The Nuclear Regulatory Commission’s draft Generic Environmental Impact Statement (GEIS) on uranium in situ leach (ISL) mining (NUREG-1910) doesn’t register a blip on the national political radar screen. And you won’t find the GEIS on anyone’s list of the Top 100 public concerns.

But in the areas where ISL mining may start or expand — New Mexico, Wyoming, Nebraska and South Dakota — the GEIS is a big deal for communities and groups on both sides of the uranium issue. It engendered emotionally charged commentary at the public hearings, and several gigabytes (hundreds of pages) of written comments in November 2008.

For the uranium industry and its supporters in mining towns like Grants, New Mexico, the GEIS is welcomed for “expediting” new yellowcake production and the jobs it may bring, by “streamlining” the NRC’s licensing process. Pro-uranium speakers at hearings in Gallup, Grants and Albuquerque in September 2008 — sporting white-on-green buttons saying “SUPPORT MINING NOW FOR THE FUTURE!” — repeatedly congratulated the NRC staff for “doing a good job,” even though few evinced any personal knowledge of the contents of the 600-page, two-volume tome (with separate errata booklet).

That industry- and pro-uranium forces were praising the federal government’s principal regulatory authority over uranium processing is ironic considering that about 28 years ago, industry and many state and local government officials openly and frequently criticized NRC for proposing to adopt uranium mill licensing requirements that were “overly stringent,” would “force facilities to close,” and understated the “benefits” of uranium development. The change in tone in 2008 was a red flag for those people who survived many hours of meetings and hearings in 1980 and 1981 listening to industry’s often vitriolic testimonies opposing the first comprehensive set of regulations ever adopted for conventional uranium mills and mill tailings management.

NRC officials presiding over the GEIS hearings quickly tried to dispel the notion that the document will be used to limit public participation in site-specific licensing decisions by reducing, or even eliminating, the need to conduct a full-blown environmental impact statement (EIS) for each license application, as has been the agency’s practice in the past.

But statements in the GEIS itself suggest just the opposite. NRC expects more than two dozen applications for new ISL facilities or major expansions of existing facilities in the next three years:… the NRC decided to prepare a GEIS to support an efficient and consistent approach to reviewing site-specific license applications for ISL facilities. The NRC staff plans to use the GEIS as a starting point for the National Environmental Policy Act (NEPA) analyses for site-specific applications for new ISL facilities. . . . [and] for restart or expansion of existing facilities.

In slides shown at the September hearings, and again in presentations to the five NRC commissioners at a public meeting on December 11, the NRC officials talked only of conducting an “environmental review” for each site-specific application.

New Mexico officials took exception with NRC’s approach in comments on NRC’s “scoping” process for the GEIS in mid-2007. Governor Bill Richardson told NRC Chairman Dale Klein in a July 31, 2007 letter that “your attempt at efficiency will negatively impact the ability of New Mexico’s citizens to participate in the NRC licensing process for individual facilities.” Congressman (now Senator) Tom Udall said that “attempts to simplify environmental protection measures deny local communities their opportunity to affect the approval process for new mines.” Both Richardson and Udall called on the NRC to prepare an EIS for each new facility application. Yet at no time since commencing the GEIS process has any NRC official committed to preparing an EIS for each license application or acknowledged that public involvement requirements are considerably more limited when a less detailed environmental assessment is prepared.

The appearance of streamlining the license process is not the only objection that community groups, environmental organizations, state agencies, and even other federal agencies have with the GEIS. The principal concerns fall into several categories:

A generic, “one-size-fits-all” assessment of impacts from ISL operations ignores the site-specific nature of solution mining.

“Given the unique environmental, geographical, cultural, historical, economic, and regional aspects of New Mexico,” wrote New Mexico Environment Department Secretary Ron Curry in an October letter to NRC, “it is contrary to the goals and purposes of NEPA for the NRC to use a GEIS approach.” The New Mexico Environmental Law Center (NMELC), in written comments submitted on behalf of SRIC, Bluewater Valley Downstream Alliance, and the Haaku Water Office of the Pueblo of Acoma, stated that at least five categories of impacts are, by their very nature, site-specific: groundwater, surface water, socioeconomics, radioactive air emissions, and environmental justice concerns. NMELC cited the Nebraska Department of Environmental Quality’s November 2007 denial of an aquifer exemption for expansion of the Crow Butte ISL facility near Chadron in large part because Cameco Resources’ permit application failed to included site-specific hydrologic data for the area of the proposed expansion.

Proposed NRC Rules Favor Uranium Industry

The GEIS lacks critical information on the environmental performance of the ISL mining industry over the last 30 years, and the absence of a complete and honest assessment of solution recovery of uranium precludes the usefulness of the GEIS in any site-specific license review.

The U.S. Environmental Protection Agency’s Office of Federal Programs commented that the GEIS would benefit from inclusion of information about 1) the locations and extent of excursions of mine fluids from operating ISL mines; 2) concentration levels of radiological and other hazardous constituent in groundwater contaminant plumes; and 3) impacts on aquifers, drinking water wells and community resources. NRDC said NRC should include detailed information on groundwater restoration programs at commercial ISL facilities, citing results of a Texas Commission on Environmental Quality (TCCEQ) compilation of original and final restoration values of all ISL facilities in the state: “Of the 42 wellfields that were restored, only five wellfields had an amended restoration value for uranium that was lower than the original value. All others — 92% of the sites — had amended their restoration values to be greater than what was originally mandated.”

The GEIS represents a significant departure from NRC’s own past practices of using a generic or programmatic EIS to analyze the effects of new regulations.

NMELC asserted that NRC violated NEPA by issuing the GEIS without proposing or adopting regulations specific to ISL operations. It noted that NRC has used its 1980 regulations governing conventional uranium milling and tailings disposal to regulate ISL mining in “non-Agreement States” like New Mexico. NMELC also stated that NRC has issued generic or programmatic EISs at least three times in years past, and all three analyzed impacts of proposed regulations on nuclear fuel cycle facilities.
The Energy Minerals Law Center in Durango, Colorado, commenting on behalf of a dozen community and environmental organizations in several Western states, said the GEIS itself is a de facto rule because of NRC’s intention to “tie” site-specific licensing decisions to the GEIS. This creates an unpublished regulation that may further NRC’s policy objectives, but is illegal under NEPA and the Council on Environmental Quality’s NEPA-implementing regulations.

Not so coincidentally, the NRC staff told the Commission in December that it intends to propose groundwater protection rules for ISL recovery facilities by April 2009. The rules would address all elements of potential groundwater impacts from ISL operations, from pre-operational construction and monitoring requirements to groundwater restoration and corrective action mandates. The NRC staff said an objective of the proposed rules is to reduce or eliminate “dual regulation” of ISL operations with USEPA’s Underground Injection Control program. The proposed ISL groundwater protection rulemaking would be done on a separate track from the GEIS, and the NRC staff has stated publicly that the two agency actions will have no connection.