



U.S. Department of Energy
Office of River Protection

P.O. Box 450
Richland, Washington 99352

02-OSR-0564

Mr. R. F. Naventi, Project Manager
Bechtel National, Inc.
2435 Stevens Center
Richland, Washington 99352

Dear Mr. Naventi:

CONTRACT NO. DE-AC27-01RV14136 - CONDITIONAL PARTIAL APPROVAL OF
BECHTEL NATIONAL, INC. (BNI) AUTHORIZATION BASIS CHANGE NOTICE (ABCN)
ABCN-24590-01-00006

- References:
1. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Revision 0 of Authorization Basis Change Notice ABCN-24590-01-00006 (ABAR-W375-00-00013)," CCN-021275, dated July 16, 2001.
 2. ORP letter from R. C. Barr to R. F. Naventi, BNI, "Office of Safety Regulation Partial Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notice, ABCN-24590-01-00006," 01-OSR-0311, dated September 17, 2001.
 3. BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Response to the Office of Safety Regulation's Request for Additional Information for Approval of Revision to Standards Requirements Document," CCN-035139, dated July 18, 2002.

This letter provides conditional partial approval of BNI ABCN-24590-01-00006 and transmits the associated Safety Evaluation Report (SER), which documents the U.S. Department of Energy, Office of River Protection (ORP) evaluation of the additional information provided by BNI in support of the change proposed for SRD SC 1.0-1.

In Reference 1, BNI submitted proposed amendments to the Safety Requirements Document (SRD) and the Integrated Safety Management Plan (ISMP). In Reference 2, ORP approved all requested changes except for the proposed change to delete the ISMP as an implementing standard from SRD Safety Criterion (SC) 1.0-1. The SER provided with ORP's September 17, 2001, partial approval noted that if the Contractor could "demonstrate that other SCs provide equivalent standards that the proposed deleted standards provide ... deletion of the ISMP as an implementing standard would be acceptable for this SC." In Reference 3, BNI provided additional information supporting the proposed change to delete the ISMP as an implementing standard from SRD SC 1.0-1.

The SRD currently cites ISMP Section 4.1, "Safety Management Process," and ISMP Chapter 5.0, "Process Safety Management," as implementing codes and standards for SC 1.0-1. BNI has proposed deleting ISMP Section 4.1 and Chapter 5.0 as implementing standards for SC 1.0-1 because other SCs commit them to a program of acceptable management practices, technologies, procedures and operations. None of the safety criteria are proposed to be changed. Except for the addition of a supporting paragraph in Appendix I of the SRD, the proposed amendment would change only the implementing codes and standards portion of SC 1.0-1. Reference 3 provided additional information to support this proposed change. Attachment 1 of Reference 3 is a table providing a "Comparison of ISMP Section 4.1 and Chapter 5.0 to SRD Volume II Safety Criteria."

Based upon the information in Reference 3, and the attached SER, the changes are acceptable or conditionally acceptable as noted in the SER, and there is reasonable assurance that the health and safety of the public, the workers, and the environment will not be adversely affected by those changes, and that they comply with applicable laws, regulations, and River Protection Project Waste Treatment and Immobilization Plant contractual requirements.

As part of the amendment implementation process, please submit within 14 days of receipt of this letter the revised pages of the SRD, identifying all revisions to date. This amendment is effective immediately and shall be fully implemented within 30 days; i.e., the provisions of the amendment may be used immediately; within 30 days, controlled copies of the SRD, and subordinate documents must be modified to reflect the changes associated with this amendment.

If you have any questions, please contact me, or your staff may call Walt Pasciak, Safety Regulation Division, (509) 373-9189.

Sincerely,

Roy J. Schepens
Manager

OSR: WJP

Attachment

**Safety Evaluation Report (SER)
of Proposed Authorization Basis Change Notice (ABCN)
ABCN-24590-01-00006
to the Safety Requirements Document (SRD)
for the River Protection Project Waste Treatment and Immobilization Plant (WTP)**

1.0 INTRODUCTION

The WTP authorization basis is the composite of information provided by the Contractor in response to radiological, nuclear, and process safety requirements that is the basis on which the U.S. Department of Energy, Office of River Protection (ORP) grants permission to perform regulated activities. The authorization basis includes that information requested by the Contractor for inclusion in the authorization basis and subsequently accepted by the ORP. The authorization basis for the WTP includes the SRD¹ and the Integrated Safety Management Plan (ISMP).² The SRD contains the approved set of radiological, nuclear and process safety standards and requirements, which if implemented, provide adequate protection of workers, the public, and the environment against the hazards associated with the operation of the facility. The ISMP contains the safety management practices developed specifically for the project in the areas of design, construction, commissioning, and operation.

