

H.436

Introduced by Committee on Natural Resources and Energy

Date:

Subject: Conservation and development; land use; natural resources; public  
service; nuclear generation facilities; decommissioning

Statement of purpose: This bill proposes to prescribe requirements pertaining  
to the decommissioning of nuclear energy generating plants and to associated  
decommissioning funds in order to promote the state's interest in assuring that  
lands associated with such facilities are restored to a condition that allows  
future beneficial use of the land.

An act relating to decommissioning and decommissioning funds of nuclear  
energy generation plants

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. FINDINGS

The general assembly finds all of the following:

(1) Entergy Nuclear Vermont Yankee, LLC (ENVY) is the owner of the  
Vermont Yankee nuclear plant located in Vernon.

(2) ENVY has committed and is required by law to decommission the  
plant to a "greenfield" condition once the Vermont Yankee site is no longer  
used for nuclear purposes or non-nuclear commercial, industrial, or similar

1 uses. As a matter of law, ENVY bears the risk of all costs in completing such  
2 decommissioning.

3 (3) ENVY is a limited liability corporation with a single asset: the  
4 Vermont Yankee nuclear plant.

5 (4) ENVY is an indirect, wholly owned subsidiary of Entergy  
6 Corporation (Entergy Corp.), headquartered in New Orleans, Louisiana.

7 (5) Entergy Corp., through various intermediaries and subsidiaries, owns  
8 and operates 11 nuclear plants in the United States, with approximately 30,000  
9 MW of capacity. It is the second largest nuclear generating company in the  
10 United States. In 2007, Entergy Corp. had operating revenues of \$11.4 billion  
11 and a net profit of \$1.1 billion.

12 (6) Estimates of costs to decommission the Vermont Yankee nuclear  
13 plant have risen substantially over the years.

14 (A) In 1994, TLG Services, which provides such estimates for the  
15 plant, estimated the costs for immediate decommissioning of the plant (in 1993  
16 \$) at \$313 million and delayed decommissioning (SAFSTOR) at \$319 million.

17 (B) In 1999, TLG Services estimated the costs for immediate  
18 decommissioning of the plant at \$557 million (1998 \$).

19 (C) In 2001, TLG Services estimated at \$621 million (2001 \$) the  
20 costs for both immediate and delayed (SAFSTOR) decommissioning of the  
21 plant.

1           (D) In 2007, TLG Services estimated (in 2006 \$) decommissioning  
2           costs for the plant to be as high as \$893 million for immediate  
3           decommissioning and \$991 million for delayed decommissioning. These totals  
4           included \$40 million for site restoration.

5           (E) In 2008, ENVY provided the Nuclear Regulatory Commission  
6           (NRC) with decommissioning cost estimates for the plant totaling \$915 million  
7           (2007 \$), which included \$219 million for spent fuel storage and management  
8           and \$40 million for site restoration.

9           (7) ENVY may recover some costs of spent fuel storage and  
10          management (estimated to be \$219 million total) from the U.S. Department of  
11          Energy (DOE). Under a standard contract, DOE was contractually responsible  
12          to begin removing spent fuel from the Vermont Yankee site starting in 1998  
13          and has not fulfilled this obligation. Federal courts have determined that DOE  
14          is in breach of the standard contract for failure to begin removing spent fuel  
15          from nuclear plants on time and is liable for the costs of storing spent fuel past  
16          that time. Some court decisions indicate that a nuclear plant may not recover  
17          the full amount of these costs.

18          (8) The balance in the existing decommissioning trust fund for the plant  
19          for many years has been significantly lower than the estimated costs of  
20          decommissioning.

21          (A) In July 2002, the balance in the trust fund was \$304 million.

1                   (B) As of December 31, 2007, the trust fund balance was \$440  
2                   million.

3                   (C) As of February 28, 2009, the trust fund balance was \$347  
4                   million.

5                   (9) ENVY does not have legal authority to operate the Vermont Yankee  
6                   nuclear plant after March 21, 2012 and therefore cannot reasonably assume  
7                   revenues from the plant after that date in assessing the adequacy of the  
8                   decommissioning fund.

