

1 H.727

2 An act relating to sustainable data center deployment

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

4 Sec. 1. 30 V.S.A. chapter 5, subchapter 3 is added to read:

5 Subchapter 3. Data Centers

6 § 281. SHORT TITLE

7 This subchapter shall be known and may be cited as the “Vermont
8 Sustainable Data Centers Act.”

9 § 282. PURPOSE

10 The purpose of this subchapter is to establish a regulatory framework that
11 ensures responsible growth of an emerging industry in a manner that
12 financially benefits existing electric ratepayers and protects them from
13 additional costs and promotes sustainable climate, environmental, community,
14 and equity outcomes consistent with State policies.

15 § 283. DEFINITIONS

16 As used in this subchapter:

17 (1) “Data center” means a facility that uses or is able to use 20
18 megawatts or more of power and is engaged in providing data processing,
19 hosting, and related services as described under code 518210 of the 2022 North
20 American Industry Classification System.

1 (2) “Electric company” means the retail electric company that provides
2 or will provide electric service to a data center pursuant to a large load service
3 equity contract under section 284 of this subchapter.

4 (3) “Facility” means all buildings, equipment, structures, and other
5 stationary items that are owned or operated by the same person or by any
6 person that controls, is controlled by, or is under common control with such
7 person and that are located on:

8 (A) a single site or contiguous or adjacent sites; or

9 (B) multiple nonadjacent sites that function as a single integrated
10 operation by virtue of shared infrastructure or unified operational protocols,
11 under a central management system.

12 § 284. LARGE LOAD SERVICE EQUITY CONTRACT; APPROVAL

13 (a) For the purpose of ensuring just and reasonable rates for all ratepayer
14 classes and precluding the risk of financial exposure to electric companies and
15 their existing ratepayers, a data center shall be served by an electric company
16 pursuant to a large load service equity contract approved by the Public Utility
17 Commission.

18 (b) The large load service equity contract shall:

19 (1) include a method for allocating costs that is equal or proportional to
20 the costs of providing electric service to the data center, including providing

1 for equitable contributions to the embedded costs and the stability, efficiency,
2 reliability, and resiliency of the electricity network;

3 (2) ensure that other ratepayer classes are insulated from all costs
4 associated with data center deployment, including expenses for new
5 generation, transmission, and distribution infrastructure, as well as energy
6 capacity and resource adequacy costs;

7 (3) specify the duration of the contract, which shall be for a minimum of
8 10 years, and the date or the estimated date that the electric company will
9 begin to provide electric service to the data center;

10 (4) obligate the data center to pay a minimum amount or percentage
11 based on the data center's projected electricity usage for the duration of the
12 contract to ensure compliance with subdivision (1) of this subsection;

13 (5) include a reasonable charge for demand in excess of the data center's
14 projected electricity demand at the time the contract is entered into;

15 (6) include a collateral requirement sufficient to prevent the risk of
16 stranded costs;

17 (7) include provisions requiring implementation of demand-side
18 management operational measures for the purpose of maintaining grid
19 stability, efficiency, reliability, and resiliency, including demand response and
20 flexible load management practices that, at a minimum, satisfy the
21 requirements of section 285 of this subchapter;

1 (8) address load curtailment procedures and priorities during grid
2 emergencies;

3 (9) include provisions for the collection of gross receipts taxes, energy
4 efficiency charges, and any other fees or charges that may be applicable to
5 electricity revenues; and

6 (10) meet any other terms or conditions required by the Commission
7 that are consistent with the purpose of this section and in the public interest.

8 (c)(1) The Commission shall not approve a large load service equity
9 contract unless the Commission first finds that it will promote the general good
10 of the State and that its terms:

11 (A) will not adversely affect the stability, efficiency, reliability, and
12 resiliency of the electric power system;

13 (B) will result in an economic benefit to the State and its residents;

14 (C) are consistent with the principles for resource selection expressed
15 in the electric company's approved least-cost integrated plan;

16 (D) are consistent with the Electrical Energy Plan approved by the
17 Department under section 202 of this title, or that there exists good cause to
18 permit a variance;

19 (E) will ensure that the data center will be served economically by
20 existing or planned transmission facilities without any undue adverse effect on
21 Vermont utilities or other retail ratepayer classes; and

1 (F) are consistent with environmental justice and equity policy as
2 established pursuant to 3 V.S.A. chapter 72.

