URANERZ ENERGY CORPORATION

NRC Meeting Presentation

Project Introduction and Plans

Nichols Ranch In Situ Recovery Project (Uranium)

Covering:

Nichols Ranch ISR Main Unit

And

Hank ISR Satellite Unit

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Washington DC

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6 July 2006

TOPICS

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Nichols Ranch ISR Project

1. **Project Overview**

Uranerz Energy Corporation ("Uranerz") is planning to construct and operate a uranium in situ recovery (ISR) facility with the name Nichols Ranch ISR Project that incorporates two production units; the Nichols Ranch ISR Main Unit consisting of a complete processing facility and in situ recovery mine, and the Hank ISR Satellite Unit consisting of an ion exchange facility and an in situ recovery mine. The Nichols Ranch Unit processing facility will have the capacity to produce approximately 750,000 pounds of dry yellow cake product per year. It is planned that approximately half of this amount will originate from the Nichols Ranch ore body while the remaining half will be produced from the Hank ore body.

The Nichols Ranch location is approximately 6 miles southwest of the North Butte (of the Pumpkin Buttes) in Township 43 North, Range 76 West, Section 17 and surrounding partial sections. The Hank property is located some 4 miles southeast of North Butte in Townships 43 & 44 North, Range 75 West.

The general location of the Nichols Ranch ISR Project is shown on Exhibit "A" with a more accurate location of the two operations shown on Exhibit "B". Detailed maps of Nichols Ranch and Hank are shown on Exhibit "C" and "D", respectively.

The Nichols Ranch and Hank ore bodies are typical Powder River Basin roll front type deposits located in the Wasatch Formation of Eocene age. Depth to the mineralized sandstone on these two properties typical ranges from 250 to 600 feet below surface and these sands are water saturated. The Uranerz license application will contain a complete description of the regional and local geology in the area of the planned mines. Because of the proximity of the Nichols Ranch and the Hank properties to PRI's North Butte property, the reader can gain a better understanding of the regional geology by referring to their North Butte license application. The terrain within the two permit areas is typically moderately sloping with some steep areas associated with ephemeral drainages.

II. Mine Plan

II.A General

Uranerz plans to mine the Nichols Ranch and Hank uranium ore bodies using the in situ recovery mining method. This is the same method that is used by Power Resources Inc. ("PRI") at the Bill Smith mine in the southern Powder River Basin and is the same method that Cogema (Areva) applied to the nearby Christensen Ranch orebody. It is also the same method that we understand PRI is planning to use at the North Butte project.

The ore bodies at Nichols Ranch and Hank will be divided into individual well fields where injection and recovery wells will be installed using a typical 5-spot or 7-spot pattern. In some situations a line-drive pattern may also be employed. Horizontal and vertical excursion monitor wells will be installed at each well field based on geologic and hydrogeologic parameters, and as approved by the NRC and the Wyoming Department of Environmental Quality - Land Quality Division.

Mine development and operations will take place in accordance with the Wyoming Department of Environmental Quality Environmental Quality Act and the Wyoming Department of Environmental Quality - Land Quality Division regulations covering in-situ recovery mining. The regulations and requirements of various federal agencies such as the NRC, BLM and EPA will all be complied with during mine development, operations and decommissioning. The design of the processing plants and their operation will be accordance with NRC regulations and as specified in the approved Source Material License.

II.B Processing

The Nichols Ranch ISR Unit will consist of a complete processing plant including auxiliary facilities such as office, change room, laboratory, maintenance, and deep disposal well. The processing plant will have the capability of concentrating the well field recovery solution obtained from down hole pumps from wells installed in the Nichols Ranch ore body. The ore body is located some 550 feet below the ground surface depending on the topographical surface relief and is completely saturated with ground water under confined aquifer conditions.

The Nichols Ranch processing facility will have additional capacity to process uranium loaded resin from the Hank ISR Satellite Unit ion exchange plant. The resulting uranium values from both ore bodies will then be processed into dry yellow cake concentrate packaged in 55-gallon steel drums that will be trucked off site for conveyance to the licensed uranium conversion facility of choice. Nichols Ranch will also have the necessary equipment to fortify the well field solution recovered from the ore body with sodium carbonate, if needed to maintain total chemical leaching strength, and inject this solution back into the well field. Carbon dioxide and oxygen gas will be added to the well field injection solution just prior to being distributed to the individual injection wells. This process will continue until the Nichols Ranch ore body is fully depleted at which time the orebody aquifer will be restored, the equipment disassembled and the area reclaimed to prior use.

The Hank ISR Satellite Unit ion exchange facility, located some six miles to the northeast of the Nichols Ranch processing plant, will be equipped to fortify baron well field solution with sodium carbonate then inject this solution, after carbon dioxide and oxygen gas has been added, into the Hank ore body. This ore body is also saturated with groundwater under confined aquifer conditions, and is approximately 350 feet below the land surface. Installed down hole pumps will then recover the resultant uranium enriched well field solution and route it to the on site ion exchange loading facility where the uranium will be removed from the water and loaded on the ion exchange resin. The baron solution coming out of the ion exchange vessels will be re-fortified with sodium carbonate, if needed, and re-injected into the Hank orebody in the same manner as the Nichols Ranch operation.

