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STORE SPENT NUCLEAR FUEL RODS

House Bill 4040 with committee amendments
First Analysis (3-1-89)

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APR 17 1989

Sponsor: Rep. James M. Middaugh
Committee: Conservation, Recreation & Environment
Mich. State Law Library

THE APPARENT PROBLEM:

Public Act 113 of 1978, which regulates the disposal and storage of radioactive wastes, requires that spent (used) nuclear power plant fuel rods be stored in aboveground storage "pools" on the plant site. Consumers Power Company reports that the storage pool at its Palisades Nuclear Power Plant near South Haven will be filled to capacity with spent nuclear fuel by mid-1992 and has requested legislation that would change existing law to allow for the option of storing spent nuclear fuel in aboveground dry storage facilities.

THE CONTENT OF THE BILL:

The bill would amend the act by striking reference to "pools" so that the act would require only "safe and secure storage in aboveground storage" of spent nuclear power plant fuel rods. Also, the bill would allow, with the approval of the federal Nuclear Regulatory Commission (NRC), spent fuel rods to be stored at or near the plant while the operating license of the plant was in effect or until the plant were decommissioned. Finally, the bill would prohibit transferring spent fuel rods from one nuclear power plant for storage at another plant.

MCL 325.491

FISCAL IMPLICATIONS:

Fiscal information is not available.

ARGUMENTS:

For:

Within the next decade, the nuclear power industry in Michigan will be faced with a lack of storage space for spent nuclear fuel. Currently nuclear power plants store spent fuel rods in aboveground "pools," which originally were intended for short-term storage of from a few months to a year, until the spent fuel could be transferred to long-term storage facilities. However, no operating storage facility is now accepting high-level radioactive waste (those that did are full), and the proposed national repository (reportedly to be sited in Nevada) will not open until after the turn of the century. As a result of these circumstances, nuclear power plant storage pools are filling up. The power plants have considered several options for storage, including fuel consolidation (which would result in a more condensed storage in the existing pool), fuel pool "reracking" (which would result in more fuel assemblies being stored in the existing pool), building additions to the original pool, or a method called "dry cask storage." According to Consumers Power, consolidation and reracking are only temporary measures and would provide only a short-term solution to its storage needs, delaying by a few years the need to develop a dry cask storage program.

There are reportedly several advantages to dry cask storage. According to the nuclear power industry, it is the

least costly technology for the utility companies, it lowers worker exposure to radiation, and does not produce additional quantities of low-level radioactive waste, unlike the consolidation or expansion of the existing pools would (through the addition of various components and systems to circulate water, cool the fuel, and maintain proper radiation protection systems).

Reportedly, dry cask storage has been used at licensed facilities for the past several years. The U.S. Nuclear Regulatory Commission (NRC) has authorized or is reviewing dry cask storage at plants in Virginia, North Carolina, Georgia, Maryland, and Minnesota, while the U.S. Department of Energy (DOE) reportedly expects over the next ten years to license 40-50 nuclear plants to allow dry cask storage facilities. And it is reported that dry cask storage is commonly used in Canada and Western Europe. Although utility companies have begun to evaluate changing their fuel storage systems to dry cask storage, in order to fully evaluate the benefits of dry storage a change in state law is needed, since present law allows this storage only in a "pool." The timely passage of the bill would allow utility companies time to go through the process of federal licensing (which still will be required even if the bill passes), as well as the process of designing, procuring, and constructing the casks.

Against:

Although the utility companies clearly need storage for their nuclear power plants' spent fuel, the bill should go further and require, as some people propose, that nuclear power plants also serve as the sites for the storage of so-called "low-level" nuclear waste (some "low-level" waste has a hazardous life of hundreds of thousands of years). This would be particularly appropriate, since, according to one report, by far the highest contribution to "low-level" waste, both by volume and toxicity, comes from commercial nuclear power plants. These two issues should not be addressed separately, particularly considering the considerable controversy over the siting of "low-level" nuclear waste.

POSITIONS:

Consumers' Power Company supports the bill. (2-28-89)

Detroit Edison Company supports the bill. (2-28-89)

Indiana-Michigan Power Company supports the bill. (2-28-89)

The Department of Public Health supported the original bill, but has not yet taken a position on the amended version. (2-28-89)

The Department of Natural Resources has no position on the bill. (2-28-89)

H.B. 4040 (3-1-89)