

1.1 moves to amend H.F. No. 1651 as follows:

1.2 Delete everything after the enacting clause and insert:

1.3 "Section 1. Minnesota Statutes 2020, section 116C.779, subdivision 1, is amended to read:

1.4 Subdivision 1. **Renewable development account.** (a) The renewable development
1.5 account is established as a separate account in the special revenue fund in the state treasury.
1.6 Appropriations and transfers to the account shall be credited to the account. Earnings, such
1.7 as interest, dividends, and any other earnings arising from assets of the account, shall be
1.8 credited to the account. Funds remaining in the account at the end of a fiscal year are not
1.9 canceled to the general fund but remain in the account until expended. The account shall
1.10 be administered by the commissioner of management and budget as provided under this
1.11 section.

1.12 (b) On July 1, 2017, the public utility that owns the Prairie Island nuclear generating
1.13 plant must transfer all funds in the renewable development account previously established
1.14 under this subdivision and managed by the public utility to the renewable development
1.15 account established in paragraph (a). Funds awarded to grantees in previous grant cycles
1.16 that have not yet been expended and unencumbered funds required to be paid in calendar
1.17 year 2017 under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, are not subject
1.18 to transfer under this paragraph.

1.19 (c) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing
1.20 each January 15 thereafter, the public utility that owns the Prairie Island nuclear generating
1.21 plant must transfer to the renewable development account \$500,000 each year for each dry
1.22 cask containing spent fuel that is located at the Prairie Island power plant for each year the
1.23 plant is in operation, and \$7,500,000 each year the plant is not in operation if ordered by
1.24 the commission pursuant to paragraph (i). The fund transfer must be made if nuclear waste

2.1 is stored in a dry cask at the independent spent-fuel storage facility at Prairie Island for any
2.2 part of a year.

2.3 (d) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing
2.4 each January 15 thereafter, the public utility that owns the Monticello nuclear generating
2.5 plant must transfer to the renewable development account \$350,000 each year for each dry
2.6 cask containing spent fuel that is located at the Monticello nuclear power plant for each
2.7 year the plant is in operation, and \$5,250,000 each year the plant is not in operation if ordered
2.8 by the commission pursuant to paragraph (i). The fund transfer must be made if nuclear
2.9 waste is stored in a dry cask at the independent spent-fuel storage facility at Monticello for
2.10 any part of a year.

2.11 (e) Each year, the public utility shall withhold from the funds transferred to the renewable
2.12 development account under paragraphs (c) and (d) the amount necessary to pay its obligations
2.13 under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, for that calendar year.

2.14 (f) If the commission approves a new or amended power purchase agreement, the
2.15 termination of a power purchase agreement, or the purchase and closure of a facility under
2.16 section 216B.2424, subdivision 9, with an entity that uses poultry litter to generate electricity,
2.17 the public utility subject to this section shall enter into a contract with the city in which the
2.18 poultry litter plant is located to provide grants to the city for the purposes of economic
2.19 development on the following schedule: \$4,000,000 in fiscal year 2018; \$6,500,000 each
2.20 fiscal year in 2019 and 2020; and \$3,000,000 in fiscal year 2021. The grants shall be paid
2.21 by the public utility from funds withheld from the transfer to the renewable development
2.22 account, as provided in paragraphs (b) and (e).

2.23 (g) If the commission approves a new or amended power purchase agreement, or the
2.24 termination of a power purchase agreement under section 216B.2424, subdivision 9, with
2.25 an entity owned or controlled, directly or indirectly, by two municipal utilities located north
2.26 of Constitutional Route No. 8, that was previously used to meet the biomass mandate in
2.27 section 216B.2424, the public utility that owns a nuclear generating plant shall enter into a
2.28 grant contract with such entity to provide \$6,800,000 per year for five years, commencing
2.29 30 days after the commission approves the new or amended power purchase agreement, or
2.30 the termination of the power purchase agreement, and on each June 1 thereafter through
2.31 2021, to assist the transition required by the new, amended, or terminated power purchase
2.32 agreement. The grant shall be paid by the public utility from funds withheld from the transfer
2.33 to the renewable development account as provided in paragraphs (b) and (e).

