

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

January 22, 2020

Mr. Rajwant S. Jolly Manager of Quality Assurance Bechtel Power Corporation 12011 Sunset Hills Road Reston, VA 20190

## SUBJECT: NUCLEAR REGULATORY COMMISSION VENDOR INSPECTION OF BECHTEL POWER CORPORATION REPORT NO. 99901365/2019-201

Dear Mr. Jolly:

From December 9 through December 12, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a routine inspection at the Bechtel Power Corporation (BPC) facility in Reston, VA. The purpose of this limited-scope inspection was to assess BPC's compliance with 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 Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

This technically-focused inspection specifically evaluated BPC's implementation of the quality activities associated with the engineering services, design modifications, procurement services, software, construction management and installation services being supplied to the U.S. nuclear power plants. The enclosed report presents the results of the inspection. This NRC inspection report does not constitute NRC endorsement of BPC's overall quality assurance (QA) program.

Based on the results of this inspection, the NRC inspection team found the implementation of your QA program met the applicable technical and requirements imposed on you by your customers or NRC licensees. No findings of significance were identified.

In accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," the NRC will make available electronically for public inspection a copy of this letter, its enclosure, and your response through the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System, which is accessible at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>.

If you have any questions concerning this matter, please contact Ms. Andrea Keim of my staff at (301)415-1671.

Sincerely,

Kerri A. Kavanagh, Chief /**RA**/ Quality Assurance and Vendor Inspection Branch Division of Reactor Oversight Office of Nuclear Reactor Regulation

Docket No.: 99901365

EPID No.: I-2019-201-0072

Enclosure: Inspection Report No. 99901365/2019-201 and Attachment

# SUBJECT: US NUCLEAR REGULATORY COMMISSION VENDOR INSPECTION OF BECHTEL POWER CORPORATION REPORT NO. 99901365/2019-201 Dated: January 22, 2020

DISTRIBUTION: rsjolly@bechtel.com ConE\_Resource CMiller RFelts MYoung ASakadales NRR\_DRO\_IQVB Distribution

ADAMS Ac	NRR-106		
OFFICE	NRR/DRO/IQVB	NRR/DRO/IQVB	NRR/DRO/IQVB
NAME	AKeim	THerrity	CRoque-Cruz
DATE	01/22/2020	01/22/2020	01/22/2020
OFFICE	NRR/DRO/IQVB		
NAME	KKavanagh		
DATE	01/22/2020		

**OFFICIAL RECORD COPY** 

## U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION DIVISION OF REACTOR OVERSIGHT VENDOR INSPECTION REPORT

Docket No.:	99901365			
Report No.:	99901365/2019-201			
Vendor:	Bechtel Power Corporation 12011 Sunset Hills Road Reston, VA 20190			
Vendor Contact:	Mr. Rajwant S. Jolly Manager of Quality Assurance Email: rsjolly@bechtel.com Phone: (703) 429-6095			
Nuclear Industry Activity: Bechtel Power Corporation's so power plants includes engineer procurement services, software installation services.		s engineering services	, design modifications,	
Inspection Dates:	December 9 - 12, 2019			
Inspectors:	Andrea Keim Thomas Herrity Carla Roque-Cruz		Team Leader	
Approved by:	Kerri A. Kavanagh, Chief Quality Assurance and Vendor Inspection Branch Division of Reactor Oversight Office of Nuclear Reactor Regulation			

# EXECUTIVE SUMMARY

#### Bechtel Power Corporation 99901365/2019-201

The U.S. Nuclear Regulatory Commission (NRC) staff conducted a routine vendor inspection at the Bechtel Power Corporation (BPC) facility in Reston, VA, to verify that it had implemented an adequate quality assurance (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," and 10 CFR Part 21, "Reporting of Defects and Noncompliance." The NRC inspection team conducted the inspection from December 9 through December 12, 2019. The NRC previously inspected BPC in 2010 when BPC was located in Frederick, MD.

This technically-focused inspection specifically evaluated BPC's implementation of quality activities associated with engineering services, design modifications, procurement services, software, construction management and installation services provided to U.S. nuclear power plants.

