

July 15, 2009

Mr. Alfred M. Paglia
Manager, Nuclear Licensing
MC P40
South Carolina Electric & Gas Company
PO Box 88
Jenkinsville, SC 29065

SUBJECT: NRC INSPECTION REPORT NOS. 05200027/2009-201 AND
05200028/2009-201 AND NOTICE OF VIOLATION

Dear Mr. Paglia:

From June 1, 2009, through June 4, 2009, the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection at the Virgil C. Summer Nuclear Station (VCSNS), Units 2 and 3, construction site in Jenkinsville, SC. The enclosed report presents the results of this inspection.

The purpose of the NRC inspection was to verify that quality assurance (QA) processes and procedures applied to activities related to the VCSNS Units 2 and 3 combined license application (COLA) were effectively implemented. The inspection focused on assessing compliance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21, "Reporting of Defects and Noncompliance," and selected portions of Appendix B, "Quality Assurance Program Criteria for Nuclear Power Plants and Fuel Processing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." This NRC inspection report does not constitute NRC endorsement of your overall QA or 10 CFR Part 21 programs.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The NRC evaluated this violation in accordance with the agency's Enforcement Policy, which is available on the NRC's Web site at http://www.nrc.gov/about_nrc/regulatory/enforcement/enforce_pol.html.

The enclosed Notice of Violation (Notice) cites the violation, and the subject inspection report describes in detail the circumstances surrounding it. The Notice cites the violation because a review of the South Carolina Electric & Gas (SCE&G) Company Quality Assurance Program, as it pertains to activities related to the VCSNS Units 2 and 3 COL application, found that certain program policies and implementation procedures were not in compliance with the applicable requirements of Appendix B to 10 CFR Part 50.

SCE&G is required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing its response. The NRC will use this response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," the NRC will make a copy of this letter, its enclosures, and the SCE&G response available electronically for public inspection in the NRC Public Document

Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy that deletes such information. If you request that such material be withheld from public disclosure, you must specifically identify the portions of your response that you seek to have withheld and provide, in detail, the bases for your claim (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If Safeguards Information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Sincerely,

Juan Peralta, Chief
Quality and Vendor Branch 1
Division of Construction Inspection
& Operational Programs
Office of New Reactors

Docket Nos.: 05200027 and 05200028

Enclosures:

1. Notice of Violation
2. Inspection Report Nos. 05200027/2009-201 and 05200028/2009-201 and Attachments

possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy that deletes such information. If you request that such material be withheld from public disclosure, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Sincerely,
/RA/

Juan Peralta, Chief
Quality and Vendor Branch 1
Division of Construction Inspection
& Operational Programs
Office of New Reactors

Docket Nos.: 05200027 and 05200028

Enclosures: 1. Notice of Violation
2. Inspection Report Nos. 05200027/2009-201 and 05200028/2009-201 and Attachment

DISTRIBUTION:

Public	NRO/REF	APAGLIA@Scana.com	
RidsOgcMailCenter	RidsNroDnrlNwe1	G. Tracy	J. Tappert
RidsNroDcipCQVP	RidsNroDcip	KKavanagh	KHeck
RidsNroLAKGoldstein	SCoffin	C.Patel	MComar
RidsRgn2MailCenter	RPatel	RPrato	

ADAMS Accession No.: ML091910321

INDICATE IN BOX "C"=COPY W/O ATTACHMENT/ENCLOSURE, "E"=COPY W/ATT/ENCL, "N" = NO COPY

OFFICE	NRO/DCIP/CQVP	E	NRO/DCIP/CQVP	E	NRO/DCIP/CQVP	E
Name	RPrato		KHeck		RPatel	
Date	7/13/09		7/13/09		7/13/09	
OFFICE	NRO/DCIP/CQVP	E	TL:/NRO/DCIP/CAET	E	BC:/NRO/DCIP/CQVP	E
Name	K.Kavanagh		R Pascarelli		J.Peralta	
DATE	7/13/09		7/15/09		7/15/09	

OFFICIAL RECORD COPY

COL SCE&G - VCSummer Mailing List

(Revised 03/25/2009)

cc:

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

Mr. Henry Porter
Assistant Director
Division of Waste Management
Bureau of Land & Waste Management
Dept. of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

Mr. Stephen A. Byrne
Sr. Vice President Generation and
Chief Nuclear Officer
South Carolina Electric and Gas
MC 196 Palmetto Center
Columbia, SC 29218

Ms. Linda Sanders
Director
Allendale County EPA
P.O. Box 129
Allendale, SC 29810

Chairman
Fairfield County Council
Drawer 60
Winnsboro, SC 29180

Ms. Sandra Threatt
South Carolina DHEC
2600 Bull Street
Columbia, SC 29201

Mr. Thomas D. Gatlin
General Manager
Nuclear Plant Operations
South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station
Post Office Box 88, Mail Code 300
Jenkinsville, SC 29065

Mr. R. J. White
Nuclear Coordinator
S.C. Public Service Authority
c/o Virgil C. Summer Nuclear Station
P.O. Box 88, Mail Code 802
Jenkinsville, SC 29065

Mr. Ronald Kinney
South Carolina DHEC
2600 Bull Street
Columbia, SC 29201

Mr. Ron Osborne
Director
South Carolina EMD
1100 Fish Hatchery Road
West Columbia, SC 29172

COL SCE&G - VCSummer Mailing List

Email

amonroe@scana.com (Amy Monroe)
APAGLIA@Scana.com (Al Paglia)
APH@NEI.org (Adrian Heymer)
arice@scana.com (April R. Rice)
awc@nei.org (Anne W. Cottingham)
bmccall@santecooper.com (Bill McCall, Jr.)
BrinkmCB@westinghouse.com (Charles Brinkman)
chris.maslak@ge.com (Chris Maslak)
CumminWE@Westinghouse.com (Edward W. Cummins)
cwaltman@roe.com (C. Waltman)
david.lewis@pillsburylaw.com (David Lewis)
dgriffin@scana.com (Donna S. Griffin)
greshaja@westinghouse.com (James Gresham)
gzinke@entergy.com (George Alan Zinke)
jarchie@scana.com (Jeffrey B. Archie)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.riccio@wdc.greenpeace.org (James Riccio)
JJNesrsta@cpsenergy.com (James J. Nesrsta)
John.O'Neill@pillsburylaw.com (John O'Neill)
Joseph_Hegner@dom.com (Joseph Hegner)
kjbrowne@santecooper.com (Kenneth J. Browne)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
lchandler@morganlewis.com (Lawrence J. Chandler)
Marc.Brooks@dhs.gov (Marc Brooks)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
media@nei.org (Scott Peterson)
mike_moran@fpl.com (Mike Moran)
MSF@nei.org (Marvin Fertel)
nirsnet@nirs.org (Michael Mariotte)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
pshastings@duke-energy.com (Peter Hastings)
rclary@scana.com (Ronald Clary)
RJB@NEI.org (Russell Bell)
RKTemple@cpsenergy.com (R.K. Temple)
rwhite@scana.com (Robin White)
sabinski@suddenlink.net (Steve A. Bennett)
sandra.sloan@areva.com (Sandra Sloan)
sbyrne@scana.com (Stephen A. Byrne)
sfrantz@morganlewis.com (Stephen P. Frantz)

