

1.1 ..... moves to amend H.F. No. 2986 as follows:

1.2 Delete everything after the enacting clause and insert:

1.3 "Section 1. Minnesota Statutes 2024, section 216B.2422, subdivision 2, is amended to  
1.4 read:

1.5 Subd. 2. **Resource plan filing and approval.** (a) A utility shall file a resource plan with  
1.6 the commission periodically in accordance with rules adopted by the commission. The  
1.7 commission shall approve, reject, or modify the plan of a public utility, as defined in section  
1.8 216B.02, subdivision 4, consistent with the public interest.

1.9 (b) In the resource plan proceedings of all other utilities, the commission's order shall  
1.10 be advisory and the order's findings and conclusions shall constitute prima facie evidence  
1.11 which may be rebutted by substantial evidence in all other proceedings. With respect to  
1.12 utilities other than those defined in section 216B.02, subdivision 4, the commission shall  
1.13 consider the filing requirements and decisions in any comparable proceedings in another  
1.14 jurisdiction.

1.15 (c) As a part of its resource plan filing, a utility shall include the least cost plan for  
1.16 meeting 50 and 75 percent of all energy needs from both new and refurbished generating  
1.17 facilities through a combination of conservation and renewable energy resources.

1.18 (d) A public utility must include in an integrated resource plan filing an estimate of (1)  
1.19 the reduction in the public utility's system peak attributable to implementing a virtual power  
1.20 plant program approved under section 216B.2429, and (2) the cost of the virtual power plant  
1.21 program.

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

2.1 **Sec. 2. [216B.2429] VIRTUAL POWER PLANT PROGRAM.**

2.2 Subdivision 1. **Definitions.** (a) For the purposes of this section, the following terms have  
2.3 the meanings given.

2.4 (b) "Aggregator" means an entity that enrolls customers in a virtual power plant program  
2.5 and coordinates the operation of enrolled energy resources. A public utility may be an  
2.6 aggregator. An aggregator is not a public utility solely as a result of its participation in a  
2.7 virtual power plant program.

2.8 (c) "Carbon-free" means a technology that generates electricity without emitting carbon  
2.9 dioxide.

2.10 (d) "Demand response measure" has the meaning given to "load management" in section  
2.11 216B.2402.

2.12 (e) "Eligible technology" means a technology that is carbon-free and that is capable of  
2.13 being activated or dispatched under a virtual power plant program in order to address a  
2.14 virtual power plant event. Eligible technology includes but is not limited to:

2.15 (1) solar photovoltaic devices;

2.16 (2) energy storage systems;

2.17 (3) electric vehicles;

2.18 (4) smart thermostats;

2.19 (5) heat pumps;

2.20 (6) electric water heaters; and

2.21 (7) demand response measures.

2.22 (f) "Energy storage system" has the meaning given in section 216B.2422, subdivision  
2.23 1.

2.24 (g) "Greenhouse gas" means atmospheric emissions of carbon dioxide, methane, nitrous  
2.25 oxide, hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride.

2.26 (h) "Grid" means a public utility's interconnected network of electricity generators and  
2.27 transmission and distribution lines that deliver electricity to ultimate consumers.

2.28 (i) "Participant" means an owner of an eligible technology enrolled in a virtual power  
2.29 plant program.

2.30 (j) "Smart thermostat" means a thermostat that can be controlled remotely via the Internet.

3.1 (k) "Solar photovoltaic device" has the meaning given in section 216C.06, subdivision  
3.2 16.

3.3 (l) "System peak" means the period of time during which electricity demand on a grid  
3.4 system is highest.

3.5 (m) "Virtual power plant event" means the dispatch or activation of eligible technologies  
3.6 participating in a virtual power plant program.

3.7 (n) "Virtual power plant program" means a program that aggregates electricity generated  
3.8 by eligible technologies and reductions in demand that can be used to maintain or improve  
3.9 the reliability, stability, or security of the electric grid, and customer affordability.

3.10 Subd. 2. **Required filing; objectives.** No later than January 1, 2027, each public utility  
3.11 must file with the commission a virtual power plant program that is consistent with the  
3.12 requirements of this section and designed to achieve the following goals:

3.13 (1) reduce demand for grid-supplied electricity during system peaks;

3.14 (2) make renewable energy generated during off-peak periods available for use during  
3.15 system peaks;

3.16 (3) lower ratepayer bills by reducing utility market purchases at elevated prices, including,  
3.17 but not limited to, during system peaks;

3.18 (4) reduce emissions of greenhouse gases and other air pollutants;

3.19 (5) optimize the use of existing generation and energy storage assets;

3.20 (6) improve the resiliency and reliability of the grid system;

3.21 (7) avoid or defer the construction of electric generation, distribution, or transmission  
3.22 infrastructure; and

3.23 (8) reduce the use of electric generating plants that are not carbon-free, prioritizing the  
3.24 reduced use of those located in environmental justice areas, as defined in section 216B.1691,  
3.25 subdivision 1.

3.26 Subd. 3. **Virtual power plant program; structure.** (a) Each public utility must procure  
3.27 electricity in a virtual power plant program through a Request for Proposal issued to  
3.28 aggregators by an independent and neutral third party that describes the amount, timing,  
3.29 and duration of electricity resources the public utility requires.

4.1 (b) The third party has authority to request data from the public utility that is necessary  
4.2 to ensure that potential bidders have access to identical information when preparing bids.  
4.3 A public utility must comply with these data requests.

