

Sub. H.B. 33
As Passed by the Senate
DEVCD68 and DEVCD69

_____ moved to amend as follows:

- In line 117 of the title, after "3746.13," insert "3748.03," 1
- In line 263 of the title, after "3737.833," insert "3748.23," 2
- In line 264 of the title, after "4141.211," insert "4164.01, 3
4164.02, 4164.04, 4164.05, 4164.051, 4164.052, 4164.053, 4164.07, 4
4164.08, 4164.09, 4164.091, 4164.092, 4164.093, 4164.094, 5
4164.096, 4164.097, 4164.098, 4164.099, 4164.0911, 4164.0912, 6
4164.0913, 4164.0914, 4164.0916, 4164.0917, 4164.0918, 4164.10, 7
4164.11, 4164.12, 4164.13, 4164.15, 4164.16, 4164.18, 4164.19, 8
4164.20," 9
- In line 848, after "3746.13," insert "3748.03," 10
- In line 954, after "3737.833," insert "3748.23," 11
- In line 955, after "4141.211," insert "4164.01, 4164.02, 12
4164.04, 4164.05, 4164.051, 4164.052, 4164.053, 4164.07, 4164.08, 13
4164.09, 4164.091, 4164.092, 4164.093, 4164.094, 4164.096, 14
4164.097, 4164.098, 4164.099, 4164.0911, 4164.0912, 4164.0913, 15
4164.0914, 4164.0916, 4164.0917, 4164.0918, 4164.10, 4164.11, 16
4164.12, 4164.13, 4164.15, 4164.16, 4164.18, 4164.19, 4164.20," 17
- After line 69394, insert: 18

"**Sec. 3748.03.** ~~(A)(1)~~(A)(1)(a) 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.

(b) The governor, on behalf of the state, may also enter into agreements described in division (A)(1)(a) of this section with the the United States department of energy or branches of the United States military.

(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.

After line 74632, insert:

"Sec. 4164.01. As used in this chapter, unless the context
 otherwise requires:

(A) "Authority" means the Ohio nuclear development authority
 created and constituted under section 4164.04 of the Revised Code.

(B) "Council" means the Ohio nuclear development authority
 nominating council created and constituted under section 4164.09
 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 development, the Ohio nuclear development
 authority. The authority's exercise of powers conferred by this
 chapter is the performance of an essential governmental function

and addresses matters of public necessity for which public moneys 76
may be spent. 77

Sec. 4164.05. (A) The authority shall consist of nine members 78
appointed by the governor, representing the following three 79
stakeholder groups within the 80
nuclear-engineering-and-manufacturing industry: 81

(1) Safety; 82

(2) Industry; 83

(3) Engineering research and development. 84

(B)(1) A member appointed from the safety group shall hold at 85
least a bachelor's degree in nuclear, mechanical, chemical, or 86
electrical engineering and at least one of the following shall 87
also apply: 88

(a) The member is a recognized professional in 89
nuclear-reactor safety or developing ISO 9000 standards. 90

(b) The member has been employed by or has worked closely 91
with the United States department of energy or the nuclear 92
regulatory commission and the member also has a professional 93
background in nuclear-energy-technology development or 94
advanced-nuclear-reactor concepts. 95

(c) The member has been employed by a contractor that has 96
built concept reactors and the member also worked with hazardous 97
substances, either nuclear or chemical, during that employment. 98

(2) A member appointed from the industry group shall have at 99
least five years of experience in one or more of the following: 100

(a) Nuclear-power-plant operation; 101

(b) Processing and extracting isotopes; 102

<u>(c) Managing a facility that deals with hazardous substances,</u>	103
<u>either nuclear or chemical;</u>	104
<u>(d) Handling and storing nuclear waste.</u>	105
<u>(3) A member appointed from the engineering research and</u>	106
<u>development group shall hold at least a bachelor's degree in</u>	107
<u>nuclear, mechanical, chemical, or electrical engineering and the</u>	108
<u>member shall also be a recognized professional in at least one of</u>	109
<u>the following areas of study:</u>	110
<u>(a) Advanced nuclear reactors;</u>	111
<u>(b) Materials science involving the study of alloys and</u>	112
<u>metallurgy, ceramics, or composites;</u>	113
<u>(c) Molten-salt chemistry;</u>	114
<u>(d) Solid-state chemistry;</u>	115
<u>(e) Chemical physics;</u>	116
<u>(f) Actinide chemistry;</u>	117
<u>(g) Instrumentation and sensors;</u>	118
<u>(h) Control systems.</u>	119
<u>(C) The members shall be United States citizens and residents</u>	120
<u>of this state.</u>	121
<u>(D) The members shall serve five-year terms.</u>	122
<u>(E) Any appointment to fill a vacancy on the authority shall</u>	123
<u>be made for the unexpired term of the member whose death,</u>	124
<u>resignation, or removal created the vacancy.</u>	125
<u>(F) Initial appointments under this section shall be made not</u>	126
<u>later than one hundred twenty days after the effective date of</u>	127
<u>this section.</u>	128