COL SCE&G - VCSummer Mailing List

stephan.moen@ge.com (Stephan Moen)
tom.miller@hq.doe.gov (Tom Miller)
TomClements329@cs.com (Tom Clements)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
vcsnrc@scana.com (NRC Senior Resident Inspector
VictorB@bv.com (Bill Victor)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)

NOTICE OF VIOLATION

South Carolina Electric & Gas Company
Virgil C. Summer Nuclear Station, Units 2 and 3
Jenkinsville, SC 29065

Docket Nos.: 05200027 and 05200028
Report No.: 2009-201

During an U.S. Nuclear Regulatory Commission (NRC) inspection conducted at the South Carolina Electric & Gas Company (SCE&G), in Jenkinsville, SC, on June 1–4, 2009, one violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is described below:

Title 10 of the *Code of Federal Regulations* (10 CFR) 52.79(a)(25) states, in part, that a description of the quality assurance (QA) program applied to the design, and to be applied to the fabrication, construction, and testing, of the structures, systems, and components of the facility, shall be provided as part of the final safety analysis report that describes the facility. In 10 CFR 52.79(a)(25), the NRC also requires that “[t]he description of the quality assurance program for a nuclear power plant must include a discussion of how the applicable requirements of Appendix B to 10 CFR part 50 have been and will be satisfied, including a discussion of how the quality assurance program will be implemented.”

Criterion II, “Quality Assurance Program,” of Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,” to 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities,” states that the QA program “shall be documented by written policies, procedures, or instructions and shall be carried out throughout plant life in accordance with those policies, procedures, or instructions.”

In a letter dated February 2, 2009, SCE&G proposed to revise Section 17.1 of the Final Safety Analysis Report for VCSNS Units 2 and 3, Revision 0, to state the following:

SCE&G maintains oversight under its existing 10 CFR Part 50, Appendix B program, as described in SCE&G “New Nuclear Deployment Quality Assurance Plan” (Reference 204) and V.C. Summer Nuclear Station Unit 1 “Operational Quality Assurance Plan” (Reference 206). These plans provide QA guidance meeting the requirements of 10 CFR Part 50 Appendix B and oversight of safety-related site characterization activities and COL application content providers.

Section 1.1.5 of the Operational Quality Assurance Plan (QAP) for VCSNS Unit 1 states, in part, that the Operational QAP is written to conform to the applicable requirements of Appendix B to 10 CFR Part 50; Regulatory Guide 1.33, “Quality Assurance Program Requirements (Operation),” Revision 4; American National Standards Institute (ANSI) N18.7-1976; and Section 6 of the VCSNS Technical Specifications. Standards, such as ANSI N45.2, “Quality Assurance Program Requirements for Nuclear Power Plants,” and the ANSI N18 series of operating standards, are relied on in the Operational QAP.

Contrary to the above, as of June 4, 2009, SCE&G New Nuclear Deployment (NND) implemented 12 NND procedures and guidelines that rely on American Society of

Mechanical Engineers NQA-1, "Quality Assurance Program Requirements for Nuclear Facilities," to describe how the quality assurance requirements in Appendix B to 10 CFR Part 50 are being satisfied rather than on ANSI N45.2, as described in the NRC-accepted QAP for VCSNS Unit 1.

This issue has been identified as Violations 05200027/2009-201-01 and 05200028/2009-201-01.

This is a Severity Level IV violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, "Notice of Violation," SCE&G is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Chief, Quality and Vendor Branch 1, Division of Construction Inspection & Operational Programs, Office of New Reactors, within 30 days of the date of the letter transmitting this Notice of Violation. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Since your response will be made available electronically for public inspection in the NRC Public Document Room or through the NRC Agencywide Documents Access and Management System (ADAMS), to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21, "Requirements for the Protection of Safeguards Information."

Dated at Rockville, Maryland, this 15th day of July 2009.

**U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NEW REACTORS
DIVISION OF CONSTRUCTION INSPECTION AND
OPERATIONAL PROGRAMS**

Docket Nos.: 05200027 and 05200028

Report Nos.: 05200027/2009-201 and 05200028/2009-201

Applicant: South Carolina Electric & Gas Company
PO Box 88
Jenkinsville, SC 29065

Applicant Contact: Mr. Alfred M. Paglia
Manager, Nuclear Licensing
(803) 345-4106
APAGLIA@Scana.com

Background: South Carolina Electric & Gas Company is pursuing a combined license for two new units at the Virgil C. Summer Nuclear Station in Richland County, SC.

Inspection Dates: June 1–4, 2009

Inspectors: Kerri Kavanagh, NRO/DCIP/CQVP, Team Leader
Raju Patel, NRO/DCIP/CQVP
Kenneth Heck, NRO/DCIP/CQVP
Robert Prato, NRO/DCIP/CQVP
Chandu Patel, NRO/DNRL/DDLO/NWE1

Approved by: Juan D. Peralta, Branch Chief
Quality and Vendor Branch 1
Division of Construction Inspection
& Operational Programs
Office of New Reactors

EXECUTIVE SUMMARY

South Carolina Electric & Gas Company
Report Nos. 05200027/2009-201 and 05200028/2009-201

The U.S. Nuclear Regulatory Commission (NRC) inspection focused on quality assurance (QA) policies and procedures implemented to support the combined license (COL) application for Virgil C. Summer Nuclear Station (VCSNS), Units 2 and 3, as described in NRC Inspection Manual Chapter 2502, "Construction Inspection Program: Pre-Combined License (Pre-COL) Phase." The purpose of this inspection was to verify that South Carolina Electric & Gas Company (SCE&G) New Nuclear Deployment (NND) had implemented an adequate QA program that complies with the requirements of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The inspection also verified that SCE&G NND had implemented a program under 10 CFR Part 21, "Reporting of Defects and Noncompliance," that meets NRC regulatory requirements.

The NRC inspection was based on the following:

- 10 CFR Part 21
- Appendix B to 10 CFR Part 50

During this inspection, the NRC inspection team implemented Inspection Procedure 35017, "Quality Assurance Implementation Inspection," dated July 29, 2008, and Inspection Procedure 36100, "Inspection of 10 CFR Part 21 and 50.55(e) Programs for Reporting Defects and Nonconformances," dated October 3, 2007.

