



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 23, 2013

Mr. B. L. Ivey
Vice President, Regulatory Affairs
Southern Nuclear Operating Company
P.O. Box 1295
Bin B022
Birmingham, AL 35201

**SUBJECT: SOUTHERN NUCLEAR OPERATING COMPANY VOGTLE ELECTRIC
GENERATING PLANT UNITS 3 AND 4 – NRC PERIODIC INSPECTION OF
QUALITY ASSURANCE PROGRAM, REPORTS 05200025/2013-008 and
05200026/2013-008**

Dear Mr. Ivey:

On June 21, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Vogtle Electric Generating Plant Units 3 and 4. The enclosed inspection report documents the inspection results, which were discussed on June 21, 2013, with Mr. David Jones, Vogtle 3 and 4 Vice President Technical Compliance, and other members of your staff.

The inspection examined the quality assurance program activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within this area, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

No findings were identified during this inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael Ernstes, Chief
Construction Projects Branch 4
Division of Construction Projects

Docket Nos. 05200025, 05200026
License No. NPF-91 (Unit 3), NPF-92 (Unit 4)

Enclosure:

Inspection Report
05200025/2013008 and
05200026/2013008
w/Attachment:
Supplemental Information

cc w/encl: (See next page)

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael Ernstes, Chief
 Construction Projects Branch 4
 Division of Construction Projects

Docket Nos. 05200025, 05200026
 License No. NPF-91 (Unit 3), NPF-92 (Unit 4)
 Enclosure:

Inspection Report
 05200025/2013008 and
 05200026/2013008
 w/Attachment:
 Supplemental Information

cc w/encl: (See next page)

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
 ADAMS: Yes ACCESSION NUMBER: ML13205A312 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII: DCI	RII: DCI	RII: DCI	RII: DCI	RIII:		
SIGNATURE	C. Jones	J. Lizardi	A. Matos	L Dumont	R. Morris		
NAME	TCS for CTJ1	TCS for JXL2	TCS for ATM1	TCS for LSD2	RMM3 via e-mail		
DATE	07/18/2013	07/23/2013	07/18/2013	07/18/2013	07/15/2013		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\CC\DCP\CPB4\PROJECT VOGTLE\INSPECTION REPORTS\INTEGRATED INSPECTION REPORTS\2013\2013-008\VEGP QA INSPECTION REPORT 2013-008 REV1.DOC

cc w/encl:

cc w/encl:
Resident Manager
Oglethorpe Power Corporation
Alvin W. Vogtle Road
7821 River Road
Waynesboro, GA 30830

Rita Kilpatrick
250 Arizona Ave
Atlanta, GA 30307

Office of the Attorney General
40 Capital Square SW
Atlanta, GA 30334

Lucious Abram
Commissioner-
Burkes County Commissioner
P.O. Box 1626
Waynesboro, GA 30830

Anne F. Appleby
Oglethorpe Power Corporation
2100 East Exchange Place
Tucker, GA 30084

Ms. Michele Boyd
Legislative Director
Energy Program
Public Citizens Critical Mass Energy
And Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Lisa Higdon
Southern Nuclear Op. Co
Document Control Coordinator
42 Inverness Center Parkway
Attn: B236
Birmingham, AL 35201

Stephen E. Kuczynski
Chairman, President and CEO
Southern Nuclear
P.O. Box 1295
Birmingham, AL 35201

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
Atlanta, GA 30334

Mr. Joseph A. (Buzz) Miller
Executive Vice President
Southern Nuclear Operating Company
241 Ralph McGill Blvd
BIN 10240
Atlanta, GA 30308-3374

Resident Inspector
Vogtle Plant
8805 River Road
Waynesboro, GA 30830

Director
Consumer's Utility
Counsel Division
Governor's Office of Consumer Affairs
2 Martin Luther King, Jr. Drive
Plaza Level East, Suite 356
Atlanta, GA 30334-4600

County Commissioner
Office of the Commissioner
Burke County Commission
Waynesboro, GA 30830

Mr. James C. Hardeman
Environmental Radiation Program Manager
Environmental Protection Division
Georgia Dept. of Natural Resources
4220 International Pkwy, Suite 100
Atlanta, GA 30354-3906

Elaine Sikes
Burke County Library
130 Highway 24 South
Waynesboro, GA 30830

Mr. Jerry Smith
Commissioner
District 8
Augusta-Richmond County Commission
1332 Brown Road
Hephzibah, GA 30815

