

## Power surge

Max Jarman

FREDONIA AZ -- A breakfast meeting at the office of Roger Smith and Lawrence Casebolt, uranium mining consultants, often begins with a shot of Jack Daniel's.

"It's sort of a tradition," Smith said.

Excitement is in the air at the former headquarters of defunct Energy Fuels Nuclear Inc., now occupied by Smith and Casebolt. Uranium, which sold for \$7.10 per pound in 2000, now is going for \$43, and the vast, rugged Arizona Strip once again is crawling with prospectors.

Demand for uranium to fuel new nuclear power plants around the world has pushed prices through the roof, and many people believe the prices will go even higher.

Smith and Casebolt have waited more than a decade for this.

"Things got so far down that I didn't think I'd see it come back in my lifetime," said the wiry Smith, who is 62.

Since 2004, when the price of uranium began to climb, almost 2,500 new claims have been filed on the Arizona Strip - 1,993 in 2005 alone.

"Before that, we had basically nothing for about 10 years," said Rody Cox, a geologist with the Bureau of Land Management's Arizona Strip field office in St. George, Utah.

'No better scenario'

Prospectors are attracted to the Strip's compact, high-grade ore deposits and deep aquifer. These qualities combine to make it relatively easy to get mining permits.

"There's probably no better scenario in the world," said Gene Spiering, vice president of operations for Quaterra Resources Inc., a Vancouver, British Columbia, company now prospecting on the Strip.

"You have flat-lying country with compact, high-grade ore deposits and little danger of water contamination."

Becky Hammond, manager of the BLM's Arizona Strip field office, estimates that a mining permit could be obtained in 12 to 18 months, considerably less than at other sites managed by BLM.

The federal agency manages the 2.8 million acres on the Arizona Strip and has to approve any mining activity. The Arizona Department of Environmental Quality also would have to approve. With the aquifer lying more than 1,000 feet below the mine depth, that permit could be relatively

easy to obtain, too.

"The process would be less involved," said Steve Owens, director of the department.

Renewed interest in uranium mining promises to bring badly needed jobs to communities such as Fredonia and nearby Kanab, Utah. Still, the situation has opened old wounds left by deadly mining activities in the 1940s and 1950s and galvanized environmental groups against the mines.

Meanwhile, prospectors are staking new claims and restaking those given up in the mid-1990s when uranium prices plunged and the government started charging an assessment of \$125 per year for each claim that measured 1,500 feet by 600 feet.

"It used to cost nothing to hold large numbers of contiguous claims," Cox said.

While individuals have filed some claims, most are held by companies such as Liberty Star Gold Corp., International Uranium Corp. and Lucky Irish Silver Inc., which are gobbling up the Arizona Strip's mineral rights.

Two companies, U.S. Energy Corp. and Quaterra, have filed exploration notices with BLM indicating intent to drill. Quaterra has drilled a dozen holes and found uranium in one and another looks promising, Spiering said.

U.S. Energy Corp. of Riverton, Wyo., also is seeing positive results.

"We've located a couple of prospects, and we're drilling deeper to test the mineralization," said Mark Larsen, president of U.S. Energy.

The company is looking for ore deposits to supply the uranium mill at Shootaring Canyon it is trying to reopen in southeastern Utah near Ticaboo. So far, no company has filed a plan of operations that would indicate intent to begin mining a claim.

"It's no turning back after that," Smith said. "That's when you put up your money."

Smith and Casebolt were executives with Energy Fuels Nuclear which, from the late 1970s until the market went bust in the mid-1990s, pulled \$600 million worth of uranium out of a handful of mines on the Strip. Since the mines closed, they have formed a company, Silver Arrow Stone, and are mining the Strip's sandstone while waiting for the price of uranium to go up.

Now, stockpiles of cheap uranium that glutted the market after the collapse of the Soviet Union have been used up, and the world faces a supply imbalance that could keep prices up for years.

The World Nuclear Association estimates that nuclear utilities are using 175 million pounds of uranium per year, while mines are producing only 105 million pounds.

The gap, which has been filled by uranium from dismantled nuclear weapons,

is expected to widen as 30 new nuclear power plants come online in 12 countries.