The NRC had not performed any QA inspections at SCE&G NND for the VCSNS Units 2 and 3 COL application before this inspection.

10 CFR Part 21 Program

The NRC inspection team concluded that the 10 CFR Part 21 program conforms to the regulatory requirements and has been implemented in accordance with applicable SCE&G procedures in support of the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

Quality Assurance Program

The NRC inspection team issued Violations 05200027/2009-201-01 and 05200028/2009-201-01 as a result of the failure by SCE&G to maintain commitments in its COL application and the Operational Quality Assurance Program (QAP) for VCSNS Unit 1. Specifically, SCE&G NND had implemented 12 NND procedures and guidelines that rely on American Society of Mechanical Engineers (ASME) NQA-1, "Quality Assurance Program Requirements for Nuclear Facilities," in support of the VCSNS Units 2 and 3 COL application instead of American National Standards Institute (ANSI) N45.2, "Quality Assurance Program Requirements for Nuclear Power Plants," as required by the Operational QAP for VCSNS Unit 1.

Training and Qualification of Personnel

The NRC inspection team concluded that the training and qualification of VCSNS Units 2 and 3 personnel conform to the regulatory requirements of Criterion II, "Quality Assurance Program," of Appendix B to 10 CFR Part 50 and have been appropriately translated into SCE&G NND implementing procedures to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

Procurement Document Control

The NRC inspectors concluded that the requirements of the procurement document control process conform to the regulatory requirements of Criterion IV, "Procurement Document Control," of Appendix B to 10 CFR Part 50 and have been implemented in accordance with applicable SCE&G procedures in support of COL engineering, procurement, and construction contract activities for VCSNS Units 2 and 3. No findings of significance were identified.

Document Control

The NRC inspectors concluded that the requirements of the SCE&G NND document control program are consistent with the regulatory requirements of Criterion VI, "Document Control," of Appendix B to 10 CFR Part 50. Based on the sample reviewed, the NRC inspection team also determined that the SCE&G policies and associated procedures are being effectively implemented. No findings of significance were identified.

Nonconforming Materials, Parts, or Components

The NRC inspection team concluded that the requirements for nonconforming materials, parts, and components implemented by SCE&G conform to the regulatory requirements of Criterion XV, "Nonconforming Materials, Parts, or Components," of Appendix B to 10 CFR Part 50 and have been appropriately translated into SCE&G NND implementing procedures to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

Corrective Action

The NRC inspection team concluded that the corrective action program implemented by SCE&G conforms to the regulatory requirements of Criterion XVI, "Corrective Action," of Appendix B to 10 CFR Part 50 and has been appropriately translated into SCE&G NND implementing procedures to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

Control of Purchased Materials, Equipment, and Services and Audits

The NRC inspection team concluded that the external and internal audit programs conform to the regulatory requirements of Criterion VII, "Control of Purchased Material, Equipment, and Services," and Criterion XVIII, "Audits," of Appendix B to 10 CFR Part 50 and have been appropriately translated into SCE&G NND implementing procedures to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

REPORT DETAILS

1. 10 CFR Part 21 Program

a. Inspection Scope

The U.S. Nuclear Regulatory Commission (NRC) inspection team reviewed the South Carolina Electric & Gas Company (SCE&G) New Nuclear Deployment (NND) implementing policies and procedures that govern the process under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21, "Reporting of Defects and Noncompliance." The NRC inspection team also discussed this process with members of the SCE&G NND management and technical staff.

The NRC inspection team reviewed the following documents for this inspection area:

- SCE&G Virgil C. Summer Nuclear Station (VCSNS) Nuclear Operations Station Administrative Procedure (SAP)-1165, "Processing and Disposition of 10CFR21 Items," Revision 1, Change B, dated October 17, 2008
- SCE&G NND Quality Assurance Plan (QAP) for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- Condition Report (CR) 0-L-09-0059, dated May 22, 2009
- CR 0-L-09-0060, dated May 22, 2009

b. 10 CFR Part 21 Procedures and Implementation

SAP-1165 provides instructions to SCE&G personnel to ensure that potential deviations and failures to comply pursuant to 10 CFR Part 21 are evaluated for potential substantial safety hazards and to verify that notifications and reports are made as required.

The NRC inspection team observed that SAP-1165 is a VCSNS Unit 1 procedure, the use of which is delineated in the SCE&G NND QAP for VCSNS Units 2 and 3. The NRC inspection team verified that SCE&G NND had SAP-1165 in place when the VCSNS Units 2 and 3 combined license (COL) application was docketed (August 2008) in accordance with 10 CFR 21.2(a) to evaluate potential deviations and failures that could cause a substantial safety hazard.

The NRC inspection team reviewed the implementation of the SCE&G 10 CFR Part 21 program. Upon evaluation of SCE&G NND 10 CFR Part 21 implementation activities, the NRC inspection team learned that SCE&G NND had not performed any 10 CFR Part 21 evaluations and had not identified any potential 10 CFR Part 21 deviations or failures requiring evaluation. The NRC inspection team reviewed SAP-1165 and met with representatives of SCE&G NND to discuss the procedure and its implementation. No issues were identified.

The NRC inspection team reviewed corrective actions associated with the SCE&G NND 10 CFR Part 21 program. CRs 0-L-09-0059 and 0-L-09-0060 were generated to develop

procedures and train personnel on SCE&G NND procedures under 10 CFR Part 21 and 10 CFR 50.55(e) before performing any safety-related activities such as major equipment witness and hold point inspections. SCE&G NND witness and hold point inspections had not yet occurred as of the time of this inspection.

c. Conclusions

The NRC inspection team concluded that the program requirements pursuant to 10 CFR Part 21 conform to the regulatory requirements and have been implemented in accordance with applicable SCE&G procedures in support of the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

2. Quality Assurance Program

a. Inspection Scope

The NRC inspection team reviewed SCE&G NND policies and procedures for the implementation of the quality assurance (QA) program to assess compliance with the requirements of Criterion II, "Quality Assurance Program," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." Specifically, the NRC inspection team verified that SCE&G NND has adequately implemented or developed procedures for activities affecting quality. The NRC inspection team also discussed the implementation of this program with members of the SCE&G NND management and technical staff.