These regulations served as the bases for the NRC inspection:

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

During the course of this inspection, the NRC inspection team implemented Inspection Procedure (IP) 43002, "Routine Inspections of Nuclear Vendors," dated January 27, 2019, IP 43004, "Inspection of Commercial-Grade Dedication Programs," dated January 27, 2019, and IP36100, "Inspection of 10 CFR Part 21 and Programs for Reporting Defects and Noncompliance," dated May 16, 2019.

The NRC inspection team concluded that BPC's QA policies and procedures comply with the applicable requirements of Appendix B to 10 CFR Part 50 and 10 CFR Part 21, and that BPC's personnel are implementing these policies and procedures effectively. The results of this inspection are summarized below.

### 10 CFR Part 21 Program

The NRC inspection team reviewed BPC's policies and implementing procedures that govern its 10 CFR Part 21 program, to verify compliance with the requirements of 10 CFR Part 21. The NRC inspection team: (1) observed examples of the 10 CFR Part 21 postings; (2) reviewed BPC's policies and procedures governing compliance with 10 CFR Part 21; and (3) verified that BPC's non-conformance and corrective action programs provide a link to the 10 CFR Part 21 program. No findings of significance were identified.

### **Corrective Action**

The NRC inspection team reviewed BPC's implementation of its policies and procedures governing corrective actions to verify compliance with the requirements of Criterion XVI, "Corrective Actions", of Appendix B to 10 CFR Part 50. The NRC inspection team verified that the procedures contained sufficient guidance for non-conforming and deficient conditions and the procedures ensure that the conditions are evaluated for 10 CFR Part 21 applicability. The

NRC inspection team reviewed a sample of condition reports (CRs) to verify that they demonstrate compliance with 10 CFR 50 Appendix B regulatory requirements and adherence to BPC procedures.

The NRC inspection team also reviewed BPC's actions associated with its response to a Notice of Violation (NOV) contained in NRC Inspection Report 99901365/2010-201-01. The NRC inspection team verified that BPC had taken adequate corrective action to address NOV 99901365/2010-201-01. This NOV is now closed.

The NRC inspection team determined that BPC's implementation of its policies and procedures associated with corrective actions met the requirements of Criterion XVI, of Appendix B to 10 CFR Part 50. No findings of significance were identified.

## Design Control

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its design control program to verify compliance with the requirements of Criterion III, "Design Control," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed a sample of design change packages and calculations packages. No findings of significance were identified.

## Commercial Grade Dedication of Software

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its commercial grade dedication (CGD) program to verify compliance with the requirements of Criterion III, Criterion IV, "Procurement Document Control," and Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed a sample of BPC's CGD packages for software to assess the elements of BPC's CGD program. The NRC inspection team noted that BPC has specific procedures and engineering instructions used for dedication of software. The process is guided by several forms that must be completed during different steps. No findings of significance were identified.

### Supplier Oversight and Supplier Audits

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its supplier oversight program to verify compliance with the requirements of Criterion IV, "Procurement Document Control," Criterion VII, "Control of Purchased Material, Equipment, and Services," and XVIII, "Audits," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed a sample of BPC's procurement documents and supplier audits. No findings of significance were identified.

### Internal Audits

The NRC inspection team reviewed the policies and procedures that govern the implementation of BPC's internal audit program to verify compliance with the regulatory requirements in Criterion XVIII, "Audits," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed the frequency of the internal audits, the independence and qualification of auditors, the objective evidence and verified findings were captured in the corrective action program. No findings of significance were identified.

# REPORT DETAILS

## 1. 10 CFR Part 21 Program

### a. Inspection Scope

The NRC inspection team reviewed Bechtel Power Corporation's (BPC's) policies and implementing procedures that govern the implementation of its Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21, "Reporting of Defects and Noncompliance," program to verify compliance with the regulatory requirements. In addition, the NRC inspection team evaluated the 10 CFR Part 21 postings and a sample of BPC's purchase orders (PO) for compliance with the requirements of 10 CFR 21.21, "Notification of Failure to Comply or Existence of a Defect and its Evaluation," and 10 CFR 21.31, "Procurement Documents." The NRC inspection team also verified that BPC's nonconformance and corrective action procedures provide a link to the 10 CFR Part 21 program. Furthermore, for a sample of 10 CFR Part 21 evaluations performed by BPC, the NRC inspection team verified that BPC had effectively implemented the requirements for evaluating deviations and failures to comply. The NRC inspection team verified that the notifications were performed in accordance with the requirements of 10 CFR 21.21, as applicable.

