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ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: UniStar Nuclear, NRC Project No. 746
Submittal of Corrections to the Quality Assurance Program Description Topical
Report Proposed Revision 3

- References:
- 1) Letter UN# 06-007, from R. M. Krich (UniStar Nuclear) to U.S. NRC, "UniStar Nuclear, NRC Project No. 746, Pre-application Submittal of the Quality Assurance Program Description," dated July 31, 2006
 - 2) Letter UN# 06-008, from R. M. Krich (UniStar Nuclear) to U.S. NRC, "UniStar Nuclear, NRC Project No. 746, Submittal of the Quality Assurance Program Description as a Topical Report," dated August 8, 2006
 - 3) Letter from Stephanie M. Coffin (NRC) to R. M. Krich (UniStar Nuclear), "Acceptance for Review of Topical Report No. UN-TR-06-0001, Quality Assurance Program Description, UniStar Nuclear, Revision 0 (Project No. 746)," dated August 30, 2006
 - 4) Letter UN# 06-010, from R. M. Krich (UniStar Nuclear) to U.S. NRC, "UniStar Nuclear, NRC Project No. 746, Submittal of Revised Quality Assurance Program Description (QAPD) Topical Report," dated October 27, 2006
 - 5) Electronic mail from Joelle Starefos (NRC) to Rod Krich (UniStar Nuclear), "RAI: UniStar QAPD UN-TR-06-0001 Revision 1," dated Tuesday, November 28, 2006, 4:17 PM
 - 6) Letter from Stephanie M. Coffin (NRC) to R. M. Krich (UniStar Nuclear), "Revised Schedule for Review of Topical Report No. UN-TR-06-0001, Quality Assurance Program Description, UniStar Nuclear, Revision 1 Submitted October 27, 2006 (Project No. 746)," dated November 29, 2006
 - 7) Letter from Larry J. Burkhart (NRC) to R. M. Krich (UniStar Nuclear), "Request for Additional Information (RAI) Regarding Topical Report No. UN-TR-06-0001, Quality Assurance Program Description (QAPD), UniStar Nuclear (Project No. 746)," dated December 18, 2006
 - 8) Letter UN# 06-014, from R. M. Krich (UniStar Nuclear) to U.S. NRC, "UniStar Nuclear, NRC Project No. 746, Response to Request for Additional Information Regarding Proposed Revision 1 of the Quality Assurance Program Description Topical Report," dated December 22, 2006

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By letter dated July 31, 2006 (Reference 1), as amended by letter dated August 8, 2006 (Reference 2), UniStar Nuclear, LLC submitted proposed Revision 0 of its Quality Assurance Program Description (QAPD) Topical Report (TR) UN-TR-06-001 for NRC review. This TR described the UniStar Nuclear Quality Assurance (QA) Program covering activities of siting; design; fabrication; construction, including pre-operational testing; operation, including testing; maintenance; and modification of a U.S. Evolutionary Power Reactor (EPR).

Proposed Revision 0 of the QAPD was developed based on applicable NRC guidance, including draft guidance, available at that time. The QAPD was accepted by the NRC for it to begin its comprehensive review as documented in NRC letter dated August 30, 2006 (Reference 3). As a result of the NRC issuing revised draft guidance on September 22, 2006, UniStar Nuclear submitted proposed Revision 1 of the QAPD by letter dated October 27, 2006 (Reference 4).

Electronic (e) mail from Joelle Starefos of the NRC, dated November 28, 2006, transmitted the NRC Request for Additional Information regarding proposed Revision 1 of the QAPD (Reference 5). The NRC issued its revised review schedule by letter dated November 29, 2006 (Reference 6), and by letter dated December 18, 2006 (Reference 7), the NRC confirmed that the RAI had been transmitted by e-mail and that UniStar Nuclear had agreed to respond by December 29, 2006. By letter dated December 22, 2006 (Reference 8), UniStar Nuclear provided its response to the RAI and submitted proposed Revision 2 of the TR.

