

First U.S. Nuclear License in 30 Years

by Marsha Freeman

After a two-and-a-half-year technical, economic, and environmental review by the Nuclear Regulatory Commission (NRC), on June 23, Louisiana Energy Services was issued a license to build and operate a new uranium-enrichment plant, the National Enrichment Facility, to be located in New Mexico. It is the first nuclear facility to be licensed in the U.S. in 30 years.

Low-enriched uranium is the fuel for America's 103 commercial nuclear power plants, but little of it is produced here. Nearly half of the fuel is imported from Russia, through the Department of Energy's post-Soviet "Megatons to Megawatts" program. To date, Russia has blended down bomb-grade highly enriched uranium from 10,748 warheads, creating 7,868 metric tons of nuclear power plant fuel. Fuel for U.S. nuclear plants is also imported from Europe, with less than 15% produced domestically.

For more than a decade, Louisiana Energy Services (LES) has been trying to obtain the go-ahead to build a uranium-enrichment gas-centrifuge factory. Now, with more than 30 new nuclear power plants under construction internationally, and the likelihood that utilities in the U.S. will be submitting applications to build plants here very soon, the need for additional enrichment and nuclear fuel fabrication facilities is critical.

LES is led by Europe's Urenco, with participation from Westinghouse, and nuclear electric utilities Duke Power, Entergy, and Exelon. Urenco's advanced gas-centrifuge enrichment technology, in use in Europe, will be used in the new facility. Utilities have already made contractual commitments worth \$3 billion to buy fuel from LES, before construction has even begun on the new plant.

The \$1.5 billion project is expected to begin construction outside the small town of Eunice, New Mexico as early as this August. Initial production of enriched uranium for fuel is slated for 2009, with full production to be reached in 2013, at a level of about one-fourth of today's demand.

Changed Political Winds

In 1990, Congress passed the Solar, Wind, Waste, and Geothermal Power Production Incentives Act. Making clear its anti-nuclear bias, the law amended the 1954 Atomic Energy Act, to require the licensing of uranium enrichment facil-

ities, and classified such a plant as a major Federal action. This meant that an Environmental Impact statement had to be prepared. Under the legislation, an adjudicatory hearing on the licensing for construction and operation of an enrichment plant is required.

This opened the door to so-called environmentalist "intervenor," who proceeded to claim that because the plant, then proposed to be built in Homer, Louisiana, would be near a black neighborhood, this constituted "environmental racism." When it became clear that LES was unlikely to win this political fight, it withdrew the application.

By 2003, when LES made its second submission to the NRC for a license, the political environment had substantially changed. Utility and industry consortia had begun to prepare to submit licensing applications to the NRC to build new nuclear power plants, and the regulatory body itself had spent a decade reforming its procedures. This was a tedious effort, designed to exorcise the onerous and unnecessary layers of impossible nuclear power plant "safety" requirements that were rushed into place after the 1979 Three Mile Island incident.

Although the two-and-a-half-year NRC review may seem excessive, the LES license procedure successfully tested a new NRC procedure, which combines the construction and operating licenses into one action. Previously, utilities that had obtained a construction license and built a plant, could find themselves without a license to operate the plant for years, as anti-nuclear activists kept them in court.

Shepherding LES and the NRC through the licensing hurdles was the bipartisan New Mexico delegation in Congress, led by Sen. Pete Domenici (R), chairman of the Energy and Natural Resources Committee. On June 23, when the license to LES was issued, Domenici pointed out that this was important not just for LES and New Mexico, but "for the renaissance of nuclear energy in this country."

Sen. Jeff Bingaman (D) stressed that "this will be one of the largest construction projects our state has ever seen. And the economic impact in southeastern New Mexico will be tremendous."

Echoing Senator Bingaman's sentiments, was the support of Lea County's entire state legislative delegation, two Chambers of Commerce, the superintendents of two local school systems, and the head of the Hispanic Workers' Council, in addition to the state's Federal representatives. Lea County has offered a \$1.8 billion industrial revenue bond to LES to pay for the construction of the new plant.

The National Enrichment Facility's combined construction and operating licensing process has been an important test case for the dozens of utility companies planning to embark on the process of obtaining NRC licenses to build new commercial power plants. Pleased with the results, LES president Jim Ferland said, "I think the industry will walk away from this . . . feeling quite comfortable."