

1 State of Arkansas
2 94th General Assembly
3 Regular Session, 2023
4

As Engrossed: H1/26/23

A Bill

HOUSE BILL 1142

5 By: Representative Ladyman
6 By: Senator C. Penzo
7

For An Act To Be Entitled

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

Subtitle

20 TO CREATE THE ARKANSAS NUCLEAR RECYCLING
21 PROGRAM.
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25 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

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

29 Subchapter 8 – Arkansas Nuclear Recycling Program

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31 8-9-801. Title.

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

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35 8-9-802. Legislative findings.

36 The General Assembly finds that:



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

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

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

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

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

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

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

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

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29 8-9-803. Purpose.

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

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

34 (A) Shipping spent nuclear fuel into the state and
35 returning the shipping containers back to the point of origin after the
36 extraction of the spent nuclear fuel for reuse and reloading;

1 (B) Recycling spent nuclear fuel into Generation IV fuel;
2 (C) Warehousing spent nuclear fuel;
3 (D) Warehousing recycled nuclear fuel; and
4 (E) Storing waste by-products from the spent nuclear fuel
5 recycling process; and

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

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10 8-9-804. Creation of program – Authorization to enter into charter.

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

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

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

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

20 (C) Developing a final report for legislative approval;

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

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

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

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

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

32 (iv) An interim storage facility;

33 (v) A permanent storage facility; and

34 (vi) A shipping facility; and

35 (3) Engage a scientific and engineering organization to develop
36 the design document for the spent nuclear fuel recycling facility as well as

1 provide an economic analysis on commercial applications and a construction
2 cost estimate and schedule.

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

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

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12 8-9-805. Applicability.

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

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17 */s/Ladyman*
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