Loaded ion exchange resin from the Hank Unit will be trucked to the Nichols Ranch Unit for stripping (uranium removal). The stripped ion exchange resin will be trucked from the Nichols Ranch processing plant back to the Hank ion exchange plant where the cycle will be repeated. This process will continue until the Hank ore body is fully depleted at which time the orebody aquifer will be restored, the equipment disassembled and the area reclaimed to prior use.

The Hank Unit will also have office space and maintenance buildings located on site. Wastewater generated at the Hank Unit will either be trucked to the Nichols Ranch Unit or routed to a deep disposal well to be installed on site.

II.C Well field

Both the Nichols Ranch and Hank in situ recovery well fields will be similar in design with some combination of five spot, seven spot and line drive patterns. Spacing between an injection well and a recovery well most likely range from 50 to 80 feet.

Poly Vinyl Chloride (PVC) and/or High Density Poly Ethylene (HDPE) casing cemented in place will be used to construct the injection and recovery wells. Well field header (manifold) houses will be utilized and each header house will control approximately 20 to 60 wells total. Injection wells will be monitored both

for flow rate as well as backpressure. Carbon dioxide and oxygen will be added to the injection solution at the header house just prior to distribution to individual wells. Flow rate and pressure determinations will also be monitored in the well field header house for each recovery well.

Injection solution from the processing plant at both Nichols Ranch and Hank will be distributed to the header houses in buried HDPE trunk lines. From the header houses the injection solution will be distributed to the individual injection wells via buried feeder lines. The recovery solution will be piped individually from each recovery well to the header house via buried feeder lines where it will be commingled with the flow from other recovery wells and sent to the processing plant via buried HDPE trunk lines. This process will form a complete loop going first from the plant to the well field injection wells as injection solution. The solution will then travel through the orebody leaching the uranium off the sandstone grains and will then be pumped from the orebody using recovery wells and routed back to the processing plant.

It is planned that horizontal monitor wells will be installed in a ring around each well field at 500 foot intervals and 500 foot spacing from the edge of each well field. These wells will be completed in the same sand interval as the production wells. Vertical monitor wells will also be employed at a frequency and location dependent upon the local hydrogeologic setting.

Once the in place economic uranium values have been depleted at a particular wellfield, aquifer restoration activities will commence utilizing most of the same well field equipment used during the mining phase. A description of the restoration process is described later in this report in Section III.

III. Reclamation and Decommissioning

III.A General

Reclamation of the affected land surface, restoration of the affected aquifer(s) and decommissioning of the facilities will take place at the appropriate stages of the Uranerz Energy Corporation, Nichols Ranch ISR Project. The surface reclamation and aquifer restoration activities will begin as soon as practicable once mining in a given well field has been terminated. The goal of the reclamation effort is to return all affected lands to their pre-mining use of livestock grazing and wildlife habitat. The goal of aquifer restoration will be to return the water quality in affected aquifer(s) to acceptable regulatory standards. Restoration of aquifers affected by ISR mining has been successfully demonstrated at several ISR uranium mines in the Powder River Basin. Decommissioning of facilities following all mining and restoration activities will be

preformed in accordance with Wyoming Department of Environmental Quality and NRC regulations.

Uranerz will calculate the cost of reclamation, restoration and decommissioning in conformance with Land Quality Division and NRC regulations and guidelines, and submit the calculations to the agencies in the permit to mine and source material license applications. Once the reclamation performance bond calculation is approved, Uranerz will provide a bond in a type instrument acceptable to the Land Quality Division and the NRC.

III.B Surface Reclamation

As stated above, Uranerz' surface reclamation program will return all lands affected by the mining and restoration activities to their pre-mining use of livestock grazing and wildlife habitat. Baselining of radiation, groundwater, soils, vegetation, wildlife, etc. will set the performance standards for the surface reclamation program. In consultation with the surface landowner, a native seed mixture will be proposed to the Land Quality Division for their consideration. The surface landowner at both the Nichols Ranch ISR Unit and Hank ISR Satellite Unit is the T-Chair Livestock Company. Preliminary discussions with the surface landowner have indicated that they do not want sagebrush included in the restoration seed mixture.

Uranerz will be salvaging and stockpiling topsoil from areas to be disturbed such as building sites, main roads, and pipelines, but does not plan to strip topsoil from the mining units. It is our understanding that other ISR mines in Wyoming have also been successful in achieving reclamation of well fields without stripping the topsoil.

III.C Aquifer Restoration

All aquifers affected by ISR mining activities at the Nichols Ranch and Hank Units will be restored to applicable state and federal standards. Through an approved baselining program, Uranerz will establish the pre-mining water quality in the orebody aquifer(s) which will be part of the input in establishing the postmining aquifer restoration criteria.

