119TH CONGRESS
2D SESSION

S. 4559

To amend the Federal Power Act to require the Federal Energy Regulatory Commission to issue a final rule relating to the interconnection of large load facilities with the transmission system, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 18, 2026

Mr. SCHIFF introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To amend the Federal Power Act to require the Federal Energy Regulatory Commission to issue a final rule relating to the interconnection of large load facilities with the transmission system, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Energy Cost Fairness and Reliability Act of 2026''.

SEC. 2. SENSE OF CONGRESS.

It is the sense of Congress that—

(1) the United States has long been a global leader in science, technology, and innovation, which are essential to economic growth, national security, and global competitiveness;

(2) artificial intelligence requires substantial computing power, storage, and networking capacity to train models and process data at scale;

(3) the rapid and significant increase in load growth driven by data centers, growing electrification, the onshoring of domestic manufacturing, and other changes in industry and the economy poses serious challenges to grid resource adequacy and reliability;

(4) responsible and sustainable investments in energy infrastructure to account for a significant increase in load growth can strengthen the energy security of the United States and ensure that technological growth is compatible with long-term sustainability;

(5)(A) electricity prices in various regions across the United States have surged in recent years due to the need for network upgrades and new energy infrastructure to serve large loads; and

(B) therefore, increasing load growth threatens to significantly increase electricity rates for ratepayers; and

(6) due to the unprecedented proliferation of large load facilities, such as data centers seeking to interconnect with the transmission system, and because of the implications this proliferation poses to the reliability and stability of the interstate transmission system, the energy and national security of the United States, the affordability of electricity for residential consumers, and the global technological leadership of the United States, it is necessary for Congress to address this proliferation and provide direction to the Commission and the Department.

SEC. 3. MANAGEMENT OF LARGE LOAD FACILITIES.

Part II of the Federal Power Act (16 U.S.C. 824 et seq.) is amended by adding at the end the following:

"SEC. 224. MANAGEMENT OF LARGE LOAD FACILITIES.

''(a) DEFINITIONS.—In this section:

''(1) COLOCATED.—The term 'colocated', with respect to a large load facility, means that the large load facility is physically connected to, and has contractual arrangements to be served by, the facilities of an existing or planned generating facility on the

generating facility's side of the point of interconnection to the interstate transmission system.

"(2) COMMISSION.—The term 'Commission' means the Federal Energy Regulatory Commission.

"(3) CURTAILABLE.—

"(A) IN GENERAL.—The term 'curtailable', with respect to a large load customer, means that the large load customer is capable of reducing or shifting electrical demand at the applicable large load facility in response to a request from the applicable electric utility or transmission provider—

"(i) to maintain grid reliability;

"(ii) to manage transmission congestion;

"(iii) to meet the operational needs of the transmission provider; or

"(iv) for other reasons, as the transmission provider determines necessary.

"(B) METHODS OF REDUCING OR SHIFTING DEMAND.—The reduction or shifting of electrical demand as described in subparagraph (A) may be accomplished through—

"(i) the deployment of on-site energy storage or other technologies that allow

continued operations while reducing grid draw; or

''(ii) voluntary reduction of operations, including shifting operations to facilities in other regions, during requested periods.

''(4) DEMAND FLEXIBILITY.—The term 'demand flexibility' means the capability of the electrical load or on-site distributed energy resources of a large load customer to reduce, shed, shift, or modulate electricity consumption or generation in response to external signals, including price changes, grid reliability needs, or energy availability.

''(5) DEPARTMENT.—The term 'Department' means the Department of Energy.

''(6) GENERATOR INTERCONNECTION QUEUE.—The term 'generator interconnection queue' means the ordered list of valid interconnection requests maintained by a transmission provider, pursuant to a tariff approved by the Commission, for purposes of studying, processing, and deciding whether to approve the interconnection of generating facilities to the transmission system.

''(7) LABOR ORGANIZATION.—The term 'labor organization' has the meaning given the term in sec-

tion 2 of the National Labor Relations Act (29 U.S.C. 152).