Sec. 4164.051. The governor shall appoint members, and fill 129
vacancies in the membership, of the authority from lists of 130
nominees recommended by the council. The governor shall fill a 131
vacancy not later than thirty days after receipt of the council's 132
recommendations. 133

Sec. 4164.052. The governor, in the governor's discretion, 134
may reject all of the nominees recommended by the council and 135
reconvene the council for it to recommend additional nominees. If 136
the governor reconvenes the council and the council provides a 137
second list of nominees, the governor shall make the required 138
appointment from one of the names on the first or second list. 139

Sec. 4164.053. All appointments by the governor to the 140
authority are subject to the advice and consent of the senate. 141

Sec. 4164.07. Immediately after appointment to the authority 142
under section 4164.05 of the Revised Code, the members shall enter 143
upon the performance of their duties. 144

Sec. 4164.08. Notwithstanding any law to the contrary, no 145
officer or employee of this state shall be deemed to have 146
forfeited, or shall have forfeited, the officer's or employee's 147
office or employment due to acceptance of membership on the 148
authority or by providing service to the authority. 149

Sec. 4164.09. There is hereby created the Ohio nuclear 150
development authority nominating council. 151

Sec. 4164.091. The council shall review, evaluate, and make 152
recommendations to the governor regarding potential appointees to 153

serve as members of the authority.

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Sec. 4164.092. (A) Consistent with division (B) of section 4164.05 of the Revised Code, and for the purpose of making initial and subsequent appointments, and for filling vacancies, the council shall provide the governor with a list of individuals who are, in the judgment of the council, the most fully qualified to become members of the authority.

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(B) For each initial appointment, and for each subsequent or vacancy appointment, the council shall provide a list of four possible appointees.

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(C) The council shall provide the lists at the following times:

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(1) For each subsequent appointment, not more than eighty-five, nor less than sixty, days before the expiration of the term of an authority member to be renewed or replaced;

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(2) For each vacancy appointment, not more than thirty days after the death of, resignation of, or termination of service by, an authority member for whom a vacancy exists.

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Sec. 4164.093. In reviewing, evaluating, and recommending potential appointees to serve as members of the authority, the council may solicit and accept comments from, and cooperate with, any individual.

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Sec. 4164.094. The council may make recommendations to the general assembly concerning changes in law to assist the council in the performance of its duties.

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Sec. 4164.096. The council shall consist of seven members:

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<u>(A) The president of the senate, or the president's designee;</u>	180
<u>(B) The speaker of the house of representatives, or the speaker's designee.</u>	181 182
<u>(C) Five members of the Ohio state university's nuclear engineering external advisory board.</u>	183 184
 <u>Sec. 4164.097.</u> <u>(A) Of the seven members of the council, the five members from the Ohio state university's nuclear engineering external advisory board shall be appointed by the governor.</u>	185 186 187
<u>(B) Initial appointments under this section shall be made not later than thirty days after the effective date of this section.</u>	188 189
 <u>Sec. 4164.098.</u> <u>The term of office for council members appointed by the governor shall be two years. Each appointed member shall serve as a member of the council from the date of appointment until the end of the term for which the member was appointed.</u>	190 191 192 193 194
<u>The president of the senate, or the president's designee, and the speaker of the house of representatives, or the speaker's designee, shall serve on the council only during the tenure of the president or speaker.</u>	195 196 197 198
 <u>Sec. 4164.099.</u> <u>Any member appointed to fill a vacancy occurring before the expiration of the term for which the member was appointed shall hold office for the remainder of such term. Any member shall continue in office after the expiration date of the term for which the member was appointed until the member's successor takes office, or until a period of sixty days has elapsed, whichever occurs first. Each vacancy of an appointed member shall be filled by appointment not later than sixty days</u>	199 200 201 202 203 204 205 206

after the vacancy occurs and shall be filled in the same manner as 207
the original appointment. 208

Sec. 4164.0911. The council shall elect a chairperson and a 209
secretary at its initial meeting. 210