The NRC inspection team reviewed the following documents for this inspection area:

- SCE&G Operational QAP, Revision 27, Change D, dated November 8, 2007
- NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- CR 0-L-09-0072, dated June 3, 2009
- Final Safety Analysis Report (FSAR) for VCSNS Units 2 and 3, Revision 0
- SCE&G letter to the NRC, "Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined License Application (COLA)—Docket Numbers 52-027 and 52-028 Response to NRC Request for Additional Information (RAI) Letter No. 011," dated February 2, 2009

b. Observations and Findings

In a letter dated February 2, 2009, SCE&G proposed to revise Section 17.1 of the FSAR for VCSNS Units 2 and 3, Revision 0, to state the following:

SCE&G maintains oversight under its existing 10 CFR Part 50, Appendix B program, as described in SCE&G "New Nuclear Deployment Quality Assurance Plan" (Reference 204) and V.C. Summer Nuclear Station Unit 1 "Operational Quality Assurance Plan" (Reference 206). These plans provide QA

guidance meeting the requirements of 10 CFR Part 50, Appendix B, and oversight of safety-related site characterization activities and COL application content providers.

Section 5, "Quality Assurance Program," of the SCE&G NND QAP states, in part, that work activities within NND will be executed to comply with the applicable requirements of Appendix B to 10 CFR Part 50. This will be accomplished by use of the NRC-approved Operational QAP for VCSNS Unit 1. Programs and procedures approved under the Operational QAP will be used in part, or in its entirety, to meet regulatory requirements. Processes and procedures that are required to support ongoing NND activities that are independent of VCSNS Unit 1 programs will be developed and implemented on an as needed basis as the project progresses.

Section 1.1.5 of the Operational QAP for VCSNS Unit 1 states, in part, that the Operational QAP is written to conform to the applicable requirements of Appendix B to 10 CFR Part 50; Regulatory Guide (RG) 1.33, "Quality Assurance Program Requirements (Operations)," Revision 2, issued February 1978; American National Standards Institute (ANSI) N18.7-1976; and Section 6 of the VCSNS Technical Specifications. Section 1.1.5 also states, in part, that standards, such as ANSI N45.2, "Quality Assurance Program Requirements for Nuclear Power Plants," and the ANSI N18 series of operating standards, are used in the development of the Operational QAP.

At the time of the inspection, the NRC inspection team identified five SCE&G NND procedures and guidelines that reference a different quality standard other than ANSI N45.2 on which the SCE&G Operational QAP is based. More specifically, these five procedures and guidelines reference American Society of Mechanical Engineers (ASME) NQA-1, "Quality Assurance Requirements for Nuclear Facility Applications," which is the quality standard that VCSNS Units 2 and 3 will be implementing if the COLs are issued. During the inspection, SCE&G NND identified a total of 12 NND procedures and guidelines (including the five procedures and guidelines identified by the NRC inspection team) that reference ASME NQA-1. The reliance on NQA-1 to describe how the quality assurance requirements in Appendix B to 10 CFR Part 50 are being satisfied does meet the approved basis of the NRC-accepted Operational QAP for VCSNS Unit 1.

SCE&G NND initiated CR 0-L-09-0072 to address this issue. Based on the number of SCE&G NND procedures and guidelines that reference ASME NQA-1, the NRC inspection team determined that SCE&G NND QA procedures are not implementing the quality assurance requirements described in the Operational QAP for VCSNS Unit 1. The NRC inspection team identified this issue as Violations 05200027/2009-201-01 and 05200028/2009-201-01.

c. Conclusions

Except for the issues identified in Violations 05200027/2009-201-01 and 05200028/2009-201-01, the NRC inspection team concluded that the implementation of the Operational QAP for VCSNS Unit 1 for SCE&G NND activities is consistent with regulatory requirements.

3. Training and Qualification of Personnel

a. Inspection Scope

The NRC inspection team reviewed SCE&G NND policies and procedures for the indoctrination and training of personnel performing activities that affect quality to assess compliance with the requirements of Criterion II of Appendix B to 10 CFR Part 50. In addition, the NRC inspection team discussed the training and qualification process with members of the SCE&G NND management and technical staff.

The NRC inspection team reviewed the following documents for this inspection area:

- SCE&G NND-AP-0006, "NND Personnel In-Processing, Training, and Qualification Procedure," Revision 1, dated October 8, 2008
- Appendix VI, "Quality System Training Manual," to the VCSNS Nuclear Training Manual (NTM), Revision 5, dated March 23, 2009
- training records for selected SCE&G NND personnel
- CRs related to training and qualification

b. Observations and Findings

The NRC inspection team reviewed procedure NND-AP-0006, which provides training and qualification program requirements for NND personnel. This procedure provides guidance for the training of the engineering, licensing, construction, quality, business, and operations departments. The scope of QA training includes in-processing, basic orientation, technical fundamentals, and discipline- and function-specific training.

NND-AP-0006 requires that supervisors specify training and qualification requirements for personnel who are newly assigned to the NND. Supervisors are required to ensure that the technical scope and depth of the training satisfy the needs for site engineering, licensing, construction, quality, business, and operations activities. Newly assigned personnel undergo in-processing, basic orientation, and technical fundamentals training within 6 months of initial employment and discipline- and functional-specific training within 12 months, but the training may take longer as specified by the supervisor. Upon completion of the qualification requirements, the supervisor verifies completion of the qualifications and forwards the training and qualification records to the NND document control record management (DCRM) for retention.

The NRC inspection team confirmed that SCE&G NND established and maintained formal indoctrination and training programs for personnel performing, verifying, or managing activities within the scope of NND policies and procedures. Additionally, the NRC inspection team verified that the training records of key SCE&G NND personnel are being properly maintained.

The NRC inspection team reviewed a sample of training and qualification records for selected SCE&G NND personnel. The records that it reviewed included training record attachment forms and attendance sheets. Training was documented on appropriate training record forms in accordance with SCE&G NND procedures.

Specifically, the NRC inspection team reviewed training and qualification records for four engineering personnel and two lead auditors. The NRC inspection team confirmed that

qualification records were complete and had been reviewed and approved by a supervisor or manager in accordance with NND procedures. No issues were identified.

The NRC inspection team reviewed Appendix VI to the VCSNS Unit 1 NTM, which provides the indoctrination and training program guidelines for the qualification and certification of quality control inspection personnel; QA personnel; nondestructive examination personnel; ASME Section XI, "Ultrasonic Testing," personnel; and lead auditors.

Since SCE&G NND presently does not have any qualified lead auditors, the lead auditors from VCSNS Unit 1 perform internal and external audits. Lead auditors are qualified in accordance with Appendix VI to the VCSNS Unit 1 NTM. The NRC inspection team reviewed training and qualification records of the VCSNS Unit 1 lead auditors and confirmed that these records were current and accurate. These records included training, experience, qualification credits, audit participation, examination scores, justification and waiver approvals, and annual evaluations reviewed and approved by supervisors.