The NRC inspection team also discussed the 10 CFR Part 21 program with BPC's management and technical staff. The attachment to this inspection report lists the documents reviewed by the NRC inspection team.

b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that BPC is implementing its 10 CFR Part 21 program in accordance with the regulatory requirements of 10 CFR Part 21. Based on the limited sample of documents reviewed, the NRC inspection team also determined that BPC is implementing its policies and procedures associated with the 10 CFR Part 21 program. No findings of significance were identified.

### 2. Corrective Action

### a. Inspection Scope

The NRC inspection team reviewed BPC's implementation of its policies and procedures governing corrective actions, in order to verify compliance with the requirements of Criterion XVI, "Corrective Actions", 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." The NRC inspection team reviewed the current corrective actions, nonconformance and Part 21 procedures and verified they contained sufficient guidance for entering conditions into the corrective action program, and that the programs provide sufficient guidance leading to a Part 21 applicability evaluation.

The NRC inspection team reviewed a sample of condition reports (CRs) to verify that the appropriateness of actions taken and timeliness of those recorded actions. The specific CRs reviewed are listed in the Appendix to this report. The NRC inspection team witnessed a condition report review committee (CRRC) screening meeting and verified BPC's adherence to procedures assessing the conditions and assigning action items to address the condition. The attachment to this inspection report lists the documents reviewed and the staff interviewed by the NRC inspection team.

In addition, the NRC inspection team reviewed BPC's corrective actions to address NOV 99901365/2010-201-01 from the NRC's 2010 Inspection.

b. Observations and Findings

No findings of significance were identified.

#### Corrective Action Associated with Violation No. 99901365/2010-201-01

The Notice of Violation (NOV) documented that, BPC's procedure 1CM-M01G-00110, "Reporting of Defects and Noncompliance to the Nuclear Regulatory Commission (10 CFR Part 21)," Revision 000, dated February 15, 2010, did not correctly begin the 60-day evaluation period. The NRC inspection team verified that the current BPC program correctly defines discovery and complies with the regulatory requirements.

c. Conclusion

The NRC inspection team concluded that BPC adequately implemented its corrective action program in accordance with the regulatory requirements of Criterion XVI of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that BPC is implementing its policies and procedures associated with the corrective action programs. No findings of significance were identified.

3. Design Control

#### a. Inspection Scope

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its design control program to verify compliance with the regulatory requirements of Criterion III, "Design Control," to 10 CFR Part 50.

The NRC inspection team verified that the design and procurement specifications were properly translated into BPC's calculations, design change packages and drawings. The documents reviewed contained appropriate technical details and received appropriate review and approval.

The NRC inspection team also discussed the design control program with BPC's management and technical staff. The attachment to this inspection report lists the documents reviewed by the NRC inspection team.

### b. Observations and Findings

No findings of significance were identified.

## c. Conclusion

The NRC inspection team concluded that BPC is implementing its design control in accordance with the regulatory requirements of Criterion III of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team determined that BPC is effectively implementing its policies and procedures associated with the design control. No findings of significance were identified.

## 4. Commercial-Grade Dedication of Software

## a. Inspection Scope

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its commercial-grade dedication (CGD) program, specifically for software, to verify compliance with the requirements of Criterion III, "Design Control," Criterion IV, "Procurement Document Control," and Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B to 10 CFR Part 50. The NRC inspection team reviewed a sample of software CGD packages and interviewed BPC staff on the CGD processes and procedures.

The NRC inspection team reviewed BPC specific procedures and engineering instructions used for dedication of software. The process is guided by several forms (exhibits) that must be completed during different steps. The CGD packages contained the Commercial Grade Item/Commercial Grade Service evaluation form, Software CGD compliance checklist, Critical Characteristics for Acceptance (CCFA) Verification form, CGD release form, and Design verification report. The NRC inspection team noted that one of BPC's forms has a list of pre-determined, generic, critical characteristics (CCs) for software with the basis and justification for selection and that designated staff selects the CCs that need to be evaluated and accepted for the specific software to be dedicated.

