

1 TO THE HONORABLE SENATE:

2 The Committee on Natural Resources and Energy to which was referred
3 House Bill No. 727 entitled “An act relating to sustainable data center
4 deployment” respectfully reports that it has considered the same and
5 recommends that the Senate propose to the House that the bill be amended by
6 striking out all after the enacting clause and inserting in lieu thereof the
7 following:

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

9 Subchapter 3. Data Centers

10 § 281. SHORT TITLE

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

13 § 282. PURPOSE

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

1 § 283. DEFINITIONS

2 As used in this subchapter:

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

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

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

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

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

18 § 284. LARGE LOAD SERVICE EQUITY CONTRACT; APPROVAL

19 (a) For the purpose of ensuring just and reasonable rates for all ratepayer
20 classes and precluding the risk of financial exposure to electric companies and
21 their existing ratepayers, a data center shall be served by an electric company

1 pursuant to a large load service equity contract approved by the Public Utility
2 Commission.

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

4 (1) include a method for allocating costs that is equal or proportional to
5 the costs of providing electric service to the data center, including providing
6 for equitable contributions to the embedded costs and the stability, efficiency,
7 reliability, and resiliency of the electricity network;

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

12 (3) specify the duration of the contract, which shall be for a minimum of
13 10 years, and the date or the estimated date that the electric company will
14 begin to provide electric service to the data center;

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

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

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

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

6 (8) address load curtailment procedures and priorities during grid
7 emergencies;

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

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

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

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

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

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

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

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

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

9 (2) The Commission’s findings pursuant to this subsection shall be in
10 writing and shall include a stated rationale for each.

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

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

18 (e) A data center shall not be eligible to participate in an energy savings
19 account or a customer credit program pursuant to subdivision 209(d)(3)(C) of
20 this title or a self-managed energy efficiency program pursuant to subsection
21 209(j) of this title.

1 § 285. DEMAND-SIDE MANAGEMENT

2 (a) Purpose. The purpose of this section is to minimize any adverse impact
3 of data center operations on Vermont’s electric system, other ratepayers, and
4 the environment. It aims to minimize peak demand increases, reduce
5 associated costs, and enhance the grid’s stability, efficiency, reliability, and
6 resiliency while minimizing climate pollution emissions and maximizing
7 benefits to Vermonters.

8 (b) Site suitability analysis and project design.

9 (1) Site suitability analysis. Prior to submitting a permit application
10 under 10 V.S.A. chapter 151, the owner or operator of a proposed data center
11 shall conduct a site suitability analysis. This analysis shall be developed in
12 consultation with the electric company and the efficiency utility appointed by
13 the Public Utility Commission under subdivision 209(d)(2)(A) of this title.
14 The analysis shall provide a preliminary assessment of the facility’s capacity
15 to:

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

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

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

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

5 (c) Combustion-based backup generation.

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

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

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

1 operation of plants constructed pursuant to this subsection to the electric
2 company.

3 (e) Energy transformation payment.

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

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

12 (2) The amount of the payment shall be equal to 60 percent of the data
13 center’s electricity usage for the prior calendar year multiplied by the
14 alternative compliance payment rate established in subdivision
15 8005(a)(6)(A)(ii) of this title. Payments shall be made in advance at the start
16 of each calendar year based on projected electricity usage. Any difference
17 between projected and actual usage shall be reconciled in the following year’s
18 payment.

19 (3) In the event funds generated by this subsection are used to support
20 projects that are also supported by the electric company under subdivision
21 8005(a)(3) of this title, or by any other regulated entity, the Commission shall

1 prorate the reduction in fossil fuel consumption and greenhouse gas emissions
2 credited to the regulated entity.

3 (f) Virtual power plant.

4 (1) A data center shall participate in a virtual power plant managed by
5 the electric company, if available and technically feasible, otherwise it shall
6 design and implement a self-managed virtual power plant in coordination with
7 the electric company to optimize energy generation and consumption. Data
8 center funds used to develop or implement a virtual power plant under this
9 subsection shall be in addition to any support or incentives provided under
10 subsection (e) of this section or through any ratepayer-funded or State-funded
11 program supporting the deployment or operation of assets participating in such
12 virtual power plant.

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

17 § 286. QUARTERLY AND ANNUAL REPORTS

18 (a) Data center quarterly reports. Within three months after a data center
19 becomes operational, and in a form and manner determined by the
20 Commission, the data center shall begin submitting quarterly reports to the
21 Commission and the Department of Public Service. Each quarterly report shall

1 include the data center’s water and energy usage, including its peak usage per
2 day, and an itemization of the data center’s payments toward shared
3 infrastructure constructed to support the data center. The reports are subject to
4 public inspection and copying under the Public Records Act.

5 (b) Department annual report. Annually, beginning on or before January
6 15, 2028, and provided at least one data center has entered into a large load
7 service equity contract pursuant to this subchapter, the Commissioner of Public
8 Service shall include in the Department’s annual report published pursuant to
9 subsection 202b(e) of this title findings and recommendations related to the
10 energy, environmental, and economic impacts of data center construction and
11 operation in Vermont, as well as any significant developments within the
12 region, such as significant laws or regulations with respect to data centers
13 enacted or adopted in other states in the region, known data center construction
14 in the region, and any known impact on ratepayers from such construction in
15 that state or region.