The NRC inspection team reviewed seven CRs related to training and qualification issues identified during self-assessment of the NND QA program. Each CR included a description of the deficiency, the evaluation, and corrective actions taken and was closed out in a timely manner. No issues were identified.

c. Conclusions

The NRC inspection team concluded that the SCE&G NND training and qualification policies and procedures conform to the regulatory requirements of Criterion II of Appendix B to 10 CFR Part 50 and have been appropriately implemented to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

4. Procurement Document Control

a. Inspection Scope

The NRC inspection team reviewed SCE&G policies and procedures for procurement of materials, equipment, and services from its primary engineering, procurement, and construction (EPC) contractor, Westinghouse Electric Corporation (WEC)/Shaw Stone & Webster (Shaw), to verify compliance with Criterion IV, "Procurement Document Control," of Appendix B to 10 CFR Part 50. Specifically, the NRC inspection team reviewed SCE&G upper tier and implementing procedures governing the imposition of contractual technical and quality requirements and reviewed procurement documents for VCSNS Units 2 and 3. The NRC inspection team discussed contract development, administration, and oversight with responsible SCE&G NND management.

SCE&G contracted with Bechtel Power Corporation (Bechtel) to prepare the site safety analysis report and with MACTEC Engineering and Consulting, Inc., to perform geotechnical field investigations. The NRC staff reviewed and documented these contract activities in a previous audit report, dated November 16, 2007 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML071003870).

The NRC inspection team reviewed the following documents for this inspection area:

- Section 7.0, “Procurement Document Control,” of the SCE&G NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- Section 8.0, “Procurement,” of the SCE&G Operational QAP, Revision 27, dated February 4, 2009
- Nuclear Procurement Practices Manual, dated April 11, 1995
- SAP-1286, “Procurement of Materials and Services,” Revision 6, dated April 23, 2009
- Engineering Services Procedure (ES)-321, “Procurement of Material and Services,” Revision 8, dated May 4, 2005
- Nuclear Vendor Selection—Due Diligence Review, March 2007
- SCE&G NND-AP-0021, “Contract Amendment,” Revision 0, dated March 23, 2009
- Purchase Order No. 02SR733531, issued to Shaw on June 6, 2008
- Purchase Order No. 02SR733605, issued to WEC on June 6, 2008

b. Observations and Findings

b.1 Policies and Procedures

The NND QAP for VCSNS Units 2 and 3 addresses processes and procedures that support NND activities that are independent of VCSNS Unit 1 programs approved under the Operational QAP. When Unit 1 programs are applicable to NND processes, reference is made to the Operational QAP. For procurement document control, the NND QAP references Section 8.0 of the Operational QAP, which describes VCSNS requirements for controlling safety-related procurement, including the preparation of procurement documents, issuance of purchase orders, and surveillance of suppliers to ensure compliance with documented requirements.

The SCE&G Nuclear Procurement Practices Manual establishes corporate procurement policy within the SCE&G nuclear program. At VCSNS, this policy is implemented through SAP-1286 and through procedure ES-1286. In accordance with SAP-1286, the VCSNS manager of materials and procurement has the overall responsibility for the materials management program, including the procurement engineering, supplier quality, and materials management functions. ES-321 applies to procurement engineering activities in the procurement of safety-related, quality-related, and nonsafety materials, equipment, components, and services.

b.2 Engineering, Procurement, and Construction Agreement

An EPC agreement for engineering, procurement, and construction associated with two AP1000 nuclear units that will be constructed at VCSNS was entered into on May 13, 2008, by a consortium consisting of WEC, Shaw, and SCE&G acting on behalf of itself and as an agent for co-owner South Carolina Public Service Authority. Purchase orders related to the

EPC agreement were issued subsequent to the contract for internal accounting purposes, but they do not impose contract conditions.

The NRC inspection team discussed the history of the contractual negotiations, which covered the period from 2005 to 2008, with the NND general manager and licensing manager. Contract administration details were discussed with the NND business and finance manager, including procurement of long-lead-time components and amendment of the contract in December 2008. The NRC inspection team discussed the project oversight process with the NND construction manager, including staffing for the oversight function, the overall project schedule, the contractor's organization, and a typical breakdown of EPC weekly activities in procurement, construction, and engineering as represented in the SCE&G weekly status report dated June 1, 2009.

The NRC inspection team reviewed elements of the EPC agreement, with particular attention to the provisions of Article 5, "Quality Assurance." The scope of the EPC agreement includes all activities necessary to comply with the commitments in the COL application to the design, procurement, construction, and startup of the facilities. Regulatory and technical requirements and provisions for test, inspection, and acceptance were adequately defined.

Article 5 states that the consortium has sole responsibility for the QA and quality control of activities within the scope of the contract. Contracted activities will be conducted under the QA programs of the consortium members for their scope of supply. The NRC staff has reviewed the WEC QA program (Westinghouse Quality Management System, Revision 5) and the Shaw QA program (Stone & Webster Standard QA Program, 2000 Edition) and has determined that they satisfy the requirements of Appendix B to 10 CFR Part 50 (ADAMS Accession Nos. ML0225400895 and M041610092, respectively). Article 5 imposes quality requirements on subcontractors consistent with the nuclear safety quality classification of their work. Article 5 requires contractor compliance with the reporting requirements of 10 CFR Part 21 and of 10 CFR 50.55, "Conditions of Construction Permits, Early Site Permits, Combined License, and Manufacturing Licenses." Article 5 also addresses owner access and auditing at contractor and subcontractor facilities, witness and hold points, and an owner's right to inspect and stop work.

c. Conclusions

The NRC inspection team concluded that the requirements of the procurement document control process conform to the regulatory requirements of Criterion IV of Appendix B to 10 CFR Part 50 and have been implemented in accordance with applicable SCE&G procedures in support of VCSNS COL procurement activities. No findings of significance were identified.

5. Document Control

a. Inspection Scope

The NRC inspection team reviewed SCE&G policies and procedures for document control to verify compliance with Criterion VI, "Document Control," of Appendix B to 10 CFR Part 50. Specifically, the NRC inspection team reviewed SCE&G implementing procedures governing the process for the review, approval, revision, and withdrawal of documents used by the NND organization.

The NRC inspection team reviewed the following documents for this inspection area:

- Section 9.0, "Document Control," of the SCE&G NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- NND Administrative Procedure (AP)-001, "Document Review and Approval," Revision 2, dated May 29, 2009
- NND-DCRM-0001, "Document Control and Records Management Process," Revision 0, dated August 18, 2008
- NND FileNet P8 Workplace, General User Training

b. Observations and Findings

b.1 Policies and Procedures

Section 9.0 of the SCE&G NND QAP for VCSNS Units 2 and 3 addresses measures to control the issuance of documents relative to NND work activities. These measures are defined in NND-AP-001 and provide assurance that NND instructions, procedures, drawings, and any subsequent changes thereto are reviewed and approved before distribution.

