



99902038

December 4, 2019

Correspondence #: TO-GAQ-00021

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

ATTN: Document Control Desk

Subject: Bechtel Quality Assurance Program for Nuclear Power Plants,  
Topical Report BQ-TOP-1, 2007 Edition, Rev. 003A

- References:
- 1) ADAMS Accession No. ML18212A363, Letter from Tamer Rezk (Bechtel) to U.S. NRC, "Submittal of Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 003," dated July 31, 2018
  - 2) ADAMS Accession No. ML18226A020, Letter from Dennis C. Morey (U.S. NRC) to Tamer Rezk (Bechtel), "Acceptance Review for 'Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 003'," dated August 17, 2008
  - 3) ADAMS Accession No. ML18347B341, Letter from Dennis C. Morey (U.S. NRC) to Tamer Rezk (Bechtel), "Draft Safety Evaluation for 'Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 003'," dated December 21, 2018
  - 4) ADAMS Accession No. ML19030A137, Letter from Tamer Rezk (Bechtel) to U.S. NRC, "Bechtel Power Corporation response to the U.S. NRC draft Safety Evaluation for 'Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 003'," dated January 29, 2019
  - 5) ADAMS Accession No. ML19029A105, "Letter from Dennis Morey (U.S. NRC) to Tamer Rezk (Bechtel), "Safety Evaluation for 'Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 003,' (EPID: L-2018-TOP-0028)," dated February 7, 2019

Bechtel Power Corporation (Bechtel) Quality Assurance Program for Nuclear Power Plants, Topical Report BQ-TOP-1, 2007 Edition, Revision 003 was submitted by letter dated July 31, 2018 (Reference 1) for U.S. Nuclear Regulatory Commission (U.S. NRC) review and acceptance. The U.S. NRC acknowledged receipt of Bechtel's letter and documents for review via letter dated August 17, 2018 (Reference 2).

The U.S. NRC transmitted its Draft Safety Evaluation for Bechtel's review and comment by letter dated December 21, 2018 (Reference 3). Bechtel responded by letter dated January 29, 2019 (Reference 4) informing the U.S. NRC that there were no factual errors, clarity concerns, or proprietary information in the Draft Safety Evaluation.

By letter dated February 7, 2019 (Reference 5), the U.S. NRC issued its Final Safety Evaluation for the Bechtel Quality Assurance Program for Nuclear Power Plants, Topical Report BQ-TOP-1, 2007 Edition,

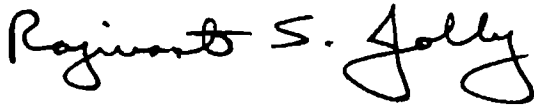
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Rev. 003, accepting it for referencing in licensing applications for nuclear power plants. The U.S. NRC's letter requested that Bechtel publish the accepted version of the Topical Report, Rev. 003 in accordance with guidance provided on the U.S. NRC website.

Accordingly, this letter submits the published Topical Report, Rev. 003A. As directed by the U.S. NRC's letter (Reference 5) and guidance on the U.S. NRC's website, the published Topical Report, Rev. 003A is enclosed, and it incorporates the U.S. NRC's letter dated February 7, 2019 with attached Final Safety Evaluation. Historical information pertaining to the U.S. NRC's review and acceptance of this revision is included in the References listed above.

If you have any questions or need addition information, please contact me.

Sincerely,



Rajwant S. Jolly  
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Enclosure: Bechtel Quality Assurance Program for Nuclear Power Plants,  
Topical Report BQ-TOP-1, 2007 Edition, Rev. 003A

cc:

U.S. NRC

Dennis Morey, Chief, Licensing Process Branch  
Joseph Holonich, Senior Project Manager  
Office of Nuclear Reactor Regulation  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 7, 2019

Mr. Tamer Rezk  
Manager of Quality Assurance  
Bechtel Power Corporation  
Office Location: RO2-C543  
12011 Sunset Hills Road  
Suite 110  
Reston, VA 20190-5919

