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133rd General Assembly
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Sub. H. B. No. 104

A BILL

To amend section 3748.03 and to enact sections 3748.23, 4164.01, 4164.02, 4164.04, 4164.05, 4164.06, 4164.07, 4164.08, 4164.10, 4164.11, 4164.12, 4164.13, 4164.15, 4164.16, 4164.18, 4164.19, and 4164.20 of the Revised Code to enact the Advanced Nuclear Technology Helping Energize Mankind (ANTHEM) Act by establishing the Ohio Nuclear Development Authority.

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

Section 1. That section 3748.03 be amended and sections 3748.23, 4164.01, 4164.02, 4164.04, 4164.05, 4164.06, 4164.07, 4164.08, 4164.10, 4164.11, 4164.12, 4164.13, 4164.15, 4164.16, 4164.18, 4164.19, and 4164.20 of the Revised Code be enacted to read as follows:

Sec. 3748.03. (A)(1) The governor, on behalf of the state, may enter into agreements with the United States nuclear regulatory commission as authorized by section 274(b) of the "Atomic Energy Act of 1954," 68 Stat. 919, 42 U.S.C.A. 2011, as amended, for the discontinuation of specified licensing and

related regulatory authority of the commission with respect to byproduct material, source material, the commercial disposal of low-level radioactive waste, and special nuclear material in quantities not sufficient to form a critical mass and the assumption of that authority by the state.

(2) The governor shall appoint a state liaison officer to the United States nuclear regulatory commission, who shall serve at the pleasure of the governor.

(B) The ~~general assembly hereby designates the~~ department of health, in addition to the Ohio nuclear development authority as ~~the agency~~ authorized ~~to~~ by division (F) of section 4164.11 of the Revised Code, may pursue agreement state status, on behalf of the governor, for the assumption by the state of specified licensing and related regulatory authority from the commission pursuant to division (A) of this section. The department shall and the Ohio nuclear development authority may enter into negotiations with the commission for that purpose.

(C) Any person who, on the effective date of an agreement entered into by the state and the commission pursuant to divisions (A) and (B) of this section, holds a license issued by the commission for radioactive materials that are subject to the agreement is deemed to hold a license issued under this chapter and rules adopted under it. That license shall expire ninety days after the holder receives a notice of expiration from the department or on the date of expiration specified in the license issued by the commission, whichever is later, provided that no such license shall expire during the ninety days immediately following the effective date of the agreement.

Sec. 3748.23. The rules adopted under this chapter shall neither conflict with nor supersede the rules adopted under

Chapter 4164. of the Revised Code.

Sec. 4164.01. As used in this chapter, unless the context otherwise requires, "authority" means the Ohio nuclear development authority created and constituted under section 4164.04 of the Revised Code.

Sec. 4164.02. It is the intent of the general assembly in enacting this chapter of the Revised Code to encourage its use as a model for future legislation to further the pursuit of innovative research and development for any industry in this state.

Sec. 4164.04. There is hereby created and constituted within the department of commerce, the Ohio nuclear development authority. The authority's exercise of powers conferred by this chapter is the performance of an essential governmental function and address matters of public necessity for which public moneys may be spent and private property acquired.

Sec. 4164.05. (A) The authority shall consist of nine members, appointed by the governor, representing the following three stakeholder groups within the nuclear-engineering-and-manufacturing industry:

(1) Safety;

(2) Industry;

(3) Engineering research and development.

(B)(1) A member appointed from the safety group shall hold at least a bachelor's degree in nuclear, mechanical, chemical, or electrical engineering and at least one of the following shall also apply:

(a) The member is a recognized professional in nuclear-

reactor safety or developing ISO 9000 standards.

(b) The member has been employed by or has worked closely with the United States department of energy or the nuclear regulatory commission and the member also has a professional background in nuclear-energy-technology development or advanced-nuclear-reactor concepts.

(c) The member has been employed by a contractor that has built concept reactors and the member also worked with hazardous substances, either nuclear or chemical, during that employment.

(2) A member appointed from the industry group shall have at least five years of experience in one or more of the following:

(a) Nuclear-power-plant operation;

(b) Processing and extracting isotopes;

(c) Managing a facility that deals with hazardous substances, either nuclear or chemical;

(d) Handling and storing nuclear waste.

(3) A member appointed from the engineering research and development group shall hold at least a bachelor's degree in nuclear, mechanical, chemical, or electrical engineering and the member shall also be a recognized professional in at least one of the following areas of study:

(a) Advanced nuclear reactors;

(b) Materials science involving the study of alloys and metallurgy, ceramics, or composites;

(c) Molten-salt chemistry;

(d) Solid-state chemistry;

(e) Chemical physics;

(f) Actinide chemistry;

(g) Instrumentation and sensors;

(h) Control systems.

(C) The members shall be United States citizens and residents of this state.

(D) The members shall serve five-year terms.

(E) Any appointment to fill a vacancy on the authority shall be made for the unexpired term of the member whose death, resignation, or removal created the vacancy.

(F) Initial appointments under this section shall be made not later than sixty days after the effective date of an agreement made under section 3748.03 of the Revised Code.

Sec. 4164.06. No member shall be appointed to the authority until an agreement is reached under division (B) of section 3748.03 of the Revised Code.

Sec. 4164.07. Immediately after appointment to the authority under section 4164.05 of the Revised Code, the members shall enter upon the performance of their duties.