3 (2) The Commission's findings pursuant to this subsection shall be in
4 writing and shall include a stated rationale for each.

5 (d)(1) The Commission shall conduct a periodic review of a large load
6 service equity contract approved under this section. The purpose of the review
7 shall be to verify the data center's ongoing compliance with all established
8 contract terms, conditions, and regulatory obligations.

9 (2) Reviews shall be performed at intervals not to exceed two years.
10 However, the Commission may initiate a review at any time upon a finding of
11 good cause or when deemed necessary to protect the public interest.

12 (e) A data center shall not be eligible to participate in an energy savings
13 account or a customer credit program pursuant to subdivision 209(d)(3)(C) of
14 this title or a self-managed energy efficiency program pursuant to subsection
15 209(j) of this title.

16 § 285. DEMAND-SIDE MANAGEMENT

17 (a) Purpose. The purpose of this section is to minimize any adverse impact
18 of data center operations on Vermont's electric system, other ratepayers, and
19 the environment. It aims to minimize peak demand increases, reduce
20 associated costs, and enhance the grid's stability, efficiency, reliability, and

1 resiliency while minimizing climate pollution emissions and maximizing
2 benefits to Vermonters.

3 (b) Site suitability analysis and project design.

4 (1) Site suitability analysis. Prior to submitting a permit application
5 under 10 V.S.A. chapter 151, the owner or operator of a proposed data center
6 shall conduct a site suitability analysis. This analysis shall be developed in
7 consultation with the electric company and the efficiency utility appointed by
8 the Public Utility Commission under subdivision 209(d)(2)(A) of this title.

9 The analysis shall provide a preliminary assessment of the facility's capacity
10 to:

11 (A) comply with the required commercial building energy standards
12 adopted under section 53 of this title;

13 (B) maximize the deployment of on-site renewable energy
14 generation, battery storage, and demand response assets; and

15 (C) implement a waste heat recovery system capable of providing
16 thermal energy to adjacent municipal or residential buildings.

17 (2) Project design. In the design and construction of the data center, the
18 owner or operator shall ensure compliance with State energy efficiency
19 requirements and best practices and maximize the potential of the site and any
20 structures on the site to host renewable energy.

21 (c) Combustion-based backup generation.

1 (1) A data center shall use combustion-based backup generation only
2 during emergency situations involving power failures and interruptions.
3 Otherwise, the data center shall prioritize to the greatest extent practicable the
4 use of battery storage and on-site renewable energy generation.

5 (2) As used in this subsection, “combustion-based backup generation”
6 includes any electrical generation system that emits air contaminants as
7 defined in 10 V.S.A. § 552 during combustion.

8 (d) Distributed renewable generation. Taking into consideration the site
9 suitability analysis and project design requirements under subsection (b) of this
10 section and any other relevant factors, a data center shall maximize the
11 construction and operation of on-site renewable energy generation to the
12 greatest extent technically feasible. A renewable energy plant that directly
13 emits air contaminants as defined in 10 V.S.A. § 552(2) from fuel combustion
14 does not qualify under this subsection, unless it is a thermal energy plant. A
15 data center shall transfer any renewable energy certificates or environmental
16 attributes generated from the operation of plants constructed pursuant to this
17 subsection to the electric company.

18 (e) Energy transformation payment.

19 (1) Because of the unique and significant demands a data center has on
20 Vermont’s electric system, it shall contribute proportionally to State initiatives
21 that reduce fossil fuel consumption and greenhouse gas emissions.

1 Accordingly, a data center shall make an annual payment directly into a fund
2 managed by the electric company. The payments shall be used to finance
3 energy transformation projects as defined in subdivision 8002(28) of this title
4 and, to the extent practicable, such projects shall be deployed in the
5 community hosting the data center and the surrounding communities.