Gene Stilp
1550 Fishing Creek Valley Road
Harrisburg, PA 17112

Mr. Robert Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

George B. Taylor, Jr.
2100 East Exchange Pl.
Atlanta, GA 30084-5336

Email

agaughtm@southernco.com (Amy Aughtman)
agbaker@southernco.com (Ann Baker)
awc@nei.org (Anne W. Cottingham)
bhwhitle@southernco.com (Brian Whitley)
Bill.Jacobs@gdsassociates.com (Bill Jacobs)
blivey@southernco.com (Pete Ivey)
bob.masse@opc.com (Resident Manager)
bwwaites@southernco.com (Brandon Waites)
chmahan@southernco.com (Howard Mahan)
crpierce@southernco.com (C.R. Pierce)
csguinn@southernco.com (Candance Guinn)
cwaltman@roe.com (C. Waltman)
dahjones@southernco.com (David Jones)
danawill@southernco.com (Dana Williams)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
david.siefken@hq.doe.gov (David Siefken)
delongra@westinghouse.com (Rich DeLong)
dgbost@southernco.com (Danny Bost)
dlfulton@southernco.com (Dale Fulton)
drculver@southernco.com (Randy Culver)
ed.burns@earthlink.net (Ed Burns)
edavis@pegasusgroup.us (Ed David)
erg-xl@cox.net (Eddie R. Grant)
G2NDRMDC@southernco.com (SNC Document Control)
james1.beard@ge.com (James Beard)
jamiller@southernco.com (Buzz Miller)
jbtomase@southernco.com (Janice Tomasello)
jenmorri@southernco.com (Jennifer Buettner)
jhall@southernco.com (Jennifer Hall)
jim@ncwarn.org (Jim Warren)
jmgidden@southernco.com (John Giddens)
Joseph_Hegner@dom.com (Joseph Hegner)
jranalli@meagpower.org (Jerry Ranalli)
jrjohnso@southernco.com (Randy Johnson)
jtdavis@southernco.com (Jim Davis)
jtgasser@southernco.com (Jeff Gasser)
karen.patterson@ttnus.com (Karen Patterson)
karlg@att.net (Karl Gross)
kim.haynes@opc.com (Kim Haynes)
kmseiber@southernco.com (Kristin Seibert)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
lchandler@morganlewis.com (Lawrence J. Chandler)
ldperry@southernco.com (Leigh D. Perry)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
markus.popa@hq.doe.gov (Markus Popa)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
mcintyba@westinghouse.com (Brian McIntyre)

mdrauckh@southernco.com (Mark Rauckhorst)
media@nei.org (Scott Peterson)
mike.price@opc.com (M.W. Price)
MSF@nei.org (Marvin Fertel)
nirsnet@nirs.org (Michael Mariotte)
nihender@southernco.com (Nancy Henderson)
Nuclaw@mindspring.com (Robert Temple)
patriciaL.campbell@ge.com (Patricia L. Campbell)
Paul@beyondnuclear.org (Paul Gunter)
pbessette@morganlewis.com (Paul Bessette)
randall@nexusamllc.com (Randall Li)
rhenry@ap.org (Ray Henry)
RJB@NEI.org (Russell Bell)
russpa@westinghouse.com (Paul Russ)
sabinski@suddenlink.net (Steve A. Bennett)
sblanton@balch.com (Stanford Blanton)
sfrantz@morganlewis.com (Stephen P. Frantz)
sjackson@meagpower.org (Steven Jackson)
skauffman@mpr.com (Storm Kauffman)
skuczyns@southernco.com (Steve Kuczynski)
sroetger@psc.state.ga.us (Steve Roetger)
stephan.moen@ge.com (Stephan Moen)
taterrel@southernco.com (Todd Terrell)
tlubnow@mpr.com (Tom Lubnow)
Tom.Bilik@nrc.gov (Thomas Bilik)
TomClements329@cs.com (Tom Clements)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)
wasparkm@southernco.com (Wesley A. Sparkman)
whelmore@aol.com (Bill Elmore)

Letter to B. L. Ivey from Michael E. Ernstes dated July 23, 2013

SUBJECT: SOUTHERN NUCLEAR OPERATING COMPANY VOGTLE ELECTRIC
GENERATING PLANT UNITS 3 AND 4 – NRC PERIODIC INSPECTION OF
QUALITY ASSURANCE PROGRAM, REPORTS 05200025/2013-008 and
05200026/2013-008

Distribution w/encl:

Region II Regional Coordinator, OEDO (D. Huyck)

M. Brown, NRO

T. Kozak, NRO

L. Burkhart, NRO

B. Anderson, NRO

R. Joshi, NRO

J. Munday, RII

M. Miller, RII

J. Yerokun, RII

M. Ernstes, RII

R. Musser, RII

S. Freeman, RII

A. Masters, RII

G. Khouri, RII

T. Steadham, RII

J. Kent, RII

J. Fuller, RII

C. Abbott, RII

C. Huffman, RII

ConE_Resource@nrc.gov

NRO_cROP_Resource@nrc.gov

PUBLIC

U.S. NUCLEAR REGULATORY COMMISSION

Region II

Docket Numbers: 05200025
05200026

License Numbers: NPF-91
NPF-92

Report Numbers: 05200025/2013-008
05200026/2013-008

Licensee: Southern Nuclear Operating Company

Facility: Vogtle Electric Generating Plant, Unit 3
Vogtle Electric Generating Plant, Unit 4

Location: Waynesboro, GA

Inspection Dates: June 17, 2013 through June 21, 2013

Inspectors: C. Jones, Sr. Construction Inspector, RII DCI
R. M. Morris, Sr. Resident Inspector, RIII Enrico Fermi
J. Lizardi-Barreto, Construction Inspector, RII DCI
A. Matos-Marin, Construction Inspector, RII DCI
L. Dumont, Construction Inspector, RII DCI

Approved by: Michael Ernstes, Chief
Construction Projects Branch 4
Division of Construction Projects

Enclosure

SUMMARY OF FINDINGS

Inspection Report (IR) 05200025/2013008, 05200026/2013008; 06/17/2013 – 06/21/2013; Vogtle Electric Generating Plant Units 3 and 4; periodic quality assurance inspection report.

