



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

April 15, 2014

Mike Thomas, Vice President
Environmental, Safety, and Health
Uranerz Energy Corporation
1701 East "E" Street
P.O. Box 50850
Casper, WY 82605

**SUBJECT: NRC INSPECTION 040-09067/13-001 AND AUTHORIZATION TO BEGIN
IN-SITU URANIUM RECOVERY OPERATIONS, URANERZ ENERGY
CORPORATION, NICHOLS RANCH ISR PROJECT, NICHOLS RANCH UNIT**

Dear Mr. Thomas:

The U.S. Nuclear Regulatory Commission (NRC) conducted a preoperational team inspection at the Nichols Ranch Unit of the Nichols Ranch ISR (in situ recovery) Project facility in Johnson and Campbell Counties, Wyoming during November 18-21, 2013, and January 28-30, 2014. Pursuant to License Condition 12.3 of Materials License SUA-1597, the purpose of the inspection was to confirm that written operating procedures and approved radiation safety and environmental monitoring programs are in place, and to verify that preoperational testing was complete. The inspectors interviewed personnel, observed the facility, and comprehensively reviewed all operating procedures for compliance with the license application, license conditions, and applicable regulations.

The inspection team concluded that Uranerz Energy Corporation (Uranerz or licensee) has established programs that are protective of site workers, the public, and the environment. These programs include management oversight, plant operations, radiation protection, effluent and environmental monitoring, groundwater monitoring, radioactive materials transportation, radioactive waste handling, and emergency operations. In particular, the licensee has:

- Constructed site systems up to the ion exchange columns, including wellfields, indicating that the plant is physically capable of conducting in situ uranium recovery operations
- Filled management and support positions (health physics, laboratory, environmental monitoring, and operations) with trained and qualified staff
- Established and implemented the performance-based license process and a quality assurance/quality control program
- Established procedures for plant operations, wellfield operations, routine and non-routine reporting, and incident investigations including spills

M. Thomas

- Completed construction of portions of the first wellfield, and the first wellfield package has been approved by the NRC by letter dated September 12, 2013 (ML13228A236).
- Established and implemented radiation protection, environmental monitoring, transportation, radioactive waste handling, and emergency preparedness programs that are in compliance with regulatory and licensed requirements
- Established and implemented a training program that includes operations, radiation protection, and industrial safety

Based on the results of the preoperational inspection, the NRC staff has determined that the Nichols Ranch Unit is physically ready for in-situ recovery operations up to the ion exchange columns. At the time of the preoperational inspection, the licensee planned to ship uranium-loaded resins to a nearby mill, an NRC-licensed site, for further processing.

The licensee is currently authorized to construct the elution and precipitation circuits as well as the yellowcake dryer at the Nichols Ranch Unit, but the licensee is not authorized to operate these circuits and systems until the NRC has conducted an inspection of these systems and associated procedures, training, operational testing, and radiation safety protocols. Additionally, the licensee is authorized to construct the Hank Unit satellite facility, but operations at the Hank Unit may not commence until a pre-operational inspection has been completed at this location.

In summary, Uranerz is authorized to commence with in-situ recovery operations at the Nichols Ranch Unit including the wellfield injection and production circuits, ion exchange columns, water disposal pathways and transportation of resins for further offsite processing. As noted above, Uranerz is not authorized to operate the elution, precipitation, and drying systems at the Nichols Ranch Unit the NRC has conducted an onsite review of these portions of the plant. The NRC staff will remain in contact with you to schedule any subsequent inspections to minimize any impacts on future facility operations.

Future inspections will be established in accordance with the guidance provided in NRC Manual Chapter 2641, "In-Situ Leach Facilities Inspection Program." Be advised that future inspections may be unannounced to ensure that Uranerz continues to operate its Nichols Ranch Unit facility in accordance with regulatory and license requirements.

As noted earlier, the NRC conducted this team inspection, in part, to fulfill the requirements of License Condition 12.3. The results of the preoperational team inspection will be provided to you under separate correspondence at a later date.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, information so that it can be made available to the Public without redaction.

M. Thomas

Should you have any questions concerning this letter, please contact Ms. Linda Gersey, Health Physicist, at 817-200-1299, or Dr. Robert Evans, Senior Health Physicist, at 817-200-1234.

Sincerely,

/RA/

Anton Vogel, Director
Division of Nuclear Materials Safety

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

cc:
Ms. Carol Bilbrough
Program Manager
Wyoming Department of Environmental Quality
Land Quality Division
122 West 25th
Cheyenne, WY 82002

Mr. Mark Rogaczewski
District 3 Supervisor
Land Quality Division
2100 West 5th Street
Sheridan, WY 82801

Director, Wyoming Radiation Control Program

M. Thomas

Should you have any questions concerning this letter, please contact Ms. Linda Gersey, Health Physicist, at 817-200-1299, or Dr. Robert Evans, Senior Health Physicist, at 817-200-1234.

Sincerely,

/RA/

Anton Vogel, Director
Division of Nuclear Materials Safety

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

cc:
Ms. Carol Bilbrough
Program Manager
Wyoming Department of Environmental Quality
Land Quality Division
122 West 25th
Cheyenne, WY 82002

Mr. Mark Rogaczewski
District 3 Supervisor
Land Quality Division
2100 West 5th Street
Sheridan, WY 82801

Director, Wyoming Radiation Control Program

DISTRIBUTION:

A. Vogel, D:DNMS L. Gersey, RSFS
L. Howell, DD:DNMS R. Linton, FSME/DWMEP/DURLD
J. Whitten, C:NMSB-B E. Striz, FSME/DWMEP/DURLD
B. VonTill, FSME/DWMEP/DURLD M. Herrera, Fee Coordinator, DRMA

S:\DNMS\!RSFS\LMG\2014UR\Uranerz Authorization Letter to Operate FINAL.docx

ADAMS: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials: LMG	
	<input checked="" type="checkbox"/> Publicly Available	<input checked="" type="checkbox"/> Non-Sensitive	
Category A.	<input type="checkbox"/> Non-publicly Available	<input type="checkbox"/> Sensitive	
KEYWORD: SUNSI REVIEW COMPLETE			
RIV:DNMS/RSFS	RSFS	FSME:DURLD	FSME:DURLD
LMGersey	RJEvans	RLinton	EStriz
/RA/	/RA/	/RA/E-mail	/RA/E-mail
03/19/14	03/25/14	04/04/14	04/04/14
C:URB	C:RSFS	D:DNMS	
BVonTill	DBSpitzberg	AVegel	
/RA/E-mail	/RA/	/RA/	
03/27/14	03/27/14	04/15/14	

OFFICIAL RECORD COPY

T=Telephone

E=Email

F=Fax