. Takats

Mr. W. A. Sparkman

Mr. J. P. Redd

Ms. K. A. Roberts

Document Services RTYPE: VND.LI.L00

File AR.01.02.06

Nuclear Regulatory Commission

Ms. C. Haney (w/o enclosure)

Mr. M. Delligatti (w/o enclosure)

Mr. L. Burkhart (w/o enclosure)

Mr. J. McKirgan (w/o enclosure)

Mr. P. Kallan

Mr. C. Patel

Mr. W. C. Gleaves

Mr. B. M. Baval

Ms. R. Reyes

Ms. M. A. Sutton

Mr. M. E. Ernstes

Mr. G. Khouri

Mr. J. D. Fuller

Ms. S. Temple

Ms. J. Uhle

Mr. T.E. Chandler

Ms. P. Braxton

State of Georgia

Mr. J. H. Turner

Oglethorpe Power Corporation

Mr. M. W. Price  
Mr. K. T. Haynes  
Ms. A. Whaley

Municipal Electric Authority of Georgia

Mr. J. E. Fuller  
Mr. S. M. Jackson

Dalton Utilities

Mr. T. Bundros

WECTEC

Ms. K. Stoner (w/o enclosure)  
Mr. C. A. Castell

Westinghouse Electric Company, LLC

Mr. R. Easterling (w/o enclosure)  
Mr. J. W. Crenshaw (w/o enclosure)  
Mr. C. D. Churchman (w/o enclosure)  
Mr. L. Woodcock  
Mr. P. A. Russ  
Mr. G. F. Couture  
Mr. M. Y. Shaqqo

Other

Mr. J. E. Hesler, Bechtel Power Corporation  
Ms. L. A. Matis, Tetra Tech NUS, Inc.  
Dr. W. R. Jacobs, Jr., Ph.D., GDS Associates, Inc.  
Mr. S. Roetger, Georgia Public Service Commission  
Ms. S. W. Kernizan, Georgia Public Service Commission  
Mr. K. C. Greene, Troutman Sanders  
Mr. S. Blanton, Balch Bingham  
Mr. R. Grumbir, APOG  
Mr. J. R. Bouknight, South Carolina Electric & Gas Company  
Mr. D. Kersey, South Carolina Electric & Gas Company  
Mr. B. Kitchen, Duke Energy  
Mr. S. Franzone, Florida Power & Light