As a result of NRC questions raised during a conference call between representatives of the NRC and UniStar Nuclear on February 20, 2007, and in an e-mail from Larry Burkhart of the NRC dated February 22, 2007, we identified a number of omissions in proposed Revision 2 of the QAPD. Accordingly, the enclosure to this letter contains the corrected pages of the QAPD. These pages are identified as proposed Revision 3 and the changes are identified by bars in the right-hand margin.

If you have any questions or need additional information, please contact me at (410) 864-6441.

Respectfully,



R. M. Krich
UniStar Nuclear Development, LLC

Enclosure: Proposed Revision 3 of Topical Report UN-TR-06-001 containing corrected pages only

cc: NRC Project Manager, U.S. EPR Combined License Application
NRC Project Manager, U.S. EPR Design Certification Application

ENCLOSURE

Proposed Revision 3 of Topical Report UN-TR-06-001 containing corrected pages only

**QUALITY ASSURANCE
PROGRAM DESCRIPTION**

UniStar Nuclear QAPD

Revision 3

Approved by _____ Date _____
G. Vanderheyden
President, UniStar Nuclear

SUMMARY OF ALTERATIONS

Revision	Summary of Revision or Change
0	Initial Issue
1	Revised to address changes made in the Final Revision to Standard Review Plan NUREG-0800 Section 17.5, "Quality Assurance Program Description – Design Certification, Early Site Permit and New License Applicants," and to make editorial corrections.
2	Revised to address NRC Request for additional information
3	Revised: Pages 1 and 2 to Revision 3. Pages 16, 18, and 93 to include the word "fabrication" in the sentences covering siting, design, and construction. Pages 46 and 47 to add a commitment to Supplement 2S-2 of NQA-1-1994, except for qualification of Nondestructive Examination personnel. Page 57 to add risk-significant nonsafety-related equipment to the scope of cleanliness controls during the operations phase.

SECTION B

QUALITY ASSURANCE PROGRAM

The elements of the UniStar Nuclear QA Program described in this section and associated procedures implement the requirements of:

- Criterion 2, Quality Assurance Program, of 10 CFR 50, Appendix B; and
- Basic Requirement 2 and Supplement 2S-4 of NQA-1-1994.

PROGRAM BASIS

The UniStar Nuclear Quality Assurance Program complies with 10 CFR 50, Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,” and applies to all levels of the organization, including contractors, who perform QA Level 1 activities. The QA program provides control over activities affecting the quality of the identified structures, systems, and components to an extent consistent with their importance to safety. ASME NQA-1-1994 Parts I and Part II, “Quality Assurance Requirements for Nuclear Facility Applications” are used in conjunction with 10 CFR 50, Appendix B, and provide additional detailed quality assurance guidelines which are committed to in this QAPD. The UniStar Nuclear QAPD describes the UniStar Nuclear overall compliance with 10 CFR 50, Appendix B and commitments to ASME NQA-1-1994. This document states the UniStar Nuclear policies, assigns responsibilities, and specifies requirements governing implementation of the QA Program to the siting, design, fabrication, construction, and operation of the UniStar Nuclear facilities. All 18 criteria of 10 CFR 50, Appendix B have been addressed to identify the scope of the QA Program applied to UniStar Nuclear facilities. QA requirements will also apply to contractors as delineated in procurement documents controlled under Section D, “Procurement Document Control,” of this QAPD. The necessary management measures to control the quality of subcontracted activities for the UniStar Nuclear design, procurement, and installation and testing of QA Level 1 components and activities have been established in this QAPD. The QAPD will be reviewed for needed revisions as described in Appendix 1, Provisions For Change.

Specific processes and controls, which implement the provisions of 10 CFR 50, Appendix B and the commitment to ASME NQA-1-1994, as specified in this QAPD, are delineated in procedures.