The purpose of this inspection was to conduct an inspection of the implementation of the quality assurance program with a focus on safety related construction work in progress. Inspectors followed guidance in Inspection Procedure (IP) 35007- Quality Assurance Program Implementation during Construction for 10 CFR Part 50 Appendix B criteria II, III, VI, XI, XII, XV, and XVIII.

A. NRC-Identified and Self Revealed Findings

No findings were identified

B. Licensee-Identified Violations

No findings were identified

REPORT DETAILS

CONSTRUCTION REACTOR SAFETY

Cornerstone: Construction/Installation

1P01 Appendix 2. Inspection of Criterion II – Quality Assurance Program (IP 35007)

a. Inspection Scope

The inspectors reviewed section 2 of Southern Nuclear Operating Company's (SNC) Nuclear Development Quality Assurance Manual (NDQAM), revision 11.0, to evaluate the implementation of the licensee's quality assurance program, to ensure that implementing documents were developed in accordance the NDQAM and to verify that adequate supervision was in place to assure that contractors were complying with the requirements of the NDQAM. In addition, the inspectors reviewed the Chicago Bridge and Iron (CB&I – formally known as Shaw) Stone & Webster Quality Assurance Program SWSQAP1-74A, revision B and Westinghouse's Quality Management System (QMS), revision 6, to assess implementation of CB&I's and WEC's quality assurance programs and to verify that both quality assurance manuals conformed to the NDQAM.

The inspectors reviewed the previous revisions of all three quality assurance manuals to verify that the changes were properly evaluated to identify any reductions in commitments contained in the previous versions accepted by the NRC, and to verify that all three organizations were in compliance with 10 CFR 50.54(a)(3) and (4).

The inspectors reviewed a sample of training and qualification records of SNC's lead auditors, auditors and quality assurance personnel and confirmed that lead auditors and auditors had completed required training and had maintained qualification and certification according to SNC procedures. The inspection scope included a review to confirm personnel who performed quality assurance activities were indoctrinated and trained in accordance with SNC policies. Also, the NRC inspectors reviewed the training and qualification records of CB&I's quality assurance staff and confirmed that the staff had completed required training and had maintained their qualification as required by CB&I policies and procedures.

The inspectors reviewed a sample of work package documents to verify that work package documents for quality-affecting activities were adequately prepared and approved by the appropriate personnel responsible for the works. The inspectors verified that SNC management had performed an assessment of the Nuclear Development quality assurance program as required and that the result of the assessment was reviewed by management.

The inspectors interviewed quality assurance managers and selected staff from the three organizations to determine whether managers and staff members were knowledgeable of the quality assurance program that they were supporting and the quality assurance activities that they were performing.

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P02 Appendix 3, Inspection of Criterion III – Design Control (IP 35007)

a. Inspection Scope

The inspection of design control was performed to evaluate the adequacy of design activities that were associated with implementing and preserving the approved design during the construction phase. To accomplish this scope, the inspectors interviewed responsible engineering and licensing personnel, reviewed samples of engineering and design coordination reports (E&DCRs), design change proposals (DCPs), and license document change requests (LDCRs), and observed a demonstration of administrative controls that were established in the Shawdocs electronic document control system.

A sample of five E&DCRs was reviewed to verify applicable requirements and standards from the current licensing basis were identified and either implemented in the new design solutions or otherwise reconciled as acceptable exceptions. In addition, the inspectors verified that documented justifications were provided for design changes, design results were independently verified, and that design outputs were approved by the designated design authority.

The inspectors reviewed a sample of two DCPs to verify proposed changes to design were evaluated to identify departures from the current licensing basis and the plant programs that would require revision to address the proposed changes. The companion LDCRs were reviewed to verify identified departures were adequately described and justified, and were supported by screening evaluations that conformed to the requirements of 10 CFR 50.59. The inspection scope included observing a demonstration of administrative controls implemented in Shawdocs and evaluating selected “license hold” E&DCRs that had been issued for design changes that could not be installed until the licensee obtained prerequisite NRC approval of the associated license amendment requests.

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P03 Appendix 6, Inspection of Criterion VI – Document Control (IP 35007)

a. Inspection Scope

The inspectors reviewed the licensee’s document control process to verify measures had been implemented to control reviewing, issuing and distributing controlled documents in accordance with the requirements of section 6 of NDQAM, revision 11.0. The inspectors reviewed the sections related to document control in both CB&I and Westinghouse’s quality assurance manuals in order to assess the implementation of their document control program and to verify that contractors were also complying with the requirements of the NDQAM.

The inspectors reviewed a sample of hard copy controlled documents and verified that the electronic version of the documents had identical identifiers and revision numbers. The inspectors also verified that the controlled documents in the inspection sample were reviewed and approved by the appropriate personnel other than the preparers of the documents. The inspectors verified that revisions to the controlled documents had been reviewed and approved by the same organization that the documents were originated.

The inspectors interviewed document control managers from the licensee and construction consortium to determine whether managers were knowledgeable of their respective document control processes and the quality assurance activities that they were performing. In addition, the inspectors interviewed construction personnel who were actively engaged in construction activities to verify that they had access to the current version of controlled documents.

