State of Arkansas
94th General Assembly
Regular Session, 2023

A Bill

HOUSE BILL 1142

By: Representative Ladyman
By: Senator C. Penzo

For An Act To Be Entitled

AN ACT TO CREATE THE ARKANSAS NUCLEAR RECYCLING PROGRAM; TO DEVELOP AND EXECUTE A PUBLIC OUTREACH PROGRAM; TO PERFORM SITE SELECTION ACTIVITIES; TO ENGAGE SCIENTIFIC LABORATORIES TO DEVELOP DESIGN DOCUMENTS FOR THE ARKANSAS NUCLEAR RECYCLING PROGRAM; TO ESTABLISH ARKANSAS AS THE ONLY STATE TO DECLARE ITSELF AS A SITE FOR INTERIM STORAGE OF NUCLEAR SPENT FUEL WITH RECYCLING CAPABILITIES; AND FOR OTHER PURPOSES.

Subtitle

TO CREATE THE ARKANSAS NUCLEAR RECYCLING PROGRAM.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Arkansas Code Title 8, Chapter 9, is amended to add an additional subchapter to read as follows:

Subchapter 8 — Arkansas Nuclear Recycling Program

8-9-801. Title.

This subchapter shall be known and may be cited as the "Arkansas Nuclear Recycling Program".

8-9-802. Legislative findings.

The General Assembly finds that:

(1) In August 2016, the Argonne National Laboratory hosted a delegation from Arkansas, including staff from the Arkansas Economic Development Commission;

(2) In January 2017, the Arkansas Alternative Energy Commission issued a recommendation the Governor to support the University of Arkansas and the United States Department of Energy national laboratories to prepare and make recommendations and to offer options on using existing technology to convert spent nuclear fuel rods into new nuclear fuel;

(3) In August 2017, the Joint Committee on Energy held hearings on advanced nuclear technology to reprocess spent nuclear fuel rods and unanimously approved an interim study resolution on the matter; and

(4) In November 2018, the Joint Committee on Energy held a meeting at Arkansas Nuclear One and further discussed the issues under subdivisions (1)-(3) of this section, including without limitation that the:

(A) University of Arkansas system, in conjunction with other institutions of higher education, can and is willing to provide a detailed analysis examining the benefits of "New Nuclear" compared to the risks of continued storage of spent fuel at Arkansas Nuclear One;

(B) Fast reactor technology and electrochemical spent fuel reprocessing are ready for commercial development; and

(C) The Department of Health and the Department of Energy and Environment support the application for funding the establishment of an education, risk analysis, and optimization design program; and

(5) Acts 2021, No. 1092, required the House Committee on Public Health, Welfare, and Labor and the Senate Committee on Public Health, Welfare, and Labor to jointly conduct a study on the commercial application of existing technology to reclaim and repurpose spent nuclear fuel rods.

8-9-803. Purpose.

The purpose of this subchapter is to authorize the Division of Environmental Quality to:

(1) Protect the public health and the environmental quality of the state by setting and implementing standards for:

(A) Shipping spent nuclear fuel into the state;

(B) Recycling spent nuclear fuel into Generation IV fuel;

(C) Warehousing spent nuclear fuel;

(D) Warehousing recycled nuclear fuel; and

(E) Storing waste by-products from the spent nuclear fuel recycling process; and

(2) Declare the state open to interim storage of spent nuclear fuel for the purpose of securing federal money for the execution of the Arkansas Nuclear Recycling Program.

8-9-804. Creation of program — Authorization to enter into charter.

(a) The Division of Environmental Quality shall establish the Arkansas Nuclear Recycling Program to:

(1) Develop and execute a public outreach program to receive public input and probable spent nuclear fuel recycling site location acceptance, including without limitation:

(A) Partnering with a major university to assist in the development and execution of the public outreach program;

(B) Holding public meetings for community and public input; and

(C) Developing a final report for legislative approval;

(2)(A) Develop and perform spent nuclear fuel recycling site selection criteria based on public comment and negotiate for acceptable properties within the state.

(B) The spent nuclear fuel recycling site selection criteria shall include criteria for:

(i) The port of call for receiving spent nuclear fuel storage units;

(ii) Transportation from the port of call to the spent nuclear fuel recycling facility;

(iii) A spent nuclear fuel recycling facility operations base;

(iv) An interim storage facility;

(v) A permanent storage facility; and

(vi) A shipping facility; and

(3) Engage a scientific and engineering organization to develop the design document for the spent nuclear fuel recycling facility as well as provide an economic analysis on commercial applications and a construction cost estimate and schedule.

(b)(1) The division shall work with the United States Department of Energy to gain acceptance and recognition of the Arkansas Nuclear Recycling Program as valid and sustainable in order to allow the state to receive federal funding for storage and recycling of spent nuclear fuel.

(2) The division may enter into a charter with the United States Government and receive federal funding for the Arkansas Nuclear Recycling Program for the storage and recycling of spent nuclear fuel.

8-9-805. Applicability.

This subchapter applies only to the recycling of spent nuclear fuel from commercial nuclear reactors, university nuclear reactors, and other research nuclear reactors.