The QA Program provides for the planning and accomplishment of activities affecting quality under suitably controlled conditions. Controlled conditions include the use of appropriate equipment, suitable environmental conditions for accomplishing the activity, such as adequate cleanliness, and assurance that all prerequisites for the given activity have satisfied. The UniStar Nuclear QA Program provides for special controls, processes, test equipment, tools and skills to attain the required quality and verification of quality. QA requirements contained in this QAPD are also invoked on UniStar Nuclear contractors for their contracted scope of work. When work cannot be accomplished as specified in implementing QA procedures, or accomplishment of such work would result in an adverse condition, work is stopped until proper corrective action is

The QA Level 2 program description is provided in Section V, "Nonsafety-related SSC Quality Controls," of this QAPD, which includes Nonsafety-Related SSCs That Perform Safety Significant Functions and Nonsafety-Related SSCs Credited for Regulated Events. These requirements are implemented by UniStar Nuclear and UniStar Nuclear contractors through the use of approved QA programs and procedures. The UniStar defined QA Level 2 SSCs and their associated activities i.e., those SSCs that are not Quality Level 1 and do not affect the functions of the safety-related or important to safety SSCs, are evaluated against the requirements in Section V of this QAPD. This evaluation identifies which QA controls are needed to ensure these SSCs meet their intended functions and do not affect the functions of the safety-related SSCs. This evaluation may also include nuclear industry precedent in the application of these augmented QA requirements.

The two QA Levels have been established and apply throughout the life of the facility from licensing and siting through design, fabrication, construction, testing, startup, operation, maintenance, and modification.

QA LEVEL 1 REQUIREMENTS

The QA Level 1 Program shall conform to the criteria established in 10 CFR 50, Appendix B, and the commitment to NQA-1-1994. The QA Level 1 program shall be applied to those structures, systems, components, and administrative controls that have been determined to be safety-related.

QA LEVEL 2 REQUIREMENTS

The QA Level 2 program is an owner-defined QA program that uses the ASME NQA-1 standard as guidance. The general QA Level 2 requirements are described in Section V, "Nonsafety-Related SSC Quality Controls." For contractors, the QA Level 2 program shall be described in documents that must be approved by UniStar Nuclear. The QA Level 2 program shall be applied to Owner designated structures, systems, components, and activities.

QUALITY ASSURANCE TRAINING

UniStar Nuclear employees who perform QA Level 1 activities receive UniStar Nuclear QA Indoctrination Training. This training includes general criteria, including introduction to applicable codes, standards, QA Procedures, QA Program elements, and job responsibilities and authorities. UniStar Nuclear personnel assigned to perform QA Level 1 activities are also required to complete training in the specific UniStar Nuclear QA procedures needed to perform their job roles and responsibilities as assigned by their supervisor. Detailed QA training is provided on the UniStar Nuclear QA Program and job specific QA procedures prior to an employee beginning QA Level 1 work. Supervision is responsible for ensuring that personnel performing work under their supervision are appropriately trained and qualified to perform assigned work. Sufficient managerial depth is provided to cover absences of incumbents. When required by code, regulation, or standard, specific qualification and selection of personnel is conducted in accordance with those requirements as established in the applicable UniStar procedures. UniStar Nuclear will also include a version of QA Indoctrination Training as part of the general employee training given to all full-time employees. The Management Position

SECTION I

CONTROL OF SPECIAL PROCESSES

The elements of the UniStar Nuclear QA Program described in this section and associated procedures implement the requirements of:

- Criterion 9, Control of Special Processes, of 10 CFR 50, Appendix B; and
- Basic Requirement 9 and Supplement 9S-1 of NQA-1-1994.
- Supplement 2S-2 of NQA-1-1994, except for qualification of Nondestructive Examination personnel which is addressed here.

Processes affecting the quality of items or services shall be controlled by written procedures using drawings, checklists, travelers or other appropriate means. These means shall ensure that the process parameters are controlled and that specified environmental conditions are maintained. Special processes that control or verify quality, such as those used in welding, heat treating, and nondestructive examination, shall be performed by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

SPECIAL PROCESSES

For the purpose of this section, a special process is a process, the results of which are highly dependent on the control of the process or the skill of the operators, or both, and in which the specified quality cannot be readily determined by inspection or test of the product.