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P04 Appendix 11, Inspection of Criterion XI – Test Control (IP 35007)

a. Inspection Scope

The inspectors conducted direct observations of test activities and reviewed records of tensile strength tests of mechanical splices for reinforcing steel bars to verify that they were conducted in accordance with applicable procedures and by trained personnel. The inspectors verified that test records included the method for testing, item tested, date of test, measuring and test equipment (M&TE) used during test, acceptance criteria, results, evaluation of acceptability, and name of independent evaluator. The inspectors reviewed special instructions and specifications to verify the adequacy of the acceptance criteria used.

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P05 Appendix 12, Inspection of Criterion XII – Control of Measuring and Test Equipment (IP 35007)

a. Inspection Scope

The inspectors reviewed the tracking systems for calibration of the onsite and offsite M&TE used by CB&I, Westinghouse, and their subcontractor Mistras to confirm the control of use the maintenance of the systems. The inspectors interviewed personnel controlling the tracking systems as well as users of the equipment to verify that they understood the program aspects. The inspectors sampled equipment in the storage facilities and in the field to ensure that the equipment and instrumentation used were

properly calibrated and used within the specifications to the equipment. Inspection procedure sections a through f of A12.04.02 were completed during this inspection.

The inspection scope included an assessment of the adequacy of controls for maintenance and calibration of new equipment that had arrived on site, including M&TE used to verify protection of the reactor vessel and vessel closure head while in long term storage. In addition, the inspector selected samples of M&TE that had been taken out of service because of non-conforming conditions to evaluate adequacy of controls to prevent inadvertent use. The inspectors determined that controls were sufficient to ensure no adverse impact had occurred for safety-related components.

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P06 Appendix 15, Inspection of Criterion XV – Nonconforming Materials, Parts, or Components (IP 35007)

a. Inspection Scope

The inspectors interviewed responsible personnel and reviewed a sample of nonconformance and disposition (N&D) reports issued by CB&I and Westinghouse to confirm that identified deviations and failures to comply were promptly identified, controlled, evaluated, and properly dispositioned. Deficiencies with dispositions of “repair” and “use as-is” were reviewed to verify the dispositions were adequately supported by documented, verified, and approved engineering justifications. The scope of inspection also included reviews to verify that the licensee screened deviations and failures to comply to determine if the conditions needed to be evaluated for any potential to create substantial safety hazards as defined in 10 CFR Part 21 and 10 CFR Part 50.55(e).

Direct observations were conducted in the M&TE laboratory and the materials storage warehouse to evaluate the adequacy of controls to segregate, mark, and control nonconforming items to prevent inadvertent installation or use.

Documents and records reviewed are listed in the attachment.

b. Findings

No findings were identified.

1P07 Appendix 18, Inspection of Criterion XVIII – Audits (IP 35007)

a. Inspection Scope

The inspectors examined audit schedules, audit reports, and associated documentation to verify implementation of the licensee’s process for conducting audits. The inspectors examined the long-range SNC, CB&I, and Westinghouse audit schedules to verify that areas to be audited and audit frequencies identified were consistent with commitments.

The inspectors reviewed records of audits to verify that audits were included in the schedule, performed in accordance with the audit plan and completed within the scheduled time frame. The inspectors reviewed audit plans and related correspondence to verify that audit plans were prepared and issued. The inspectors conducted interviews to verify that auditors did not have direct responsibility in the areas that were audited, they did not perform the work being audited, and they had direct access to the levels of management of the activities being audited.

The inspectors reviewed audit reports to verify that they included a determination of effectiveness of implementation and compliance with the quality assurance program, and a summary of identified deficiencies. The inspectors also verified that audit results were reviewed by responsible management. The inspectors reviewed entries into the corrective action program, including corrective action reports (CARs), supplier corrective action reports (SCARs), condition reports (CRs), and supplier responses to audit findings to verify that deficiencies identified during quality assurance audits were entered in the applicable corrective action program and were resolved.

Documents and records reviewed are listed in the attachment.

b. Findings

No findings were identified.

KEY POINTS OF CONTACT

Licensee and Contractor Personnel

K. Bankston, Quality Assurance, SNC
J. Beasley, Quality Engineer Manager, CB&I
G. Couture, Licensing Director, Westinghouse
W. Cristes, Project Quality Director, CB&I
V. Floyd, QA project Manager, SNC
R. Henderson, Licensing, SNC
S. Huminski, Records & Information Management, CB&I
K. Kroll, Licensing, Westinghouse
M. Lesko, Instrument Maintenance, Mistras
T. Lieb, Quality Assurance and Control, CB&I
B. Lowery, Quality Assurance, SNC
C. Martin, Quality Assurance and Control, CB&I
T. McKinney, Design Engineering, Westinghouse
R. Normandeau, Design Engineering Department Manager, CB&I
C. Patel, Site Construction Engineering, SNC
B. Powell, General Foreman, CB&I
L. Smith, Information Management, SNC
J. Smith, Instrument Maintenance, Mistras
J. Speer, Engineering, Westinghouse
J. Tull, Quality Assurance, Westinghouse

ITEMS OPENED, CLOSED, AND DISCUSSED

(None)