3.1 (h) The collective amount paid under the grant contracts awarded under paragraphs (f)
3.2 and (g) is limited to the amount deposited into the renewable development account, and its
3.3 predecessor, the renewable development account, established under this section, that was
3.4 not required to be deposited into the account under Laws 1994, chapter 641, article 1, section
3.5 10.

3.6 (i) After discontinuation of operation of the Prairie Island nuclear plant or the Monticello
3.7 nuclear plant and each year spent nuclear fuel is stored in dry cask at the discontinued
3.8 facility, the commission shall require the public utility to pay \$7,500,000 for the discontinued
3.9 Prairie Island facility and \$5,250,000 for the discontinued Monticello facility for any year
3.10 in which the commission finds, by the preponderance of the evidence, that the public utility
3.11 did not make a good faith effort to remove the spent nuclear fuel stored at the facility to a
3.12 permanent or interim storage site out of the state. This determination shall be made at least
3.13 every two years.

3.14 (j) Funds in the account may be expended only for any of the following purposes:

3.15 (1) to stimulate research and development of renewable electric energy technologies;

3.16 (2) to encourage grid modernization, including, but not limited to, projects that implement
3.17 electricity storage, load control, and smart meter technology; and

3.18 (3) to stimulate other innovative energy projects that reduce demand and increase system
3.19 efficiency and flexibility.

3.20 Expenditures from the fund must benefit Minnesota ratepayers receiving electric service
3.21 from the utility that owns a nuclear-powered electric generating plant in this state or the
3.22 Prairie Island Indian community or its members.

3.23 The utility that owns a nuclear generating plant is eligible to apply for grants under this
3.24 subdivision.

3.25 (k) For the purposes of paragraph (j), the following terms have the meanings given:

3.26 (1) "renewable" has the meaning given in section 216B.2422, subdivision 1, paragraph
3.27 (c), clauses (1), (2), (4), and (5); and

3.28 (2) "grid modernization" means:

3.29 (i) enhancing the reliability of the electrical grid;

3.30 (ii) improving the security of the electrical grid against cyberthreats and physical threats;
3.31 and

4.1 (iii) increasing energy conservation opportunities by facilitating communication between
4.2 the utility and its customers through the use of two-way meters, control technologies, energy
4.3 storage and microgrids, technologies to enable demand response, and other innovative
4.4 technologies.

4.5 (l) A renewable development account advisory group that includes, among others,
4.6 representatives of the public utility and its ratepayers, and includes at least one representative
4.7 of the Prairie Island Indian community appointed by that community's tribal council, shall
4.8 develop recommendations on account expenditures. The advisory group must design a
4.9 request for proposal and evaluate projects submitted in response to a request for proposals.
4.10 The advisory group must utilize an independent third-party expert to evaluate proposals
4.11 submitted in response to a request for proposal, including all proposals made by the public
4.12 utility. A request for proposal for research and development under paragraph (j), clause (1),
4.13 may be limited to or include a request to higher education institutions located in Minnesota
4.14 for multiple projects authorized under paragraph (j), clause (1). The request for multiple
4.15 projects may include a provision that exempts the projects from the third-party expert review
4.16 and instead provides for project evaluation and selection by a merit peer review grant system.
4.17 In the process of determining request for proposal scope and subject and in evaluating
4.18 responses to request for proposals, the advisory group must strongly consider, where
4.19 reasonable, potential benefit to Minnesota citizens and businesses and the utility's ratepayers.

4.20 (m) The advisory group shall submit funding recommendations to the public utility,
4.21 which has full and sole authority to determine which expenditures shall be submitted by
4.22 the advisory group to the legislature. The commission may approve proposed expenditures,
4.23 may disapprove proposed expenditures that it finds not to be in compliance with this
4.24 subdivision or otherwise not in the public interest, and may, if agreed to by the public utility,
4.25 modify proposed expenditures. The commission shall, by order, submit its funding
4.26 recommendations to the legislature as provided under paragraph (n).

