

House File 2447 - Introduced

HOUSE FILE 2447

BY GOLDING

A BILL FOR

1 An Act relating to water and energy use for data centers,
2 including reporting and tariff requirements, and including
3 effective date provisions.

4 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. NEW SECTION. 455B.280 Water usage at data
2 centers.

3 1. As used in this section:

4 a. "Data center" means the same as defined in section
5 476.59.

6 b. "Water usage effectiveness" means a calculation of a
7 data center's total water input divided by the total water
8 consumption of the data center's information technology
9 equipment.

10 2. No later than six months after the effective date of
11 this Act, or, for a data center that has been in operation for
12 at least one year as of the effective date of this Act, no
13 later than three months after the effective date of this Act,
14 or within three months of starting operations for a new data
15 center, and quarterly thereafter, the owner or operator of a
16 data center in the state of Iowa shall prepare and submit a
17 water usage report to the department that contains at least the
18 following information:

19 a. Basic information relating to the data center, including
20 all of the following:

21 (1) The name of the data center.

22 (2) The owner or operator of the data center.

23 (3) The address of the data center.

24 (4) The nature or purpose of the data center.

25 (5) The month and year that the data center commenced
26 operation.

27 b. Information related to water usage at the data center,
28 including all of the following:

29 (1) The total water input in gallons including the
30 respective volumes of water input for specific functions of the
31 data center.

32 (2) The source of water for the data center including a
33 municipal water supply, groundwater, or surface water, and
34 whether water from such sources is potable or reclaimed, and
35 water withdrawal permit numbers. If a data center utilizes

1 more than one water source, the data center shall provide
2 information regarding water usage from each source as a
3 percentage of total water usage.

4 (3) Performance calculations and indicators for the data
5 center regarding water use effectiveness.

6 3. Within thirty days of receiving a water usage report from
7 the owner or operator of a data center pursuant to subsection
8 2, the department shall publish the information on its internet
9 site, and update the information as necessary.

10 4. An owner or operator of a data center that has submitted
11 a water usage report to the department pursuant to subsection
12 2 shall notify the department of any substantial change in
13 operations or technologies at the data center that would
14 require an update to the information provided in the water
15 usage report at least sixty days prior to implementing the
16 change in operations or technologies at the data center.

17 Sec. 2. Section 476.4, subsection 3, Code 2026, is amended
18 by striking the subsection and inserting in lieu thereof the
19 following:

20 3. The commission shall provide for a classification of
21 service for data centers, as defined in section 476.59. The
22 classification of service must be separate and distinct from
23 classification of service for other commercial or industrial
24 retail electricity consumers and have its own tariff schedule.
25 Any tariff schedule adopted by the commission for data centers
26 must meet all of the following requirements:

27 a. Allocate the costs of servicing data centers in a manner
28 that is equal or proportional to the costs of serving the data
29 centers or directly assign the costs of serving a data center
30 to the data center.

31 b. Mitigate the risk of all of the following:

32 (1) Other classes of retail electricity consumers paying
33 unwarranted costs.

34 (2) Shifting the costs, in an unwarranted manner, of
35 serving a data center to other classes of retail electricity

1 consumers, including costs of an electric company to meet
2 load requirements resulting from the provision of electricity
3 service to a data center.

4 c. In deciding whether to approve a proposed tariff schedule
5 of a data center, the commission shall consider whether the
6 rate, charge, or schedule may do any of the following:

7 (1) Result in or have the potential to result in increased
8 costs or unwarranted risks to other retail electricity
9 consumers.

10 (2) Provide for equitable contributions to grid efficiency,
11 reliability, and resiliency benefits.

12 (3) Meet any other conditions the commission may require in
13 the public interest.

14 Sec. 3. Section 476.4, Code 2026, is amended by adding the
15 following new subsection:

16 NEW SUBSECTION. 4. A person shall not construct or expand
17 a data center, as defined in section 476.59, until the tariff
18 required under subsection 3 has been filed by the public
19 utility that is responsible for the service territory where the
20 data center is to be constructed or expanded.

21 Sec. 4. NEW SECTION. **476.59 Energy usage at data centers.**

22 1. As used in this section:

23 a. "Data center" means a facility for which all of the
24 following apply:

25 (1) The facility's primary services are the storage,
26 management, and processing of digital data.

27 (2) The facility is used to house computer and network
28 systems, including associated components such as servers,
29 network equipment and appliances, telecommunications, and
30 data storage systems, systems for monitoring and managing
31 infrastructure performance, internet-related equipment and
32 services, data communications connections, environmental
33 controls, fire protection systems, and security systems and
34 services.

35 b. "Energy reuse factor" means a calculation of waste heat

1 reused divided by total energy consumption.

2 *c.* "Power usage effectiveness" means a calculation of a
3 data center's total energy consumption divided by the total
4 energy consumption of the data center's information technology
5 equipment.

6 *d.* "Waste heat reused" means any heat that is used or reused
7 outside the boundary of a data center and that replaces, partly
8 or entirely, energy needed outside the boundary of the data
9 center.