9                   (10) ENVY's current plan is to complete decommissioning of the plant  
10                  no later than 2072. Completing decommissioning in 2072 is a delayed  
11                  decommissioning or SAFSTOR scenario. ENVY would use delayed  
12                  decommissioning in order to allow the decommissioning trust fund to grow to  
13                  meet decommissioning costs.

14                  (11) The Vermont Yankee plant is located near the Connecticut River,  
15                  with ready access to high voltage transmission lines, a railroad, and highways.  
16                  Its location is well suited for an energy generation plant or other commercial or  
17                  industrial use.

18                  (12) Delayed decommissioning (SAFSTOR) of the Vermont Yankee  
19                  nuclear plant would deprive Vermont for many decades of the economic  
20                  benefits of the plant's site, including the jobs, taxes, and other economic

1 benefits that would result from its use for energy generation or other  
2 commercial or industrial activity.

3 (13) If four payments of \$114.72 million were made in 2011, 2012,  
4 2018, and 2020, it is estimated that the decommissioning trust fund would have  
5 sufficient funds for immediate decommissioning of the plant following  
6 cessation of authority to operate on March 21, 2012.

7 (14) The net present value to ENVY of these four payments in 2009 \$ is  
8 \$237.45 million.

9 (15) Using the decommissioning cost estimates described in subdivision  
10 (6)(D) of this section, the cost savings to ENVY from immediate  
11 decommissioning, as opposed to SAFSTOR, would be \$98 million (in 2006 \$).

12 Sec. 2. 30 V.S.A. § 275 is added to read:

13 § 275. DECOMMISSIONING; FUND; NUCLEAR GENERATION

14 (a) Purpose. The purpose of this section is to promote reclamation of lands  
15 on which nuclear energy generation plants are located, as soon as possible  
16 following cessation of use for electric power generation or of authority to  
17 operate, to a condition that allows future beneficial use of those lands, whether  
18 for energy production, industrial use, commercial use, recreational use, or  
19 other use consistent with the character and traditional settlement patterns and  
20 land uses of the state, region, and locality.

1        (b) Decommissioning fund. Any person, as defined in 10 V.S.A.  
2        § 6001(14), and any company receiving, holding, or subject to a certificate  
3        from the board under sections 102, 107, 109, 231, or 248 of this title, shall  
4        maintain a separate decommissioning fund for each nuclear energy generation  
5        plant located in the state that is owned, operated, or controlled by that person  
6        or company. An existing decommissioning fund may be used to satisfy the  
7        requirements of this section. Under this section:

8            (1) A decommissioning fund cannot be structured in a manner that  
9            subjects it to claims by creditors in a bankruptcy proceeding or used by the  
10          certificate holder or any other person for any purpose other than  
11          decommissioning.

12          (2) A decommissioning fund shall be funded by cash or other financial  
13          instrument that is approved by either the Nuclear Regulatory Commission or  
14          the board, which may include a guarantee by a parent corporation.

15          (3) "Decommissioning" means the decommissioning of a nuclear plant  
16          in accordance with the decommissioning requirements of the Nuclear  
17          Regulatory Commission, management and storage of spent fuel, and return of  
18          the site of the plant to a greenfield condition no later than a maximum of  
19          10 years after either of the following, whichever is earlier: the permanent  
20          cessation of the plant's use for generation of electricity or a date set by the

1 board in a certificate applicable to the plant, person, or company for cessation  
2 of authority to operate the plant.

3 (4) "Financial instrument" excludes SAFSTOR or similar long-term  
4 storage.

5 (5) "Greenfield condition" means restoring the site by removal of all  
6 structures and foundations and, if appropriate, regrading and reseeding the  
7 land.

8 (6) "SAFSTOR" means placing and maintaining a nuclear energy  
9 generation plant in a condition that allows the plant to be stored and  
10 subsequently decontaminated to levels that permit release for unrestricted use.

11 (c) Existing nuclear generation plants.