LIST OF DOCUMENTS REVIEWED

Appendix 2, Inspection of Criterion II – Quality Assurance Program

1. SNC

NC-CA-VPN-021-F03, Version 1, "CMP Quality Surveillance Qualification"
ND-LI-VNP-002, version 6, "Applicability Determination and 50.59 / Departure Screening for VEGP 3&4"
ND-LI-VNP002-F02, Version 2, "10 CFR 50.54(a) / 10 CFR 50.55(f) Evaluation Quality Assurance Program Review"
ND-QA-004, Version 8, "Quality Assurance internal Audits"
ND-QA-008-F05, Version 2, "QA Surveillance Qualification Nuclear Development QA"
ND-QA-008-F08, Version 2, "Lead Auditor Certification Guide Nuclear Development Supplement"
ND-TR-002-F01, Version 2, "Nuclear Development Training Program – Training Plan"
NDQA 2012 Management Assessment, dated 3/14/2012
Nuclear Development Quality Assurance Manual, Revision 11.0

2. CB&I

CSI 2-11-26, "Work Package Planning, Development, Approval and Closure (Shaw Power)," dated 2/15/2013

NCSP 2-19-2, "Work Package Planning, Development, Approval and Closure," dated 3/11/2013

PWR-RIM-001, Rev. 01, "Records Management Program (Shaw)"

PWR-RIM-002, Rev. 03, "Records Management Disposition and Retention"

SWSQAP1-74A, Revision B "Shaw Standard Nuclear Quality Assurance Program (Shaw)"

Topical Report SWSQAP1-74A, "Shaw Standard Nuclear Quality Assurance Program (Shaw)"

3. WEC

APP-GW-GAH-010, Rev. 5, Project Quality Assurance Program Interface Plan for Domestic AP1000 Projects

Quality Management System, Rev. 6

SV0-GW-GTP-001, Rev. 0, Vogtle 3 & 4 Site Quality Training and Qualification Procedure

WEC 18.4, Rev. 0.1, Self-Assessments

Appendix 3, Inspection of Criterion III – Design Control

1. AP1000 Design Change Proposals

APP-GW-GEE-282, "Level Indication Addition in the Refueling Cavity and Cask Loading Pit"
APP-GW-GEE-849, Rev. 0, RV "Head Stand SFS and PXS P&ID and Model Changes"

2. Engineering & Design Coordination Reports

APP-1210-GEF-125, Rev. 0

APP-1210-GEF-097, Rev. 0

APP-GW-GEF-137, Rev. 0, "Addenda 1 to APP-GW-P0-007 (Rev.6) and APPGW-P0-008 (Rev 5)"

APP-GW-GEF-320, Rev. 0, "Mechanical Modules Design Requirements & Inputs"

APP-SS30-GEF-008, Rev. 0, "Anchor Bolt Sleeve Material Substitution"

SV0-PH01-GEF-000002, Rev. 0, "Licensing HOLD for DCP 1497"

3. Drawings

APP-GW-K9-100, Rev. 3, "General Notes, Mechanical Modules"

APP-KB36-V0-002, Rev. 2, "Module 1231-KB-36 PCS Pump/Valve Module Drawing Index"

APP-PH01-V2-217, "Advanced Passive Light Water Reactor, Reactor Vessel Support, Interior Anchor Bolt Assembly and Details," dated 9/13/2012

APP-Q233-V0-001, Revs. 3 and 6, "Module 1124-Q2-33 DVI A Valve Module Drawing Index"

4. License Document Change Requests

LDCR 2012-067, "PXS Screen Flow Limit Changes for RNS Injection to Prevent ADS Stage 4"

LDCR 2012-070, "Spent Fuel Pool Cooling System"

5. Procedures

APP-GW-GAP-420, Rev. 7, "Engineering and Design Coordination Reports"
 NEPP 4-13-4, "Design Change Control (Engineering & Design Coordination Report)," Rev. 4
 WEC 3.4.1, Rev. 2, "Change Control for the AP1000® Plant Program"

6. Corrective Action Reports

CAR 2013-1103, "Concerns with disposition of N&D SV3-CR01-GNR-00003," dated 6/20/2013
 Condition Report 477309, "SNC Construction Engineering Oversight Review of E&DCRs – Technical Justification," dated 6/29/2012
 Condition Report 542151, "SNC Eng Review of E&DCRs – Lack of Technical Justification for E&DCR," dated 10/31/2012
 Condition Report 542763, "SNC Eng Review of E&DCRs – Weld Design for Turbine Bypass pipe Supports," dated 11/1/2012
 Condition Report 566089, "SNC Eng Review of E&DCRs – Lack of Technical Justification in E&DCR Dispositions," dated 12/28/2012
 Condition Report 588614, "SNC Eng Review of E&DCRs – Lack of Technical Justification in E&DCRs," dated 2/12/2013
 Condition Report 593797, "SNC Construction Engineering – Inadequate Consortium Resolution to CR 513910," dated 2/20/2013
 IR 12-222-M033, "ICAP – Improper Technical Justification for E&DCRs – Adverse Trend," dated 6/29/2012
 IR 13-171-M049, "Concerns with disposition of N&D SV3-CR01-GNR-00003," dated 6/20/2013