NND-AP-001 describes the process that NND personnel use for review, approval, revision, and withdrawal of procedures. Section 5.0 of NND-AP-001 defines approval authority for NND documents and the responsibilities of the document originator, reviewers, supervisors, QA specialists, and the DCRM specialist. Section 6.0 describes the document review process, including guidance for completing the document review form, which is included as Attachment 2 to the procedure.

NND-DCRM-0001 describes the DCRM processes that support the NND project for VCSNS Units 2 and 3.

b.2 Implementation of the Document Control Process

The NRC inspection team selected a sample of project documents that it used in the course of the inspection. These documents contained a completed document review form, which identified document attributes, such as title, revision, description of the change, and the reason for the change. The form identified the originator, reviewer(s), responsible supervisor, and approval authority. The form incorporated a checklist for actions to be acknowledged and completed, as applicable, before release of the document, such as resolution of reviewer comments; completion of necessary training; reviews required under 10 CFR 50.59, "Changes, Tests, and Experiments"; and reviews by independent oversight organizations. The NRC inspection team checked the data entered on the forms against the positions and functional areas shown in the NND organizational charts. Reviews, concurrences, and approvals were complete and reasonably assigned to managers and supervisors responsible for the functional areas shown in the organizational charts. The forms were completed in conformance with the requirements of NND-AP-001.

The NRC inspection team discussed the DCRM process with the DCRM specialist responsible for the transmittal and controlled distribution of documents and records into the FileNet document management system. The DCRM specialist discussed the DCRM system and retrieved documents that the NRC inspection team requested. The specialist explained the process for the entry of documents into the database, the withdrawal of superseded documents, and the temporary storage of documents pending FileNet database entry. The NRC inspection team used the FileNet system and the user training manual to access documents from the selected sample. The NRC inspection team reviewed the training manual and found that it illustrated and discussed the various user screens and explained important terms, such as “controlled document,” “QA record,” and “nonpermanent record.” The NRC inspection team verified document information available on the access screens, including dates, revisions, and titles, against copies used by the team. A few controlled and uncontrolled copies were printed. The NRC inspection team verified that the document control process, as documented by the referenced procedures, was consistent with the requirements of Criterion VI of Appendix B to 10 CFR Part 50.

c. Conclusions

The NRC inspection team concluded that the document control process requirements conform to the regulatory requirements of Criterion VI of Appendix B to 10 CFR Part 50 and have been implemented in accordance with applicable SCE&G procedures in support of VCSNS COL activities. No findings of significance were identified.

6. Nonconforming Materials, Parts, or Components

a. Inspection Scope

The NRC inspection team reviewed SCE&G NND policies and procedures for the control of nonconforming materials, parts, and components to assess compliance with the requirements of Criterion XV, “Nonconforming Materials, Parts, or Components,” of Appendix B to 10 CFR Part 50. In addition, the NRC inspection team discussed the nonconformance process with members of the SCE&G NND management and technical staff.

The NRC inspection team reviewed the following documents for this inspection area:

- SCE&G Operational QAP, Revision 27, Change D, dated November 8, 2007
- NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- SCE&G NND-AP-0002, “Corrective Action Program,” Revision 1, dated May 5, 2009

b. Observations and Findings

Section 12, “Nonconformance and Corrective Action Control,” of the Operational QAP for VCSNS Unit 1 describes the requirements and assigns responsibilities for identifying, reporting, and controlling materials, parts, components, services, and activities that deviate from established quality requirements. The Operational QAP for VCSNS Unit 1 states that controls and corrective measures are required to ensure that conditions adverse to quality are reported and appropriate corrective actions are taken in a timely manner. Section 18, “Nonconforming Materials, Parts, or Components,” of the SCE&G NND QAP describes the

requirements for controlling and processing nonconforming materials, parts, and components under the EPC agreement.

The NRC inspection team reviewed SCE&G NND-AP-0002. This procedure includes nonconformance as one of the conditions identified, evaluated, reported, and verified as resolved by the corrective action program. In addition, the NRC inspection team interviewed SCE&G NND staff and management responsible for the SCE&G NND nonconformance process. Specific procedures for identifying and controlling nonconforming materials have yet to be developed because VCSNS Units 2 and 3 are in the pre-construction stage. SCE&G NND will monitor the WEC/Shaw control of nonconforming materials, parts, and components for long-lead-time components under the EPC agreement. The NRC inspection team reviewed a listing and description of all CRs and verified that no material, part, or component nonconformance had been identified as of the completion of this inspection.

c. Conclusions

The NRC inspection team concluded that the requirements of the VCSNS Unit 1 Operational QAP control of nonconformances are consistent with the regulatory requirements of Criterion XV of Appendix B to 10 CFR Part 50 and have been appropriately implemented to support VCSNS Units 2 and 3 COL activities. No findings of significance were identified.

7. Corrective Action Program

a. Inspection Scope

The NRC inspection team reviewed SCE&G NND policies and procedures for implementing the corrective action program to assess compliance with the requirements of Criterion XVI, "Corrective Actions," of Appendix B to 10 CFR Part 50. In addition, the NRC inspection team discussed the corrective action program with members of the SCE&G NND management and technical staff.

The NRC inspection team reviewed the following documents for this inspection area:

- SCE&G Operational QAP, Revision 27, Change D, dated November 8, 2007
- NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- SCE&G Administrative Procedure NND-AP-0002, "Corrective Action Program," Revision 1
- CR 0-L-06-0008; CRs 0-L-07-0008 and -0012; CRs 0-L-08-0004, -0011, -0028, -0030, and -0031; and CRs 0-L-09-0002, -0003, -0004, -0019, -0024, -0028, -0037, -0039, -0042, -0045, -0054, -0059, -0060, -0063, -0065, -0069, -0073, -0074, and -0077
- "VC Summer Root Cause Analysis Report CAR 2009-01-08-44," dated February 24, 2009
- VCSNS Units 2 and 3 NND "Trend Report First Quarter of 2009,"

b. Observations and Findings

The NRC inspection team reviewed the SCE&G policies and procedure for implementation of the corrective action program. More specifically, the NRC inspection team reviewed Section 12, "Nonconformance and Corrective Action Control," of the Operational QAP for VCSNS Unit 1, which describes the controls and corrective measures prescribed to ensure that conditions adverse to quality are reported and that appropriate corrective actions are implemented in a timely manner. Section 19, "Corrective Actions," of the SCE&G NND QAP states that "[m]easures have been established, independent of those utilized by VCSNS Unit 1, that ensure conditions adverse to quality are promptly identified and corrected. These measures are defined in NND procedures."

The NRC inspection team reviewed SCE&G Administrative Procedure NND-AP-0002, which states, in part, that the purpose of the corrective action program is to provide a centralized process for identifying and resolving issues that do not meet the expectations associated with design, regulatory requirements, and other NND project issues and will be used to identify, evaluate, report, and verify resolution of conditions that are potentially adverse to quality and personnel safety.

