

TESTIMONY BEFORE THE ILLINOIS COMMERCE COMMISSION

RE: Docket # 98-0194, Rule to Write Disclosure Requirement in the Utility De-Regulation Law, Sec. 16-127

Date: April 24, 1998

Submitted by: David A. Kraft, Director, NEIS, in support of positions presented by the Environmental Law and Policy Center of the Midwest

SUMMARY POSITION STATEMENT

Discussion has occurred regarding the disclosure of amounts and types of so-called "high-level" radioactive waste (HLRW) and "low-level" radioactive wastes (LLRW), pursuant to the implementation of Section 16-127 of the Utility De-Regulation legislation of 1997. The two classes are distinct and separate forms of radioactive wastes, defined by federal law. Both should be reported pursuant to this act, and reported separately from each other because of their unique characteristics, methods utilized for perpetual storage (often mis-labelled "disposal"), differing regulatory jurisdictions, and differing yet significant economic impacts of each type of waste. This reporting requirement can easily be satisfied using current methods of HLRW and LLRW reporting required by federal and state law for decades, without additional costs to either the consumer, the utility, or the State. Finally, failure to report LLRW, or to do so improperly or separately could possibly jeopardize Illinois' jurisdiction over LLRW storage, treatment, and perpetual storage, causing it to revert back to federal control.

BACKGROUND

LLRW and HLRW are a classifications of radioactive wastes established by federal laws, and promulgated in the Code of Federal Regulations. Specific definitions for HLRW can be found in 10CFR Part 60.2; for LLRW in 10CFR Part 61.55. Several distinct and uniquely different classifications of radioactive wastes exist: 1.) "high-level" radioactive wastes; 2.) "low-level" radioactive wastes; 3.) mill tailings; 4.) transuranics; and 5.) "NARM" and "NORM."

HLRW is defined as "...(1) Irradiated reactor fuel, (2) liquid wastes resulting from the operation of the first cycle solvent extraction system, or equivalent, and the concentrated wastes from subsequent extraction cycles, or equivalent, in a facility for reprocessing reactor fuel, and (3) solids into which such wastes have been converted." 10CFR60.2.

Regrettably, LLRW is not as precisely defined. It consists of anything that is NOT HLRW, transuranics, or mill tailings, and which can meet NRC standards for near-surface burial without endangering the public. However, three classes of LLRW have been defined: Class A, B, and C. Recently a "greater than Class C" category has been unofficially recognized. Such waste may actually end up being treated as HLRW for perpetual storage purposes, and may wind up at a federal facility rather than a State licensed LLRW facility.

Recognizing their unique nature, Congress has enacted separate laws for the perpetual storage ("disposal") of these wastes. Jurisdiction over HLRW matters resides with the federal Nuclear Regulatory Commission (NRC) and Department of Energy (DOE). NRC has, with Congress' approval, bestowed jurisdiction over LLRW matters to "agreement states" which have demonstrated that methods used in the storage, treatment, transportation and disposal of LLRW are not in contradiction with federal standards. Illinois is an "agreement state."

Currently, all HLRW is being held at reactor sites in the "spent fuel pools" required for operation of each reactor. It will be moved upon completion and licensing of a federal permanent deep-geologic repository.

The exception to this statement is the 700+ tons of irradiated fuel held separately at the General Electric Morris Operation (GEMO) in Morris, Illinois.

Currently, five of six previously constructed LLRW national perpetual storage facilities have been closed, and are leaking materials on or off site boundary. This includes the closed facility at Sheffield, Illinois. The only facility operating today is at Barnwell, SC. The current base-rate cost for "disposal" of Class A (lowest hazard) LLRW is \$315/f3. The costs escalate dramatically for Class B and C wastes, and for unusual packaging, handling or disposal requirements. All LLRW produced in Illinois is either being sent to Barnwell, or is being stored on-site by the generators.

The entire Illinois LLRW waste stream is under the jurisdiction and supervision of the Illinois Department of Nuclear Safety (IDNS). A written, detailed annual report of all LLRW produced and shipped is required for all generators of LLRW by the IDNS. The resulting data is compiled into IDNS' LLRW Annual Survey Report. The most current data available is for the year 1996.

DISCUSSION

Given the intent of the current disclosure clause of the De-Regulation legislation, and given the nature of LLRW and HLRW and the immense federal and state infrastructures regulating both, NEIS makes the following assertions with great confidence:

To satisfy the intent as well as the letter of the law, BOTH HLRW and LLRW must be reported, and reported separately.

1.) They are qualitatively different wastes: The discussion of including one waste form or the other is one based on a very false dichotomy. Both HLRW and LLRW are legitimately recognized and unique waste classes. While the radioactive content (measured in radioactive units called "curies") of HLRW is vastly greater than that of LLRW, that fact in and of itself is irrelevant as to whether LLRW should be considered for disclosure as a potentially hazardous and environmentally damaging substance. Some forms of LLRW are extremely hazardous, and can provide a lethal dose of radiation to unshielded humans in less than 4 minutes. Many isotopes found in LLRW have hazardous lifespans (measured in "half-lives") of hundreds of years.

The relative amounts of volume and radiation content are irrelevant. Coal plants produce vastly greater amounts of NOx and SOx pollutants than they do mercury and arsenic. This relative disproportion does not argue that the latter two should not be disclosed, or do not represent a health hazard; merely that they should be reported separately. The same rationale applies to HLRW and LLRW.

