

September 14, 2015

Mr. Mike Thomas  
Vice President, Regulatory and Public Affairs  
Uranerz Energy Corporation  
P.O. Box 50850  
1701 East E Street  
Casper, WY 82605-0850

SUBJECT: URANERZ ENERGY CORPORATION, NICHOLS RANCH PROJECT, SOURCE MATERIALS LICENSE SUA-1597, REQUEST FOR ADDITIONAL INFORMATION, ANNUAL FINANCIAL ASSURANCE ESTIMATE ADJUSTMENT (TAC NO. L00758)

Dear Mr. Thomas:

The U.S. Nuclear Regulatory Commission (NRC) received the annual financial assurance update for the Uranerz Energy Corporation (Uranerz) Nichols Ranch Project dated December 16, 2014. The report was made publicly available in the NRC's Agencywide Documents Access and Management System (ADAMS) as ML15021A177. The annual financial assurance submission was updated on March 13, 2015, and was made publicly available ADAMS as ML15078A044. NRC staff evaluated the contents of the cost estimate according to 10 CFR Part 40, Appendix A.

NRC staff requires additional information from Uranerz in order to complete the surety review. The request for additional information is provided in the enclosure. Within 35 days of the date of this letter, please either provide the information requested or inform us of the date you expect to provide the information. We are available to meet with you to discuss the requested information.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

M. Thomas

- 2 -

If you have any questions concerning this letter, please contact me, either by telephone at (301) 415-7777, or by e-mail at [ron.linton@nrc.gov](mailto:ron.linton@nrc.gov).

Sincerely,

***/RA/***

Ron C. Linton, Project Manager  
Uranium Recovery Licensing Branch  
Division of Decommissioning, Uranium Recovery,  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 040-09067  
License No.: SUA-1597

Enclosure:  
Request for Additional Information

cc: Mike Ploughe P.G. (WDEQ)

M. Thomas

- 2 -

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**ADAMS Accession No.: ML15253A780**

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**Request for Additional Information (RAI)**  
**Uranerz Energy Corporation, 2014-2015 Financial Assurance (Surety) Estimate**  
**Nichols Ranch In-Situ Recovery Project**

**RAI (1)**

Provide separate decommissioning cost estimates to the following elements listed in the cost estimate under contingency since these costs, identified by the licensee, are not unknown and unforeseen:

- Project Design
- Contractor Profit, Overhead, and Mobilization
- Pre-Construction Investigation
- Project Management
- On-Site Monitoring
- Long-term Administration & Licenses
- Site Security & Liability Assurance

Alternatively, the licensee may provide an adequate justification as to how these costs are already accounted for within the estimate.

**Description of Deficiency**

As currently presented, the surety estimate lists cost elements that should not be part of the contingency factor (10 CFR Part 40, Appendix A, Criterion 9(b)(1)(ii); Appendix C of NUREG-1569).

**Technical Basis**

10 CFR Part 40, Appendix A, Criterion 9(b)(1)(ii) requires that cost estimates include an adequate contingency factor.

The Total Restoration and Reclamation Cost Estimates table includes a line item for "CONTINGENCY (Miscellaneous & Unknown) (25%)" and identifies the following cost elements as included in the 25 percent contingency factor:

- Project Design
- Contractor Profit, Overhead, and Mobilization
- Pre-Construction Investigation
- Project Management
- On-Site Monitoring
- Long-term Administration & Licenses
- Site Security & Liability Assurance

The listed cost elements should not be categorized as being part of the contingency factor because all of the listed cost elements represent anticipated costs for decommissioning. In contrast, contingency costs are for *unknown and unforeseen* costs that are incorporated into the cost estimate through a contingency factor that helps to ensure coverage for unexpected

Enclosure

circumstances that could raise decommissioning costs. Estimated costs should be included for each of the listed cost elements. The 25 percent contingency amount should be calculated only after all costs are estimated. The way the cost estimate is currently structured, the cost estimate may not account for the full cost of decommissioning.

## **RAI (2)**

Provide financial assurance estimates to account for estimated reporting costs as required by NRC Materials License SUA-1597.

### **Description of Deficiency**

Appendix C (IV) of NUREG-1569 states, "Itemize estimated costs for engineering design, review, and change; mobilization; quality control; and radiological safety; *and any other costs not included in other estimation categories* [emphasis added]." The Willow Creek cost estimate does not appear to include itemized reporting costs and, therefore, may not account for the full cost of decommissioning.