SUBJECT: SAFETY EVALUATION FOR "BECHTEL QUALITY ASSURANCE PROGRAM  
FOR NUCLEAR POWER PLANTS TOPICAL REPORT, BQ-TOP-1, 2007  
EDITION, REVISION 003" (EPID: L-2018-TOP-0028)

Dear Mr. Rezk:

By letter dated July 31, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18112A363), Bechtel Power Corporation (Bechtel) submitted for U.S. Nuclear Regulatory Commission (NRC) staff review "Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-Top-1, 2007 Edition, Revision 003." By letter dated December 21, 2018, the NRC staff issued its draft safety evaluation (SE) (ADAMS Accession No. ML18347B341).

By letter dated January 29, 2019 (ADAMS Accession No. ML19030A137), Bechtel informed the NRC staff that there was no proprietary information in the draft SE and that Bechtel had no comments.

The NRC staff has found that the Bechtel Quality Assurance (QA) Program, Revision 3 is acceptable for referencing in licensing applications for nuclear power plants to the extent specified and under the limitations delineated in the TR and in the enclosed final SE. The final SE defines the basis for our acceptance of the TR.

Our acceptance applies only to material provided in the subject TR. We do not intend to repeat our review of the acceptable material described in the TR. When the TR appears as a reference in license applications, our review will ensure that the material presented applies to the specific plant involved. License amendment requests that deviate from this TR will be subject to a plant-specific review in accordance with applicable review standards.

In accordance with the guidance provided on the NRC website, we request that Bechtel publish an accepted version of QA Program, Revision 3 within three months of receipt of this letter. The approved versions shall incorporate this letter and the enclosed final SE after the title page. The accepted version shall include an "A" (designating accepted) following the TR identification symbol.

If future changes to the NRC's regulatory requirements affect the acceptability of this TR, Bechtel will be expected to revise the TR appropriately. Licensees referencing this TR would be expected to justify its continued applicability or evaluate their plant using the revised TR.

If you have any questions or require any additional information, please feel free to contact the NRC Project Manager for the review, Joseph Holonich at (301) 415 7297 or [joseph.holonich@nrc.gov](mailto:joseph.holonich@nrc.gov).

Sincerely,

*/RA/*

Dennis Morey, Chief  
Licensing Processes Branch  
Division of Licensing Projects  
Office of Nuclear Reactor Regulation

Docket No. 99902038

Enclosure:  
Safety Evaluation

SUBJECT: SAFETY EVALUATION FOR "BECHTEL QUALITY ASSURANCE PROGRAM FOR NUCLEAR POWER PLANTS TOPICAL REPORT, BQ-TOP-1, 2007 EDITION, REVISION 003" (EPID: L-2018-TOP-0028) DATE: FEBRUARY 7, 2019

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AKeim, NRO

K Kavanagh, NRO  
DMorey, NRR

**ADAMS Accession Nos.: ML19029A105**

**\*via e-mail;**

**NRR-106**

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DATE	02/05/2019	02/05/2019	01/29/2019	02/07/2019

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## **SAFETY EVALUATION OF THE BECHTEL**

### **QUALITY ASSURANCE PROGRAM FOR NUCLEAR POWER PLANTS**

#### **TOPICAL REPORT BQ-TOP-1, 2007 EDITION, REVISION 3**

#### **1.0 INTRODUCTION**

By letter dated July 31, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18212A362), Bechtel Power Company (Bechtel) submitted the Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report (hereafter referred to as Bechtel QATR) BQ-TOP-1, 2007 Edition, Revision 3, for the U.S. Nuclear Regulatory Commission (NRC) staff's review.

#### **2.0 REGULATORY BASIS**

The Commission's regulatory requirements related to Quality Assurance (QA) programs for non-licensees are set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.4(b)(7)(ii). This regulation requires that a change to an NRC-accepted QA program description from non-licensees (i.e., architect/engineers, nuclear steam system suppliers, fuel suppliers, constructors, etc.) must be submitted to the NRC. The NRC will review the proposed QA program description for acceptability, to ensure that the applicable requirements of Appendix B to 10 CFR Part 50 are satisfied.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 establishes QA requirements for the design, fabrication, construction, and testing of structures, systems, and components (SSCs) of the facility. The pertinent requirements of Appendix B to 10 CFR Part 50 apply to all activities affecting the safety-related functions of those SSCs and include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying.