By letter dated July 16, 2001,³ Bechtel National, Inc., (the Contractor) submitted proposed amendments to the SRD and ISMP. By letter dated September 17, 2001,⁴ ORP approved all requested changes except for the proposed change to delete the ISMP as an implementing standard from SRD Safety Criterion (SC) 1.0-1. The SER provided with ORP's September 17, 2001, partial approval noted that if the Contractor could "demonstrate that other SCs provide equivalent standards that the proposed deleted standards provide ... deletion of the ISMP as an implementing standard would be acceptable for this SC." By letter dated July 18, 2002,⁵ the Contractor provided to ORP additional information supporting the proposed change to delete the ISMP as an implementing standard from SRD SC 1.0-1. This SER documents the ORP evaluation of the additional information provided by the Contractor in support of the change proposed for SRD SC 1.0-1 in ABCN-24590-01-00006.

¹ 24590-WTP-SRD-ESH-01-001-01, *Safety Requirements Document, Volume I* and 24590-WTP-SRD-ESH-01-001-02, *Safety Requirements Document, Volume II*.

² 24590-WTP-ISMP-ESH-01-001, *Integrated Safety Management Plan*.

³ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Revision 0 of Authorization Basis Change Notice ABCN-24590-01-00006 (ABAR-W375-00-00013)," CCN 021275, dated July 16, 2001.

⁴ ORP letter from R. C. Barr to R. F. Naventi, BNI, "Office of Safety Regulation Partial Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notice, ABCN-24590-01-00006," 01-OSR-0311, dated September 17, 2001.

⁵ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Response to the Office of Safety Regulation's Request for Additional Information for Approval of Revision to Standards Requirement Document," CCN 035139, dated July 18, 2002.

2.0 BACKGROUND

The SRD contains the set of radiological, nuclear, and process safety standards necessary to ensure adequate protection of the health and safety of workers, co-located workers, the public, and the environment from radiological, nuclear, and process hazards. The SRD standards are developed by an iterative process. Included in the development process is a continuing review of industry practices, particularly those referenced in the SRD, and review of the results of the process hazards and accident analyses as they evolve with the design of the facility for potential impacts on the SRD standards used to ensure protection of the public and workers.

The ISMP contains the safety management practices developed specifically for the project in the areas of design, construction, commissioning, and operation. The management practices ensure implementation of the corporate policy that no activities are more important than protecting the health and safety of workers, the public, and the environment. The ISMP documents the process used to incorporate laws, regulations, and standards applicable to the nuclear, radiological, and process safety aspects of the project into programs for facility design, construction, commissioning, and operation. At this stage of the project, the ISMP largely reflects information relevant to design and construction.

The SRD currently cites ISMP Section 4.1, "Safety Management Process" and ISMP Chapter 5.0, "Process Safety Management" as implementing codes and standards for SC 1.0-1. The Contractor has proposed deleting ISMP Section 4.1 and Chapter 5.0 as implementing standards for SC 1.0-1 because other SCs commit the Contractor to a program of acceptable management practices, technologies, procedures and operations. None of the safety criteria themselves are proposed to be changed. The proposed amendment would only change the implementing codes and standards portion of SC 1.0-1. The Contractor has provided additional information to support this proposed change in its July 18, 2002, letter. Attachment 1 of that letter is a table providing a "Comparison of ISMP Section 4.1 and Chapter 5.0 to SRD Volume II Safety Criteria". Attachment 1 indicates where the Contractor considers the SRD to provide standards equivalent to those cited from the ISMP and supports the Contractor's claim that deleting the ISMP as an implementing standard is valid.

3.0 EVALUATION

3.1 Proposed Deletion of ISMP Section 4.1

3.1.1 Proposed Deletion of Section 4.1: The text in ISMP Section 4.1 states that the Project safety management processes are developed through the safety approach as described in ISMP Chapter 1.0.