6 (2) The amount of the payment shall be equal to 60 percent of the data
7 center's electricity usage for the prior calendar year multiplied by the
8 alternative compliance payment rate established in subdivision
9 8005(a)(6)(A)(ii) of this title. Payments shall be made in advance at the start
10 of each calendar year based on projected electricity usage. Any difference
11 between projected and actual usage shall be reconciled in the following year's
12 payment.

13 (3) In the event funds generated by this subsection are used to support
14 projects that are also supported by the electric company under subdivision
15 8005(a)(3) of this title, or by any other regulated entity, the Commission shall
16 prorate the reduction in fossil fuel consumption and greenhouse gas emissions
17 credited to the regulated entity.

18 (f) Virtual power plant.

19 (1) A data center shall participate in a virtual power plant managed by
20 the electric company, if available and technically feasible, otherwise it shall
21 design and implement a self-managed virtual power plant in coordination with

1 the electric company to optimize energy generation and consumption. Data
2 center funds used to develop or implement a virtual power plant under this
3 subsection shall be in addition to any support or incentives provided under
4 subsection (e) of this section or through any ratepayer-funded or State-funded
5 program supporting the deployment or operation of assets participating in such
6 virtual power plant.

7 (2) As used in this subsection, “virtual power plant” means a network of
8 distributed energy resources, such as batteries, demand response assets,
9 renewable energy generation, and controllable loads, that are coordinated
10 through software to function like a traditional power plant.

11 § 286. QUARTERLY AND ANNUAL REPORTS

12 (a) Data center quarterly reports. Within three months after a data center
13 becomes operational, and in a form and manner determined by the
14 Commission, the data center shall begin submitting quarterly reports to the
15 Commission and the Department of Public Service. Each quarterly report shall
16 include the data center’s water and energy usage, including its peak usage per
17 day, and an itemization of the data center’s payments toward shared
18 infrastructure constructed to support the data center. The reports are subject to
19 public inspection and copying under the Public Records Act.

20 (b) Department annual report. Annually, beginning on or before January
21 15, 2028, and provided at least one data center has entered into a large load

1 service equity contract pursuant to this subchapter, the Commissioner of Public
2 Service shall include in the Department’s annual report published pursuant to
3 subsection 202b(e) of this title findings and recommendations related to the
4 energy, environmental, and economic impacts of data center construction and
5 operation in Vermont, as well as any significant developments within the
6 region, such as significant laws or regulations with respect to data centers
7 enacted or adopted in other states in the region, known data center construction
8 in the region, and any known impact on ratepayers from such construction in
9 that state or region.

10 § 287. RULES

11 The Commission may adopt rules it deems necessary to implement and
12 enforce the provisions of this subchapter consistent with its purpose and in the
13 public interest.

14 Sec. 2. 10 V.S.A. § 6001 is amended to read:

15 § 6001. DEFINITIONS

16 As used in this chapter:

17 * * *

18 (3)(A) “Development” means each of the following:

19 * * *

20 (xiv) The construction of improvements on a tract or tracts of land
21 for a data center as defined in 30 V.S.A. § 283(1), including on land within a

1 Tier 1A area, notwithstanding anything to the contrary in section 6034 of this
2 title.

3 * * *

4 Sec. 3. 10 V.S.A. § 6086c is added to read:

5 § 6086c. WATER USE; COOLING; PERMITTING; QUALITY

6 (a) As used in this section:

7 (1) “Closed-loop cooling system” means a sealed cooling process in
8 which the same water or coolant circulates continuously within a data center’s
9 cooling system without withdrawal of water from municipal public water
10 supplies, groundwater, or surface water and without discharge of wastewater to
11 municipal wastewater systems, groundwater, or surface waters, except for de
12 minimis discharges authorized under a discharge permit issued by the Agency
13 of Natural Resources.

14 (2) “Data center” has the same meaning as in 30 V.S.A. § 283(1).

