THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL No. 1276 ^{Session of} 2006

INTRODUCED BY D. WHITE, FERLO, BOSCOLA, PUNT, CORMAN, WASHINGTON, ERICKSON, RAFFERTY, LEMMOND, GORDNER, MUSTO, PILEGGI, ORIE AND PICCOLA, JUNE 30, 2006

REFERRED TO ENVIRONMENTAL RESOURCES AND ENERGY, JUNE 30, 2006

AN ACT

1	Amending the act of July 10, 1984 (P.L.688, No.147), entitled
2	"An act combining the radiation safety provisions of The
3	Atomic Energy Development and Radiation Control Act and the
4	Environmental Radiation Protection Act; empowering the
5	Department of Environmental Resources to implement a
6	comprehensive Statewide radiation protection program; further
7	providing for the power of the Environmental Quality Board
8	and for the duties of the Environmental Hearing Board;
9	expanding the authority of the department to regulate other
10	radiation sources; providing for radiation emergency
11	response; establishing requirements for transport of spent
12	reactor fuel; establishing fees; providing penalties; making
13	repeals; and authorizing and directing the Department of
14	Environmental Resources and the Governor to convey ownership
15	to the Carl A. White Acid Mine Drainage Treatment Plant,
16	situated in Washington Township, Indiana County,
17	Pennsylvania, to the County of Indiana, subject to a right of
18	reverter for stated conditions," further providing for
19	definitions, for powers of Environmental Quality Board, for
20	nuclear facility and transport fees, for creation of special
21	funds, for response program and for transportation of
22	radioactive materials; and making repeals.
23	The General Assembly of the Commonwealth of Pennsylvania
20	
24	hereby enacts as follows:
25	Section 1. Sections 103 and 302 of the act of July 10, 1984

26 (P.L.688, No.147), known as the Radiation Protection Act, are

27 amended to read:

1 Section 103. Definitions.

2 The following words and phrases when used in this act shall
3 have the meanings given to them in this section unless the
4 context clearly indicates otherwise:

5 "Abatement." Any action deemed necessary by the department to protect public health, safety or welfare, or public or 6 7 private property, resulting from the use of a radiation source. 8 "Agency." The Pennsylvania Emergency Management Agency. 9 "Away-from-reactor spent nuclear fuel storage facility." A spent nuclear fuel storage facility located outside the site 10 boundaries or property lines of a nuclear power reactor licensed 11 under 10 CFR Pt. 50 (relating to domestic licensing of 12 13 production and utilization facilities). 14 "Council." The Pennsylvania Emergency Management Council. 15 "Department." The Department of Environmental [Resources] 16 Protection and its authorized representatives. 17 "Director." The Director of the Pennsylvania Emergency 18 Management Agency. "Electronic product radiation." Any radiation emitted by 19 20 products subject to the Radiation Control for Health and Safety Act of 1968 (Public Law 90-602, 82 Stat. 1173). 21 22 "High-level waste." 23 (1) Irradiated reactor fuel; (2) highly-radioactive material resulting from the 24 reprocessing of spent nuclear fuel, including liquid waste 25 26 produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products 27 28 in sufficient concentrations; or (3) other highly radioactive material that the Nuclear 29 Regulatory Commission, consistent with existing Federal law, 30

20060S1276B1979

- 2 -

1 determines by rule requires permanent isolation. 2 "Large quantity of radioactive material." A single package 3 or multiple packages in a single shipment of radioactive material which exceed any of the following limits: 4 5 (1) 1,000 Terabecquerels (TBq) (27,000 curies (Ci)); (2) 3,000 times the A subl or A sub2 limits for a 6 radionuclide listed in Appendix A of 10 CFR Pt. 71 (relating 7 8 to packaging and transportation of radioactive material); (3) a radioactive material quantity of concern as 9 defined by the Nuclear Regulatory Commission; or 10 (4) any radioactive material shipment where State 11 12 notification is mandated by Federal law, regulation, order or 13 other Federal requirement. "NRC." The United States Nuclear Regulatory Commission or 14 15 any predecessor or successor thereto. 16 "Person." An individual, corporation, firm, association, 17 public utility, trust, estate, public or private institution, 18 group, agency, political subdivision of the Commonwealth, any 19 other state or political subdivision or agency thereof and any 20 legal successor, representative, agent or agency of the 21 foregoing, other than the United States Nuclear Regulatory 22 Commission or any successor thereto. In any provision of this 23 act prescribing a fine, imprisonment or penalty, or any combination of the foregoing, the term "person" shall include 24 25 the officers and directors of any corporation or other legal 26 entity having officers and directors. 27 ["PSP." The Pennsylvania State Police.] 28 "Radiation." Any ionizing radiation or electronic product 29 radiation.