Evaluation (acceptable): The text in ISMP Section 4.1 is introductory in nature. The proposed change is acceptable because the introductory requirements described in ISMP Section 4.1 are contained in SRD Volume II, Appendix A, and the proposed change is not a reduction in commitment or effectiveness.

- 3.1.2 Proposed Deletion of Section 4.1.1: The text in ISMP Section 4.1.1 states that safety management processes are identified and developed in the SRD, and that the SRD also includes discussion of the process for developing the SRD. The rest of ISMP Section 4.1.1 describes benefits of the standards-based safety management approach.

Evaluation (acceptable): The SRD is already developed and approved by DOE. SRD Volume II, Appendix A provides details of standards selection. ABCN 24590-WTP-ABCN-ESH-01-001, Revision 1,⁶ proposed to add a new Chapter 11.0, "Maintenance of the SRD" to Appendix A to address maintenance of requirements and standards. By letter dated October 3, 2002,⁷ ORP approved this change. The proposed change is acceptable because the SRD process described in ISMP Section 4.1.1, including maintenance of requirements and standards, is adequately covered in SRD Volume II, Appendix A, and because the benefits discussion in ISMP Section 4.1.1 does not impose commitments or requirements. The proposed change is not a reduction in commitment or effectiveness.

- 3.1.3 Proposed Deletion of Section 4.1.2: The text in ISMP Section 4.1.2 states that through the SRD development process, safety management programs are identified that protect the worker and public through implementation of regulatory requirements, through the programs themselves, and through controls on design, operation, and maintenance.

Evaluation (acceptable): The SRD development and maintenance process is adequately addressed by SRD Volume II, Appendix A (see Item 3.1.2 in this SER). The programmatic requirements cited are listed as examples that are covered more completely elsewhere in the SRD. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.4 Proposed Deletion of Section 4.1.2.1: The text in ISMP Section 4.1.2.1 describes commitments and/or requirements for nuclear and process safety.

Evaluation (acceptable): The commitments and/or requirements for nuclear and process safety described in ISMP Section 4.1.2.1 are adequately covered by SRD Volume II, Chapters 1.0 and 3.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.5 Proposed Deletion of Section 4.1.2.2: The text in ISMP Section 4.1.2.2 describes commitments and/or requirements for engineering and design.

⁶ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmittal for approval: Authorization Basis Change Notice 24590-WTP-ABCN-ESH-01-001, Revision 1, Revision to ISM Process & Defense in Depth (SRD) Appendices A & B," CCN 033132, dated July 3, 2002.

⁷ ORP letter from R. J. Schepens to R. F. Naventi, BNI, "Approval Of Bechtel National, Inc (BNI) Authorization Basis Change Notices (ABCN) 24590-WTP-ABCN-ESH-01-001, Revision 1, 24590-WTP-ABCN-ESH-01-029, Revision 1, and Partial Approval Of ABCN 24590-WTP-ABCN-ESH-02-019, Revision 0," 02-OSR-0449, dated October 3, 2002.

Evaluation (acceptable): The commitments and/or requirements for engineering and design described in ISMP Section 4.1.2.2 are adequately covered by SRD Volume II, Chapter 4.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.6 Proposed Deletion of Section 4.1.2.3: The text in ISMP Section 4.1.2.3 describes commitments and/or requirements for radiation protection.

Evaluation (acceptable): The commitments and/or requirements for radiation protection described in ISMP Section 4.1.2.3 are adequately covered in SRD Volume II, Chapter 5.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.7 Proposed Deletion of Section 4.1.2.4: The text in ISMP Section 4.1.2.4 describes commitments and/or requirements for commissioning.

Evaluation (acceptable): The commitments and/or requirements for commissioning described in ISMP Section 4.1.2.4 are adequately covered in SRD Volume II, Chapter 6.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.8 Proposed Deletion of Section 4.1.2.5: The text in ISMP Section 4.1.2.5 states that safety management programs included under Management and Operations Programs establish principles for conduct of day-to-day operations that are important in maintaining a safe facility; lists 12 topics included in these programs; and states that these programs are defined in SRD Volume II, Chapter 7.0.