Sec. 4164.0912. The council shall hold its initial meeting 211
not later than sixty days after the effective date of this 212
section. Subsequent meetings of the council may be called by the 213
chairperson. Special meetings shall be called by the chairperson 214
upon receipt of a written request for a meeting signed by two or 215
more members of the council. 216

Sec. 4164.0913. Before each meeting of the council, written 217
notice of the time and place of each meeting shall be sent to each 218
member of the council by mail or electronic mail. 219

Sec. 4164.0914. Four members of the council, or their 220
alternates, constitute a quorum. No measure shall be voted on, or 221
any action taken by the council unless a quorum is present. 222

Sec. 4164.0916. The council shall keep a record of its 223
proceedings. 224

Sec. 4164.0917. The council may adopt bylaws governing its 225
proceedings. 226

Sec. 4164.0918. Members of the council shall serve without 227
compensation. 228

Sec. 4164.10. The authority is established for both of the 229
following purposes: 230

<u>(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;</u>	231
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<u>(B) To make this state all of the following:</u>	236
<u>(1) A leader in the development and construction of new-type advanced-nuclear-research reactors;</u>	237
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<u>(2) A national and global leader in the commercial production of isotopes and research;</u>	239
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<u>(3) A leader in the research and development of high-level-nuclear-waste reduction and storage technology.</u>	241
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<u>Sec. 4164.11. The authority shall have all powers necessary and convenient for carrying out its statutory purposes, including the following powers:</u>	243
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<u>(A) To adopt bylaws for the management and regulation of its affairs;</u>	246
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<u>(B) To develop and adopt a strategic plan for carrying out the purposes set forth in this chapter;</u>	248
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<u>(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;</u>	250
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<u>(D) To identify and support, in cooperation with the public and private sectors, the development of education programs related to Ohio's isotope industry;</u>	255
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(E) To assume, with the advice and consent of the Senate, any 258
regulatory powers delegated from the United States nuclear 259
regulatory commission, the United States department of energy, or 260
any branch of the United States military, or similar federal 261
agencies, departments, or programs, governing the construction and 262
operation of noncommercial power-producing nuclear reactors and 263
the handling of radioactive materials; 264

(F) To act in place of the governor in approving agreements 265
with the United States nuclear regulatory commission and 266
joint-development agreements with the United States department of 267
energy or an equivalent regulatory agency in the event that any of 268
the following occur: 269

(1) The authority requests the commission to delegate rules 270
for a state-based nuclear research-and-development program. 271

(2) The authority requests to jointly develop 272
advanced-nuclear-research-reactor technology with the department 273
under the department's authority. 274

(3) The authority requests to jointly develop 275
advanced-nuclear-research-reactor technology with the United 276
States department of defense or another United States military 277
agency under the authority of the department or agency. 278

Sec. 4164.12. For the purpose of carrying out the Ohio 279
nuclear development authority's duties under sections 4164.01 to 280
4164.20 of the Revised Code, the authority may make use of the 281
staff and experts employed at the department of development in 282
such manner as is provided by mutual arrangement between the 283
authority and the department. 284

Sec. 4164.13. Meetings of the authority shall be held in 285

<u>compliance with section 121.22 of the Revised Code.</u>	286
<u>Sec. 4164.15. The authority shall work with industrial and</u>	287
<u>academic institutions and the United States department of energy</u>	288
<u>or branches of the United States military to approve designs for</u>	289
<u>the commercialization of advanced-nuclear-reactor components,</u>	290
<u>which may include any of the following:</u>	291
<u>(A) Advanced-nuclear-reactor-neutronics analysis and</u>	292
<u>experimentation, including reactor, plant, shielding, nuclear</u>	293
<u>data, source-program software, nuclear database, conceptual</u>	294
<u>design, core and system design, certification in the phases,</u>	295
<u>core-management and fuel-management technology, modeling, and</u>	296
<u>calculation;</u>	297
<u>(B) Advanced-nuclear-reactor safety and plant safety,</u>	298
<u>including reactor-system safety standards, accident-analysis</u>	299
<u>software, and accident-management regulations;</u>	300
<u>(C) Advanced-nuclear-reactor fuels and materials, including</u>	301
<u>long-life fuel, clad materials, structural materials, component</u>	302
<u>materials, absorber materials, circuit materials, raw materials,</u>	303
<u>fuels-and-materials research and development, testing programs</u>	304
<u>used to develop fuels and materials-manufacturing processes,</u>	305
<u>experimental data, formulae, technological processes, and</u>	306
<u>facilities and equipment used to manufacture</u>	307
<u>advanced-nuclear-reactor fuels and materials;</u>	308
<u>(D) Advanced-nuclear-reactor-nuclear-steam-supply systems and</u>	309
<u>their associated components and equipment, including design</u>	310
<u>standards, component, equipment, and systems design, thermal</u>	311
<u>hydraulics, mechanics, and chemistry analysis;</u>	312
<u>(E) Advanced-nuclear-reactor engineered-safety features and</u>	313
<u>their associated components, including design standards, component</u>	314