''(8) LABOR PEACE AGREEMENT.—The term 'labor peace agreement' means a written agreement between an employer and a labor organization through which the employer guarantees that—

''(A) the employer will be neutral regarding any of the employees of the employer seeking to be represented by the labor organization; and

''(B) if employees seek to be represented by a labor organization, the employer shall recognize the labor organization as the exclusive bargaining representative on a showing that a majority of the employees choose to be represented by the labor organization.

''(9) LARGE LOAD CUSTOMER.—The term 'large load customer' means the 1 or more entities using power at a large load facility.

''(10) LARGE LOAD FACILITY.—The term 'large load facility' means—

''(A) a facility the peak demand of which exceeds 50 megawatts; or

''(B) an aggregation of facilities the peak demand of which exceeds 50 megawatts at a

single site (as determined by the Commission, taking into consideration ownership of the facilities).

''(11) LOAD INTERCONNECTION QUEUE.—The term 'load interconnection queue' means the ordered list of valid interconnection requests maintained by a transmission provider, pursuant to a tariff approved by the Commission, for purposes of studying, processing, and deciding whether to approve the interconnection of large load facilities to the transmission system.

''(12) NATIONAL LABORATORY.—The term 'National Laboratory' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

''(13) REGISTERED APPRENTICESHIP PROGRAM.—The term 'registered apprenticeship program' means an apprenticeship program registered under the Act of August 16, 1937 (commonly known as the 'National Apprenticeship Act') (50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.).

''(14) SECRETARY.—The term 'Secretary' means the Secretary of Energy.

''(15) TRANSMISSION PROVIDER.—The term 'transmission provider' means the applicable pro-

vider of transmission services, which may include an Independent System Operator, a Regional Transmission Organization, or a public utility that provides transmission services.

''(b) STANDARD INTERCONNECTION PROCEDURES.—Not later than 1 year after the date of enactment of this section, the Commission, in order to establish a formal interconnection queue system for large loads to be regulated by the Commission, shall issue 1 or more final rules to establish standard interconnection procedures for large loads requesting to interconnect to the interstate transmission system, which shall require the following:

''(1) COSTS OF INTERCONNECTION STUDIES.—With respect to the costs of interconnection studies—

''(A) any large load customer seeking interconnection to the interstate transmission system shall pay 100 percent of the costs of interconnection studies; and

''(B) any large load customer that fails to satisfy the payment obligations described in subparagraph (A) shall be prohibited from interconnection or receiving transmission service until full compliance with that subparagraph.

''(2) NETWORK UPGRADES.—Network upgrades shall be assigned to large load customers through the interconnection study process that is part of the load interconnection queue system established under this subsection.

''(3) RELIABILITY STANDARDS.—Interconnection to the interstate transmission system for a large load facility shall not proceed until the applicable transmission provider determines that the interconnection would not cause a violation of any applicable Commission-approved reliability standards (as defined in section 215(a)).

''(4) REQUIREMENTS FOR INTERCONNECTION.—

''(A) IN GENERAL.—Interconnection to the transmission system shall not be approved for a large load customer unless the large load customer satisfies the following criteria:

''(i) DEMAND FLEXIBILITY AND CURTAILABILITY.—The large load customer—

''(I) is technically capable of exercising demand flexibility and being curtailable, as evidenced by satisfaction of—

"(aa) the minimum criteria established under subparagraph (B); and

"(bb) any minimum technical standards established or approved under subparagraph (C); and

"(II) enters into a binding agreement with the transmission provider to exercise demand flexibility and be curtailable.

"(ii) NEW GENERATING RESOURCES.—The large load customer demonstrates and guarantees that the large load customer or the operator of the applicable new large load facility will construct, arrange to have constructed, or otherwise arrange for new generating facilities, which may include power produced or made available by distributed energy resources (including virtual power plants) that the large load customer has created or has worked with the transmission provider to arrange or coordinate, to supply the power needed by the new large load facility, with such

power being deliverable to the large load facility and temporally matching its capacity needs.