30 "Radiation source." An apparatus or material, other than a 20060S1276B1979 - 3 - nuclear power reactor and nuclear fuel located on a plant site,
 emitting or capable of emitting radiation.

3 "Radiation source user." A person who owns or is responsible
4 for a radiation source.

5 "Reactor fuel fabrication facility." A facility in which onsite operations include preparation of reactor fuel material 6 with fissionable material such as uranium or plutonium, reactor 7 8 fuel material research and development, formation of fuel material shapes, application of cladding, recovery of reactor 9 10 fuel material or any other reactor fuel material manufacturing 11 operation. "Secretary." The Secretary of Environmental [Resources] 12 13 Protection or his or her authorized representative. "Spent nuclear fuel." Fuel that has been withdrawn from a 14

15 nuclear reactor following irradiation, the constituent elements 16 of which have not been separated by reprocessing.

17 <u>"Transuranic waste." Radioactive waste containing more than</u>

18 <u>3.7 kilobecquerels (KBq) (100 nanocuries) of alpha-emitting</u>

19 transuranic isotopes per gram of waste, with half-lives greater

20 than 20 years, except for high-level waste.

21 Section 302. Powers of Environmental Quality Board.

(a) Powers and duties.--The Environmental Quality Board or
its successor shall have the power and its duty shall be to
adopt the rules and regulations of the department to accomplish
the purposes and carry out the provisions of this act.

(b) Review of <u>department</u> fee structure.--The Environmental
Quality Board or its successor shall review every [four] <u>three</u>
years the fee structure as authorized by [sections 401 and
402(b)] <u>section 401</u>.

30 Section 2. Section 402 of the act, repealed in part December 20060S1276B1979 - 4 - 1 18, 1992 (P.L.1638, No.180), is amended to read:

2 Section 402. Nuclear facility and transport fees.

3 (a) General rule.--Persons engaged in the business of 4 producing electricity utilizing nuclear energy, operating 5 facilities for storing away-from-reactor spent nuclear fuel [for others] or fabrication of nuclear reactor fuel or shipping spent 6 nuclear fuel, high-level waste, transuranic waste or a large 7 8 quantity of radioactive material shall pay fees to cover the 9 costs of the programs related to their activities as required by 10 this act.

11

(b.1) Department fees.--

12 (1) Within 30 days of the effective date of this 13 subsection each person who has a current nuclear power reactor construction permit or operating license from the NRC 14 15 for a site within this Commonwealth shall pay the department 16 \$100,000 per nuclear power reactor site, regardless of the number of individual nuclear power reactors located at the 17 18 site. By July 1, 2006, and by July 1 of each year thereafter, each person who has a current nuclear power reactor 19 20 construction permit or operating license from the NRC for a 21 site within this Commonwealth shall pay the department an 22 annual fee of \$550,000 per nuclear power reactor site, 23 regardless of the number of individual nuclear power reactors 24 located at the site. For the purposes of this subsection 25 only, a nuclear power reactor site shall be deemed to be the 26 location of one or more individual nuclear power reactors 27 which still has spent nuclear fuel stored onsite, has not 28 been fully dismantled and decommissioned pursuant to 29 applicable Federal law and regulations, and has not been granted license termination by the NRC. 30

20060S1276B1979

- 5 -

1	(2) By July 1 of each year, each person who has applied	
2	for or currently holds a valid license from the NRC to	
3	<u>operate an away-from-reactor spent nuclear fuel storage</u>	
4	facility within this Commonwealth shall pay to the department	
5	<u>an annual fee of \$250,000 per site.</u>	
6	(3) By July 1 of each year, each person who has approval	
7	from the Department of Energy, or has applied for or	
8	currently holds a valid license from the NRC, to operate a	
9	reactor fuel fabrication facility within this Commonwealth	
10	shall pay to the department an annual fee of \$250,000 per	
11	<u>site.</u>	
12	(4) Prior to the date of a shipment that requires an	
13	escort, each shipper of spent nuclear fuel, high-level waste,	
14	transuranic waste or a large quantity of radioactive material	
15	who ships to, within, through or across this Commonwealth	
16	shall pay to the department a fee of \$500 per individual	
17	vehicle shipment or \$1,000 per railroad or river barge	
18	shipment.	
19	(5) Every three years beginning in 2009, the department	
20	shall convene a working group consisting of personnel from	
21	the department selected by the secretary and an equal number	
22	of representatives from the nuclear facilities, selected by	
23	the owners of those facilities, to review the nuclear	
24	facility fees paid to the department, related issues that may	
25	have an impact on those fees and the expenditures made by the	
26	department in administering its radiation protection	
27	programs. This working group shall issue a report to the	
28	General Assembly outlining its findings of fact and its	
29	recommendations relative to the fees imposed by the	
30	department pursuant to this section, including any individual	
20060S1276B1979 - 6 -		

