

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 unwarranted costs and promotes sustainable climate, environmental,
18 community, and equity outcomes consistent with State policies.

19 § 283. DEFINITIONS

20 As used in this subchapter:

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

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

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

12 (A) a single site or on contiguous or adjacent sites; or

13 (B) multiple non-adjacent sites that function as a single integrated
14 operation by virtue of shared infrastructure, interconnected utilities, or unified
15 operational protocols, under a central management system.

16 § 284. LARGE LOAD SERVICE EQUITY CONTRACT; APPROVAL

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

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

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

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

10 (3) specify the duration of the contract and the date or the estimated date
11 that the electric company will begin to provide electric service to the data
12 center;

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

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

18 (6) include a collateral requirement sufficient to mitigate the risk of
19 stranded costs;

20 (7) include provisions requiring implementation of demand-side
21 management operational measures for the purpose of maintaining grid

1 stability, efficiency, reliability, and resiliency, including demand response and
2 flexible load management practices that, at a minimum, satisfy the
3 requirements of section 285 of this subchapter;

4 (8) specify that the data center is designated as a primary load for
5 curtailment during grid emergencies;

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

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

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

14 ~~(d) Before the Commission approves a large load service equity contract as~~
15 ~~required under this section, the Commission shall find that the terms of the~~
16 ~~contract meet the following criteria, unless an electric company demonstrates~~
17 ~~good cause for a specific exception:~~

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

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

1 (C) are consistent with the principles for resource selection expressed
2 in the electric company’s approved least-cost integrated plan;

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

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

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

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

13 (d) A data center shall not be eligible to participate in an energy savings
14 account or a customer credit program pursuant to subdivision 209(d)(3)(C) of
15 this title or a self-managed energy efficiency program pursuant to subsection
16 209(j) of this title.

17 § 285. DEMAND-SIDE MANAGEMENT

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

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

3 (b) ~~[House Passed – Option 1]~~ Energy efficiency design. Early in the
4 design development phase of a data center, the owner or operator of a data
5 center shall consult with the efficiency utility appointed by the Public Utility
6 Commission under subdivision 209(d)(2)(A) of this title to ensure compliance
7 with State energy efficiency requirements and best practices.

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

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

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

19 (C) participate in a self-managed or utility-managed virtual power
20 plant; and

1 ~~(4)~~ implement a waste heat recovery system capable of providing
2 thermal energy to adjacent municipal or residential buildings.

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

7 (c) Combustion-based backup generation.

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

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

16 (d) Distributed renewable generation. Taking into consideration the site
17 suitability analysis prepared pursuant to subsection (b) of this section and any
18 other relevant factors, a data center shall maximize the construction and
19 operation of on-site renewable energy generation to the greatest extent
20 technically feasible. A renewable energy plant that directly emits air
21 contaminants as defined in 10 V.S.A. § 552(2) from fuel combustion does not

1 qualify under this subsection. A data center shall transfer any renewable
2 energy certificates or environmental attributes generated from the operation of
3 plants constructed pursuant to this subsection to the electric company.

4 (e) Energy transformation payment.

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

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

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

20 (3) In the event funds generated by this subsection are used to support
21 projects that are also supported by the electric company under subdivision

1 8005(a)(3) of this title, or by any other regulated entity, the Commission shall
2 prorate the reduction in fossil fuel consumption and greenhouse gas emissions
3 credited to the regulated entity.

4 (f) Virtual power plant.

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

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

18 § 286. QUARTERLY AND ANNUAL REPORTS

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

1 Commission and the Department of Public Service. Each quarterly report shall
2 include the data center’s water and energy usage, including its peak usage per
3 day, and an itemization of the data center’s payments toward shared
4 infrastructure constructed to support the data center. The reports are subject to
5 public inspection and copying under the Public Records Act. However, upon
6 petition of a data center, the Public Utility Commission may redact information
7 it determines is exempt from public inspection and copying under 1 V.S.A.
8 § 317(c).

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

1 § 287. RULES

2 In addition to the rules required by this subchapter, the Commission may
3 adopt any other rules it deems necessary to implement and enforce the
4 provisions of this subchapter consistent with its purpose and in the public
5 interest.

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

7 § 6001. DEFINITIONS

8 As used in this chapter:

9 * * *

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

11 * * *

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

16 * * *

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

18 § 6086c. WATER USE; COOLING; PERMITTING; QUALITY

19 (a) As used in this section:

20 (1) “Closed-loop cooling system” means a sealed cooling process in
21 which the same water or coolant circulates continuously within a data center’s

1 cooling system without withdrawal of water from municipal public water
2 supplies, groundwater, or surface water and without discharge of wastewater to
3 municipal wastewater systems, groundwater, or surface waters, except for de
4 minimis discharges authorized under a discharge permit issued by the Agency
5 of Natural Resources.

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

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

10 (A) R-(CF₂)-CF(R')R'', where both the CF₂ and CF moieties are
11 saturated carbons;

12 (B) R-CF₂OCF₂-R', where R and R' can either be F, O, or saturated
13 carbons; or

14 (C) CF₃C(CF₃)R'R'', where R' and R'' can either be F or saturated
15 carbons.

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

19 (2) If water is used to cool a data center, the data center shall use a
20 closed-loop cooling system or an alternative cooling system approved by a
21 District Commission to minimize impacts to the quality and quantity of surface

1 water and groundwater. Before approving an alternative cooling system, a
2 District Commission shall find that the alternative cooling system will
3 minimize groundwater use or surface water use and will not unreasonably
4 burden a public water supply, surface water, or groundwater resource.

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

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

15 (d) If a data center proposes to use surface water to cool the facility, the
16 data center shall obtain a surface water withdrawal permit pursuant to section
17 1043 of this title. The rules adopted by the Secretary to implement section
18 1043 of this title shall require a data center to cease withdrawals under drought
19 conditions.

20 (e)(1) A data center shall obtain all applicable water quality and water
21 resource protection permits from the Agency of Natural Resources, including

1 stormwater, stream alteration, direct discharge, surface water withdrawal,
2 groundwater withdrawal, wetland, and river corridor development permits.

3 (2)(A) If a data center proposes to use more than 300,000 gallons a day
4 of surface water for cooling or other purposes, the Agency in reviewing the
5 application for a surface water withdrawal permit required under section 1042
6 of this title shall assess the impacts on water quality, aquatic biota, State
7 endangered and threatened species, instream flow habitat, impingement,
8 streambank erosion, littoral habitat, and wetlands.

9 (B) The issuance of a surface water withdrawal permit by the Agency
10 after completion of the assessments required under subdivision (2)(A) of this
11 subsection (e) shall create a rebuttable presumption that the data center will not
12 result in undue water pollution under the requirements of subdivision
13 6086(a)(1) of this title.

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

18 (f) A data center that discharges waste into a surface water of the State
19 shall monitor for the maximum number of PFAS that are detectable under U.S.
20 Environmental Protection Agency standard methods. A data center shall not
21 discharge waste that exceeds the criteria established under the Vermont Water

1 Quality Standards. If no criteria has been established under the Vermont
2 Water Quality Standards for PFAS, the data center shall not discharge waste
3 above the reporting limit of the U.S. Environmental Protection Agency
4 standard method utilized to monitor for PFAS in surface water by the data
5 center.

6 ~~(g) A data center is prohibited from adding PFAS to any discharge of~~
7 ~~waste.~~

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

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

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

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12 (Committee vote: _____)

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Senator _____

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FOR THE COMMITTEE