7. Miscellaneous

APP-FSAR-GLN-084, Rev. 0, "AP1000 Licensing Applicability Determination and 10 CFR 50.59 / 10 CFR 52 Appendix D Section VIII Screening: PXS Screen Flow Limit Changes for RNS Injection to Prevent ADS Stage 4"
 APP-FSAR-GLN-099, Rev. 0, "AP1000 Licensing Applicability Determination and 10 CFR 50.59 / 10 CFR 52 Appendix D Section VIII Screening: Spent Fuel Pool Cooling System"
 APP-PL02-Z0-102, "AP1000 Class 2, 3 Piping and B31.1 Extensions Design Specification"
 APP-SFS-M3-001, Revs. 2 & 3, "Spent-Fuel Pool Cooling System Specification Document"
 APP SFS-PLR-600, Rev. 1, "Piping Analysis Report for Spent Fuel Pool Cooling System from SCV Penetration P21A to Anchor SFS-PH-11A2018"

Appendix 6, Inspection of Criterion VI – Document Control

1. Procedures:

DAPP 5-1-1, "Project Document Control (Shaw)," dated 5/2/2011
 Mistras Procedure 100-MT-302, Rev. 2, "Magnetic Particle Examination in Accordance with AWS Structural Steel Welding Code"
 Mistras Procedure 100-UT-310, Rev. 5, "Ultrasonic Examination of Welds in Accordance with AWS Structural Welding Code D1.1"
 NCSP 2-16-2, Rev. 2, "Construction Documents, Records Management and Control"
 ND-DC-007, Version 3.1, "Document Control"
 QS 6.1, Rev. J, "Document Control (Shaw)"
 WEC 6.1, Rev. 6.1, "Document Control"

WEC 17.3, Rev. 4.1, "Electronic Document Management"

2. Miscellaneous:

Work Package SV3-CA20-S5W-CV1353, "CA20-01 Liner Plate Weld Rework"

Work Package SV3-WRS-PLW-ME0330, "Installation of WRS Embedded Drain Piping and Drain Hubs"

Appendix 11, Inspection of Criterion XI – Test Control

1. Instructions:

QSI 11.1 Rev. 4, "Testing Reinforcing Steel & Mechanical Spliced for Reinforcing Steel Bars," dated 6/11/2013

CSI 3-44-7 Rev. 7, "Mechanical Splicing of Reinforcing Steel," dated 1/31/2013

2. Specifications:

SV3-CR01-Z0-010 Rev. 4, "Specification for Supply and Installation of Mechanical Splices," dated 4/19/2011

3. Test Records:

QSI Form 11013, "Average of Tensile Test Results Data Record", dated 3/25/13

SS-13-0143, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

SS-13-0144, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

SS-13-0145, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

SS-13-0146, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

SS-13-0147, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

SS-13-0148, "Tensile Test Data Record (Mechanical Splices)" QSI Form 11012, dated 4/29/13

Appendix 12, Control of Measuring and Test Equipment

1. Corrective Action and Nonconformance Reports:

CAR 2013-0863; "M&TE Calibrations Performed Not in Accordance with Requirements in QS 12.01 Revision 001 and Metrology Standards MS 1.9 Revision 001;" dated 05/28/2013

CAR 2013-1091; "Segregation of Rejected Measuring and Test Equipment;" dated 06/19/2013

Condition Report 654222; "Inadequate Condition of the U3 Reactor Vessel;" dated 06/12/2013

Field Deviation Report: SV3-MV01-GNR-034; Rev. 0, "Vogtle Unit 3 Reactor Vessel; Shrink Wrap Torn during Transit"

Field Deviation Report: SV3-MV01-GNR-035; "Vogtle Unit 3 Reactor Vessel, Loose Outlet

Nozzle Cover;" Revision 0
 Field Deviation Report: SV3-MV01-GNR-036; Rev. 0; "Vogtle Unit 3 Reactor Vessel, Spent Desiccant"
 Field Deviation Report: SV3-MV01-GNR-037; "Reactor Vessel Closure Head for Vogtle Unit 3"
 Field Deviation Report: SV3-MV01-GNR-038; "Reactor Vessel Closure Head for Vogtle Unit 3"
 Field Deviation Report: SVC-MV01-GNR-037; Rev. 0; (NRC Identified) "Un-calibrated Pressure Gauge on Nitrogen Purge System of Reactor Vessel Closure Head"
 Issue Report 13-171-MO24; (NRC Identified) "Surveillance of PM Activities; dated 06/20/2013"
 Nonconformance and Disposition Report SV3-CA20-GNR-000017, Rev. 0, "CA20 Sub-Modules Not Welded Per Design, Southern Company CR#545727"
 Nonconformance and Disposition Report SV3-CE01-GNR-000008; Rev. 0; "Coatings on Embedded Surfaces of Plates"
 Nonconformance and Disposition Report SV3-CR01-GNR-000018; Rev. 0; "No. 14 Rebar is Within 1" at the Pipe Riser on Q-Line"
 Nonconformance and Disposition Report SV3-CR01-GNR000024; Rev. 0; "A970 Testing for Additional Terminator Lot #"
 Nonconformance and Disposition Report SV3-CR01-GNR-000037; Rev. 0; "Prequalification of #5 T-Heads"