The NRC inspection team reviewed approximately 25 CRs, including both opened and closed CRs. The NRC inspection team also reviewed the VCSNS Units 2 and 3 NND "Trend Report," which provided trends from the CRs for the first quarter of 2009. The trend report was documented in CR 0-L-09-0054 to include the conditions identified from the developed trends in the corrective action program and to track the corrective actions for each condition. In addition, the NRC inspection team interviewed SCE&G NND responsible staff and management as part of its evaluation of the SCE&G NND corrective action program. The NRC inspection team noted that SCE&G policies and implementing procedures provided the necessary guidance to adequately document, evaluate, correct, report, and verify resolution of conditions adverse to quality.

c. Conclusions

The NRC inspection team concluded that the elements of the corrective action program being implemented by SCE&G NND conform to the regulatory requirements of Criterion XVI of Appendix B to 10 CFR Part 50 and have been appropriately translated into SCE&G NND implementing procedures to support the VCSNS Units 2 and 3 COL application. No findings of significance were identified.

8. Control of Purchased Materials, Equipment, and Services and Audits

a. Inspection Scope

The NRC inspection team reviewed the SCE&G NND policies and implementing procedures that govern the control of purchased materials, equipment, and services and reviewed the audit process to verify compliance with the requirements of Criterion VII, "Control of Purchased Material, Equipment, and Services," and Criterion XVIII, "Audits," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed a sample of internal and external audit reports to evaluate compliance with program requirements and adequate implementation of those requirements. Audit findings were reviewed for potential adverse significance on the VCSNS Units 2 and 3 COL application. Corrective actions to resolve deficiencies identified by the audit findings were reviewed for adequacy and timeliness.

The NRC inspection team reviewed the following documents for this inspection area:

- NND QAP for VCSNS Units 2 and 3, Revision 1, dated May 28, 2009
- SCE&G NND-AP-0010, "NND QA Audit/Surveillance, QA Program Effectiveness Review, and QA Plan Review Programs," Revision 1, dated April 6, 2009
- SCE&G NND-AP-0023, "Receipt, Review, Establishment, and Tracking of Witness Points and Hold Points of Supplier Quality Plans," Revision 0, dated March 9, 2009
- SCE&G Operational QAP for VCSNS Unit 1, Revision 27
- ES-343, "Supplier Qualification," for VCSNS Unit 1, Revision 8, dated October 29, 2008
- ES-344, "Supplier Surveillance," for VCSNS Unit 1, Revision 5, dated July 3, 2003
- ES-345, "Audit/Survey/Manufacturing/Corrective Action Report Preparation," for VCSNS Unit 1, Revision 6, dated May 18, 2009
- external audit of WEC, conducted August 18–22, 2008
- external surveillance of quality activities associated with WEC oversight of nuclear component suppliers, conducted February 13, 2009
- external audit of quality activities associated with Bechtel, conducted March 3–7, 2008
- external audit of quality activities associated with Shaw, conducted August 20–23, 2007
- external surveillance of quality activities associated with Shaw, conducted August 14, 2008
- internal audit of quality activities associated with the implementation of the corrective action program, conducted from May 18–26, 2009
- internal surveillance of quality activities associated with the implementation of the training and qualification program, conducted January 20, 2008
- internal surveillance of quality activities associated with the implementation of the licensing department, conducted December 23, 2008

b. Observations and Findings

Section 15.4 of the Operational QAP for VCSNS Unit 1 establishes requirements for external audits and surveillances. The VCSNS Unit 1 quality supplier group conducts external audits and surveillances of vendors and contractors.

NND-AP-0010 provides instructions for scheduling, preparation, planning, performance, and followup of internal audits and surveillances conducted by the NND QA group. The NRC inspection team identified that this procedure referenced ASME NQA-1 and is an example of

Violations 05200027/2009-201-01 and 05200028/2009-201-01 discussed in Section 2 of this report.

NND-AP-0023 provides guidance for the receipt, review, establishment, and tracking of witness points and hold points associated with vendor manufacturing and fabrication plans (quality plans).

The NRC inspection team reviewed a sample of audits conducted by SCE&G in support of the VCSNS Units 2 and 3 COL application. The NRC inspection team reviewed the scope and depth of the audits and also reviewed the corrective actions associated with these audits.

(1) Nuclear Procurement Issues Committee Audit of Westinghouse Electric Company

The NRC inspection team reviewed Audit Report No. VA08111, which documented a Nuclear Procurement Issues Committee (NUPIC) audit performed at WEC. The audit scope included review of the WEC QA program (Westinghouse Quality Management System, Revision 5) and the implementing procedures for control of contract review, design, commercial-grade dedication, software QA, procurement, document control, organization, nonconforming items (10 CFR Part 21 requirements), internal audit, corrective action, training and certification, and records. The audit report identified 11 findings in the areas of design, commercial-grade dedication, procurement, and corrective action. The NRC inspection team noted that SCE&G had documented the review of the NUPIC audit and determined that the WEC status was acceptable, pending the evaluation of the safety significance of the findings by SCE&G NND. SCE&G will follow the audit findings through implementation of corrective actions. SCE&G will also conduct surveillances of the WEC QA program in the areas related to the findings.

(2) Surveillance of Westinghouse Electric Corporation

The NRC inspection team reviewed a SCE&G surveillance of WEC, which documented a WEC audit of the Curtiss-Wright Electro-Mechanical facility. The SCE&G surveillance was performed to evaluate the adequacy of the WEC external audit program for nuclear component suppliers for the AP1000 project. The SCE&G audit verified that the WEC external audit program was adequate and was effectively implemented. The SCE&G surveillance report did not document any findings related to the WEC external audit program.

(3) Nuclear Procurement Issues Committee Audit of Bechtel Power Corporation

The NRC inspection team reviewed Audit Report No. BPC-1-08, which documented a NUPIC audit performed at Bechtel. The audit focused on the areas of contract review, design, software QA, procurement, document control, nonconforming items, audits, corrective action, training, and field services. The audit identified one finding in the area of corrective action. The audit report closed the finding based on Bechtel completing the corrective action after the audit but before issuance of the audit report. The audit report concluded that Bechtel had adequately implemented its "Nuclear Quality Assurance Manual."