The NRC inspection team selected a sample of dedication packages for software used for safety-related applications and dedicated by BPC and noted that the packages contained the forms and/or exhibits as required by BPC's CGD process. The NRC inspection team noted that the dedication packages covered areas such as software packaging, software errors, changes to software, documentation included with software, credible failure mechanisms and safety functions. All forms were signed by the technical staff and experts involved in the dedication process and by BPC management at appropriate levels.

The NRC inspection team also discussed the CGD program with BPC's management and technical staff. The attachment to this inspection report lists the documents reviewed by the NRC inspection team.

## b. Observations and Findings

No findings of significance were identified.

## c. Conclusion

The NRC inspection team concluded that BPC is implementing its CGD program for software in accordance with the regulatory requirements of Criterion III, Criterion IV, and Criterion VII of Appendix B to 10 CFR Part 50. Based on the sample of documents reviewed, the NRC inspection team also determined that BPC is implementing its policies and procedures associated with the CGD process. No findings of significance were identified.

## 5. Supplier Oversight and Supplier Audits

## a. Inspection Scope

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its supplier oversight and external audit programs to verify compliance with the requirements of Criterion IV, "Procurement Document Control," Criterion VII, "Control of Purchased Material, Equipment, and Services," and Criterion XVIII, "Audits," of Appendix B to 10 CFR Part 50.

For the sample of purchase orders (POs) reviewed, the NRC inspection team verified that the POs included, as appropriate, the applicable technical and quality requirements. For the sample of external audits reviewed, the NRC inspection team verified the audit reports included an audit plan, any findings identified, adequate documented objective evidence of compliance with the applicable requirements and lead auditor qualification documentation, as required by BPC's procedures. The NRC inspection team also reviewed BPC's lead auditor qualifications and verified that audit results are reviewed by BPC's responsible management.

The NRC inspection team also discussed the supplier oversight processes and procedures with BPC's management and technical staff. The attachment to this inspection report lists the documents reviewed and the staff interviewed by the NRC inspection team.

### b. Observations and Findings

No findings of significance were identified.

c. Conclusion

The NRC inspection team concluded that BPC is implementing its supplier oversight program and external audits in accordance with the regulatory requirements of Criterion IV, Criterion VII, and Criterion XVIII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team also determined that BPC is implementing its policies and procedures associated with the supplier oversight program and external audits. No findings of significance were identified.

### 6. Internal Audits

#### a. Inspection Scope

The NRC inspection team reviewed BPC's policies and implementing procedures that govern the implementation of its internal audit program to verify compliance with the requirements of Criterion XVIII, "Audits" of Appendix B to 10 CFR Part 50.

The NRC inspection team reviewed a sample of internal audits. The NRC inspection team verified that BPC prepared and approved plans that identify the audit scope and criteria to be audited. The NRC inspection team confirmed that the audit reports contained objective evidence of the areas reviewed. The NRC inspection team verified that audit findings were entered into the corrective action program. The NRC inspection team also verified that lead auditors were adequately qualified.

The NRC inspection team also discussed the internal audit program with BPC's management and technical staff. The attachment to this inspection report lists the documents reviewed by the NRC inspection team.

#### b. Observations and Findings

No findings of significance were identified

#### c. Conclusion

The NRC inspection team concluded that BPC is implementing its internal audit program in accordance with the regulatory requirements of Criterion XVIII of Appendix B to 10 CFR Part 50. Based on the limited sample of documents reviewed, the NRC inspection team finds that BPC is adequately implementing its policies and procedures associated with internal audits. No findings of significance were identified.

### 5. Entrance and Exit Meetings

On December 9, 2019, the NRC inspection team discussed the scope of the inspection with Ms. Margaret McCullough, President of BPC, and other members of BPC's management and technical staff. On December 12, 2019, the NRC inspection team presented the inspection results and observations during an exit meeting with Ms. Margaret McCullough, and other members of BPC's management and technical staff. The attachment to this report lists the attendees of the entrance and exit meetings, as well as those individuals whom the NRC inspection team interviewed.