16 § 287. RULES

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

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

21 § 6001. DEFINITIONS

1 As used in this chapter:

2 * * *

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

4 * * *

5 (xiv) The construction of improvements on a tract or tracts of land
6 for a data center as defined in 30 V.S.A. § 283(1), including on land within a
7 Tier 1A area, notwithstanding anything to the contrary in section 6034 of this
8 title.

9 * * *

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

11 § 6086c. WATER USE; COOLING; PERMITTING; QUALITY

12 (a) As used in this section:

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

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

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

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

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

8 (C) CF₃C(CF₃)R’R”, where R’ and R” can either be F or saturated
9 carbons.

10 (b)(1) A data center shall identify to the District Commission reviewing the
11 data center’s application for a permit under this chapter how the data center
12 will cool the facility.

13 (2) If water is used to cool a data center, the data center shall use a
14 closed-loop cooling system or an alternative cooling system that is approved
15 by a District Commission and that shall not use more water than a comparable
16 closed-loop cooling system for the data center. Before approving an
17 alternative cooling system, a District Commission shall find that the alternative
18 cooling system will minimize groundwater use or surface water use and will
19 not unreasonably burden a public water supply, surface water, or groundwater
20 resource.

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

5 (c) If a data center proposes to use groundwater to cool the data center, the
6 data center shall obtain a groundwater withdrawal permit under section 1418 of
7 this title for any withdrawal of groundwater by the data center notwithstanding
8 the permitting threshold of withdrawal of more than 57,600 gallons of
9 groundwater a day. A closed-loop cooling system is not exempt from the
10 groundwater withdrawal permit under subdivision 1418(b)(6) of this title.

11 (d) If a data center proposes to use surface water to cool the facility, the
12 data center shall obtain a surface water withdrawal permit pursuant to section
13 1043 of this title. The rules adopted by the Secretary to implement section
14 1043 of this title shall require a data center to cease withdrawals under drought
15 conditions.

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

20 (2)(A) If a data center proposes to use more than 150,000 gallons a day
21 of surface water for cooling or other purposes, the Agency in reviewing the

1 application for a surface water withdrawal permit required under section 1042
2 of this title shall assess the impacts on water quality, aquatic biota, State
3 endangered and threatened species, instream flow habitat, impingement,
4 streambank erosion, littoral habitat, and wetlands.

5 (B) The issuance of a surface water withdrawal permit by the Agency
6 after completion of the assessments required under subdivision (2)(A) of this
7 subsection (e) shall create a rebuttable presumption that the data center will not
8 result in undue water pollution under the requirements of subdivision
9 6086(a)(1) of this title.

10 (C) The Agency may by rule reduce the amount of surface water
11 proposed for withdrawal by a data center for which the Agency would be
12 required to complete the assessment under subdivision (2)(A) of this
13 subsection (e).

14 (f) A data center that discharges waste into a surface water of the State
15 shall monitor the discharge for the maximum number of PFAS that are
16 detectable under U.S. Environmental Protection Agency standard methods
17 approved as of January 1, 2026. A data center shall not discharge waste that
18 exceeds the criteria established under the Vermont Water Quality Standards. If
19 no criteria have been established under the Vermont Water Quality Standards
20 for PFAS and the data center is withdrawing surface water or groundwater for
21 purposes of operating the data center’s cooling system, the data center shall

1 monitor the withdrawn water for PFAS at the point of withdrawal. When the
2 data center discharges waste from the cooling system to surface water, PFAS
3 in the discharged waste shall not exceed the level of PFAS detected in the
4 surface water or groundwater withdrawn for purposes of operating the cooling
5 system at the data center.

6 Sec. 3a. AGENCY OF NATURAL RESOURCES REPORT ON

7 DISCHARGES OF PFAS FROM DATA CENTERS TO SURFACE
8 WATERS OF THE STATE

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

14 Sec. 4. REPORT ON REGIONAL RENEWABLE ENERGY MARKET
15 CONDITIONS; PUBLIC UTILITY COMMISSION

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

1 (b) In preparing the report, the Commission shall provide an opportunity
2 for written input from interested stakeholders, including retail electricity
3 providers, renewable energy developers, regional transmission organizations,
4 consumer advocates, and any other members of the public. In addition, the
5 Commission may consult with the Department of Public Service and other
6 relevant state, regional, or federal entities, as the Commission deems
7 appropriate. Preparation of the report is not subject to the contested case
8 procedures established under 3 V.S.A. chapter 25.

9 (c) The Commission shall submit the report to the House Committees on
10 Environment and on Energy and Digital Infrastructure and the Senate
11 Committees on Finance and on Natural Resources and Energy.

12 Sec. 5. RECOMMENDATION ON DATA CENTER DECOMMISSIONING

13 (a) The Commissioner of Public Service, in consultation with the Secretary
14 of Natural Resources, the Chair of the Land Use Review Board, and any other
15 interested stakeholders deemed appropriate by the Commissioner, shall
16 recommend a regulatory model for data center decommissioning. As used in
17 this section, “data center” has the same meaning as in Sec. 1, 30 V.S.A.
18 § 283(1), of this act.

19 (b) The recommended regulatory model developed pursuant to this section
20 shall ensure responsible data center decommissioning in a manner that protects

1 and preserves the environment and the public health and welfare. The model
2 shall include standards and procedures that address:

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

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

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

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

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

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