2. Procedures:

APP-GW-GAP-428; Rev. 3; "Control of Nonconforming Items for the AP 1000 Program"
 APP-MV01-GEM-002; Rev. 0; "AP1000 Reactor Vessel Long-Term Storage Manual"
 MS1.3; Rev. D; "Measuring and Test Equipment Recall and Instrument Status"
 MS 1.11; Rev. C; "Storage and Handling of Measuring and Test Equipment"
 NCPS-PCN- 3-10-3-B; "Measuring and Test Equipment Control;" dated 03/30/2012
 NSNP 15.2; Rev. 1; "Use of Hold Tags"
 QAD 15.1; Rev. 000; "Nonconformance and Disposition Tagging"
 QS 12.01; Rev. 001; "Nuclear Calibration Program"
 QSI 12.1; "Control of Measuring and Testing Equipment;" dated 10/04/2012
 Stone & Webster Engineering Corporation Calibration Procedure CP-4-N-001; Rev. A; "Torque Wrenches & Torque Screwdrivers"
 SV3-XR32-VHR-002; Rev. 0; "Vogtle Unit 3, Reactor Vessel and Reactor Vessel Head Shipment Accelerometer Output Report"
 Temporary Change Notice; QAD 12.2 Rev. A.1-TCN, "Equipment, Tool, and Instruments Requiring Verification of Specific Characteristics"; dated 02/04/2013
 Temporary Change Notice; QS 15.1 Rev. 002.B-TCN "Nonconformance and Disposition Report"; dated 04/26/2013
 WEC 12.1; Rev. 4.0; "Control of Inspection, Measuring, and Test Equipment"
 WEC 15.1; Rev. 0.0; "Deviation Notices"
 WEC 15.5; Rev. 3; "Stop Work 15.5"

3. Miscellaneous:

Certificate of Conformance; Olympus NDT, DSC Dist and SENS Calibration Block;" dated 10/14/2011
 Shaw Nuclear Commercial Grade Item/Service Procurement/Dedication Requirements;

“Calibration Services for Dynamometer;” dated 06/06/2013
 Shaw Nuclear EPCR, Job Number 132175, ID SV3-RXS-N2; “Reactor Vessel Head Nitrogen System, Activity MA 607 Monitoring Check Nitrogen Levels”
 Shaw Nuclear EPCR, Job Number 132175, ID SV3-RXS-N2; “Reactor Vessel Head Nitrogen System, Activity MA 126, Replace Cortec 126”
 Westinghouse Design Specification APP-MV01-Z0-101; Rev. 10; “Design Specification Details”
 Westinghouse Surveillance Plan/Report SV3-WEC-MATLSTORAGE-0005; Rev. 0; “Preliminary Receiving Verification”

Appendix 15, Inspection of Criterion XV – Nonconforming Materials, Parts, or Components

1. Nonconformance Reports

430001-NCR-12-000027, “CA20-66-200 Vogtle / Distortion out of tolerance,” dated 2/10/2012
 APP-1208-GNR-000010 Rev. 0, “Liner Plate 2501 A Rev. 2,” dated 3/20/2013
 MPP-12-0003, “Submodule exceeds flatness tolerance,” dated 1/12/2012
 SV3-CR01-GNR-00003 Rev. 0, “NI 3 Base Mat Layer 2 Rebar with detrimental surface imperfections,” dated 10/8/2012
 SV3-ML05-GNR-00001 Rev. 0, “End Prep Documentation,” dated 1/2/2013
 V-ND-12-0153, “NI #3 Base Mat Layer 2 Rebar with detrimental surface imperfections,” dated 3/22/2012
 V-ND-12-0157, “Separation (delamination) of Nuclear Island waterproofing membrane layers during specified laboratory testing,” dated 6/27/2011
 V-ND-12-0384, “NI #3 Base Mat Layer 2 Rebar with detrimental surface imperfections,” dated 3/22/2012

2. Procedures

QS 15.1, “Nonconformance and Disposition Report,” Rev. 2, including TCNs A and B
 QAD 15.1, “Nonconformance & Disposition Tagging,” Rev. 0

3. Miscellaneous

CAR 2013-1103, “Concerns with disposition of N&D SV3-CR01-GNR-00003,” dated 6/20/2013
 IR 13-171-M049, “Concerns with disposition of N&D SV3-CR01-GNR-00003,” dated 6/20/2013
 Quality Assurance Inspection Report – Type “A” C112-02-12-0008
 Specification APP-CR01-Z0-011, Rev. 4, “Furnishing of Safety Related Reinforcing Steel”

Appendix 18, Inspection of Criterion XVIII – Audits

1. Procedures:

APP-GW-GAP-112 Rev. 2, “Supplier Audit Performance and Owner participation”
 ND-QA-014, Version 4.0, “Audits of the NDQA Department”

Nuclear Development Quality Assurance Manual Version 11.0
 QSI 11.1, Rev. 4
 QAD 18.1, Rev. 2, "Quality Assurance Audits"
 QS 18.01, Rev. 2, "Quality Audit Program"