Evaluation (acceptable): The commitments and/or requirements for safety management programs described in ISMP Section 4.1.2.5 are adequately covered in SRD Volume II, Chapter 7.0; SRD SC 6.0-1; SRD Appendix I, Item 4.0 (7); SRD Appendix I Item 5.1(2); PSAR Volume I, Chapter 17; and the Quality Assurance Manual. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.9 Proposed Deletion of Section 4.1.2.6: The text in ISMP Section 4.1.2.6 describes commitments and/or requirements for deactivation and decommissioning.

Evaluation (acceptable): The commitments and/or requirements for deactivation and decommissioning described in ISMP Section 4.1.2.6 are adequately covered by SRD Volume II, Chapter 8.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.10 Proposed Deletion of Section 4.1.3: The text in ISMP Section 4.1.3 describes development and configuration control of plans, procedures, and standards selection for all work activities.

Evaluation (acceptable): The requirements for development and configuration control of plans, procedures, and standards selection described in ISMP Section 4.1.3 are

adequately covered by the SRD. SRD Volume II, SC 4.0-1 and 4.0-2 require configuration management of all facility activities, through deactivation, including safety, and that written procedures be established and implemented to manage changes. In conjunction with SRD Volume II, Chapter 7.0, "Management and Operations", Appendix B, "Implementing Standard for Defense in Depth," and Appendix C, "Implementing Standards," requirements and standards are adequately established in the SRD for developing policies, procedures, and instructions for safety management programs. Finally, SRD Volume II, Appendix A provides the ORP approved process for identifying, establishing, and maintaining (see Item 3.1.2 in this SER) the SRD. Therefore, the proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.1.11 Proposed Deletion of Section 4.1.4: The text in ISMP Section 4.1.4 addresses compliance with mandatory and non-mandatory statements in SRD Volume II, the role of the biannual SRD revision process in ensuring compliance with laws, regulations, and contractual commitments, and methods by which proposed changes to the SRD are reviewed and implemented subject to an established configuration management process.

Evaluation (conditionally acceptable): Reviewers questioned whether the requirements in paragraphs one and two of ISMP Section 4.1.4 had corresponding requirements or standards cited in the SRD. In a responding communication⁸, the Contractor proposed adding the following from ISMP Section 4.1.4 to SRD Volume II, Appendix I, Section 3.0, "Authorization Basis:"

"The authorization basis applies to the WTP project. Compliance to a standard which is included in Volume II of the SRD means that all mandatory statements (shall/will/must) applicable to nuclear, radiological, or process safety are implemented or deviations justified and approved by the DOE. Compliance with non-mandatory statements (should/may) are not required; but are reviewed and considered for each standard on an individual basis. This review is documented. Compliance to statements not applicable to nuclear, radiological, or process safety may in many cases be required to ensure compliance to regulations outside the scope of the DOE review (e.g., environmental protection); however, if no other regulatory entity requires compliance via the standard, compliance is not required to be reviewed on an individual basis."

The commitments and/or requirements in ISMP Section 4.1.4 for revising and changing the SRD are adequately covered in SRD Volume II, Appendix A. The commitments and/or requirements in ISMP Section 4.1.4 for compliance with mandatory and non-mandatory requirements will be adequately covered in SRD Volume II, Appendix I, with the proposed paragraph added to Section 3.0. The proposed change is acceptable, on the condition that the proposed paragraph is added to SRD Volume II, Appendix I, Section 3.0. The proposed change is not a reduction in commitment or effectiveness.

⁸ Communication between W. Spezialetti (BNI) and W. Pasciak (ORP), on November 1, 2002.

3.2 Proposed Deletion of ISMP Chapter 5.0

- 3.2.1 Proposed Deletion of Section 5.0: The text in ISMP Section 5.0 introduces and describes the purpose of all of Section 5.0.

Evaluation (acceptable): The text in ISMP Section 5.0 is introductory in nature. The proposed change is acceptable because the introductory requirements described in ISMP Section 5.0 are contained in SRD Volume II, SC 3.1-1, which dictates the use of the ISM Process for both chemical and radiological hazards, and SRD Volume II, Appendix A, which describes the ORP approved process for identifying, establishing, and maintaining (see Item 3.1.2 in this SER) the SRD. The proposed change is not a reduction in commitment or effectiveness.