''(B) MINIMUM CRITERIA FOR DEMAND FLEXIBILITY AND CURTAILABILITY.—The Commission shall issue standards or guidelines, or otherwise approve standards proposed by the applicable transmission provider through a tariff to be reviewed by the Commission, to establish minimum criteria necessary for a large load facility or category of large load facilities to qualify as sufficiently capable of exercising demand flexibility and sufficiently curtailable for purposes of subparagraph (A)(i)(I).

''(C) MINIMUM TECHNICAL STANDARDS.—If the Commission determines necessary, the Commission shall establish minimum technical standards, or approve minimum technical standards established by transmission providers, for system-protection facilities and automated load-shedding equipment necessary to verify and execute the capabilities to exercise demand flexibility and be curtailable, as described in subparagraph (A)(i)(I).

''(5) PRIORITIZATION WITHIN LOAD INTERCONNECTION QUEUES.—

''(A) IN GENERAL.—Within a load interconnection queue, an interconnection request from a large load customer shall be prioritized if the large load customer satisfies any 1 or more of the following criteria:

''(i) BATTERY BACKUP.—The large load customer demonstrates and guarantees that the large load customer or the operator of the applicable new large load facility will implement a battery energy storage system to use as primary backup generation for the large load facility, with sufficient capacity to meet the backup needs of the large load facility during periods of outages or curtailments.

''(ii) CONSTRUCTION.—The large load customer demonstrates and guarantees that, in the construction of the applicable new large load facility and any new energy supply resource that the large load facility brings to the electric grid—

''(I) all laborers and mechanics employed by the large load customer

and contractors and subcontractors of the large load customer in the performance of construction are paid wages at rates not less than those prevailing on projects of a character similar in the locality in which the construction project is located, as most recently determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code; and

''(II) all contractors and subcontractors of the large load customer use registered apprentices participating in registered apprenticeship programs.

''(iii) LABOR PEACE AGREEMENT.—The large load customer ensures that each owner or operator of a new energy supply resource that the applicable new large load facility brings to the electric grid has agreed to enter into a labor peace agreement with respect to the operation and maintenance of the energy supply resource.

''(B) REQUIREMENT.—A transmission provider shall endeavor to complete the interconnection study process for a large load customer that satisfies the criteria for prioritization under this paragraph before other large load customers that do not satisfy the criteria for such prioritization.

''(6) NON-FIRM TRANSMISSION ACCESS ON AN AS-AVAILABLE BASIS.—Transmission providers shall provide to colocated large load facilities non-firm transmission access to the transmission system for the purpose of withdrawing electric energy from the transmission network on an as-available basis, subject to the condition that such non-firm transmission service shall be—

''(A) subject to curtailment or interruption before firm network or point-to-point transmission service, in accordance with the open access and reliability standards of the Commission; and

''(B) priced to reflect the non-firm nature of such service.

''(7) INJECTION RIGHTS ON A NON-FIRM BASIS.—Transmission providers offer to colocated large load facilities injection rights without the need

for deliverability studies if the injection will occur on a non-firm basis.

''(c) PROTECTION OF GRID RELIABILITY.—The Commission shall require transmission provider tariffs provided to the Commission to specify the following:

''(1) An existing generating facility operated by an interconnection customer may not, as a result of any request of the interconnection customer to modify its interconnection service level for such existing generating facility, withdraw any of its capacity to begin serving a large load facility if the withdrawal of capacity from the existing generating facility to serve a large load facility would result in a loss of capacity to serve customers other than the large load facility without a new generation resource being interconnected to the grid to compensate for such loss of capacity.

''(2) An existing generating facility operated by an interconnection customer may not, as a result of any request of the interconnection customer to modify its interconnection service level for such existing generating facility, withdraw any of its capacity to begin serving a large load facility until all modifications to interconnection facilities and network upgrades that the transmission provider determines to

be necessary to maintain reliability for existing customers are carried out and placed in commercial operation.