2. Audit Schedules:

CB&I Audit Schedule 2012, dated December 11, 2012
 CB&I Audit Schedule 2013, dated June 17, 2013
 ND-11-0521, Rev. 1, "2011/2012 Corporate and Site Nuclear Development Quality Assurance Audit Schedule"
 ND-11-1501, Rev. 2, "2011/2012 Corporate and Site Nuclear Development Quality Assurance Audit Schedule"
 ND-11-2034, Rev. 3, "2011/2012 Corporate and Site Nuclear Development Quality Assurance Audit Schedule"
 ND-12-0075, Rev. 1, "2012/2013 Nuclear Development Quality Assurance Audit Schedule"
 ND-12-1508, Rev. 2, "2012/2013 Nuclear Development Quality Assurance Audit Schedule"
 ND-12-1922, Rev. 3, "2012/2013 Nuclear Development Quality Assurance Audit Schedule"
 ND-12-2450, Rev. 4, "2012/2013 Nuclear Development Quality Assurance Audit Schedule"
 Westinghouse Exhibit Q, "Supplier Audit, Surveillance, & Activity Schedule Affecting Vogtle," dated 3/26/2013

3. Audit Reports and associated documentation:

2011-06, "Audit of the Domestic AP1000 Units 3 & 4 Project Vogtle Site Activities," dated August 11, 2011
 2012-08, "Shaw Nuclear Services Annual Audit of Vogtle Units 3 & 4," dated July 3, 2012; and "Completed Audit Plan Checklist Approval" (Audit No. 2012-08), dated 6/26/2012
 2012-34, "QA Audit of the Domestic AP1000 Design Finalization Project," dated October 17, 2012; and "Shaw Nuclear Quality Assurance Audit Plan Scope" (Audit No. 2012-34), dated 09/7/12
 BNP-2012-069, "Independent Audit of NDQA Vogtle 3 & 4" (Audit No. ND-I-QA-2012), dated March 6, 2012
 CFO-12-226, "SNC Supplier Audit Report of Tetra Tech, Inc.," dated June 1, 2012
 ND-12-1097, "NDQA Audit of WEC Vogtle 3 & 4" (Audit No. SNC-ND-2012.03), dated May 21, 2012
 ND-12-1272, "ND QA Audit of Shaw Nuclear Services, Inc" (Audit No. SNC-ND-2-12.05-SHAW-SITE-QA), dated July 3, 2012; and ND QA Audit Checklist (Audit No. SNC-ND-2012.05-SHAW-SITE-QA)
 ND-12-2609, Rev. 1, "NDQA Audit of ND Vendor and Fabrication Oversight" (Audit No. ND-CS-VOF-2012, v1), dated: April 2, 2013
 ND-13-0297, "Independent Audit of NDQA Vogtle 3 & 4" (Audit No. ND-I-QA-2013), dated February 6, 2013
 ND-13-0893, "NDQA Audit of WEC Vogtle 3 & 4" (Audit No. SNC-ND-2013.03-WEC-SITE-QA), dated April 24, 2013
 SQA-11-0003, "Westinghouse Quality Program Audit Plan" (Audit No. WES-2011-013), dated January 12, 2011
 SQA-11-0074, "Supplier Quality Program Audit Report" (Audit No. WES-2011-013), dated March 19, 2011
 WES-2012-377-R "Supplier Program Audit Report," dated: 2/26/2013; and Valcor Engineering Corporation - Response to Audit Report # WES-2012-377-R," dated

March 26, 2013

3. Corrective Action Records:

- CAR 2012-1381, "No calculation to support the ground conductor sizing inside the buildings within the DDF scope," dated 09/27/2012"
- CAR 2012-1383, "Records Classification Scheme (RCS) does not contain E&DCRs and CRNs as record types in the AP1000 DocBase," dated 09/27/2012
- CAR 2012-1384, "Documents not entered into Documentum," dated 09/27/2012
- CAR 2013-1098, "Lack of Objective Evidence in the Checklist for QA Audit 2012-08," dated 06/19/2013.
- CAR 191088, "Repair Procedure"
- CAR 194076, "Deficiency #1 from Independent Audit of NDQA, ND-I-QA-2012"
- CAR 194158, "Deficiency #3 from Independent Audit of NDQA, ND-I-QA-2012"
- CAR 194167, "Deficiency #6 from Independent Audit of NDQA, ND-I-QA-2012"
- CAR 194168, "Deficiency #5 from Independent Audit of NDQA, ND-I-QA-2012"
- CAR 196945, "SR PO issued to supplier not on QSL"
- CR 408491, "Potential Impact to timely Resolution of Conditions Adverse to Quality," dated 2/15/2012

INSPECTION PROCEDURES USED

IP 35007, Quality Assurance Program Implementation during Construction and Pre-Construction Activities.

LIST OF ACRONYMS

10CFR	Title 10 of the Code of Federal Regulations
CAR	Corrective Action Report
CB&I	Chicago Bridge and Iron
CR	Condition Report
DCP	Design Change Proposal
E&DCR	Engineering and Design Coordination Reports
IP	Inspection Procedure
IR	Inspection Report
LDCR	License Document Change Request
M&TE	Measuring and Test Equipment
N&D	Nonconformance and Disposition Report
NDQAM	Nuclear Development Quality Assurance Manual
NRC	Nuclear Regulatory Commission
QMS	Quality Management System
QSI	Nuclear Quality Site Instruction
SCAR	Supplier Corrective Action Report
SNC	Southern Nuclear Operating Company, Inc
WEC	Westinghouse Electric Company