- 3.2.2 Proposed Deletion of Section 5.1: The text in ISMP Section 5.1 describes the compilation of written process safety information that is maintained to enable WTP employees involved in operating processes to identify and understand the hazards posed. The compiled information covers the hazardous chemicals used, process technology, and equipment, and is maintained under the WTP configuration management system.

Evaluation (acceptable): The commitments and/or requirements for process safety information described in ISMP Section 5.1 are equivalent to the requirements in SRD Volume II, SC 3.1-2, and equivalent requirements for configuration management of process safety information are included in SRD Volume II, SC 4.0-1 and 4.0-2. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.3 Proposed Deletion of Section 5.2: The text in ISMP Section 5.2 describes the Contractor's responsibilities to ensure that all subcontractors work as safely as Contractor employees, describes subcontractor responsibilities to work safely, describes environment, safety and health (ES&H) and quality assurance (QA) program activities related to ensuring safe subcontractor performance, and describes how practices for prequalification, day-to-day monitoring, and regular reporting also contribute to ensuring that subcontractors conduct their work safely.

Evaluation (acceptable): The commitments and/or requirements in ISMP Section 5.2 for ensuring that all subcontractors work as safely as Contractor employees are adequately covered in SRD SC 1.0-9; SRD SC 7.1-2 (including Ad Hoc Implementing Standard for Project Integrated Safety Management Approach, Appendix I to the SRD Volume II, as the implementing standard); SRD SC 7.3-2 (under which other subcontractor requirements are implemented through the Quality Assurance Manual); SRD SC 7.3-11 (including ASME NQA-1-1989 as the implementing standard); and SRD SC 7.7-9 (including DOE M 232.1-1A as the implementing standard). The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.4 Proposed Deletion of Section 5.3: The text in ISMP Section 5.3 describes how the WTP configuration management program ensures that consistency to the technical baseline is established and maintained among design requirements, physical configuration, administrative controls, and facility documentation throughout the operating and

deactivation phases. Procedures for considering, approving, disapproving, and implementing changes are also described.

Evaluation (acceptable): ABCN-24590-01-00006 stated that ISMP Section 5.3 has equivalent requirements and standards in the SRD because: SRD Volume II, SC 4.0-1, 4.0-2, and 4.0-3 provide equivalent requirements for configuration management, with ISO 10007 identified as the implementing standard; the requirement for USQ evaluations is covered in SRD Volume II, SC 7.4-1; SRD Volume II, SC 7.4-3 requires procedures be developed and implemented to govern the need for and the performance of safety evaluations; and this will include the AB Maintenance procedure, which requires the WTP Project to assess impacts to the authorization basis. The equivalency comparison provided in ABCN-24590-01-00006 did not demonstrate that the requirements in ISMP Section 5.3 have completely equivalent requirements in SRD Volume II, SC 4.0-1, 4.0-2, 4.0-3, 7.4-1, and 7.4-3, because not all of the requirements have exact correspondence (for example, "11) Necessary changes to the master equipment list" in ISMP Section 5.3 does not have a direct correlation in the cited SRD Volume II safety criteria). However, the differences are minor, and would be adequately covered by the intent, procedures, and requirements imposed by the implementing standards and regulatory bases listed in the cited safety criteria (i.e., ISO 10007, DOE Guide 424.1-1, DOE/RL-96-0006). Thus, while there are some differences between ISMP Section 5.3 and the comparable requirements in SRD Volume II, SC 4.0-1, 4.0-2, 4.0-3, 7.4-1, and 7.4-3, the regulatory bases and implementing standards required by SRD Volume II will result in an outcome that is equivalent to the requirements in ISMP Section 5.3. Therefore, the proposed change is acceptable and there is no reduction in commitment or effectiveness.

- 3.2.5 Proposed Deletion of Section 5.4: The text in ISMP Section 5.4 describes how the Contractor will conduct and report compliance audits of the process safety management program.

Evaluation (acceptable): The commitments and/or requirements for compliance audits described in ISMP Section 5.4 are adequately covered in SRD Volume II, SC 7.3-10. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.6 Proposed Deletion of Section 5.5: The text in ISMP Section 5.5 describes how the appropriate technique for process hazard analysis (PHA) is chosen as the design matures, tailored to the information available and the complexity of the WTP processes, and documented.