''(d) COST RECOVERY.—

''(1) NETWORK UPGRADES.—

''(A) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Commission shall issue a final rule requiring transmission providers to ensure that a large load customer seeking interconnection to the interstate transmission system shall be responsible for 100 percent of the network upgrades that are assigned to the large load customer pursuant to 1 or more interconnection studies, including any additions, modifications, or upgrades to the interstate transmission system at or beyond the point of interconnection that, in the determination of the transmission provider, are required—

''(i) to accommodate the interconnection; or

''(ii) to maintain the reliability or operational integrity of the transmission system.

''(B) NONREFUNDABLE PAYMENTS.—All payments made by a large load customer to cover the costs of network upgrades described in subparagraph (A) shall be nonrefundable.

''(C) PROHIBITION.—The Commission shall not approve any tariff submitted to the Commission for review to include any crediting mechanism, refund, or offset that allows for the costs of network upgrades described in subparagraph (A) to be—

''(i) recovered from any transmission customer other than the applicable large load customer described in that subparagraph; or

''(ii) credited against future transmission or retail service charges.

''(D) COMMISSION-JURISDICTIONAL PAYMENT MECHANISM.—

''(i) IN GENERAL.—The costs of network upgrades described in subparagraph (A) shall be directly assigned to the applicable large load customer through a Commission-jurisdictional payment mechanism, such as—

''(I) a non-refundable upfront payment;

''(II) a structured surcharge that may be paid over time; or

''(III) any other cost-assignment mechanism that is within the jurisdiction of the Commission.

''(ii) INCLUSION IN OPEN ACCESS TRANSMISSION TARIFF.—The Commission may require that payments to cover costs described in clause (i) be included in each applicable open access transmission tariff.

''(iii) SAVINGS PROVISION.—The payment of network upgrade costs described in clause (i) through a Commission-jurisdictional payment mechanism described in that clause shall not preempt the authority of a State commission to regulate the retail rates, terms, or conditions of electric service provided to the applicable load by a retail utility.

''(2) COLOCATED LARGE LOAD FACILITIES.—For a colocated large load facility—

''(A) the applicable large load customer shall be assessed charges on a gross-demand

basis for ancillary services and black start service provided through the interstate transmission system if the colocated generating facility is interconnected to the interstate transmission system, even if the colocated large load facility withdraws zero net energy from the interstate transmission system; and

''(B) the existence of on-site generation, energy storage, or other behind-the-meter resources shall not relieve a colocated large load facility of cost responsibility under subparagraph (A) if the facility remains interconnected with, synchronized to, or reliant upon the interstate transmission system for reliability, backup service, or ancillary services.

''(3) REVIEW OF COST ALLOCATION METHODOLOGIES.—In determining the justness and reasonableness of any rate, charge, term, or condition of a tariff or tariff amendment filed under section 205, the Commission shall, consistent with State authority, review the cost allocation methodologies to ensure that the costs of transmission services, network upgrades, or related facilities necessitated by the interconnection or operation of large load facilities are not shifted to other customers, including by

taking into account the ultimate impact of rates under the jurisdiction of the Commission on downstream retail ratepayers.

''(4) COMPENSATION FOR CERTAIN GENERATION.—Energy generated by a colocated generating facility that is in excess of the amount consumed by the colocated large load facility and that is injected into the interstate transmission system shall be compensated at the applicable wholesale locational marginal price or the avoided cost rate, in accordance with the relevant tariff of the transmission provider that has been filed with and approved by the Commission.

''(e) QUEUE MANAGEMENT BEST PRACTICES.—

''(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Commission shall initiate a rulemaking to revise the pro forma Large Generator Interconnection Procedures promulgated pursuant to section 35.28(f) of title 18, Code of Federal Regulations (or a successor regulation), to require public utility transmission providers to share and employ, as appropriate, queue management best practices with respect to the use of computing technologies, such as artificial intelligence, machine learning, or automation, in evaluating and

processing generating facility interconnection requests within a generator interconnection queue, in order to expedite study results with respect to those requests.