Sec. 4164.08. Notwithstanding any law to the contrary, no officer or employee of this state shall be deemed to have forfeited, or shall have forfeited, the officer's or employee's office or employment due to acceptance of membership on the authority or by providing service to the authority.

Sec. 4164.10. The authority is established for both of the following purposes:

(A) To be an information resource for this state, the

United States nuclear regulatory commission, all branches of the United States military, and the United States department of energy on advanced-nuclear-research reactors, isotopes, and isotope technologies;

(B) To make this state all of the following:

(1) A leader in the development and construction of new-type advanced-nuclear-research reactors;

(2) A national and global leader in the commercial production of isotopes and research;

(3) A leader in the research and development of high-level-nuclear-waste reduction and storage technology.

Sec. 4164.11. The authority shall have all powers necessary and convenient for carrying out its statutory purposes, including the following powers:

(A) To adopt bylaws for the management and regulation of its affairs;

(B) To develop and adopt a strategic plan for carrying out the purposes set forth in this chapter;

(C) To foster innovative partnerships and relationships in the state and among the state's public institutions of higher education, private companies, federal laboratories, and nonprofit organizations, to accomplish the purposes set forth in this chapter;

(D) To identify and support, in cooperation with the public and private sectors, the development of education programs related to Ohio's isotope industry;

(E) To assume any regulatory powers delegated from the

United States nuclear regulatory commission, the United States department of energy, or any branch of the United States military, or similar federal agencies, departments, or programs, governing the construction and operation of noncommercial power-producing nuclear reactors and the handling of radioactive materials;

(F) To act in place of the governor in approving agreements with the United States nuclear regulatory commission and joint-development agreements with the United States department of energy or an equivalent regulatory agency in the event that any of the following occur:

(1) The authority requests the commission to delegate rules for a state-based nuclear research-and-development program.

(2) The authority requests to jointly develop advanced-nuclear-research-reactor technology with the department under the department's authority.

(3) The authority requests to jointly develop advanced-nuclear-research-reactor technology with the United States department of defense or another United States military agency under the authority of the department or agency.

Sec. 4164.12. For the purpose of carrying out the Ohio nuclear development authority's duties under sections 4164.01 to 4164.20 of the Revised Code, the authority may make use of the staff and experts employed at the department of commerce in such manner as is provided by mutual arrangement between the authority and the department.

Sec. 4164.13. Meetings of the authority shall be held in compliance with section 121.22 of the Revised Code.

Sec. 4164.15. The authority shall work with industrial and academic institutions and the United States department of energy or branches of the United States military to approve designs for the commercialization of advanced-nuclear-reactor components, which may include any of the following:

(A) Advanced-nuclear-reactor-neutronics analysis and experimentation, including reactor, plant, shielding, nuclear data, source-program software, nuclear database, conceptual design, core and system design, certification in the phases, core-management and fuel-management technology, modeling, and calculation;

(B) Advanced-nuclear-reactor safety and plant safety, including reactor-system safety standards, accident-analysis software, and accident-management regulations;

(C) Advanced-nuclear-reactor fuels and materials, including long-life fuel, clad materials, structural materials, component materials, absorber materials, circuit materials, raw materials, fuels-and-materials research and development, testing programs used to develop fuels and materials-manufacturing processes, experimental data, formulae, technological processes, and facilities and equipment used to manufacture advanced-nuclear-reactor fuels and materials;

(D) Advanced-nuclear-reactor-nuclear-steam-supply systems and their associated components and equipment, including design standards, component, equipment, and systems design, thermal hydraulics, mechanics, and chemistry analysis;

(E) Advanced-nuclear-reactor engineered-safety features and their associated components, including design standards, component design, system design, and structural design;

(F) Advanced-nuclear-reactor building, including containment design, structural analysis, and architectural analysis;

(G) Advanced-nuclear-reactor instrumentation and control and application of computer science, including survey, monitor, control, and protection systems;

(H) Advanced-nuclear-reactor-quality practices, nondestructive-inspection practices, and in-service-inspection technology;

(I) Advanced-nuclear-reactor plant design and construction, debug, test-run, operation, maintenance, and decommissioning technology;

(J) Advanced-nuclear-reactor economic methodology and evaluation technology;

(K) Treatment, storage, recycling, and disposal technology for advanced-nuclear-reactor and system-spent fuel;

(L) Treatment, storage, and disposal technology for advanced-nuclear-reactor and system radioactive waste;

(M) Other areas that the parties or their executive agents agree upon in writing.

Sec. 4164.16. The authority shall give priority to projects that reduce nuclear waste and produce isotopes.

Sec. 4164.18. On or before the fourth day of July of each year, the authority shall submit an annual report of its activities to the governor, the speaker of the house of representatives, the president of the senate, and the chairs of the house and senate committees that oversee energy-related issues. The report shall be posted to the authority's web site.

Sec. 4164.19. Nothing in this chapter shall be construed to supersede any agreement between the department of health and the United States nuclear regulatory commission entered into under section 3748.03 of the Revised Code with respect to regulating activities not within the scope of activities of the authority.

Sec. 4164.20. The authority shall, under Chapter 119. of the Revised Code, adopt rules provided for by the United States nuclear regulatory commission, department of energy, department of defense or another United States military agency, or a comparable federal agency for an Ohio state nuclear technology research program for the purposes of developing and studying advanced-nuclear research reactors to produce isotopes and to reduce this state's high-level nuclear waste. The rules shall reasonably ensure Ohioans of their safety in respect to nuclear technology research and development and radioactive materials.

Section 2. That existing section 3748.03 of the Revised Code is hereby repealed.