# ATTACHMENT

# 1. ENTRANCE/EXIT MEETING ATTENDEES

Name	Title	Affiliation	Entrance	Exit	Interviewed
Rajwant Jolly	ajwant Jolly Manager of Assurance (QA)		x	х	х
Deborah Smith	Engineering Planning Manager	BPC	х	X*	
Franco Moi	ESL Coordinator	BPC	X	х	
Robert Bybel	Project QA Manager	BPC	х		
Ed Sherow	Engineering Manager Nuclear Power	BPC	х		
Greg Fouché	Nuclear A&PS Manager	BPC	х	Х*	
Ahmet Tokpinar	VP and Operations Manager	BPC	х		
Margaret McCullough	President, BPC	BPC	Х		
Garry May	Nuclear Construction Quality Manager	BPC	х	х	
Khadeejah Yanes	Quality Engineer	BPC	X*	Х	
Dena Volovar	Manager of NSE	BPC	X*	Х	
Lisa Myers	Document Control	BPC	X*		
Gail Toddings	Manager of Office and Adm Services	BPC	X*	х	
Trisha O'Toole	Manager of Procurement and Contracts	BPC	X*	х	
Russel Daniels	Manager of Engineering	BPC	X*		
Jason Hatfield	Manager of Startup Commissioning and Operation	BPC	X*		

Name	Title	Affiliation	Entrance	Exit	Interviewed
John Atwell	Manager of Operation	BPC	X*		
Barbara Rusinko	President of NS&E	BPC	X*		
Cynthia Riviera	Riviera Manager BPC 2		X*	Х*	
Cindy Ford	Records and Information Manager	BPC X* X*			
Dave Sprague	Vogtle-Project Quality Manager	BPC	X*		
Tamer Rezk	Vogtle-Project QA Manager	BPC	X*		
Bill Olsen	Welding and NDE	BPC	X*		
Flay Peterson	Project Controls	BPC		Х	
Charlie Givens	Engineering	BPC		х	х
Jim Rugg	Manager of Quality	BPC		х	х
Mike McHood	Geotechnical Engineer	BPC	X*		х
Michelle Clay	Project Administrator	BPC			х
Susan High	Project Controls Manager	BPC			Х
Lisa Myers	Document Control	BPC	X*		
Kerri Kavanagh	Branch Chief	NRC		Х*	
Andrea Keim	Inspection Team Leader	NRC	Х	х	
Thomas Herrity	Inspector	NRC	х	Х	
Carla Roque-Cruz	Inspector	NRC	Х	Х	

\* via telephone

# 2. INSPECTION PROCEDURES USED

Inspection Procedure (IP) 36100, "Inspection of 10 CFR Part 21 and Programs for Reporting Defects and Noncompliance," dated May 16, 2019.

IP 43002, "Routine Inspections of Nuclear Vendors," dated January 27, 2019.

IP 43004, "Inspection of Commercial-Grade Dedication Programs," dated January 27, 2019.

# 3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

ſ	Item Number	Status	Туре	Description	
	99901365/2010-201-01	CLOSED	NOV	10 CFR Part 21	

## 4. DOCUMENTS REVIEWED

## Policies and Procedures

- GQN-GAQG-N0001-008, "Bechtel Power Corporation, Nuclear Quality Assurance Manual (NQAM)," Revision 008, dated July 30, 2018
- Supplier Quality Manual 12th Edition, Revision 002, May 30, 2017
- Engineering Department Procedure Instruction (EDPI)-3DP-G00G-00001, "Master Index," Revision 007, October 30, 2019
- EDPI-3DP-G04G-00037, "Design Calculations," Revision 009, June 28, 2019
- EDPI-3DP-G04G-00066, "Reporting Deviations, Defects, and Noncompliance to the NRC," Revision 005, October 30, 2019
- EDPI-3DP-G04G-00061, "Nonconformance Reports (NCRs)," Revision 000, December 20, 2016
- EDPI-3DP-G06G-00001, "Material Requisitions," Revision 000, October 30, 2019
- EDPI-3DP-G06G-00002, "Contracts, Subcontracts, and Service Requisitions," Revision 005, August 05, 2012
- EDPI-3DP-G06G-00009, "Supplier Document and Data Submittal Quality and Review Process Requests," Revision 007, December 20, 2018
- EDPI 3DP-G06G-00010, "Specifying and Evaluating Supplier Quality Management System or QA Program Requirements," Revision 011, dated December 20, 2018
- EDPI-3DP-G06G-00020, "Commercial Grade Dedication," Revision 004, October 15, 2018