''(2) TECHNICAL ASSISTANCE.—Subject to the availability of appropriations, the Secretary shall provide to transmission providers technical assistance with respect to the implementation of any best practices established by the Commission under paragraph (1), as the Secretary determines to be appropriate.

''(f) LARGE LOAD FORECASTING.—The Commission shall require that, in at least 1 category of load forecast utilized by a transmission provider for estimating future energy demand or making grid planning decisions, a large load facility may be included in the forecast only if the large load facility is able to provide proof of viable demonstration of commercial or operational commitment pursuant to objective criteria set forth in a Commission-approved tariff, which may include—

''(1) an energy or transmission service agreement;

''(2) credit or collateral support;

''(3) significant infrastructure investment;

''(4) a long-term generation supply commitment; or

''(5) any other comparable demonstration of commitment approved by the Commission.

''(g) INTERCONNECTION AND STUDY PROCESS DISCIPLINE.—

''(1) IN GENERAL.—Notwithstanding any other provision of law, the Commission shall require each transmission provider, as a condition of accepting and processing an interconnection request, transmission service request, or comparable request from a large load facility, to impose—

''(A) study deposits sufficient to cover the costs of system impact, facilities, or comparable studies;

''(B) readiness or milestone payments tied to progression through the study and interconnection process; and

''(C) withdrawal penalties designed to ensure that a large load facility that withdraws from such process bears an appropriate share of the costs imposed on the transmission provider and other customers.

''(2) REQUIREMENT.—The requirements established under paragraph (1) shall be designed—

''(A) to discourage speculative requests; and

''(B) to reduce study delays and restudies.

''(h) TARIFF REVISIONS; TRANSITION PERIOD.—

''(1) TARIFF REVISIONS.—Not later than 180 days after the effective date of each final rule issued under subsection (b), each transmission provider subject to the jurisdiction of the Commission shall submit to the Commission for approval any tariff amendments necessary to effectuate the rule.

''(2) TRANSITION PERIOD.—As part of each rulemaking proceeding required of the Commission under this section, the Commission shall ensure that there is a reasonable transition period for affected entities (as determined by the Commission), while seeking to avoid disruptions to existing projects or projects that are significantly underway.

''(3) REQUIREMENT.—On and after the effective date of the final rules issued under subsection (b) to establish the load interconnection queue system described in that subsection, a large load facility may only interconnect with the interstate transmission system once it has been approved through the applicable load interconnection queue system.

''(i) DOE DATA COLLECTION.—

"(1) IN GENERAL.—The Secretary, in accordance with section 13 of the Federal Energy Administration Act of 1974 (15 U.S.C. 772), may require owners or operators of data centers to submit to the Secretary such data as is necessary to enable the Secretary—

"(A) to identify trends in new data center requests and commissioning;

"(B) to identify trends in energy and water performance, including cooling and on-site generation, and flexibility in operations;

"(C) to assess actual energy use associated with artificial intelligence activities, including the training of artificial intelligence models and inference operations;

"(D) to establish benchmarks of—

"(i) current data center energy and water use by data center type and function; and

"(ii) the operational flexibility of load by data center type;

"(E) to engage in quarterly tracking of trends in data center energy demand relating to artificial intelligence; and

"(F) to support the development of refined models for projecting future energy needs and load shapes associated with data center workloads.

"(2) DATA PROTECTION.—

"(A) IN GENERAL.—The Secretary shall protect any confidential business information that is submitted by a data center owner as required under paragraph (1).

"(B) FOIA EXEMPTION.—Information described in subparagraph (A) shall be exempt from disclosure under—

"(i) section 552(b)(4) of title 5, United States Code (commonly known as the 'Freedom of Information Act'); and

"(ii) any provision of State, Tribal, or local freedom of information law, open government law, open meetings law, open records law, sunshine law, or similar law requiring disclosure of information or records.