4.27 (n) The commission shall present its recommended appropriations from the account to
4.28 the senate and house of representatives committees with jurisdiction over energy policy and
4.29 finance annually by February 15. Expenditures from the account must be appropriated by
4.30 law. In enacting appropriations from the account, the legislature:

4.31 (1) may approve or disapprove, but may not modify, the amount of an appropriation for
4.32 a project recommended by the commission; and

4.33 (2) may not appropriate money for a project the commission has not recommended
4.34 funding.

5.1 (o) A request for proposal for renewable energy generation projects must, when feasible
5.2 and reasonable, give preference to projects that are most cost-effective for a particular energy
5.3 source.

5.4 (p) The advisory group must annually, by February 15, report to the chairs and ranking
5.5 minority members of the legislative committees with jurisdiction over energy policy on
5.6 projects funded by the account for the prior year and all previous years. The report must,
5.7 to the extent possible and reasonable, itemize the actual and projected financial benefit to
5.8 the public utility's ratepayers of each project.

5.9 (q) By February 1, 2018, and each February 1 thereafter, the commissioner of
5.10 management and budget shall submit a written report regarding the availability of funds in
5.11 and obligations of the account to the chairs and ranking minority members of the senate
5.12 and house committees with jurisdiction over energy policy and finance, the public utility,
5.13 and the advisory group.

5.14 (r) A project receiving funds from the account must produce a written final report that
5.15 includes sufficient detail for technical readers and a clearly written summary for nontechnical
5.16 readers. The report must include an evaluation of the project's financial, environmental, and
5.17 other benefits to the state and the public utility's ratepayers.

5.18 (s) Final reports, any mid-project status reports, and renewable development account
5.19 financial reports must be posted online on a public website designated by the commissioner
5.20 of commerce.

5.21 (t) All final reports must acknowledge that the project was made possible in whole or
5.22 part by the Minnesota renewable development account, noting that the account is financed
5.23 by the public utility's ratepayers.

5.24 (u) Of the amount in the renewable development account, priority must be given to
5.25 making the payments required under section 216C.417.

5.26 (v) A construction project funded from an appropriation made under this section must
5.27 adhere to the provisions of sections 177.41 and 177.43.

5.28 **EFFECTIVE DATE.** This section is effective the day following final enactment and
5.29 applies to appropriations made on or after that date.

6.1 Sec. 2. Minnesota Statutes 2020, section 216B.1611, is amended by adding a subdivision
6.2 to read:

6.3 Subd. 5. **Energy storage; capacity; treatment.** No later than November 1, 2022, the
6.4 commission shall issue an order clarifying that for the purpose of interconnecting a distributed
6.5 generation facility that operates in conjunction with an energy storage system, as defined
6.6 in section 216B.2422, subdivision 1, paragraph (f), the system capacity must be calculated
6.7 as the alternating current capacity of the distributed generation facility alone, provided that
6.8 the energy storage system is connected:

6.9 (1) to the distributed generation facility by direct current; or

6.10 (2) to the electrical system of the customer receiving electric service on-site by alternating
6.11 current, and is configured to prohibit the export of electricity beyond the common point of
6.12 coupling with the utility.

6.13 **EFFECTIVE DATE.** This section is effective the day following final enactment.

6.14 Sec. 3. **[216B.1615] FEEDER REPLACEMENT; STORAGE REQUIREMENT.**

6.15 (a) When replacing a feeder line with a feeder line of higher capacity, an electric utility
6.16 must install an energy storage system at the applicable distribution substation that is of
6.17 sufficient capacity to insure customer safety and grid reliability.

6.18 (b) For the purposes of this section:

6.19 (1) "energy storage system" has the meaning given in section 216B.2422, subdivision
6.20 1, paragraph (f); and

6.21 (2) "feeder line" means a powerline transferring power from a distribution system
6.22 substation to distribution transformers and whose current flow is the same at the sending
6.23 and receiving end of the powerline.

6.24 **EFFECTIVE DATE.** This section is effective the day following final enactment.

6.25 Sec. 4. **[216B.1616] ENERGY STORAGE; PEAK SHAVING TARIFF.**

6.26 (a) No later than September 15, 2022, the commission shall initiate a docket designed
6.27 to result in a commission order requiring public utilities providing electric service to file a
6.28 tariff with the commission, based on guidelines established in the order, for compensation
6.29 to be paid to customer-owners of on-site energy storage systems, as defined in section
6.30 216B.2422, subdivision 1, paragraph (f), for the discharge of stored energy that is net input
6.31 to the utility during periods of peak electricity demand by utility customers.