2.) Both HLRW and LLRW are already being accurately tracked and reported on an annual basis by nuclear utilities: ComEd and Illinois Power are already required to keep accurate records of HLRW and LLRW production, storage, treatment, transport and eventual "disposal." HLRW statistics are reported to the federal regulators (NRC and DOE); LLRW statistics are submitted annually to IDNS. A copy of this year's 30-page survey is found in Appendix B to IDNS' 1996 Annual Report. Numerous tables documenting both the annual volume and curie production of each individual nuclear reactor in Illinois are also found in this Report. As a consequence, no new reporting mechanisms need be developed, other than to convert the data to a format compatible with that used in the disclosure requirement. There should be no new financial or paperwork burden on the utilities to do this; merely a "cc" of the data they are already required by law to compile to the appropriate State office.

The only significant difference this additional Disclosure Requirement reporting would make would be to better and more completely inform the ratepayers of the true impacts and costs of continued use of nuclear power.

3.) LLRW does present a unique financial expense that the public needs to be aware of and actively monitor: While the curie content of LLRW is astronomically low compared to that of HLRW, the disposal cost of LLRW for Illinois ratepayers is not. Fees for the perpetual storage of HLRW are already being automatically collected by nuclear utilities and deposited in the federal HLRW disposal fund at a rate of one mill/kWh of nuclear generated electricity. Illinois ratepayers have already paid over \$1.2 billion into this fund.

However, Illinois has been engaged in a decade-long process to site a new LLRW facility in Illinois sometime before the year 2005. At present each reactor in Illinois is assessed \$120,000 per year to fund this facility siting process. This amount could escalate as the process draws closer to completion. At one point in the late 1980s, IDNS proposed to increase this fee to as much as \$600,000 per reactor per year. As a result the LLRW siting process that Illinois is engaged in represents an annual expenditure that ranges from the current \$1.56 million, to as high as \$7.8 million per year should fees increase to complete the Illinois facility.

Illinois' nuclear utilities are currently shipping LLRW to Barnwell, SC, at a current base cost of \$315/f3. This rate is expected to increase over the next few years, and would probably be at least this high for the Illinois facility once it opens next century. In addition, surcharges are placed on various forms of LLRW that are in unusual shapes or conditions that require special handling, packaging, and disposal techniques. Normal operation of reactors accounts for as much as 50,000 to 250,000 f3 per year, according to the above mentioned IDNS Annual Report. This provides a range of cost for LLRW disposal of between \$15.75 million to \$78.75 million per year from reactors sending waste out of state for disposal.

Reactor decommissioning -- expected to begin in the first decade of the next Century -- is expected to contribute an additional 6-10 million f3 of LLRW for disposal. At the current base rate cost for disposal of \$315/f3, this gives a range of cost between \$1.9 to \$3.2 billion for LLRW disposal. Indeed, ComEd's most recent estimate for reactor decommissioning costs exceeds \$4.1 billion, and is deemed to be an underestimate by many observers.

These are not insignificant costs for the utilities or their ratepayers. As a result their impact should be made known to the public.

Failure to properly define, report, and account for LLRW could have unforeseen negative impacts on Illinois retaining its Agreement State Status with the federal NRC:

As mentioned above the federal Nuclear Regulatory Commission has bestowed jurisdiction for LLRW matters to the States via the Agreement State process. Illinois' Agreement State status has conferred authority on LLRW matters to the IDNS. It is unclear what effects having the ICC or Legislature making unilateral decisions about LLRW would have on how the NRC would perceive Illinois' handling of LLRW.

Historically, ICC has always claimed lack of jurisdiction on issues relating to nuclear safety and environmental effects of nuclear power and waste -- historically deferring to the federal NRC or State IDNS in these matters. Having ICC now act out of character (and jurisdiction) by making rulings on whether LLRW is worth our "regulatory concern" could force NRC to inquire about Illinois' ability to handle its Agreement State obligations. Should NRC feel there was a serious enough situation or variance from their regulations and expectations, the NRC could intervene and reassume authority over Illinois' LLRW matters. This point needs to be further examined by attorneys familiar with Illinois' Agreement State contract with NRC.

In conclusion, NEIS endorses the position that the Disclosure Requirement, Section 16- 127 of the recently passed Electric Utility De-Regulation legislation requires that the costs and impacts of LLRW generation and perpetual storage be reported fully and separately from those of HLRW.

We thank the Commission for this opportunity to present this information. We are available to answer any questions the Commission may have surrounding this information or our position.

Submitted this day, April 24, 1998 by

David A. Kraft, Director

PREPARATION OF THIS TESTIMONY:

This testimony was prepared for the Illinois Commerce Commission Docket #98-0194 at the request of the Environmental Law and Policy Center of the Midwest by David A. Kraft, Director of Nuclear Energy Information Service. Mr. Kraft has been Director of NEIS since its inception in 1981. He was a member of the Illinois Department of Nuclear Safety's Citizens' Advisory Group on Low Level Radioactive Waste Issues from 1986 to 1990. He currently is a member of the Steering Committee for the national Nuclear Waste Citizens Coalition in Washington, D.C. ?

April 24, 1998

Dan Miller, Chair
Illinois Commerce Commission
527 E. Capitol Avenue
P.O. Box 19280
Springfield, IL 62704-9280

RE: Docket #98-0194

Dear Chairman Miller:

Please find enclosed testimony from NEIS concerning the above numbered docket dealing with implementation of the 1997 amendments to the Public Utilities Act.

Thank you for your consideration.

Sincerely,

David A. Kraft
Director