"(j) DOE ARTIFICIAL INTELLIGENCE TESTBED.—

"(1) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish a data-center-scale artificial

intelligence testbed at a National Laboratory that shall be complementary to, but distinct from, the current set of high-performance computing facilities operated by Department.

''(2) REQUIREMENT.—The testbed established under paragraph (1) shall allow researchers from the National Laboratories, academia, and industry to collaborate in the development and assessment of various aspects of artificial intelligence, including—

''(A) algorithms for energy-efficient or energy-flexible artificial intelligence training and inference to advance the artificial intelligence capabilities of the United States and build on the success of comparable public-private efforts that have accelerated advances in high-performance computing;

''(B) technology hardware and control systems relating to power supply, cooling, and computing system configuration;

''(C) grid integration, load flexibility, efficient grid management, and strategies for protecting or enhancing grid reliability, resource adequacy, or energy affordability; and

''(D) advancing or de-risking new technologies to advance the efforts described in subparagraphs (A) through (C).

''(3) REPORT.—

''(A) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary shall submit to Congress and the Commission a report compiled using knowledge gained and lessons learned from—

''(i) the testbed established under paragraph (1); and

''(ii) any other relevant projects that are ongoing at the Department and the National Laboratories.

''(B) COLLABORATION.—In compiling the report under subparagraph (A), the Secretary shall work with—

''(i) the National Laboratories;

''(ii) Federal partners, such as the Commission;

''(iii) academia; and

''(iv) industry.

''(C) ASSESSMENTS.—The report under subparagraph (A) shall assess—

''(i) the scale of load growth being driven by the proliferation of data center infrastructure, including significant regional differences;

''(ii) how that load growth will affect grid reliability, resource adequacy, and national security;

''(iii) how electric utilities and regulators obtain information to verify when and whether prospective large load facilities will reach commercial operation;

''(iv)(I) how utilities and regulators determine and apply consistent and objective screening criteria for interconnection requests; and

''(II) how utilities and regulators are attempting to deter speculative or duplicative interconnection requests for large loads;

''(v) innovative technologies for—

''(I) the reduction of power and water utilized by data centers;

''(II) the utilization of waste heat, including for heating residential homes; and

''(III) facility-level electricity supply; and

''(vi) the usage and ability of demand response and demand flexibility by data center facilities to alleviate stresses on grid resource adequacy.

''(D) RECOMMENDATIONS.—The report under subparagraph (A) shall provide recommendations for—

''(i) how load forecasting can be improved to more accurately determine how the actual electricity consumption of a large load facility will compare to its requested level of interconnection service;

''(ii) how to ensure that large load interconnection requests—

''(I) are subject to consistent and objective screening criteria; and

''(II) are not double-counted;

''(iii) hardware and algorithmic improvements to further reduce energy consumption relating to artificial intelligence, including for developing energy-efficient methods for training and inference of large

language models and other large artificial intelligence models;

''(iv) policy changes or actions that the Federal Government may take to ensure quick and efficient buildout of data infrastructure while ensuring a buildout that maintains grid reliability and energy affordability; and

''(v) how the National Laboratories can facilitate collaboration and information-sharing to accelerate innovation.

''(E) COMMISSION CONSIDERATION.—Not later than 180 days after receiving the report under subparagraph (A), the Commission shall—

''(i) decide whether to implement any recommendations or act on any findings in that report; and

''(ii) initiate a rulemaking proceeding or take other appropriate action, if applicable.

''(F) PUBLICATION OF TOPLINE DATA.—

''(i) IN GENERAL.—The Secretary shall publish on the website of the Department aggregated topline data and conclu-

sions from the report under subparagraph (A).

''(ii) REQUIREMENT.—In carrying out clause (i), the Secretary shall ensure that no data that could be attributed to a single private entity is made available to the public.

''(k) SAVINGS PROVISION.—Nothing in this section shall be construed to authorize the Commission to regulate retail electricity rates, charges, or terms of service, which shall remain subject to the jurisdiction of the States.''.

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