12 (1)(A) The owner or operator of a nuclear energy generation plant in  
13 existence in the state as of January 1, 2009 shall add to the plant's  
14 decommissioning fund, in addition to any moneys that may be in the fund as of  
15 the date of enactment of this section, the following amounts according to the  
16 following schedule:

17 (i) \$114.72 million by January 1, 2011.

18 (ii) \$114.72 million by January 1, 2012.

19 (iii) \$114.72 million by January 1, 2018.

20 (iv) \$114.72 million by January 1, 2020.

1           (B) The amount required by subdivision (1)(A)(iv) of this subsection  
2           shall be increased or reduced to the remaining amount necessary as of  
3           January 1, 2020 to complete decommissioning of the plant. The public service  
4           board shall determine the necessary amount to be added or reduced under this  
5           subdivision.

6           (2) Failure of the plant owner to add an amount to the decommissioning  
7           fund by a date required by this subsection shall result in the automatic  
8           suspension of authority to operate a plant that is subject to this subsection.  
9           Such suspension shall be lifted if, on subsequent petition, the board determines  
10          that the required amount has been added, along with interest under 9 V.S.A.  
11          § 41a(a) for the period between the date due and the actual date the amount is  
12          added.

13          (3) Subdivisions (c)(1) and (2) of this subsection shall become effective  
14          for an existing nuclear generation plant on December 31, 2010 unless prior to  
15          that date the general assembly affirmatively makes the approval and  
16          determination concerning the plant's operation described in subdivision  
17          248(e)(2) of this title.

18          (d) Future certificates; transfer of ownership; nuclear plants. Subsequent to  
19          enactment of this section, the board may not issue a certificate under this title  
20          authorizing the sale or transfer of ownership of a nuclear energy generation  
21          plant required to have a decommissioning fund under this section without a

1 finding that the fund will be adequate to fund prompt decommissioning of the  
2 plant without reliance on SAFSTOR or similar long-term storage. Once an  
3 approved sale or transfer of a nuclear energy generation plant occurs in  
4 compliance with this subsection, any remaining requirements to add amounts  
5 to the plant's decommissioning fund under the schedule in subsection (c) of  
6 this section shall cease to apply. An affirmative finding under this subsection  
7 shall be based on the full estimated costs of decommissioning and shall not:

8 (1) Be net of salvage value.

9 (2) Rely on an assumption that the funds available for decommissioning  
10 will increase faster than the costs of decommissioning if the plant is in  
11 SAFSTOR or similar long-term storage prior to decommissioning.

12 (3) Assume operation of the plant beyond the date permitted in any  
13 certificate of public good granted pursuant to this title.

14 (e)(1) Decommissioning date. Any nuclear energy generation plant  
15 required to have a decommissioning fund under this section shall be  
16 decommissioned within a maximum of 10 years after either of the following,  
17 whichever is earlier: the date on which the plant permanently ceases to be  
18 used for generation of electricity or the date set by the board in a certificate  
19 applicable to the plant, person, or company for cessation of authority to operate  
20 the plant. This 10-year period may be extended by such additional time as the  
21 Nuclear Regulatory Commission may authorize for nonfinancial reasons.

1           (2) On cessation of a plant's use for electric generation or of authority to  
2           operate the plant, the owner of the site of a plant subject to this section may  
3           petition the board to allow retention of an existing structure, facility, or  
4           component associated with the plant, including a transmission or distribution  
5           facility or a road. The board may grant such a petition if it finds that allowing  
6           the structure, facility, or component to remain is consistent with future  
7           beneficial use of the property as described in subsection (a) of this section and  
8           will promote the public good. The possibility that an existing structure,  
9           facility, or component might be retained after decommissioning shall not affect  
10           the determination of the adequacy of the decommissioning fund pursuant to  
11           subsection (d) of this section.

12       Sec. 3. EFFECTIVE DATE

13           (a) This act shall take effect from passage, except that 30 V.S.A.  
14           § 275(c)(1) and (2) shall take effect as provided under 30 V.S.A. § 275(c)(3).

15           (b) Notwithstanding 1 V.S.A. §§ 213 and 214, Sec. 2 of this act shall apply  
16           to certificates granted by the public service board prior to enactment and  
17           proceedings pending before that board as of the date of enactment.