At Long Last, the Yucca Mountain License Application

Remember the story of Penelope, the wife of Ulysses, of Iliad and Odyssey fame? While Ulysses was off fighting the Trojans for 10 years, and then taking an additional 10 years to get back home again, she waited patiently, staving off unwanted suitors (she was, after all, presumed to be a wealthy widow) and weaving each day (and unraveling each night) her famous unfinished tapestry. Eventually, Ulysses came home, slew the suitors, and he and Penelope lived happily ever after (although you wonder if she was ever just the teeniest bit curious about what took him so long). Anyhow, Penelope's story is considered to be the epitome of patience rewarded.

The patience of Penelope came to mind on June 3, when the U.S. Department of Energy at long last submitted to the U.S. Nuclear Regulatory Commission the license application to build a high-level waste and spent nuclear fuel repository at Yucca Mountain in the Nevada desert (see news story, this issue, page 5). For those of you who thought this day might never come, I can only say that you simply were not patient enough.

Interestingly, Penelope's 20-year wait corresponds pretty closely to the wait that U.S. utilities and waste producers have endured over the li-

Correction

The magazine's proofreader failed to catch the fact that an incorrect headline was attached to the Editor's Note in the May/June 2008 issue. The headline of the editorial should be "LLW Crisis? What LLW Crisis?" The proofreader, who also serves as the magazine's editor, was sentenced to be hanged, drawn, and quartered, but was pardoned at the last minute.— *The Editor* cense application submittal. The original Nuclear Waste Policy Act of 1982 envisioned (well, mandated, actually) that the repository would open in 1998. If we allow for an 8year construction period and a 3year NRC license review, then, working backwards, that means that the license application should have been submitted some time in 1987-21 years ago. Of course, we all know that nothing the government does ever gets done on schedule (except maybe in wartime), especially a schedule that Congress sets without much input from the people in the field. So, we really can't fault the DOE for coming in 21 years behind schedule, given the ups, downs, highs, and lows of the Yucca Mountain project over the past couple of decades.

Of course, just submitting the license application does not mean that the repository program can now proceed full steam ahead. If we thought there were ups, downs, highs, and lows before, I'm sure the future will show us just how low "down" can get, as well as just how high "up" can get. Ahead, we can expect strong challenges from the state of Nevada, which has always opposed the repository, as well as challenges from environmental groups and ordinary citizens. Such issues as the level of funding Congress will continue to vote to the project, the transportation of spent fuel and high-level waste, the radiation protection standards still not issued by the U.S. Environmental Protection Agency, the final design of the repository, and the railroad the DOE needs to build to the repository are just a few of the potential roadblocks the DOE might encounter in the years ahead. Add to that some anti-Yucca Mountain rhetoric spoken by our presidential candidates this year.



Patience Rewarded; Or, Ulysses, I Hardly Knew You

The path ahead is not going to be a smooth one.

Still, we need to celebrate the achievements made so far. The Yucca Mountain license application is now sitting in the NRC's office. NRC reviewers are looking at the 8600-plus pages of the application, as well as scanning through the 30 million pages of supporting documents on their Licensing Support Network.

And the patience we displayed heretofore will be good practice for the patience that we must manifest in the coming years, as we wait for the waste repository to actually *open.*— *Nancy J. Zacha, Editor*