10 2. No later than six months after the effective date of
11 this Act, or, for a data center that has been in operation for
12 at least one year as of the effective date of this Act, no
13 later than three months after the effective date of this Act,
14 or within three months of starting operations for a new data
15 center, and quarterly thereafter, the owner or operator of a
16 data center in the state of Iowa shall prepare and submit an
17 energy usage report to the commission that contains at least
18 the following information:

19 *a.* Basic information relating to the data center, including
20 all of the following:

- 21 (1) The name of the data center.
- 22 (2) The owner or operator of the data center.
- 23 (3) The address of the data center.
- 24 (4) The nature or purpose of the data center.
- 25 (5) The month and year that the data center commenced
26 operation.

27 *b.* Information related to energy usage at the data center,
28 including all of the following:

- 29 (1) The total energy consumption in kilowatt hours during
30 the reporting period, including the use of electricity, fuels,
31 and other energy sources used for cooling.
- 32 (2) The name of the electric utility serving the data center
33 and a copy of any electric service agreements between the
34 electric utility and the data center.
- 35 (3) All on-site power supplies, including any primary power

1 on site and emergency backup power supply, and any permit
2 information, including permit numbers, capacity, tier level,
3 fuel type, total permitted emissions for the data center, and
4 any other relevant information.

5 (4) The total energy consumption in kilowatt hours measured
6 as the value of the combined annual energy consumption at every
7 uninterruptible power system.

8 c. Performance calculations for the data center, including
9 the energy reuse factor and power usage effectiveness.

10 d. Sustainability indicators for the data center, including
11 all of the following:

12 (1) The average set point intake temperature in degrees
13 Fahrenheit, which shall be measured as the average set point
14 temperature in all of the data center's computer rooms over a
15 twelve-month period.

16 (2) The average waste heat temperature in degrees
17 Fahrenheit, which shall be measured as the temperature of the
18 fluid used to cool any information and communication technology
19 equipment, averaged over a twelve-month period and across every
20 measurement point. Individual waste heat temperature readings
21 shall be measured at the point where heated fluid enters a heat
22 exchanger in the data center's computer rooms.

23 (3) The amount of waste heat reused in kilowatt hours.

24 e. Any other information deemed necessary by the commission.

25 3. Within thirty days of receiving an energy usage report
26 from the owner or operator of a data center pursuant to
27 subsection 2, the commission shall publish the nonprivileged
28 information on its internet site and update the information as
29 necessary.

30 4. An owner or operator of a data center that has submitted
31 an energy usage report to the commission pursuant to subsection
32 2 shall notify the commission of any substantial change in
33 operations or technologies at the data center that would
34 require an update to the information provided in the energy
35 usage report at least sixty days prior to implementing the

1 change in operations or technologies at the data center.

2 Sec. 5. EFFECTIVE DATE. This Act, being deemed of immediate
3 importance, takes effect upon enactment.

4 EXPLANATION

5 The inclusion of this explanation does not constitute agreement with
6 the explanation's substance by the members of the general assembly.

7 This bill relates to water and energy use for data centers,
8 including reporting and tariff requirements.

9 The bill requires owners or operators of data centers
10 located in Iowa to submit periodic water usage reports to
11 the department of natural resources (department). The bill
12 requires data center owners or operators to submit an initial
13 water usage report within six months after the effective date
14 of the bill if the data center has been in operation for less
15 than one year, within three months of the effective date of
16 the bill if the data center has been in operation for at
17 least one year, or within three months of starting operations
18 for a new data center, and submit updated reports quarterly
19 thereafter. The reports must include identifying information
20 about the data center and certain information regarding water
21 inputs, water sources, and water usage effectiveness. The bill
22 requires the department to publish the reported information on
23 its internet site within 30 days of receipt. The bill also
24 requires a data center to notify the department at least 60
25 days before implementing any substantial change in operations
26 or technologies that would require updating the reported
27 information.

28 The bill requires the Iowa utilities commission (commission)
29 to establish a separate classification of electric service
30 for data centers that is distinct from other commercial or
31 industrial customers and that has its own tariff schedule. The
32 bill specifies that tariffs for data centers must allocate or
33 directly assign costs in proportion to the costs of serving
34 data centers and must mitigate the risk of other customer
35 classes paying unwarranted costs and the risk of shifting, in

1 an unwarranted manner, the costs of serving a data center to
2 other customer classes.

3 The bill requires the commission, when deciding whether
4 to approve a proposed tariff for a data center, to consider
5 whether the proposal may result in or have the potential
6 to result in increased costs or unwarranted risks to other
7 retail consumers, whether the proposal provides for equitable
8 contributions to grid efficiency, reliability, and resiliency
9 benefits, and whether the proposal meets any other conditions
10 the commission may require in the public interest.

11 The bill prohibits the construction or expansion of a data
12 center until the required data center tariff has been filed
13 by the public utility responsible for the applicable service
14 territory.

15 The bill requires owners or operators of data centers
16 located in Iowa to submit periodic energy usage reports to the
17 commission. Data center owners or operators are required to
18 submit energy usage reports to the utilities commission on
19 the same timeline as the water usage reports. The reports
20 must include identifying information about the data center
21 and certain information regarding energy consumption,
22 electric service agreements, and on-site power supplies.
23 The report must also include certain performance metrics
24 and sustainability indicators. The bill provides similar
25 publication requirements for the commission and similar
26 notification of substantial change requirements for data
27 centers regarding energy usage reports as required for water
28 usage reports.

29 The bill strikes provisions relating to rate, charge, rule,
30 and regulation filings made prior to July 4, 1963. The bill
31 takes effect upon enactment.