1 or minority recommendations from members of the working 2 <u>group.</u> 3 (b.2) Actual department cost recovery.--The following individual nuclear power reactors shall be subject to actual 4 5 department cost recovery for decommissioning oversight responsibilities, with these costs to be tracked by site and 6 7 invoiced to the person holding the NRC reactor license at the 8 end of each Commonwealth fiscal quarter: 9 (1) Peach Bottom Atomic Power Station, Unit 1. (2) Three Mile Island Nuclear Generating Station, Unit 10 11 2. 12 The two individual nuclear power reactors specified in this 13 subsection are not subject to the fees described in subsections (b.1)(1) and (c)(1.1). 14 15 (c) Agency fees. --16 [(1) Each person who has received or has applied for a 17 nuclear power reactor facility operating license from the NRC 18 shall pay to the agency a one-time fee of \$200,000 per site 19 within 30 days of the effective date of this act and an 20 annual fee of \$100,000 per site payable by July 1 of each year, regardless of the number of power reactors per site.] 21 (1.1) Within 30 days of the effective date of this 22 23 paragraph each person who has a current nuclear power reactor 24 construction permit or operating license from the NRC, for a 25 site within this Commonwealth, shall pay the agency, regardless of the number of individual nuclear power reactors 26 27 located at the site, \$100,000 to be collected and used by the 28 agency in accordance with the provisions of 35 Pa.C.S. § 7320 29 (relating to radiological emergency response preparedness, planning and recovery program) and \$50,000 to be collected 30

20060S1276B1979

- 7 -

1	and used by the agency for radiological emergency response
2	equipment, planning, training and exercise costs involving
3	nonagency personnel. By July 1, 2006, and by July 1 of each
4	year thereafter, each person who has a current nuclear power
5	reactor construction permit or operating license from the
б	NRC, for a site within this Commonwealth, shall pay the
7	agency the following fees, regardless of the number of
8	individual nuclear power reactors located at the site:
9	(i) \$200,000 to be collected and used by the agency
10	in accordance with the provisions of 35 Pa.C.S. § 7320.
11	(ii) \$150,000 to be collected and used by the agency
12	for radiological emergency response equipment, planning,
13	training and exercise costs involving nonagency
14	personnel.
15	Payments collected under this section shall be deposited into
16	the Radiological Emergency Response Planning and Preparedness
17	Program Fund established pursuant to 35 Pa.C.S. § 7320(c). For
18	the purposes of this subsection only, a nuclear power reactor
19	site shall be deemed to be the location of one or more
20	individual nuclear power reactors which still has spent nuclear
21	fuel stored onsite, has not been fully dismantled and
22	decommissioned pursuant to applicable Federal law and
23	regulations and has not been granted license termination by the
24	NRC.
25	(2) [Each] <u>By July 1 of each year, each</u> person who has
26	applied for or [received a valid] <u>holds a current</u> license
27	from the NRC to operate an away-from-reactor spent <u>nuclear</u>
28	fuel storage facility within this Commonwealth shall pay to
29	the agency an annual fee of [\$50,000 per site payable by July
30	1 of each year] <u>\$75,000 per site</u> .
200	60°1276°1070 – 8 –

20060S1276B1979

- 8 -

(3) [Each] <u>By July 1 of each year, each person who has</u>
<u>approval from the Department of Energy, or has applied for or</u>
[received a valid] <u>holds a current</u> license from the NRC to
operate a reactor fuel fabrication facility <u>within this</u>
<u>Commonwealth</u> shall pay to the agency an annual fee of
[\$50,000 per site payable by July 1 of each year] <u>\$75,000 per</u>
<u>site</u>.