The senior Uranerz management has been directly involved with the successful aquifer restoration of three ISR test mines and one commercial ISR mine in Wyoming back in the 1970's and 80's. At these four projects, the pump and treatment method of aquifer restoration was utilized. This method involves the pumping of affected groundwater from the orebody aquifer to the processing plant where it is treated with a reverse osmosis (RO) unit or similar device. The clean water, or permeate, from the RO unit is sent back to the well field and

treatment method of aquifer restoration was utilized. This method involves the pumping of affected groundwater from the orebody aquifer to the processing plant where it is treated with a reverse osmosis (RO) unit or similar device. The clean water, or permeate, from the RO unit is sent back to the well field and injected into the orebody aquifer in a continuous closed loop. The bad water, or brine, from the RO unit is disposed of in an approved manner such as routing to a deep disposal well or a lined evaporation pond. Permeate is circulated through the orebody aquifer until such time as the water quality in the aquifer meets the restoration criteria. Uranerz plans to utilize this same method of aquifer restoration at both the Nichols Ranch and Hank mine sites.

As part of the aquifer restoration process, it is necessary to demonstrate that the water quality in the restored aquifer is stable. Uranerz will have an approved stability period monitoring program to document that the water quality in each restored wellfield is stable.

IV. NRC Licensing Steps and Procedures

Representatives from Uranerz will discuss the protocol of licensing a new in situ recovery uranium mine with representatives of the NRC. The discussion will be relative to Uranerz' plans to prepare a license application covering the Nichols Ranch ISR Project. Topics that will be discussed include: 1) Licensing steps and procedures, 2) NEPA Process and interaction between the NRC and BLM, 3) Ground water issues, 4) Aquifer restoration standards and aquifer exemptions, 5) Radiation baselining and MILDOS, and 6) Interaction between the NRC and the Wyoming Department of Environmental Quality – Land Quality Division.

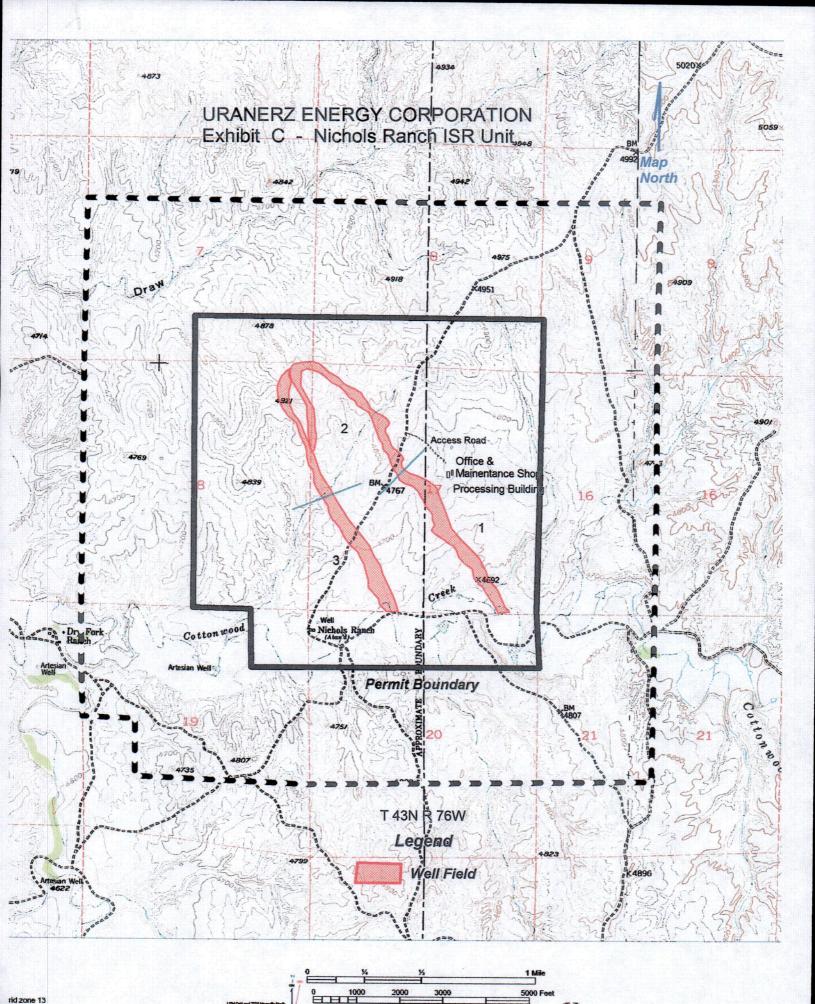
Dates	Activity
Now to 2 nd Qtr. 2007	Collect Baseline Data and Prepare Source Material License Application
2 nd Qtr. 2007	Submit Source Material License Application to the U.S. NRC
2008	Receive Source Material License Application and Start Construction
2009	Startup ISR Operations at the Nichols Ranch Project

V. Development Schedule (Anticipated)

VI. Wrap Up

During the wrap up the results of the meeting will be summarized, and representatives of Uranerz or the NRC will have the opportunity to ask questions of the other party.





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