4.4 (c) Each aggregator must submit competitive bids to the third party outlining the amount,  
4.5 timing, and price of electricity the aggregator can supply or the reduction in demand it can  
4.6 arrange.

4.7 (d) A public utility must select the combination of bids that most closely meets its  
4.8 electricity supply needs at the least cost.

4.9 Subd. 4. **Virtual power plant program; content.** (a) A virtual power plant program  
4.10 filed under this section must contain, at a minimum:

4.11 (1) a description of the goals of the virtual power plant program and the role the program  
4.12 plays in meeting the public utility's grid system needs and its system peak reduction targets  
4.13 required under subdivision 7;

4.14 (2) provisions to enroll and manage participants by aggregators;

4.15 (3) provisions that address:

4.16 (i) the maximum number of virtual power plant events in a given period of time for  
4.17 which the utility may dispatch electricity generated by enrolled eligible technologies;

4.18 (ii) the months of the year during which virtual power plant events may occur;

4.19 (iii) the times of the day during which virtual power plant events may occur;

4.20 (iv) the maximum duration of virtual power plant events;

4.21 (v) communication protocols between aggregators and participants that provide no less  
4.22 than day-ahead advance notification of nonemergency virtual power plant events;

4.23 (vi) a process by which participants may opt out of virtual power plant events; and

4.24 (vii) a process by which participants may leave the program;

4.25 (4) provisions to operate a virtual power plant program, including how the public utility  
4.26 communicates with aggregators and participants during a virtual power plant event; and

4.27 (5) provisions that, notwithstanding section 216B.164, participants must be compensated  
4.28 at the applicable rate established under the virtual power plant program for electricity  
4.29 exported to the public utility or demand reductions made during a virtual power plant event.

4.30 (b) The commission may require a virtual power plant program filed under this section  
4.31 to contain:

5.1 (1) provisions that prohibit a participant from being compensated for providing the same  
5.2 energy resources more than once;

5.3 (2) provisions to measure and verify energy storage system performance directly at the  
5.4 site of the energy storage system without requiring the installation of an additional meter;  
5.5 and

5.6 (3) any other information the commission determines is necessary to efficiently operate  
5.7 a virtual power plant program.

5.8 Subd. 5. **Other operational factors.** (a) A public utility customer may enroll with an  
5.9 aggregator to participate in a virtual power plant program at any time after the customer's  
5.10 eligible technology begins operations.

5.11 (b) A participant must not be excluded from enrollment in a virtual power plant program  
5.12 solely as a result of participating in other programs offered by the public utility.

5.13 (c) The commission must develop and implement provisions to ensure that a utility that  
5.14 elects to be an aggregator under a virtual power plant program does not enjoy any competitive  
5.15 advantage as a result of its utility status that could hinder competition from nonutility  
5.16 aggregators or deter private investment and participation in a virtual power plant program.

5.17 (d) The department must provide appropriate and reasonable consumer protections and  
5.18 standards for entry into a virtual power plant program, including, but not limited to,  
5.19 requirements for standard contract terms and disclosure forms, payment terms, and warranties.

5.20 Subd. 6. **Commission duties.** (a) The commission may approve, reject, or modify a  
5.21 virtual power plant program filed under this section.

5.22 (b) The commission must ensure that the energy resources selected through the  
5.23 competitive bidding process established under subdivision 3 are competitively priced, least  
5.24 cost, and meet the requirements of this section.

5.25 (c) The commission must establish standards and procedures governing energy data held  
5.26 by participants and public utilities that must be shared with aggregators in order to ensure  
5.27 a virtual power plant program's efficient operation. An aggregator must not sell or use, for  
5.28 any other purpose, data from participants or public utilities gathered for virtual power plant  
5.29 program use.

5.30 Subd. 7. **System peak reduction targets.** (a) A public utility, by implementing a virtual  
5.31 power plant program and other programs, must reduce the public utility's system peak,  
5.32 compared with the system peak experienced in the base year 2025, by at least:

6.1 (1) five percent by December 31, 2028; and

6.2 (2) ten percent by December 31, 2032.

6.3 (b) The commission must establish new targets for subsequent years, provided the targets  
6.4 are cost effective.

6.5 Subd. 8. **Modification or delay.** The commission may modify or delay a virtual power  
6.6 plant program's implementation if the commission determines that doing so is in the public  
6.7 interest. When making a determination under this subdivision, the commission must consider  
6.8 whether the system peak reduction targets established under subdivision 7 are technically  
6.9 feasible and cost-effective.

6.10 Subd. 9. **Cost recovery.** A public utility may seek to recover capital investments and  
6.11 expenditures determined by the commission to be prudently incurred and necessary to the  
6.12 implementation and effective functioning of an approved virtual power plant program.

6.13 Subd. 10. **Report.** Beginning January 31, 2028, and each January 31 thereafter, a public  
6.14 utility must file an annual report with the commission and with the chairs and ranking  
6.15 minority members of the senate and house of representatives committees with primary  
6.16 jurisdiction over energy policy on the operations of the virtual power plant program. The  
6.17 report must include, at a minimum:

6.18 (1) the total capacity enrolled under the virtual power plant program approved by the  
6.19 commission under this section, reported separately by eligible technology type, customer  
6.20 class, and whether the participant operated under an aggregator or directly through the public  
6.21 utility;

6.22 (2) the system peak reductions attributable to the virtual power plant program;

6.23 (3) contributions to ancillary services made by the virtual power plant program;

6.24 (4) recommendations to increase participation in the virtual power plant program; and

6.25 (5) other information requested by the commission.

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

6.27 Amend the title accordingly