15 (3) “Per- and polyfluoroalkyl substances” or “PFAS” means any
16 chemical substance or mixture containing a chemical substance that
17 structurally contains at least one of the following three substructures:

18 (A) R-(CF₂)-CF(R')R”, where both the CF₂ and CF moieties are
19 saturated carbons;

20 (B) R-CF₂OCF₂-R’, where R and R’ can either be F, O, or saturated
21 carbons; or

1 (C) CF3C(CF3)R'R", where R' and R" can either be F or saturated
2 carbons.

3 (b)(1) A data center shall identify to the District Commission reviewing the
4 data center's application for a permit under this chapter how the data center
5 will cool the facility.

6 (2) If water is used to cool a data center, the data center shall use a
7 closed-loop cooling system or an alternative cooling system that is approved
8 by a District Commission and that shall not use more water than a comparable
9 closed-loop cooling system for the data center. Before approving an
10 alternative cooling system, a District Commission shall find that the alternative
11 cooling system will minimize groundwater use or surface water use and will
12 not unreasonably burden a public water supply, surface water, or groundwater
13 resource.

14 (3) If water is used to cool a data center through a closed-loop cooling
15 system or through an alternative cooling system approved by a District
16 Commission, a data center shall identify where the data center will obtain
17 water to cool the facility and where the cooling water will be discharged.

18 (c) If a data center proposes to use groundwater to cool the data center, the
19 data center shall obtain a groundwater withdrawal permit under section 1418 of
20 this title for any withdrawal of groundwater by the data center notwithstanding
21 the permitting threshold of withdrawal of more than 57,600 gallons of

1 groundwater a day. A closed-loop cooling system is not exempt from the
2 groundwater withdrawal permit under subdivision 1418(b)(6) of this title.

3 (d) If a data center proposes to use surface water to cool the facility, the
4 data center shall obtain a surface water withdrawal permit pursuant to section
5 1043 of this title. The rules adopted by the Secretary to implement section
6 1043 of this title shall require a data center to cease withdrawals under drought
7 conditions.

8 (e)(1) A data center shall obtain all applicable water quality and water
9 resource protection permits from the Agency of Natural Resources, including
10 stormwater, stream alteration, direct discharge, surface water withdrawal,
11 groundwater withdrawal, wetland, and river corridor development permits.

12 (2)(A) If a data center proposes to use more than 150,000 gallons a day
13 of surface water for cooling or other purposes, the Agency in reviewing the
14 application for a surface water withdrawal permit required under section 1043
15 of this title shall assess the impacts on water quality, aquatic biota, State
16 endangered and threatened species, instream flow habitat, impingement,
17 streambank erosion, littoral habitat, and wetlands.

18 (B) The issuance of a surface water withdrawal permit by the Agency
19 after completion of the assessments required under subdivision (A) of this
20 subdivision (e)(2) shall create a rebuttable presumption that the data center will

1 not result in undue water pollution under the requirements of subdivision
2 6086(a)(1) of this title.

3 (C) The Agency may by rule reduce the amount of surface water
4 proposed for withdrawal by a data center for which the Agency would be
5 required to complete the assessment under subdivision (A) of this subdivision
6 (e)(2).

7 (f) A data center that discharges waste into a surface water of the State
8 shall monitor the discharge for the maximum number of PFAS that are
9 detectable under U.S. Environmental Protection Agency standard methods
10 approved as of January 1, 2026. A data center shall not discharge waste that
11 exceeds the criteria established under the Vermont Water Quality Standards. If
12 no criteria have been established under the Vermont Water Quality Standards
13 for PFAS and the data center is withdrawing surface water or groundwater for
14 purposes of operating the data center's cooling system, the data center shall
15 monitor the withdrawn water for PFAS at the point of withdrawal. When the
16 data center discharges waste from the cooling system to surface water, PFAS
17 in the discharged waste shall not exceed the level of PFAS detected in the
18 surface water or groundwater withdrawn for purposes of operating the cooling
19 system at the data center.