7.1 (b) Within 90 days of the issuance of an order by the commission under this subdivision,
7.2 each public utility must file with the commission for commission approval, disapproval, or
7.3 modification, a tariff that is consistent with that order.

7.4 **EFFECTIVE DATE.** This section is effective the day following final enactment.

7.5 Sec. 5. Minnesota Statutes 2020, section 216B.2422, is amended by adding a subdivision
7.6 to read:

7.7 Subd. 7a. **Energy storage systems; installation.** The commission shall, as part of an
7.8 order with respect to a public utility's integrated resource plan filed under this section,
7.9 require a public utility to install one or more energy storage systems, provided that the
7.10 commission finds the investments are reasonable, prudent, and in the public interest. In
7.11 determining the aggregate capacity of the energy storage systems ordered under this
7.12 subdivision, the commission must consider the public utility's assessment of energy storage
7.13 systems contained in the public utility's integrated resource plan, as required under
7.14 subdivision 7.

7.15 **EFFECTIVE DATE.** This section is effective the day following final enactment and
7.16 applies to any order issued to a public utility by the commission in an integrated resource
7.17 plan proceeding after July 1, 2022.

7.18 Sec. 6. **[216B.2427] ENERGY STORAGE SYSTEM; APPLICATION.**

7.19 Subdivision 1. **Definition.** For the purposes of this section, "energy storage system" has
7.20 the meaning given in section 216B.2422, subdivision 1, paragraph (f).

7.21 Subd. 2. **Application requirement.** No later than one year following the commission's
7.22 order to a public utility in an integrated resource plan proceeding under section 216B.2422,
7.23 the public utility must submit an application to the commission for review and approval to
7.24 install one or more energy storage systems whose aggregate capacity meets or exceeds that
7.25 ordered by the commission in the public utility's most recent integrated resource plan
7.26 proceeding under section 216B.2422, subdivision 7a.

7.27 Subd. 3. **Application contents.** (a) Each application submitted under this section must
7.28 contain the following information:

7.29 (1) technical specifications of the energy storage system, including but not limited to:

7.30 (i) the maximum amount of electric output that the energy storage system can provide;

7.31 (ii) the length of time the energy storage system can sustain maximum output;

8.1 (iii) the location of the project within the utility's distribution system and a description
8.2 of the analysis conducted to determine the location;

8.3 (iv) a description of the public utility's electric system needs that the proposed energy
8.4 storage system addresses;

8.5 (v) a description of the types of services the energy storage system is expected to provide;
8.6 and

8.7 (vi) a description of the technology required to construct, operate, and maintain the
8.8 energy storage system, including any data or communication system necessary to operate
8.9 the energy storage system;

8.10 (2) the estimated cost of the project, including:

8.11 (i) capital costs;

8.12 (ii) the estimated cost per unit of energy delivered by the energy storage system; and

8.13 (iii) an evaluation of the cost-effectiveness of the energy storage system;

8.14 (3) the estimated benefits of the energy storage system to the public utility's electric
8.15 system, including but not limited to:

8.16 (i) deferred investments in generation, transmission, or distribution capacity;

8.17 (ii) reduced need for electricity during times of peak demand;

8.18 (iii) improved reliability of the public utility's transmission or distribution system; and

8.19 (iv) improved integration of the public utility's renewable energy resources;

8.20 (4) how the addition of an energy storage system complements proposed actions of the
8.21 public utility described in the most recent integrated resource plan submitted under section
8.22 216B.2422 to meet expected demand with the least cost combination of resources; and

8.23 (5) any additional information required by the commission.

8.24 (b) A public utility must include in the application an evaluation of the potential to store
8.25 energy throughout the public utility's electric system and must identify geographic areas in
8.26 the public utility's service area where the deployment of energy storage systems has the
8.27 greatest potential to achieve the economic benefits identified in paragraph (a), clause (3).