Evaluation (acceptable): The commitments and/or requirements for PHA described in ISMP Section 5.5 are adequately covered in SRD Volume II, Appendix A. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.7 Proposed Deletion of Section 5.6: The text in ISMP Section 5.6 introduces and generally describes the content of the rest of the section.

Evaluation (acceptable): The proposed change is acceptable because ISMP Section 5.6 is introductory in nature and does not include any commitments or requirements.

- 3.2.8 Proposed Deletion of Section 5.6.1: The text in ISMP Section 5.6.1 describes how operating procedures provide instructions for safely operating the WTP, the kinds of safety-related information included in the operating procedures, methods for reviewing and making procedures available to employees, and hierarchy for safely implementing operating procedures.

Evaluation (acceptable): SRD Volume II, SC 7.2-5, 7.2-6, 7.2-7, and 7.2-8 require operating procedures and safe work practices be established and maintained to reflect changes in operating practice. ABCN 24590-WTP-ABCN-ESH-01-020, Rev. 0⁹ and Rev. 1,¹⁰ proposed to add DOE O 5480.19 (as tailored in SRD Volume II, Appendix C) as the implementing standard for SRD Volume II, SC 7.2-5, 7.2-6, 7.2-7, and 7.2-8. By letter dated September 13, 2002,¹¹ ORP conditionally approved this change. The operating procedures requirements and/or commitments described in ISMP Section 5.6.1 are adequately covered in SRD Volume II, SC 7.2-5, 7.2-6, 7.2-7, and 7.2-8. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.9 Proposed Deletion of Section 5.6.2: The text in ISMP Section 5.6.2 describes when and how the PHA and hazards analysis report (HAR) are updated to assure that the analyses are consistent with current processes or assumptions.

Evaluation (acceptable): All but one of the requirements for updating and maintaining the PHA and HAR described in ISMP Section 5.6.2 are covered in the SRD. The SRD includes requirements equivalent to those described in ISMP Section 5.6.2 for completing an annual hazard analysis in SRD Volume II, SC 3.1-7; for unresolved safety questions (USQs) in SRD Volume II, Section 7.4; and for configuration management in SRD Volume II, Section 4.0. One item of potential non-equivalency is due to the statement in ISMP Section 5.6.2 that "*At least annually* after the receipt of hazardous material at the WTP, the PHA and HAR are updated by a qualified team" (emphasis added). SRD Volume II, SC 3.1-7 states "The process hazard analysis shall be updated to reflect changes *concurrently with the annual update of the FSAR* by a qualified team..." (emphasis added). The difference between the two requirements is that one (ISMP Section 5.6.2) requires updating the PHA and HAR as frequently as necessary (possibly more often than annually) to remain consistent with the current process, whereas SRD Volume II, SC 3.1-7 commits the Contractor to updating the PHA only annually, concurrent with the FSAR update. Despite this difference, however, ORP concludes that SRD Volume II requirements provide equivalency for ISMP Section 5.6.2 because: (1) the USQ process (SRD Volume II, Section 7.4) imposes no time-specific limitations, and is to be invoked whenever certain, appropriate criteria are met (e.g., increased probability of safety occurrences, different types of safety occurrences not previously analyzed); and

⁹ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval: Contract Deliverable Revised Standards Approval Package and Associated Authorization Basis Change Notices in Support of the SRD Standards Approval Package Submittal," CCN 026385, dated January 15, 2002.

¹⁰ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmitted for Approval: Contract Deliverable Revised Standards Approval Package – Update and Revision 1 to Associated Authorization Basis Change Notices in Support of the SRD Standards Approval Package Submittal," CCN 028977, dated March 22, 2002.

¹¹ ORP letter from R. J. Schepens to R. F. Naventi, BNI, "Conditional Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notice (ABCN) 24590-WTP-ABCN-ESH-01-020, Rev. 1," 02-OSR-0427, dated September 13, 2002.

(2) configuration management (SRD Volume II, Section 4.0) requires that all changes be managed to ensure programmatic objectives, including safety, are fully achieved. Thus, while the exact words in ISMP Section 5.6.2 are not replicated in SRD Volume II, the combined effect of the PHA, USQ, and configuration management processes required by SRD Volume II will result in an outcome that is equivalent to the requirements in ISMP Section 5.6.2. Therefore, the proposed change is acceptable and there is no reduction in commitment or effectiveness.