1 Sec. 3a. AGENCY OF NATURAL RESOURCES REPORT ON
2 DISCHARGES OF PFAS FROM DATA CENTERS TO SURFACE
3 WATERS OF THE STATE

4 On or before January 1, 2027, the Secretary of Natural Resources shall
5 submit to the House Committee on Environment and the Senate Committee on
6 Natural Resources and Energy a recommended standard for authorizing per-
7 and polyfluoroalkyl substances in the discharge of waste from the cooling
8 systems of data centers to surface waters of the State.

9 Sec. 4. REPORT ON REGIONAL RENEWABLE ENERGY MARKET
10 CONDITIONS; PUBLIC UTILITY COMMISSION

11 (a) On or before January 15, 2027, the Public Utility Commission shall
12 prepare a written report on projected regional renewable electric generation
13 market conditions. In developing the report, the Commission shall examine
14 the cost and availability of new regional renewable electric generation
15 resources during the years 2027–2035.

16 (b) In preparing the report, the Commission shall provide an opportunity
17 for written input from interested stakeholders, including retail electricity
18 providers, renewable energy developers, regional transmission organizations,
19 consumer advocates, and any other members of the public. In addition, the
20 Commission may consult with the Department of Public Service and other
21 relevant state, regional, or federal entities, as the Commission deems

1 appropriate. Preparation of the report is not subject to the contested case
2 procedures established under 3 V.S.A. chapter 25.

3 (c) The Commission shall submit the report to the House Committees on
4 Environment and on Energy and Digital Infrastructure and the Senate
5 Committees on Finance and on Natural Resources and Energy.

6 Sec. 5. RECOMMENDATION ON DATA CENTER DECOMMISSIONING

7 (a) The Commissioner of Public Service, in consultation with the Secretary
8 of Natural Resources, the Chair of the Land Use Review Board, and any other
9 interested stakeholders deemed appropriate by the Commissioner, shall
10 recommend a regulatory model for data center decommissioning. As used in
11 this section, “data center” has the same meaning as in Sec. 1, 30 V.S.A.
12 § 283(1), of this act.

13 (b) The recommended regulatory model developed pursuant to this section
14 shall ensure responsible data center decommissioning in a manner that protects
15 and preserves the environment and the public health and welfare. The model
16 shall include standards and procedures that address:

17 (1) approval of a decommissioning plan by the appropriate regulatory
18 entity, with a clear delineation of authority if more than one entity is involved
19 in the approval process;

20 (2) regulatory oversight of the decommissioning process, including
21 through site visits and inspections;

1 (3) a bond requirement or other financial assurance to ensure a data
2 center is solely responsible for the costs associated with implementation of an
3 approved decommissioning plan;

4 (4) guidelines for data sanitization, the physical destruction of highly
5 sensitive storage devices, and a documented chain of custody for information
6 technology assets, including compliance with the Storage Device Sanitization
7 and Destruction Manual, Policy Manual 9-12, prepared by the National
8 Security Agency and the Central Security Service of the U.S. Department of
9 Defense;

10 (5) guidelines for environmental compliance, hazardous material
11 handling, environmental remediation, and site restoration;

12 (6) a timeline for commencing and completing the decommissioning
13 process after the abandonment, closure, destruction, or permanent cessation of
14 operations of a data center; and

15 (7) any other matters deemed appropriate by the Commissioner.

16 (c) On or before December 15, 2026, the Commissioner shall submit
17 recommendations for a data center decommissioning regulatory model in the
18 form of draft legislation to the House Committees on Energy and Digital
19 Infrastructure and on Environment and the Senate Committees on Finance and
20 on Natural Resources and Energy.

1 Sec. 6. EFFECTIVE DATE; APPLICATION

2 This act shall take effect on passage and shall apply to any data center not
3 operational on the effective date of this act as well as to any data center that
4 uses less than 20 MW of power that is operational on the effective date of this
5 act to the extent such data center seeks to expand its capacity and meet the
6 threshold requirements of Sec. 1, 30 V.S.A. § 283(1).