(4) Nuclear Procurement Issues Committee Audit of Shaw Stone & Webster

The NRC inspection team reviewed Audit Report No. CQA2007-117, which documented a NUPIC audit performed at Shaw. The audit focused on the evaluation of Shaw quality control measures for design and engineering support services. The audit report identified four recommendations and noted that the team could not verify implementation of several elements of the Shaw QA program because no safety-related work had been performed before or during the audit. The NRC inspection team noted that Shaw is on the SCE&G quality supplier list. The NRC inspection team questioned the basis for accepting Shaw on the SCE&G quality supplier list without an adequate assessment of its QA program. SCE&G management stated that NND had imposed a condition on purchase orders to Shaw whereby surveillances will be performed for any item or service that Shaw provides until its quality performance record has been established. The NRC inspection team reviewed the EPC agreement and confirmed that the EPC contract documents such conditions under quality requirements.

(5) Surveillance of Shaw Stone & Webster

The NRC inspection team reviewed a SCE&G surveillance of Shaw, which was conducted at Shaw on August 14, 2008. The surveillance evaluated the adequacy of the Shaw surveillance reports and corrective actions from identified discrepancies. SCE&G surveillance verified adequate implementation of the Shaw corrective action program.

(6) Audit of New Nuclear Deployment Corrective Action Program

The NRC inspection team reviewed Audit Report No. NND-AUD-200905-0, dated June 4, 2009, which documented an internal audit of the NND corrective action program performed from May 18–26, 2009. The audit report identified one finding in the area of unsupported database use for the initiation and storage of CRs and initiated two CRs for procedure discrepancies, one CR for lack of procedural guidance, and one CR for multiple discrepancies identified with the implementation of the Shaw emergency, health, and safety manual. The NRC inspection team reviewed audit finding CR 0-L-09-0065, dated June 1, 2009, which remains open, pending an NND management evaluation. The NRC inspection team also reviewed CR 0-L-09-0063, CR 0-L-09-0066, CR 0-L-09-0067, and CR 0-L-09-0068, dated May 29, 2009. These CRs identify the findings, but they remain open, pending an NND management evaluation and assignment of corrective action.

Additionally, the NRC inspection team reviewed CR 0-L-0071, dated June 1, 2009, which documented that an audit did not follow the guidance of current procedure NND-AP-0010, such as the development of an audit plan; the issuance of an audit notification letter that must be sent to the audited organization 2 weeks before the audit; and the development of an audit checklist. The NRC inspection team noted that the CR was open, pending an NND management evaluation and determination of corrective action.

(7) Surveillance of New Nuclear Deployment Training and Qualification Program

The NRC inspection team reviewed an internal surveillance report, dated January 20, 2008, which documented a surveillance of the NND training and qualification program. The surveillance issued two condition evaluation reports (CER 0-L-009 and CER 0-L-010); CER 0-L-009 was issued for documenting basic orientation requirements that were not being conducted, and CER 0-L-010 was issued for specialty training requirements that were

not assigned to personnel and their supervisors. The NRC inspection team noted that the CERs identified the proposed corrective action and were closed in a timely fashion.

(8) Surveillance of Licensing Department

The NRC inspection team reviewed an SCE&G surveillance of NND licensing to determine that requirements concerning the protection of safeguards information were adequately applied to NND personnel. The surveillance report stated that all the required attributes for an individual to be granted access to safeguards information were adequate. The auditors did not observe any deficiencies concerning the protection of safeguards information and no findings were issued.

c. Conclusions

With the exception of the noted violations, the NRC inspection team concluded that the SCE&G NND control of purchased materials, equipment, and services and the audit program requirements are consistent with the regulatory requirements of Criterion XVIII of Appendix B to 10 CFR Part 50. Based on the sample reviewed, the NRC inspection team determined that the SCE&G policies and associated procedures were effectively implemented. No findings of significance were identified.

9. Entrance and Exit Meetings

On June 1, 2009, the NRC inspection team presented the inspection scope during an entrance meeting with Ronald Clary, General Manager, NND; Alfred Paglia, Manager, Licensing, NND, VCSNS Units 2 and 3; Alan Torres, Manager, Construction, NND, VCSNS Units 2 and 3; and other SCE&G NND personnel. On June 4, 2009, the NRC inspection team presented the inspection results during an exit meeting with Ronald Clary, Alfred Paglia, and other SCE&G NND personnel.

ATTACHMENT 1

1. PERSONS CONTACTED

Ron Clary	General Manager, New Nuclear Deployment (NND)
Alfred Paglia	Manager, Licensing, NND
Alan Torres	Manager, Construction, NND
Brad Stokes	Manager, Design Engineering, NND
Roosevelt Word	Manager, Quality Systems, NND
Skip Smith	Manager, Business/Finance, NND
Gary Moffatt	Supervisor, Engineering, NND
April Rice	Supervisor Licensing, NND
David McGlaufflin	Supervisor, Corrective Action Program, NND
Jerry Harrison	Consultant, NND
James Brown	Quality Assurance Specialist, NND
John Walker	Licensing Engineer, NND
Daniel Snow	Construction Oversight, NND

2. INSPECTION PROCEDURES USED

Inspection Procedure 35017, "Quality Assurance Implementation Inspection," dated July 29, 2008

Inspection Procedure 36100, "Inspection of 10 CFR Part 21 and 50.55(e) Programs for Reporting Defects and Nonconformances," dated October 3, 2007

3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

The NRC had performed no previous implementation inspections of the quality assurance program governing the COL application for Virgil C. Summer Nuclear Station, Units 2 and 3.

<u>Item Numbers</u>	<u>Status</u>	<u>Type</u>	<u>Description</u>
05200027/2009-201-01 and 05200028/2009-201-01	Opened	NOV	Criterion II

ATTACHMENT 2

Virgil C. Summer Nuclear Station, Units 2 and 3, Quality Assurance Implementation Inspection Entrance and Exit Meeting Attendance

List of Attendees: (1) Entrance Meeting June 1, 2009, and (2) Exit Meeting on June 4, 2009

<u>(1)</u>	<u>(2)</u>		
X	X	Kerri Kavanagh	NRC Inspection Team Leader
X	X	Raju Patel	NRC Inspection Team
X	X	Robert Prato	NRC Inspection Team
X	X	Kenneth Heck	NRC Inspection Team
X	X	Chandu Patel	NRC Project Manager
X	X	Kevin Nietmann	NRC Office of the Inspector General
X	X	Michael Zeitler	NRC Office of the Inspector General
X	X	Ron Clary	SCE&G, NND
X	X	Alfred Paglia	SCE&G, NND
X	X	Alan Torres	SCE&G, NND
X	X	Brad Stokes	SCE&G, NND
X	X	Roosevelt Word	SCE&G, NND
X		Skip Smith	SCE&G, NND
X		Gary Moffatt	SCE&G, NND
X	X	April Rice	SCE&G, NND
X	X	David McGlaufflin	SCE&G, NND
X	X	Jerry Harrison	SCE&G, NND
X	X	James Brown	SCE&G, NND
X	X	John Walker	SCE&G, NND
	X	Daniel Snow	SCE&G, NND