8 (4) [Each] Prior to the proposed date of a shipment that 9 requires an escort, each shipper of spent [reactor fuel] nuclear fuel, high-level waste, transuranic waste or a large 10 quantity of radioactive material who ships to, within, 11 through or across the boundaries of this Commonwealth shall 12 13 pay to the agency a fee of [\$1,000 per shipment, payable prior to the proposed date of shipment.] \$2,500 per 14 individual vehicle shipment or \$4,500 per railroad car or 15

16 <u>river barge shipment.</u>

(5) Every three years beginning in 2009, the agency 17 18 shall convene a working group consisting of personnel from the agency selected by the director and an equal number of 19 representatives from the nuclear facilities, selected by the 20 21 owners of those facilities, to review the nuclear facility fees paid to the agency, related issues that may have an 22 23 impact on those fees and the expenditures made by the agency 24 in administering its radiation protection programs. This 25 working group shall issue a report to the General Assembly outlining its findings of fact and its recommendations 26 27 relative to the fees imposed by the agency pursuant to this 28 section, including any individual or minority recommendations 29 from members of the working group.

30 (d) [PSP] <u>Pennsylvania State Police</u> fees.--

20060S1276B1979

- 9 -

1 (1) Each shipper of spent [reactor fuel] <u>nuclear fuel</u>, 2 high-level waste, transuranic waste or a large quantity of 3 radioactive material who ships to, within, through or across 4 the Commonwealth shall reimburse the [PSP] Pennsylvania State 5 Police for the actual costs, as determined by the Pennsylvania State Police, to provide escort service. [at the 6 7 following rates: \$20 per hour per officer and 50ç per mile 8 for highway shipments. Rail shipments shall be based on a 9 rate of \$25 per hour per officer.] If the shipment is 10 canceled following [PSP] notification for escort service, the 11 shipper shall compensate the [PSP] Pennsylvania State Police 12 at an appropriate rate for [four] total hours of officers' 13 time.

(2) [The PSP may adjust the rates by regulation as
prevailing wage rates and transportation costs change.] <u>The</u>
<u>Pennsylvania State Police may establish a schedule of fees</u>
<u>for escort, and revise such fees on an annual basis. Such</u>
<u>fees shall be published in the Pennsylvania Bulletin.</u>
(e) Penalties.--Any person violating any provision of this
chapter shall be subject to the penalties and enforcement

21 provisions of section 309(a) and (b).

22 Section 3. Sections 403 and 502 of the act are amended to 23 read:

24 Section 403. Creation of special funds.

(a) Radiation Protection Fund.--There is hereby created in the General Fund a restricted account to be known as the Radiation Protection Fund. Fees and penalties received under sections 401 [and 402(b)], 402(b.1)(1), (2), (3) and (4) and costs recovered under section 402(b.2) shall be deposited in this fund and are hereby appropriated to the department for the 20060S1276B1979 - 10 -

purpose of carrying out its powers and duties under this act. 1 2 (b) Radiation Emergency Response Fund.--There is hereby 3 created in the General Fund a restricted account to be known as 4 the Radiation Emergency Response Fund. Fees received under section [402(c)(1),] 402(c)(1.1), (2) and (3) shall be deposited 5 in this fund as provided and are hereby appropriated to the 6 7 agency for the purpose of carrying out its responsibilities under Chapter 5. 8

9 (c) Radiation Transportation Emergency Response Fund.--There 10 is hereby created in the General Fund a restricted account to be 11 known as the Radiation Transportation Emergency Response Fund. 12 Fees received under section 402(c)(4) shall be deposited in this 13 fund and are hereby appropriated to the agency for the purpose 14 of carrying out its responsibilities under Chapter 6. 15 Section 502. Response program.

16 In conjunction with the department, the agency shall develop 17 a Radiation Emergency Response Program for incorporation into 18 the Pennsylvania Emergency Management Plan [development] 19 developed by the agency pursuant to Title 35 of the Pennsylvania 20 Consolidated Statutes (relating to health and safety). Any 21 volunteer organizations which are incorporated into the 22 Radiation Emergency Response Program developed under the 23 authority of this act shall be consulted prior to such 24 incorporation. The Radiation Emergency Response Program shall 25 include an assessment of potential nuclear accidents or 26 incidents, the radiological consequences and necessary 27 protective measures required to mitigate the effects of such 28 accidents or incidents. The program shall include, but not be limited to: 29

30 (1) Development of a detailed fixed nuclear emergency 20060S1276B1979 - 11 - response plan for areas surrounding each nuclear electrical generation facility, nuclear <u>fuel</u> fabricator and away-fromreactor storage facility. The term "areas" shall be deemed to mean the emergency response zone designated by the [NCR] <u>NRC</u> Emergency Response Plan applicable to each such fixed nuclear facility.