- Nuclear, Security and Environmental Nuclear Work Process Procedure (NS&E WPP)-4MP-T81C-N7104, "Control of Nonconforming Items," Revision 1, November 07, 2018
- NS&E WPP-4MP-T81C-N7108, "Corrective Action Management," Revision 1, November 13, 2018
- EDPI-3DP-G04R-00085, "Qualification of Computer Software for Use in Nuclear Safety Related Application," Revision 001, April 24, 2017
- EDPI-3DP-G04R-00038, "Computer Program Error Notification," Revision 002, October 15, 2018
- 3DP-G04R-06036, "Appendix G to 3DP-G04R-00036 NS&E G&HS Approved Computer Program List," Rev 003, September 19, 2019
- Bechtel Management Instruction (BMI)-1CM-M01G-00110, "Reporting Defects and Noncompliance to the Nuclear Regulatory Commission (10 CFR Part 21)," Revision 002, December 20, 2018
- BMI-283, "Corrective Action Program," Revision 003, November 1, 2018
- BMI-283A, "Corrective Action Program, Condition Report Review Committee (CRRC) Guidelines," Revision 003, November 1, 2018
- BMI-283B, "Corrective Action Program, Corrective Action Program (CAP) Configurations," Revision 000, November 1, 2018
- BMI-283C, "Corrective Action Program, Event Codes," Revision 000, November 1, 2018
- BMI-283D, "Corrective Action Program, Cause Codes," Revision 000, November 1, 2018
- BMI-283E, "Corrective Action Program, Recommendation Disposition Criteria," Revision 000, November 1, 2018
- BMI-283F, "Corrective Action Program, Overview," Revision 00, November 1, 2018
- BMI-283G, "Corrective Action Program, Workflow Diagrams," Revision 000, November 1, 2018
- BMI-283H, "Corrective Action Program, Condition Report (CR) and Recommendation Standard Document Numbering," Revision 000, November 1, 2018
- BMI-283I, "Corrective Action Program, Significance Level Criteria," Revision 000, November 1, 2018
- BMI-283J, "Corrective Action Program, CR Workflow Pre-Defined Durations," Revision 000, November 1, 2018

- 2QP-Q01B-00304, "Audits," Revision 002.1, dated November 27, 2018
- 2QP-Q01B-00302, Auditor/Lead Auditor Qualification," dated November 27, 2018
- #DP-G06G-0002, "NQAM-Policy No Q-7.1 Control of Purchased Material Equipment and Services". Revision 005, August 5, 2012.

# Design and Commercial-Grade Dedication Records

- CGI/COM G Software Evaluation Form, Y1A-UD73-EF027, "Seep/W", Ver 7.23 Rev 000, dated January 2, 2018
- CGI/COM G Software Evaluation Form, Y1A-UD73-EF028, "Slope/W", Ver 7.23 Rev 000, dated September 8, 2015
- MC-F-16-0091, "Calculation: Turbine Building DC System Study," Version 1, dated December 20, 2016
- MC-F-16-0092, "Calculation: SW, Cooling Tower and Turbine Building Battery Sizing," Version 1, dated December 20, 2016
- NMP-ES-084-001-F10, "Design Change/Modification: Battery Banks Unit 2", Version 4, dated December 22, 2016
- NMP-AD-010-FO1, "Replace Small EDG Jacket Water and Intercooler Heat Exchanger Tube Bundles," Version 10, dated February 12, 2019