Special processes that control or verify quality shall be controlled according to the requirements of this section whether or not they are covered by existing codes and standards, or whether or not the quality requirements specified for an item exceed those of existing codes or standards

PERSONNEL, IMPLEMENTING DOCUMENTS, AND EQUIPMENT QUALIFICATIONS

Implementing UniStar Nuclear documents shall be used to ensure that process parameters are controlled and that the specified environmental conditions are maintained. Each special process shall be performed in accordance with appropriate implementing documents and these implementing documents shall include or reference:

- The responsibility of the organization performing the special process to adhere to the approved procedures and processes,
- Qualification requirements for personnel, implementing documents and equipment,
- Conditions necessary for accomplishment of the special process. These conditions shall include proper equipment, controlled parameters of the process and calibration requirements, and/or

- Requirements of applicable codes and standards, including acceptance criteria for the special process.

For special processes not covered by existing codes and standards or where quality requirements specified for an item exceed those of existing codes or standards, the necessary requirements for qualifications of personnel, procedures, or equipment shall be specified or referenced in the procedures or instructions.

QUALIFICATION/CERTIFICATION OF NONDESTRUCTIVE EXAMINATION (NDE) PERSONNEL

Nondestructive Examination (NDE) personnel performing QA Level 1 activities shall be certified in accordance with specified requirements.

In lieu of Supplement 2S-2, for qualification of Nondestructive Examination personnel, certification shall be to the applicable versions of the standards referenced in Section XI of the ASME code, as permitted for use by 10 CFR Part 50.55a, for performing nondestructive examinations required by ASME Code Sections III or Section XI, or design specifications, provided that other applicable rules contained in Section XI of the ASME Code are met

DOCUMENTATION

Records shall be maintained as appropriate in accordance with Section Q, "Records," for currently qualified personnel, processes and equipment of each special process.

- Controls for hoisting, rigging, and transport activities are established that protect the integrity of the item involved as well as potentially affected nearby structures and components. Applicable hoisting, rigging, and transportation regulations and codes shall be followed.
- Cleanliness controls for work on safety-related and risk-significant nonsafety-related equipment are required to be established that minimize the introduction of foreign material and maintain system/component cleanliness throughout maintenance or modification activities. Procedures require documented verification of absence of foreign material prior to system closure.

SPECIAL HANDLING TOOLS AND EQUIPMENT

Special handling tools and equipment shall be used and controlled as necessary to ensure safe and adequate handling. Special handling tools and equipment shall be inspected and tested at specified time intervals and in accordance with procedures to verify that the tools and equipment are adequately maintained.

Operators of special handling and lifting equipment shall be experienced or trained in the use the equipment.

MARKING AND LABELING

Measures shall be established for marking and labeling for the packaging, shipping, handling and storage of items as necessary to adequately identify, maintain and preserve the item. Markings and labels shall indicate the presence of special environments or the need for special controls if necessary.

APPENDIX 1

PROVISIONS FOR CHANGE

This QAPD is reviewed and revised as necessary to reflect any changes that occur during the siting, fabrication, design, construction, operation, including maintenance and modifications. In addition, this QAPD is revised when corrective actions, regulatory, organizational, or work scope changes warrant changes to the UniStar Nuclear QA Program. The UniStar Nuclear QAPD is maintained current through design, construction, and operation. The UniStar Nuclear QAPD is kept current as the design, construction, and operation activities progress, and appropriate changes are made based on any of the following:

- UniStar Nuclear lessons learned from audit and assessment findings,
- Program improvements identified from analysis of trends, and
- Changes due to regulations, commitments, reorganizations, revised project schedule, or program improvements from continuous review of assessment results and process improvement initiatives.

Any changes that reduce commitments in the approved QAPD, including those commitments that affect the QA Level requirements in this QAPD, will be submitted to the NRC for review and approval prior to implementation as required by 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(3). Changes that do not reduce commitments will be submitted in accordance with 10 CFR 50.54 and 10 CFR 50.55(f)(3), as applicable.

For the purposes of 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(3) the following are not considered a reduction in commitment.

- Quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items,
- The use of a QA standard approved by the NRC which is more recent than the QA standard in the licensee's current QA program at the time of the change;
- The use of a quality assurance alternative or exception approved by an NRC safety evaluation, provided that the bases of the NRC approval are applicable to the licensee's facility;
- The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles;
- The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text;
- The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the licensee is committed; and