**Southern Nuclear Operating Company**

**ND-16-0282**

**Enclosure**

**Vogtle Electric Generating Plant (VEGP) Units 3 and 4**

**Proposed Alternative VEGP 3&4-PSI-ALT-04**

**in Accordance with 10 CFR 50.55a(z)(1)**

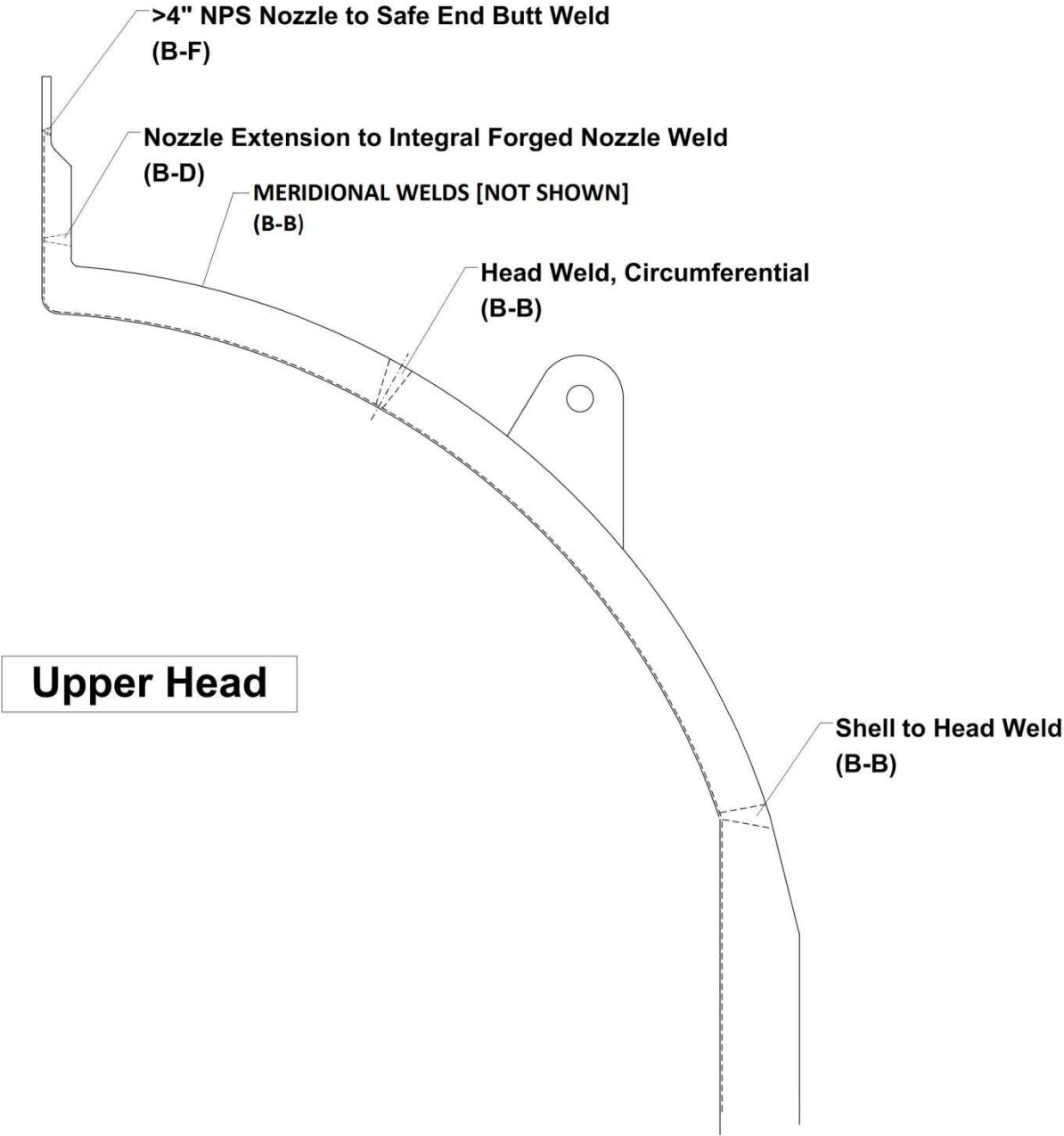
**Regarding Preservice Inspection Requirements for Core Makeup Tanks**

**(Enclosure consists of 6 pages, including this cover page.)**

<b>Plant Site-Unit:</b>	Vogtle Electric Generating Plant (VEGP) – Units 3 and 4
<b>Interval Dates:</b>	Applies to Preservice Inspection (PSI)
<b>Requested Date for Approval:</b>	Approval is requested by September 30, 2016 to support the performance of the VEGP Unit 3 Section XI PSI of the two Core Makeup Tanks (CMTs).
<b>ASME Code Components Affected:</b>	The Westinghouse AP1000 <sup>®</sup> design includes two CMTs per unit. The primary function of the CMT is to provide makeup and boration to the reactor coolant system during events not involving loss of coolant when the normal makeup system is unavailable or insufficient. These tanks are designed and fabricated to the ASME Boiler and Pressure Vessel (B&PV) Code, Section III as Class 1 components. The CMTs are located inside containment at an elevation slightly above the reactor coolant main loop piping. The two CMTs are vertical, cylindrical tanks with hemispherical upper and lower heads made of carbon steel, clad with stainless steel (see Figures 1 & 2).
<b>Applicable Code Edition and Addenda:</b>	ASME (B&PV) Code, Section XI, 2007 Edition through 2008 Addenda
<b>Applicable Code Requirements:</b>	The CMT is a Class 1 component specific to the Westinghouse AP1000 <sup>®</sup> passive design; therefore, the ASME Code has not previously addressed this component.
<b>Reason for Request:</b>	The 2007 Edition through 2008 Addenda of ASME Section XI does not describe requirements for the examination of the CMT. Therefore, this alternative will be used to satisfy the PSI requirements.