<u>design, system design, and structural design;</u>	315
<u>(F) Advanced-nuclear-reactor building, including containment design, structural analysis, and architectural analysis;</u>	316
<u>(G) Advanced-nuclear-reactor instrumentation and control and application of computer science, including survey, monitor, control, and protection systems;</u>	318
<u>(H) Advanced-nuclear-reactor-quality practices, nondestructive-inspection practices, and in-service-inspection technology;</u>	321
<u>(I) Advanced-nuclear-reactor plant design and construction, debug, test-run, operation, maintenance, and decommissioning technology;</u>	324
<u>(J) Advanced-nuclear-reactor economic methodology and evaluation technology;</u>	327
<u>(K) Treatment, storage, recycling, and disposal technology for advanced-nuclear-reactor and system-spent fuel;</u>	329
<u>(L) Treatment, storage, and disposal technology for advanced-nuclear-reactor and system radioactive waste;</u>	331
<u>(M) Other areas that the parties or their executive agents agree upon in writing.</u>	333
<u>Sec. 4164.16. The authority shall give priority to projects that reduce nuclear waste and produce isotopes.</u>	335
<u>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</u>	337
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issues. The report shall be posted to the authority's web site.

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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.

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Sec. 4164.20. (A) 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.

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(B) Notwithstanding any provision of section 121.95 of the Revised Code to the contrary, a regulatory restriction contained in a rule adopted under this section is not subject to sections 121.95 to 121.953 of the Revised Code."

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In line 124672, after "3746.13," insert "3748.03,"

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After line 281166, insert:

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"Section 741.10. Not later than ninety days after the effective date of this section, the Ohio nuclear development authority nominating council shall provide the governor with a list of possible initial appointees."

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The motion was _____ agreed to.

SYNOPSIS

Ohio Nuclear Development Authority	368
R.C. 3748.23, 4164.01 to 4164.07, and 4164.10 to 4164.20	369
Establishes the Ohio Nuclear Development Authority	370
(Authority) within the Ohio Department of Development consisting	371
of nine members, from certain stakeholder groups.	372
Establishes the Authority for the following purposes:	373
- To be an information resource for Ohio and certain federal	374
agencies regarding advanced nuclear research reactors, isotopes,	375
and isotope technologies;	376
- To make Ohio a leader regarding new-type advanced nuclear	377
research reactors, isotopes, and high-level nuclear waste	378
reduction and storage.	379
Grants the Authority extensive power to fulfill its nuclear	380
technology purposes specifically with respect to advanced nuclear	381
reactor commercialization, isotope production, and nuclear waste	382
reduction.	383
Requires the Authority to submit an annual report of its	384
activities and post the report on the Authority's website.	385
Requires the Authority to adopt rules for an Ohio State	386
Nuclear Technology Research Program.	387
Prohibits rules adopted under continuing law by the	388
Department of Health for radiation control from conflicting with	389
or superseding the rules adopted by the Authority.	390

Exempts Authority rules from being subject to Ohio law governing the sunset of regulatory restrictions.	391 392
Ohio Nuclear Development Authority Nominating Council	393
R.C. 4164.09 to 4164.0918; Section 741.10	394
Establishes a seven-member Ohio Nuclear Development Authority Nominating Council (Council).	395 396
Requires the Council to review, evaluate, and make recommendations to the Governor for potential Authority member appointees, which the Governor must select from.	397 398 399
Designates time limits for the appointment of membership to the Council and for the Council to provide recommendation lists to the Governor, as well as term limits for Council members.	400 401 402
Creates various requirements regarding Council meetings and activities, such as when meetings must occur, adoption of bylaws, recordkeeping, and selection and duties of the Council chairperson and secretary.	403 404 405 406
Nuclear agreements	407
R.C. 3748.03	408
Permits the Governor, to the same extent as may be done under current law with the U.S. Nuclear Regulatory Commission, to enter into agreements with the U.S. Department of Energy or branches of the U.S. military to permit the state to license and exercise regulatory authority regarding certain radioactive materials.	409 410 411 412 413
Permits the Authority to enter into the same agreements on behalf of the Governor.	414 415