7 (2) Notification by nuclear power facility operating
8 licensees of municipalities within the areas set forth in
9 paragraph (1) of unusual radioactivity as defined in section
10 301(d).

11 (3) Training and equipping of State and local emergency 12 response personnel.

13 (4) Periodical exercise of the accident scenarios
14 designated in the NRC Emergency Response Plan applicable to
15 each fixed nuclear facility.

16 (5) Procurement of specialized supplies and equipment.
17 (6) Provisions for financial assistance to
18 municipalities, school districts, volunteer and State

19 agencies as provided for in section 503.

20 (7) At a minimum, each nuclear power reactor owner shall 21 provide to the department existing plant and radiological monitoring data collected by that owner, derived from 22 23 equipment and monitoring methods installed by each owner in 24 accordance with the requirements of its license by the 25 Nuclear Regulatory Commission. By July 1, 2008, each plant owner shall enter into an agreement with the department 26 27 establishing the protocols for providing such data to the 28 department through an expedited, secure process. Nothing in 29 this section shall be construed to diminish or abrogate any 30 existing agreement between the department and a plant owner 20060S1276B1979 - 12 -

1 to provide data for the purpose of monitoring plant and radiological conditions important to the protection of the 2 3 general public. 4 Section 4. The heading of Chapter 6 of the act is amended to 5 read: 6 CHAPTER 6 7 TRANSPORTATION OF [SPENT NUCLEAR FUEL] RADIATION MATERIAL 8 Section 5. Sections 601, 602, 603 and 604 of the act are 9 amended to read: Section 601. General rule. 10 11 It is unlawful for any person to transport upon the highways, waterways or rails of this Commonwealth any spent nuclear fuel, 12 13 high-level waste, transuranic waste or a large quantity of 14 radioactive material unless that person notifies the agency in 15 advance [of transporting the spent nuclear fuel] in accordance with [10 C.F.R. 71.5(a) and (b).] 10 CFR Pt. 71 (relating to 16 17 packaging and transportation of radioactive material) regarding 18 advanced notification of shipment of irradiated reactor fuel and nuclear waste. Notification requirements for transuranic waste 19 20 or a large quantity of radioactive material shall be the same as required for irradiated reactor fuel and nuclear waste. 21 22 Section 602. Escort requirements. 23 All shipments of spent nuclear fuel or high-level waste 24 shipped to, within, through or across the boundaries of the 25 Commonwealth shall be escorted by the Pennsylvania State Police. 26 All shipments of transuranic waste or large quantities of radioactive material shipped to, within, through or across the 27 28 boundaries of this Commonwealth may, at the discretion of the Pennsylvania State Police in consultation with the department, 29 be escorted by the Pennsylvania State Police. 30 20060S1276B1979 - 13 -

1 Section 603. Authorization.

2 Spent nuclear fuel, high-level waste, transuranic waste or a 3 large quantity of radioactive material shipments shall be 4 authorized by the agency subject to the Commonwealth's authority 5 to delay individual highway, waterway and rail shipments due to 6 specific holiday [or safety], safety or security considerations 7 including, but not limited to, weather, highway, waterway or 8 rail conditions.

9 Section 604. Radiation Transportation Emergency Response Plan.

 (a) Planning.--The agency shall develop the Transportation
 Emergency Response Plan to respond to accidents involving the
 shipment of spent [fuel] <u>nuclear fuel, high-level waste,</u>
 <u>transuranic waste or a large quantity of radioactive material.</u>
 The plan shall:

15 (1) Incorporate local agencies and volunteer
16 organizations along the preprescribed routes [for] <u>of</u>
17 transport [of spent fuel].

18 (2) Incorporate any Commonwealth agency responsible for
19 protection of the health and safety of the public as
20 necessary and approved by the specific agency.

(b) Funding of State and local agencies.--Funds received under section 402(c)(4) shall be used to train and equip State and local agencies and volunteer organizations in accordance with regulations adopted by the council to implement the plan. Section 6. (a) The General Assembly declares that the repeals under subsection (b)(1) and (2) are necessary to effectuate the amendments of the act.

(b) The following acts and parts of acts are repealed:
(1) Sections 616-A(3) and 1904-A.2 of the act of April
9, 1929 (P.L.177, No.175), known as The Administrative Code
20060S1276B1979 - 14 -

1 of 1929.

2 (2) 35 Pa.C.S. § 7320(d).

(c) All other acts and parts of acts are repealed insofar as 3 4 they are inconsistent with this act.

Section 7. This act shall take effect immediately. 5