<p><b>Proposed Alternative and Basis for Use:</b></p>	<p>This proposed alternative is requesting the use of the ASME Section XI examination requirements stipulated in the 2007 Edition through 2008 Addenda of ASME Section XI for the Pressurizer as denoted in Table IWB-2500 for Categories B-B, B-D, B-F, B-G-2, B-K and B-P to be used for the Core Makeup Tanks.</p> <p>Both the Pressurizer and Core Makeup Tanks are Class 1 Vessels designed, fabricated, and examined in accordance with ASME Section III, Subsection NB requirements. Both are operated at Reactor Coolant System nominal operating pressure and are fabricated of similar materials (SA-508 Gr. 3, Class 1 or 2). The proposed examinations shown in Table 1 and Figures 1 and 2 of this enclosure are consistent with IWB-2500 requirements for the pressurizer. Application of the pressurizer PSI requirements will assure the pressure retaining integrity of the CMTs is maintained in accordance with ASME Section XI requirements and is consistent with the requirements of 10 CFR 50.55(a).</p> <p>Based on the information above and as applied in Table 1, SNC concludes that the proposed examinations provide an acceptable level of quality and safety.</p>
<p><b>Duration of Proposed Alternative:</b></p>	<p>The duration of the proposed alternative is the Section XI preservice inspections for VEGP Units 3 and 4.</p>
<p><b>References:</b></p>	<ol style="list-style-type: none"> <li>1. ASME (B&amp;PV) Code, Section XI, 2007 Edition through 2008 Addenda.</li> <li>2. VEGP Units 3&amp;4, UFSAR (plant specific Design Control Document (DCD), Subsection 5.4.13, 6.3.2.1.2, and 6.3.2.2.1).</li> </ol>
<p><b>Status:</b></p>	<p>Awaiting NRC authorization.</p>