8.28 Subd. 4. **Commission review.** The commission shall review each proposal submitted
8.29 under this section and may approve, reject, or modify the proposal. The commission shall
8.30 approve a proposal the commission determines is in the public interest and reasonably
8.31 balances the value derived from the deployment of an energy storage system for ratepayers

9.1 and the public utility's operations with the costs of procuring, constructing, operating, and
9.2 maintaining the energy storage system.

9.3 Subd. 5. **Cost recovery.** A public utility may recover from ratepayers all costs prudently
9.4 incurred by the public utility to deploy an energy storage system approved by the commission
9.5 under this section, net of any revenues generated by the operation of the energy storage
9.6 system.

9.7 Subd. 6. **Commission authority; orders.** The commission may issue orders necessary
9.8 to implement and administer this section.

9.9 **EFFECTIVE DATE.** This section is effective the day following final enactment.

9.10 Sec. 7. **[216C.377] ENERGY STORAGE INCENTIVE PROGRAM.**

9.11 (a) The electric utility subject to section 116C.779 must develop and operate a program
9.12 to provide a lump-sum grant to customers for the purpose of reducing the cost of purchasing
9.13 and installing an on-site energy storage system, as defined in section 216B.2422, subdivision
9.14 1, paragraph (f). The utility subject to this section must file a plan with the commission to
9.15 operate the program no later than October 1, 2022. The utility may not operate the program
9.16 until it is approved by the commissioner. Any change to an operating program must be
9.17 approved by the commission.

9.18 (b) To be eligible to receive a grant under this section, an energy storage system:

9.19 (1) must have a capacity no greater than 50 kilowatt hours; and

9.20 (2) must be located within the electric service area of the utility subject to this section.

9.21 (c) An owner of an energy storage system is eligible to receive a grant under this section
9.22 if:

9.23 (1) a solar energy generating system is operating at the same site as the proposed energy
9.24 storage system; or

9.25 (2) the owner has filed an application with the utility subject to this section to interconnect
9.26 a solar energy generating system at the same site as the proposed energy storage system.

9.27 (d) The commissioner shall annually review, and may adjust, the amount of grants
9.28 awarded under this section but may not increase the amount over that awarded in previous
9.29 years unless the commissioner demonstrates in writing that an upward adjustment is
9.30 warranted by market conditions.

10.1 (e) A customer who receives a grant under this section is eligible to receive financial
10.2 assistance under programs operated by the state or the utility for the solar energy generating
10.3 system operating in conjunction with the energy storage system.

10.4 (f) For the purposes of this section, "solar energy generating system" has the meaning
10.5 given in section 216E.01, subdivision 9a.

10.6 **EFFECTIVE DATE.** This section is effective the day following final enactment.

10.7 Sec. 8. **PHOTOVOLTAIC DEMAND CREDIT RIDER.**

10.8 By October 1, 2022, an investor-owned utility that has not already done so must submit
10.9 to the Public Utilities Commission a photovoltaic demand credit rider that reimburses all
10.10 demand metered customers with solar photovoltaic systems greater than 40 kilowatts
10.11 alternating current for the demand charge overbilling that occurs. The utility may submit
10.12 to the commission multiple options to calculate reimbursement for demand charge overbilling.
10.13 At least one submission must use a capacity value stack methodology. The commission is
10.14 prohibited from approving a photovoltaic demand credit rider unless the rider allows
10.15 stand-alone photovoltaic systems and photovoltaic systems coupled with storage. The
10.16 commission must approve the photovoltaic demand credit rider by June 30, 2023.

10.17 **EFFECTIVE DATE.** This section is effective the day following final enactment.

10.18 Sec. 9. **APPROPRIATION.**

10.19 Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j),
10.20 \$..... in fiscal year 2023 is appropriated from the renewable development account established
10.21 in Minnesota Statutes, section 116C.779 to the commissioner of commerce for the purpose
10.22 of awarding grants for the installation of energy storage systems under Minnesota Statutes,
10.23 section 216C.377, and to pay the reasonable costs of the department to administer that
10.24 section. This appropriation remains available until expended. The base for this program in
10.25 fiscal year 2024 is \$.....

10.26 **EFFECTIVE DATE.** This section is effective the day following final enactment."

10.27 Amend the title accordingly