# Purchase Orders, Audit Reports, and Commercial-Grade Surveys

- Audit No. 25411-000-2QA-GAQ-19003, "Independent Audit of Southern Nuclear Company (SNC) Engineering Services Project Quality Activities, Reston VA," Revision 000, dated November 18, 2019
- Audit No. QSM-GAP-19002, "Quality Assurance Management Audit of the Nuclear, Security and Environmental (NS&E) Startup Function," Revision 000, dated May 17, 2019
- Audit No. QSM-GAP-19004, "Quality & Six Sigma Department Audit of Engineering Department Functions Including BPC BQAM Implementation, Revision 000, dated June 14, 2019
- Audit No. 26139-000-2QA-GAQ-18003-001, "Independent Audit of Bechtel Vogtle Units 3 & 4 Project Quality Function," Revision 001, dated January 17, 2019
- Audit No. QSM-GAP-18012, "Quality Assurance Management Audit of NS&E Quality Function Reston," Revision 000, dated January 3, 2019
- Form SQ-396R, Supplier QA Program Evaluation Report. Supplier: Superheat, Inc. safety related heat treatment on-site services, dated August 12, 2019
- Form SQ-397A, Survey/Audit Report and Assessment Evaluation, dated
- Bechtel Audit 50158-100-YAA-2019-00009/NIAC Audit 24034, Audit Dates: March 5-7, 2019
- Bechtel Audit 50158-100-YAA-2017-00007/NIAC Audit 22052, Audit Dates: Jun 6-8, 2017
- Bechtel Audit 50158-100-YAA-2018-00013, Audit Date: May 9, 2018

- Bechtel Audit 50158-100-YAA-2018-00001/NIAC Audit 23024, Audit Dates: January 9-11, 2018
- PO: S&ME-001-HC4-CX00-00002, June 2016 Project: Southern Nuclear Greene
- PO: AMEC-25665000-HC4-CY00-00001, October 2017: TVA Clinch River Small Modular Reactor License Application

# **Condition Reports**

- CR 25411-000-GCA-GAMG-00539
- CR 25411-000-GCA-GAMG-00563
- CR 25411-000-GCA-GAMG-00592
- CR 25411-000-GCA-GAMG-00597
- CR 25411-000-GCA-GAMG-00598
- CR 25411-000-GCA-GAMG-00599
- CR 25411-000-GCA-GAMG-00602
- CR 25411-000-GCA-GAMG-00603
- CR 25411-000-GCA-GAMG-00614
- CR 25411-000-GCA-GAMG-00642
- CR 25411-000-GCA-GAMG-00657
- CR 25411-000-GCA-GAMG-00661
- CR 25411-000-GCA-GAMG-00695
- CR 25411-000-GCA-GAMG-00568
- CR 25411-000-GCA-GAMG-00558
- CR 25411-000-GCA-GAMG-00636
- CR 25411-000-GCA-GAMG-00652
- CR 25411-000-GCA-GAMG-00662
- CR 25411-000-GCA-GAMG-00665
- CR 25411-000-GCA-GAMG-00712
- CR 25411-000-GCA-GAMG-00717
- CR 25411-000-GCA-GAMG-00721

# Condition Reports Opened During the NRC Inspection

- CR 97805-000-GCA-GAMG-00866
- CR 97805-000-GCA-GAMG-00867

# Training Records

- Lead Auditor Record GAQ-7GQ-00068, dated November 27, 2019
- Lead Auditor Record GAQ-7GQ-00013, dated November 16, 2018
- Lead Auditor Record GAP-7GQ-00046, dated January 5, 2019
- Lead Auditor Record GAP-7GQ-00060, dated January 5, 2019
- 25411-000-G8C-GGG-00211, dated November 22, 2019
- 25411-000-G8C-GGG-00142, dated March 5, 2018
- 25411-000-G8C-GGG-00218, dated November 20, 2019
- 25411-000-G8C-GGG-00007, dated November 21, 2019

# **Miscellaneous**

- Spreadsheet, Bechtel Condition Reports from February 19, 2018 to November 27, 2019 Priority Levels 1-3
- Ad Hoc Report, List of Domestic Nuclear Power CRs, December 2016 to December 2019
- Bechtel 2019 QA Internal Audit Schedule, Vogtle 3 and 4, Revision 1, dated June 11, 2019
- Bechtel Internal Audit Plan 2019 Schedule, Revision 000, dated January 25, 2019
- Bechtel Internal Audit Plan 2018 Schedule, Revision 002, dated January 29, 2019