- 3.2.10 Proposed Deletion of Section 5.6.3: The text in ISMP Section 5.6.3 describes how operator and employee training programs are developed and implemented to ensure the facility is operated safely.

Evaluation (acceptable): SRD Volume II, Chapter 7.2, "Training and Procedures," requires programs for training operations, maintenance, and technical support personnel, and requires development of procedures that include training and qualification to ensure safe operations and work practices. ABCN 24590-WTP-ABCN-ESH-01-020, Rev. 0 and Rev. 1, proposed to add DOE O 5480.20A (as tailored in SRD Volume II, Appendix C) as the implementing standard for SRD Volume II, SC 7.2-1, 7.2-2, 7.2-3, and 7.2-4, and DOE O 5480.19 (as tailored in SRD Volume II, Appendix C) as the implementing standard for SRD Volume II, SC 7.2-5, 7.2-6, 7.2-7, and 7.2-8. By letter dated September 13, 2002, ORP conditionally approved this change. The training program requirements and/or commitments described in ISMP Section 5.6.3 are adequately covered in SRD Volume II, Chapter 7.2. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.11 Proposed Deletion of Section 5.6.4: The text in ISMP Section 5.6.4 describes how, prior to operation with radioactive materials and chemicals, commissioning tests of the facility structures, systems and components (SSCs) and personnel are performed to confirm that safety equipment are functioning properly and personnel can conduct operations safely.

Evaluation (acceptable): SRD Volume II, Chapter 6.0, "Startup," requires a pre-operational testing program for Important to Safety SSCs, and that prior to the introduction of hazardous radioactive or process chemicals a pre-operational safety review be performed for equipment, operating procedures, and employees. ABCN 24590-WTP-ABCN-ESH-01-002, Revision 0¹² and Revision 1¹³, proposed changes to SRD Volume II, Section 6.0, "Startup", and addition of Appendix *, "Ad Hoc Implementing Standard for Startup". By letter dated September 26, 2002¹⁴, ORP conditionally approved these changes. The startup requirements and/or commitments described in ISMP Section 5.6.4 are adequately covered in SRD Volume II, Chapter 6.0. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

¹² Ibid 9.

¹³ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmittal for Approval: Authorization Basis Change Notice 24590-WTP-ABCN-ESH-01-002, Revision 1, Selection of Implementing Standard for Startup," CCN 035791, dated July 3, 2002.

¹⁴ ORP letter from R. J. Schepens to R. F. Naventi, BNI, "Conditional Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notice (ABCN) 24590-WTP-ABCN-ESH-01-002, Rev. 1," 02-OSR-0445, dated September 26, 2002.

("Appendix *" indicates next available appendix letter when incorporated into SRD.)

- 3.2.12 Proposed Deletion of Section 5.6.5: The text in ISMP Section 5.6.5 describes the establishment and implementation of procedures and programs (including training and QA) to maintain the integrity of process equipment.

Evaluation (acceptable): SRD Volume II, SC 7.6-1, 7.6-2, 7.6-3, and 7.6-4 require that a maintenance program be developed and implemented. ABCN 24590-WTP-ABCN-ESH-01-006, Rev. 0¹⁵ and Rev. 1¹⁶, proposed to add DOE O 433.1 (as tailored in SRD Volume II, Appendix C) as the implementing standard for SRD Volume II, SC 7.6-1, 7.6-2, 7.6-3, and 7.6-4. By letter dated August 15, 2002¹⁷, ORP conditionally approved this change. SRD Volume II, SC 7.3-2 requires that a written QA program be developed, implemented and maintained, with ASME NQA-1-1989 identified as the implementing standard. The proposed change is acceptable because the commitments and/or requirements for process equipment integrity described in ISMP Section 5.6.5 are adequately covered in SRD Volume II, SC 7.3-2, 7.6-1, 7.6-2, 7.6-3, and 7.6-4. The proposed change is not a reduction in commitment or effectiveness.

- 3.2.13 Proposed Deletion of Section 5.6.6: The text in ISMP Section 5.6.6 describes how hot work operations are reviewed and conducted, and how implementation of other safety work practices are developed.

