

The Machine' now a symbol of Yucca project

By BENJAMIN GROVE - Las Vegas Sun
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WASHINGTON -- In the classic children's book, "Mike Mulligan and His Steam Shovel," Mike promises that his beloved but outdated machine Mary Anne can still dig a cellar in a single day.

And she proves it, carving out a perfect hole for the new Popperville town hall _ only to realize she dug herself so deep there was no escape.

So Mary Anne stayed there and adapted to a new role as the building's furnace, and as a kind of museum piece.

So it is with the machine that dug the 5-mile exploratory tunnel in Yucca Mountain, a gigantic \$13 million drill bit that sits at the site unused _ and for sale with no takers _ nine years after its job was done.

The Tunnel Boring Machine is becoming a monument to the project itself. Historians may one day consider The Machine a testament to Man's ability to dream and build big, or maybe an aging symbol of a failed idea.

In the mid-1990s, as The Machine rumbled, there was more excitement about Yucca. The nuclear industry was flush with optimism that it would soon have a place to bury the spent fuel that comes out of reactors.

Public officials were confident they were pursuing the best, most technologically advanced solution to the nation's nuclear waste problem _ burying it in tunnels under the mountain.

Energy Department officials spoke of Yucca in lofty terms as a project unlike any the world has ever known. It was no less than a test of man's ambition _ and hubris, some said.

But the desert ridge had yet to be excavated so scientists could examine its innards. The Machine would give researchers entre to the inside of the mountain to study the rock and test its reactions to heat and moisture.

So the government bought a massive piece of machinery befitting the size of the \$58 billion repository project _ one of the biggest drill bits in the world at 860 tons, 25 feet wide.

The Machine arrived in pieces on 50 trucks from a plant in Kent, Wash. It was reassembled at the foot of the mountain, and on a September day in 1994 it began to gnaw.

Powered by 12 motors and 3,800 horsepower spinning 48 17-inch "cutter wheels," The Machine did its job well.

For two and a half years it chewed at the rock, three shifts a day, five days a week. On occasions it reached a top speed of 18 feet per hour. It consumed tons of rock and a \$130 million budget.



In April 1997, the 1.7 million-pound gopher emerged victorious from its five-mile, U-shaped hole. The moment was dubbed, "The Daylighting."

Then-project manager Wesley Barnes pumped his fist with pride. Workers cheered.

Not long after, the department treated The Machine to a bath of fresh white paint.

But the glory faded. And with its work complete, The Machine was unceremoniously discarded not far from the tunnel's South Portal.

It sits there still.

The Energy Department has tried to get rid of it. Most of its attachment, which had included trailers and gantries that made the entire apparatus longer than a football field, were sold as scrap a few years ago.

The Energy Department offered The Machine to other government agencies. The feds tried to sell it commercially. But it wasn't like unloading a 1994 Subaru.

One potential buyer offered a few hundred thousand dollars, but the department refused to be low-balled. "The scrap alone is probably worth that," department spokesman Allen Benson said.

Today, The Machine is the highlight of the Yucca Mountain tour.

Visitors are awed by its size. Some Energy Department employees argue that it should be put on permanent display.

Truth is, The Machine is already becoming a kind of monument to Yucca.

It is either a symbol of the promise of the world's first high-level nuclear waste repository and Man's ability to engineer it, or a relic of a rusting idea the government keeps repainting, trying to restore its luster. (Distributed by Scripps-McClatchy Western Service, <http://www.shns.com>.)