

Department of Legislative Services
Maryland General Assembly
2011 Session

FISCAL AND POLICY NOTE

Senate Bill 460
Finance

(Senator Pipkin)

Nuclear Power Transparency Act of 2011

This bill prohibits a person from operating a nuclear generating facility in the State until the person discloses specified information to the Public Service Commission (PSC). This information includes the short-term and long-term plans for storing spent nuclear waste generated at the facility; the plan to mitigate any increase in the temperature of water flowing through a nuclear generating facility into the Chesapeake Bay or a tributary of the bay; the total projected cost of power generated at the facility (per kilowatt hour); the details of any federal or State loan guarantee used to finance the nuclear generating facility; and a description of any cost overruns incurred by the builder of the nuclear generating facility in previous projects.

Fiscal Summary

State Effect: The bill does not materially affect State finances or operations.

Local Effect: None.

Small Business Effect: None.

Analysis

Current Law: In order to construct or modify an electric generating station in the State, PSC must grant a certificate of public convenience and necessity (CPCN). Prior to taking final action on a CPCN for construction of a generating station or overhead transmission lines, PSC must consider the stability and reliability of the electric system; economics; esthetics; historic sites; aviation safety; when applicable, air and water pollution; and the

availability of means for the required timely disposal of wastes produced by a generating station.

The regulation of nuclear power generating facilities is the primary responsibility of the U.S. Nuclear Regulatory Commission (NRC). A nuclear power generating station must be granted an operating permit by NRC. The NRC regulatory process involves five main components: (1) developing regulations and guidance for applicants and licensees; (2) licensing or certifying applicants to use nuclear materials or operate nuclear facilities and decommissioning; (3) overseeing licensee operations and facilities to ensure that licensees comply with safety requirements; (4) evaluating operational experience at licensed facilities or involving licensed activities; and (5) conducting research, holding hearings to address the concerns of parties affected by agency decisions, and obtaining independent reviews to support regulatory decisions.

Background:

Nuclear Power Generation in Maryland

The Calvert Cliffs nuclear power generating station is the only nuclear generating station in the State. The Calvert Cliffs generating station currently has two nuclear reactors (Unit 1 and Unit 2) and is planning to construct a third reactor. NRC is reviewing the application submitted by the owners of the project, Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC (Unistar), to obtain a combined operating license for Calvert Cliffs, Unit 3. PSC granted a CPCN authorizing construction of Calvert Cliffs Unit 3 through docketed case 9127 and 9218.

The owners of the Calvert Cliffs nuclear generating station, Electricité de France International, SA, (EDF) and Constellation Energy, applied for a loan guarantee from the U.S. Department of Energy to secure financing for the project; however, Constellation Energy, Inc. subsequently sold its ownership in the project to EDF. EDF is currently seeking a U.S. partner to continue the project, since federal law prohibits foreign entities from owning or controlling a U.S. nuclear plant.

The Electric Customer Choice and Competition Act of 1999 (Chapters 3 and 4) facilitated the restructuring of the electric utility industry in Maryland. The Act eliminated PSC regulation of generation functions. The Calvert Cliffs generating station is a merchant generating station and its rates are not regulated by PSC. Therefore, some of the requirements specified in the bill, such as federal or State loan guarantees, cost overruns, and project cost per kilowatt hour, are not likely to be considered by PSC when evaluating a CPCN application; however, electric generating stations are required to submit data to the Federal Energy Regulatory Commission on the sale of wholesale

electricity. Additionally, much of the other information specified in the bill must be submitted to various State and federal regulatory bodies.

Certificate of Public Convenience and Necessity

The licensing of new electric power plants in the State is a comprehensive two-part process involving PSC and several other State agencies, *e.g.*, the Department of Natural Resources and the Maryland Department of the Environment. PSC is the lead agency for licensing the siting, construction, and operation of power plants in the State. During the CPCN application process, the agencies hold extensive discussions with interested parties such as local governments, environmental organizations, the company proposing to build the power plant, and individual citizens. Concerns are identified and the State agencies incorporate those concerns into their evaluation.

Regulation of Spent Nuclear Waste

Uranium fuel used in a nuclear reactor to generate electricity typically stays in a reactor between 12-18 months, after which it is no longer efficient in producing electricity and is removed from the generator. Spent nuclear fuel is considered high-level nuclear waste and is highly radioactive, and therefore highly dangerous. NRC regulates spent nuclear fuel through a combination of licensing and regulatory requirements and through performance and safety evaluation.

Federal policies governing the permanent disposal of high-level nuclear waste are defined by the Nuclear Waste Policy Act of 1982, as amended. The Act specifies that high-level waste will be disposed of underground, in a deep geologic repository, and that Yucca Mountain, Nevada, will be the single candidate site for characterization as a potential geologic repository. Under the Act, NRC is one of three federal agencies with a role in the disposal of spent nuclear fuel. Until the Yucca Mountain disposal facility is operational, most spent nuclear fuel rods are safely stored in specially designed pools at individual reactor sites around the country.

Additional Information

Prior Introductions: SB 993 of 2010 was referred to the Senate Rules Committee, however, no further action was taken.

Cross File: None.

Information Source(s): Public Service Commission, U.S. Nuclear Regulatory Commission, *Baltimore Sun*, Department of Legislative Services

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