Arizona Public Service Co. is considering adding two units to the three that the Palo Verde Nuclear Generating Station west of Phoenix now comprises.

"We're going to need a lot of new mines, and the ones we have will have to be expanded," said John Hazelbaker, Palo Verde's manager of nuclear fuel procurement.

Until those mines are located and opened, Hazelbaker predicts prices will stay high.

Three Arizona Strip mines formerly operated by Energy Fuels have proven reserves and could be opened relatively quickly, Smith said. The mines now are owned by International Uranium Corp., which is evaluating whether to reopen them.

International Uranium also owns the White Mesa uranium mill near Blanding, Utah, one of only four such processing facilities in the country.

Ore from Arizona Strip mines would be trucked 200 miles to White Mesa or, if it reopens, Shootaring Canyon, which is marginally closer. It's a long way to truck ore for processing, but the ore's high grade makes it economically feasible, particularly at today's prices.

Ore grades from former mines on the Arizona Strip have averaged 0.5 percent to 1 percent uranium, while those on the Colorado Plateau to the east typically produce grades from 0.2 percent to 0.3 percent.

Different points of view

Not everyone is in favor of uranium mining on the Arizona Strip.

BLM has developed a proposed comprehensive land-management plan that includes uranium mining in specific locations.

BLM is charged with managing the lands under its purview to make money and, given the remote nature of the Arizona Strip, Hammond believes uranium mining is a legitimate use of the land.

"We want to encourage it," she said.

Environmental groups such as the Arizona Wilderness Coalition, Grand Canyon Wildlands Council, Sierra Club, Friends of the River and Center for Biological Diversity, among others, have weighed in against uranium mining on the Arizona Strip.

The Navajo Nation, whose members suffered myriad health problems and deaths stemming from uranium mining in the 1940s and 1950s, has banned the activity on its enormous reservation adjacent to the Strip.

Coconino County also opposes mining. The Arizona Strip is located in Coconino and Mohave counties, and the Coconino County Board of Supervisors

officially has opposed uranium mining in the area.

"Knowing there have been health issues and a long history of litigation, I would just as soon not see the industry come back," said Carl Taylor, the Coconino County supervisor who represents the area that includes the Arizona Strip.

That doesn't sit well with many of the approximately 5,000 residents in Fredonia and Kanab, Utah, where big government and environmentalists are viewed as the enemy.

"They're mean people," Cindy Robinson of Fredonia said of environmental groups active in the area. "They cut down power poles and chain themselves to Forest Service buildings."

Robinson and others blame environmental groups for the loss of about 150 jobs in the mid-1990s when Energy Fuels closed its uranium mines and the loss of 200 jobs in 1994 when Kaibab Industries shut its 30-year-old sawmill in Fredonia.

The company blamed environmentalists who successfully sought to set aside much of the North Kaibab Forest as habitat for the endangered Mexican spotted owl and threatened northern goshawk.

Both of Robinson's parents lost their jobs at the time. Her mother eventually found another job; her father never did.

"When the mines were here, the economy was good," said Zee Jarvis of Fredonia.

"You could make a good living. Now, you have to struggle."

Taylor understands the residents' desire for better jobs but said, "There has to be another way for people to earn a good living."

He wants to have the whole region declared a National Heritage Area, making it eligible for federal funds to promote main-street improvements and tourism.

While Taylor says the designation would not affect the BLM's authority to approve mining in the area, residents at Buckskin Tavern in Fredonia are suspicious. They still are stinging from President Clinton's designation of two national monuments in the area: Vermilion Cliffs and Grand Canyon-Parashant.

These designations closed Mike Dettamonti's raspberry alabaster mine in the area. He now makes headstones.

Pete Byers, chairman of the Mohave County Board of Supervisors, is in favor of uranium mining on the Strip.

"The idea of a main street and tourist stuff is nice," he said, "but these people need jobs so they can make a living."

Buckskin's patrons also were supportive of the renewed interest in mining.

Deor Perkins worked for Energy Fuels for seven years and calls it the best job he ever had.

"Hell, yes, I'd go back if they reopened," he said. "It would be a big present for everybody."