#### **3.0 EVALUATION**

The Bechtel QATR revision was submitted by letter dated July 31, 2018, in accordance with the provisions of 10 CFR 50.4(b)(7)(ii). The letter included Bechtel QATR, BQ-TOP-1, 2007 Edition, Revision 3. In evaluating the adequacy of the Bechtel QATR, the NRC staff used the guidance contained in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Section 17.5, Revision 0, "Quality Assurance Program Description – Design Certification, Early Site Permit and New License Applicants," dated March 2007 (ADAMS Accession No. ML063190019) hereafter referred to as SRP Section 17.5, which provides acceptance criteria for quality assurance program descriptions based on American Society of Mechanical Engineers (ASME) Standard NQA-1, "Quality Assurance Program for Nuclear Facilities," 1994 Edition.

Bechtel's QATR, BQ-TOP-1, 2007 Edition, Revision 3, included changes in the organization of Bechtel, changes in job titles and line of reporting, adoption of Regulatory Issue Summary (RIS) 2016-01, "Nuclear Energy Institute Guidance for the use of Accreditation in lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services," along with minor corrections and other editorial changes. Bechtel's organizational changes

Enclosure

consisted of title changes and several changes in the lines of reporting. The NRC staff reviewed the organizational changes, using the guidance of NUREG-0800, Section 17.5, and determined that Revision 3 to Bechtel's QATR, continues to meet the requirements of Appendix B to 10 CFR Part 50. Specifically, the staff's review confirmed that the revised Bechtel QATR continues to ensure that persons and organizations performing quality assurance functions have the required authority and organizational freedom and remain sufficiently independent from cost and schedule when opposed to safety considerations.

Bechtel's QATR provides changes to address an alternative for performing commercial grade surveys when procuring commercial grade calibration and testing services. The NRC staff reviewed these changes and finds they meet the conditions described in RIS 2016-01. The NRC staff finds that the alternative addressed in Subsection 7.5 of Bechtel's QATR to be an acceptable method for suppliers of basic components to use the International Laboratory Accreditation Cooperation (ILAC) accreditation process in lieu of performing commercial grade surveys for procurement of calibration and testing services performed by domestic and international laboratories accredited by ILAC signatories as part of the commercial grade dedication process.

The other changes were minor corrections and editorial changes. The NRC staff reviewed the minor changes and determined they were typographical changes (including renumbering) and changes for consistency. The NRC staff concluded these changes did not reduce the level of commitment in the QATR.

#### 4.0 CONCLUSION

The NRC staff used the acceptance criteria of NUREG-0800, Section 17.5, as the basis for evaluating the acceptability of the Bechtel QATR, BQ-TOP-1, 2007 Edition, Revision 3 for conformance with the applicable requirements of Appendix B to 10 CFR Part 50. The NRC staff concludes that Bechtel's QATR BQ-TOP-1, Revision 3, follows the NRC guidance contained within and conforms to the format of NUREG-0800, Section 17.5, complies with Appendix B to 10 CFR Part 50 requirements for the QA program, and is therefore, acceptable.

#### 5.0 REFERENCES

1. Bechtel Power Company letter to NRC, "Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report, BQ-TOP-1, 2007 Edition, Revision 3," dated July 31, 2018 (ADAMS Accession No. ML14071A512).
2. NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition, Section 17.5 Revision 0, "Quality Assurance Program Description – Design Certification, Early Site Permit and New License Applicants," dated March 2007 (ADAMS Accession No. ML063190019).
3. NRC RIS 2016-01, "Nuclear Energy Institute Guidance for Use of Accreditation in lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services," dated March 16, 2016 (ADAMS Accession No. ML15075A434).

Principal Contributor: Andrea Keim

Date: February 2019