Evaluation (acceptable): The commitments and/or requirements for implementation of other safety work practices described in ISMP Section 5.6.6 are adequately covered in SRD SC 4.5-19 and SC 7.2-8. The proposed change is acceptable and is not a reduction in commitment or effectiveness.

- 3.2.14 Proposed Deletion of Section 5.6.7: The text in ISMP Section 5.6.7 describes how incidents that have the potential to result in a major accident or a release of hazardous or radioactive material from the controlled area of the WTP are investigated and reported, and processes for corrective actions necessary to prevent recurrence.

Evaluation (acceptable): ABCN-24590-01-00006 stated that ISMP Section 5.6.7 refers to SRD Volume II, Section 7.7, "Reporting and Incident Investigation", and ABCN 24590-WTP-ABCN-ESH-01-00007¹⁸ proposed DOE M 232.1-1A as the implementing standard. The reference is correct, and by letter dated June 5, 2002,¹⁹ ORP approved ABCN 24590-

¹⁵ Ibid 9.

¹⁶ Ibid 10.

¹⁷ ORP letter from R. J. Schepens to R. F. Naventi, BNI, "Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notices 24590-WTP-ABCN-ESH-01-005, Rev. 1, and 24590-WTP-ABCN-ESH-01-006, Rev. 1," 02-OSR-0374, dated August 15, 2002.

¹⁸ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Transmittal for Approval – Authorization Basis Change Notice ABCN-24590-01-00007, Revision 0, Selection of Implementing Standard for Reporting and Incident Investigations", CCN 023763, dated October 19, 2001.

¹⁹ ORP letter from R. C. Barr to R. F. Naventi, BNI, "Office of Safety Regulation (OSR) Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notices ABCN-24590-01-00007, Revision 0, 24590-WTP-ABCN-ESH-01-022, Revision 0, 24590-WTP-ABCN-ESH-02-007, Revision 0, 24590-WTP-ABCN-ESH-02-008, Revision 0, 24590-WTP-ABCN-ESH-02-009, Revision 0," 02-OSR-0209, dated June 5, 2002.

WTP-ABCN-ESH-01-00007. The proposed change is acceptable because the commitments and/or requirements for incident investigations described in ISMP Section 5.6.7 are adequately covered by requirements in SRD Volume II, Section 7.7. The proposed change is not a reduction in commitment or effectiveness.

- 3.2.15 Proposed Deletion of Section 5.6.8: The text in ISMP Section 5.6.8 describes emergency response and preparedness for accidents that result in the need to take additional actions to protect the public, workers and environment from accidental releases of hazardous or radiological material.

Evaluation (acceptable): ABCN-24590-01-00006 stated that ISMP Section 5.6.8 refers to SRD Volume II, Section 7.8, "Emergency Preparedness," and that ABCN 24590-WTP-ABCN-ESH-01-003²⁰ proposed DOE/RL-94-02 as the implementing standard. The reference is correct, and by letter dated June 18, 2002²¹, ORP approved ABCN 24590-WTP-ABCN-ESH-01-003. The proposed change is acceptable because the commitments and/or requirements for emergency preparedness and response described in ISMP Section 5.6.8 are adequately covered by requirements in SRD Volume II, Section 7.8. The proposed change is not a reduction in commitment or effectiveness.

4.0 CONCLUSION

On the basis of the considerations described above, ORP has concluded that there is reasonable assurance that the health and safety of the public, the workers and the environment will not be adversely affected by the proposed ABCN changes, and that the accepted changes comply with applicable laws, regulations, and WTP contractual requirements. One proposed change is conditionally acceptable, as indicated above in Section 3.1.11.

²⁰ BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Contract No. DE-AC27-01RV14136 – Transmittal for Approval – Authorization Basis Change Notice 24590-WTP-ABCN-ESH-01-003, Revision 0, Selection of Implementing Standard for Emergency Preparedness," CCN 023762, dated October 19, 2001.

²¹ ORP letter from R. C. Barr to R. F. Naventi, BNI, "Approval of Bechtel National, Inc. (BNI) Authorization Basis Change Notices, 24590-WTP-ABCN-ESH-01-003, Revision 0, 24590-WTP-ABCN-ESH-01-008, Revision 1, 24590-WTP-ABCN-ESH-02-011, Revision 0, 24590-WTP-ABCN-ESH-02-013, Revision 0," 02-OSR-0232, dated June 18, 2002.