**FIGURE 1 – CMT Upper Head**





**FIGURE 2 – CMT Lower Head**

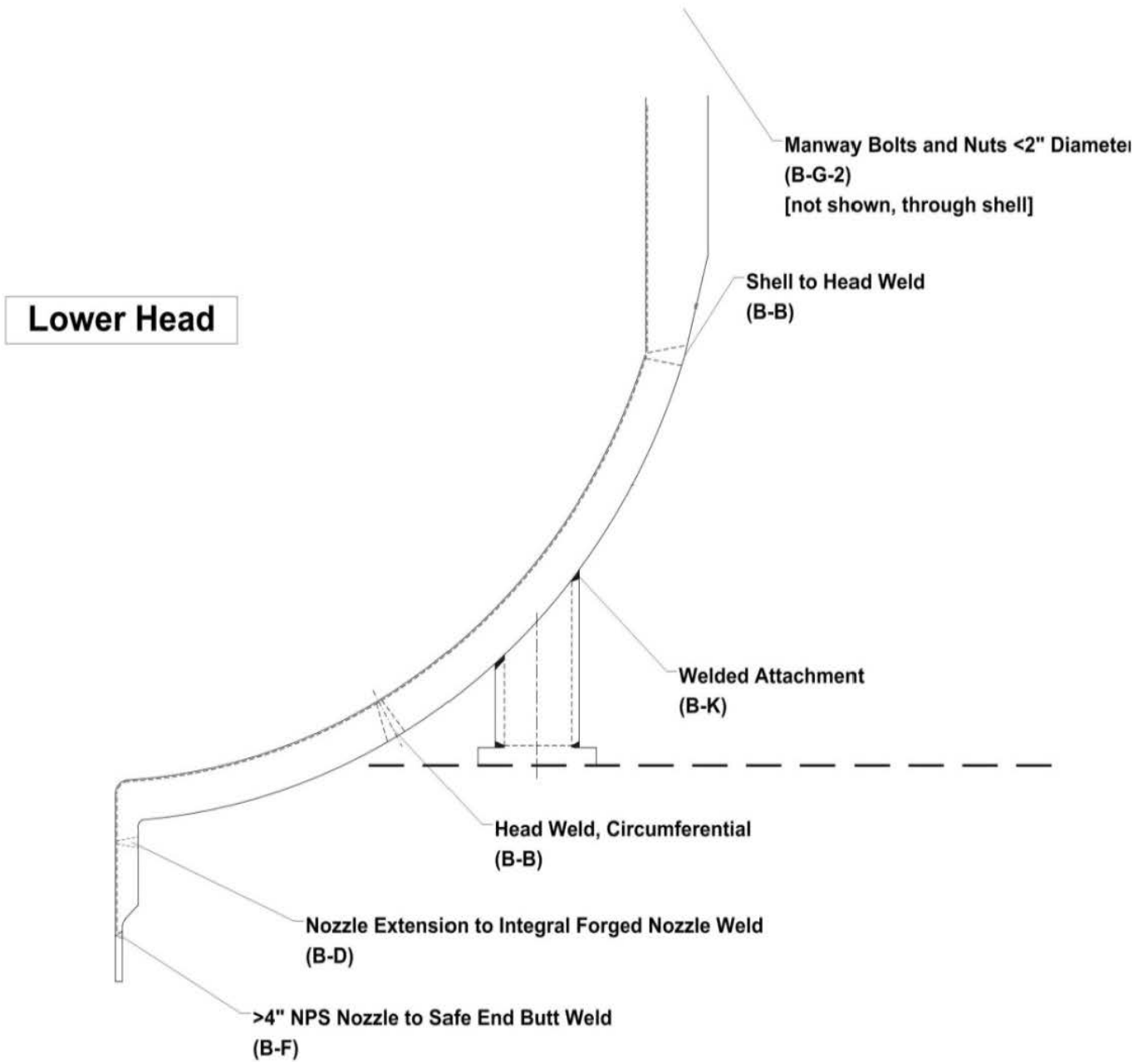


Table 1

Examination Category	Item No.	Parts Examined	Examination Method	Comments
<b>B-B</b> , PRESSURE RETAINING WELDS IN VESSELS OTHER THAN REACTOR VESSELS	B2.10	Shell-to-Head	Volumetric	2 per Vessel N/A
	B2.11	Circumferential		
	B2.12	Longitudinal		
	B2.20	Head Welds	Volumetric	2 per Vessel 8 per Vessel
B2.21	Circumferential			
B2.22	Meridional			
<b>B-D</b> , FULL PENETRATION WELDED NOZZLES IN VESSELS	B3.110	Nozzle-to-Vessel Welds	Volumetric	2 per Vessel
<b>B-F</b> , PRESSURE RETAINING DISSIMILAR METAL WELDS IN VESSEL NOZZLES	B5.40	NPS 4 (DN 100) or Larger Nozzle-to-Safe End Butt Welds	Volumetric and Surface	2 per Vessel
<b>B-G-2</b> , PRESSURE RETAINING BOLTING, 2 in. AND LESS IN DIAMETER	B7.20	Bolts, studs and Nuts	Visual, VT-1	0 bolts, 20 studs, 20 Nuts per Vessel
<b>B-K</b> , WELDED ATTACHMENTS FOR VESSELS, PIPING, PUMPS, AND VALVES	B10.10	Welded attachments in Pressure Vessels	Surface	8 per Vessel Note 7 in Table IWB-2500-1 applies
<b>B-P</b> , ALL PRESSURE RETAINING COMPONENTS				Pressure Testing will be performed in accordance with ASME Section III for Construction prior to commercial operations.