

June 18, 2015

Rajwant S. Jolly
Manager of Quality Assurance
Bechtel Power Corporation
5275 Westview Drive
Frederick, MD 21703

SUBJECT: FINAL SAFETY EVALUATION FOR BECHTEL TOPICAL REPORT, BQ-TOP-1, 2007 EDITION, REVISION 2, "QUALITY ASSURANCE PROGRAM FOR NUCLEAR POWER PLANTS" (TAC NO. ME3676)

Dear Mr. Jolly:

By letter dated March 4, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14071A512), Bechtel Power Company (Bechtel) submitted Bechtel Quality Assurance (QA) Program for Nuclear Power Plants Topical Report (QATR), BQ-TOP-1, Revision 2, to the U.S. Nuclear Regulatory Commission (NRC) staff for review. The revision to Bechtel QATR BQ-TOP-1 includes changes in the organization of Bechtel, along with several corrections and other editorial changes.

By letter dated August 18, 2014 (ADAMS Accession No. ML14212A617), the NRC staff transmitted a request for additional information (RAI). By letter dated October 13, 2014 (ADAMS Accession No. ML14293A538), Bechtel responded to the RAI. The NRC and Bechtel staff participated in a conference call on November 6, 2014, for a follow-up discussion related to the RAI and the Bechtel response. By letter dated December 18, 2014 (ADAMS Accession No. ML14358A114), Bechtel provided additional clarification to the NRC staff.

The NRC staff has reviewed the Bechtel QATR BQ-TOP-1, Revision 2, and supporting documentation. Based on its review, the NRC staff finds that the QA program described in the Bechtel QATR BQ-TOP-1, Revision 2, as supplemented by the RAI responses and the December 18, 2014, clarification, meet the criteria of Appendix B to Title 10 of the *Code of Federal Regulations* Part 50 and is, therefore, acceptable. The associated safety evaluation (SE) is enclosed.

In accordance with the guidance provided on the NRC website, we request that Bechtel, publish an accepted version of the topical report (TR), Bechtel QATR BQ-TOP-1, Revision 2, within three months of receipt of this letter. The accepted version shall incorporate this letter and the enclosed final SE after the title page. Also, the accepted version must contain historical review information, including NRC RAI and your responses after the title page. The accepted version shall include a "-A" (designating accepted) following the TR identification symbol.

If future changes to the NRC's regulatory requirements affect the acceptability of this TR, Bechtel and/or licensees referencing it will be expected to revise the TR appropriately, or justify its continued applicability for subsequent referencing.

R. Jolly

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If you have any questions or need additional information, please feel free to contact the NRC project manager for the TR, Lydiana Alvarado. Ms. Alvarado can be reached at 301-415-3550 or via e-mail at Lydiana.Alvarado@nrc.gov.

Sincerely,

/RA/

Mirela Gavrilas, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Enclosure:
Safety Evaluation

R. Jolly

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Sincerely,

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Mirela Gavrilas, Deputy Director
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Office of Nuclear Reactor Regulation

Enclosure:
Safety Evaluation

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DATE	05/19/2015	05/20/2015	04/08/2015	05/26/2015	06/18/2015

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SAFETY EVALUATION OF THE
BECHTEL QUALITY ASSURANCE PROGRAM
FOR NUCLEAR POWER PLANTS TOPICAL REPORT
BQ-TOP-1, REVISION 2

1.0 INTRODUCTION

By letter dated March 4, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14071A512), 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, Revision 2, for the U.S. Nuclear Regulatory Commission (NRC) staff's review. By letter dated August 18, 2014 (ADAMS Accession No. ML14212A617), the NRC transmitted a request for additional information (RAI) to Bechtel. By letter dated October 13, 2014 (ADAMS Accession No. ML14293A538), Bechtel responded to the RAI. The NRC and Bechtel staff participated in a conference call on November 6, 2014, for a follow-up discussion related to the RAI and the Bechtel response. By letter dated December 18, 2014 (ADAMS Accession No. ML14358A114), Bechtel provided additional clarification to the NRC.

2.0 REGULATORY BASIS

The Commission's regulatory requirements related to quality assurance 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 a NRC-accepted quality assurance 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 quality assurance program description for acceptability, to ensure that the applicable requirements of Appendix B to 10 CFR Part 50 will be satisfied.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 establishes quality assurance 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 March 4, 2014, in accordance with the provisions of 10 CFR 50.4(b)(7)(ii). The letter included Bechtel QATR, BQ-TOP-1, and Revision 2 (provided in Enclosure 2 thereto). 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 Section 17.5, which provides acceptance criteria for quality assurance program descriptions for non-licensees.

ENCLOSURE

Bechtel's QATR, BQ-TOP-1, Revision 2, included changes in the organization of Bechtel, along with some corrections and other editorial changes. The Bechtel organizational changes 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 2 to Bechtel's QATR, continues to meet the requirements of Appendix B to 10 CFR Part 50. Specifically, the NRC staff reviewed 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. The other changes were minor grammar and editorial changes.

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, Revision 2, 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 2, 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 quality assurance 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 2," dated March 4, 2014 (ADAMS Accession No. ML14071A512).
2. NRC letter to Bechtel Power Company, "Request for Additional Information Regarding to Bechtel Quality Assurance Program for Nuclear Power Plants Topical Report BQ-TOP-1, Revision 2," dated August 18, 2014 (ADAMS Accession No. ML14212A617).
3. Bechtel Power Company letter to NRC, "Bechtel Quality Assurance Program for Nuclear Power Plants, BQ-TOP-1, Revision 2," dated October 13, 2014 (ADAMS Accession No. ML14293A538).
4. Bechtel Power Company letter to NRC, "Bechtel Quality Assurance Program for Nuclear Power Plants, BQ-TOP-1, Revision 2," dated December 18, 2014 (ADAMS Accession No. ML14358A114).
5. 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).

Principal Contributor: Thomas Kendzia

Date: June 18, 2015