### **Basis for Request**

For an independent third party to follow the requirements of the license and to complete decommissioning and reclamation activities, there would be professional, engineering and/or reporting costs as required in the license for items such as:

- Quarterly reporting. License Condition 11.1 A. states, "A quarterly report that includes a summary of the weekly excursion indicator parameter values, corrective actions taken, and the results obtained for all wells that were on excursion status during that quarter. This report shall be submitted to the NRC within 30 days following completion of the reporting period."
- Semi-annual reporting. License Condition 11.1 B. states, "A semi-annual report that discusses: status of production areas in operation (including last date of lixiviant injection), status of production areas in restoration, status of any long term excursions and a summary of MITs during the reporting period. This report shall be submitted to the NRC within 30 days following completion of the reporting period."
- Semi-annual effluent and environmental monitoring program reporting. License condition 11.1 D. states, "Consistent with Regulatory Position 2 of Regulatory Guide 4.14 (as revised), a semiannual report that summarizes the results of the operational effluent and environmental monitoring program."
- Annual Report. Section 5.2.2.4 of the License Application (tied to SUA-1597 by License Condition 9.2) states, "An annual report will be submitted to the NRC that includes the results of the annual audit of the radiation safety and ALARA programs required at Section 5.3, land use survey, monitoring data, corrective action program report, one of the semi-annual effluent and environmental monitoring reports, and description of activities approved by the SERP."

- Groundwater restoration reporting. Section 6.1.2 of the License Application (tied to SUA-1597 by License Condition 9.2) states, “The success of the restoration will be determined after the completion of the stability monitoring period (see Section 6.1.4). If no significant increasing trends in restoration values are identified, restoration will be deemed complete. A summary report requesting approval will be submitted.”
- Final Decommissioning Plan. Section 6.2.2 of the License Application (tied to SUA-1597 by License Condition 9.2) states, “A final decommissioning plan will be sent to the NRC for review and approval at least 12 months prior to the planned decommissioning of a wellfield or project area.”
- Decommissioning Structures and Equipment Plan. Section 6.2.6.2 of the License Application (tied to SUA-1597 by License Condition 9.2) states, “Uranerz will provide a plan for decommissioning structures and equipment (plan) to the NRC for review and approval at least 12 months before the planned commencement of decommissioning of such structures and equipment.”
- Final Status Survey Plan. License Condition 10.12 states, “The licensee will provide a final status survey plan for post-reclamation and decommissioning that demonstrates that residual radioactivity in soil and building structures meets the criteria in 10 CFR Part 40, Appendix A, Criterion 6(6).”
- Alternate concentration limits application. License Condition 10.6 states, “In submitting any license amendment application requesting review and license amendment approval of proposed alternate concentration limits (ACLs) pursuant to Criterion 5(B)(6), the licensee must also show that it has first made reasonable effort to restore the specified hazardous constituents to the background or maximum contaminant levels (whichever is greater).”

NRC staff requests that the licensee revise or justify its surety estimate as necessary to itemize estimated costs for engineering design, review, and change; mobilization; quality control; and radiological safety; *and any other costs not included in other estimation categories* [emphasis added]. These other costs would include regulatory reporting or professional plan development as required by license SUA-1597 and/or commitments made by the licensee in the License Application. NRC staff notes the above bulleted list may not be comprehensive of all the monitoring requirements or plan development in the license or License Application.

NRC staff notes the financial assurance estimate may require reporting costs (semi-annual and annual) for at least four years after the end of operations in Nichols Ranch PA #1. Figure 6 of the Nichols Ranch Annual Report shows the reclamation schedule and final surface reclamation occurring approximately four years after the end of operations for PA #1.

**General Comment:**

As currently presented, the surety estimate does not include a basis for all unit costs used in the current annual cost estimate. Many of the key assumptions may have been included in earlier versions of the surety and may now be captured in the Consumer Price Index adjustment. Criterion 9 of 10 CFR Part 40, Appendix A, states that each cost estimate must contain "identification and justification for using the key assumptions contained in the DCE [decommissioning cost estimate]." Furthermore, Appendix C of NUREG-1569 states that the "licensee should provide supporting information on the basis for selection of the unit cost figures used in estimates."

NRC staff requests that future surety adjustments contain the basis document used for the cost or provide references stating where supporting information for the basis for selection of the unit cost figures used in estimates may be found.