To require the Federal Energy Regulatory Commission to establish minimum interregional transfer capabilities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

September 18, 2023

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

A BILL

To require the Federal Energy Regulatory Commission to establish minimum interregional transfer capabilities, 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 “Building Integrated Grids With Inter-Regional Energy Supply Act” or the “BIG WIRES Act”.

SEC. 2. FINDINGS.

Congress finds that—
(1) interregional electric transmission is foundational to a modern grid and a growing economy based on affordable and abundant energy;

(2) in recent decades, the interregional electric grid infrastructure of North America, and of the United States in particular, has stagnated;

(3) since 2014, the total capacity of planned or newly constructed large-scale interregional transmission in North America has amounted to less than $\frac{1}{3}$ that of South America, $\frac{1}{6}$ that of Europe, and $\frac{1}{30}$ that of China;

(4) such a shortage of interregional transmission threatens the reliability of the electric grid of the United States and its resiliency to extreme weather events and cyber and physical attacks while artificially inflating energy prices for the people of the United States;

(5) the damages resulting from that interregional transmission shortfall have been borne across the United States, in part during extreme weather events, including the 2022 freeze affecting the majority of the United States, the 2020 and 2022 heat waves in California, the 2019 heat wave and 2021 freeze in Texas, the 2018 cyclone on the East Coast, and the 2014 polar vortex in the North-
east and Midwest, and those extreme weather events collectively cost the people of the United States hundreds of billions of dollars;

(6) new interregional transmission, and transfer capability achieved by means of other technologies and grid-operational practices, represents a unique opportunity to fortify the critical energy infrastructure of the United States while lowering the cost of living for families;

(7) studies of interregional transmission routinely find benefit-cost ratios as high as 2.5, in line with real-world experience;

(8) by relieving grid congestion and promoting more efficient grid planning and operation, new interregional transmission presents an all-of-the-above opportunity for the full energy-generating portfolio of renewable, fossil, and nuclear resources of the United States; and

(9) interregional transmission represents a 2-way value proposition, with secure careers for workers in energy communities and competitively sourced, low-cost, reliable energy for industrial, commercial, and residential energy customers nationwide.
SEC. 3. MINIMUM INTERREGIONAL TRANSFER CAPABILITIES AND REQUIREMENTS.

(a) In General.—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. INTERREGIONAL RELIABILITY.

“(a) Definitions.—In this section:

“(1) COINCIDENT INTERREGIONAL TRANSFER CAPABILITY.—The term ‘coincident interregional transfer capability’, with respect to an interregional transmission planning region, means the ability of the interconnected electrical system to coincidently move electric energy reliably between the interregional transmission planning region in question and the rest of the interconnected electrical system.

“(2) COMMISSION.—The term ‘Commission’ means the Federal Energy Regulatory Commission.

“(3) INTERREGIONAL TRANSFER CAPABILITY.—The term ‘interregional transfer capability’ means the ability of the interconnected electrical system to move electric energy reliably between 2 or more interregional transmission planning regions.

“(4) INTERREGIONAL TRANSMISSION PLANNING REGION.—The term ‘interregional transmission planning region’ means a region for which electric energy transmission planning is appropriate, as determined
by the Commission, such as a region approved by
the Commission to meet the requirements of the
final rule of the Commission entitled ‘Transmission
Planning and Cost Allocation by Transmission Own-
ing and Operating Public Utilities’ (Docket No.
RM10–23).

“(5) Minimum interregional transfer ca-
pability.—The term ‘minimum interregional trans-
fer capability’ means, as applicable—

“(A) the coincident interregional transfer
capability described in subsection (b)(1)(A); or

“(B) a higher coincident interregional
transfer capability established in accordance
with subsection (b)(1)(B).

“(6) Minimum interregional transfer re-
quirement.—The term ‘minimum interregional
transfer requirement’ means any requirement to
meet or maintain a minimum interregional transfer
capability.

“(b) Establishment of Minimum Interregional
Transfer Capabilities.—

“(1) In general.—Not later than 18 months
after the date of enactment of this section, the Com-
mission shall promulgate a final rule that—
“(A) requires each interregional transmission planning region to establish or increase interregional transfer capabilities such that the coincident interregional transfer capability of each interregional transmission planning region is not less than the lesser of—

“(i) 30 percent of its own present-day coincident peak load; and

“(ii) the sum obtained by adding—

“(I) the present-day coincident interregional transfer capability of the interregional transmission planning region; and

“(II) 15 percent of its own present-day coincident peak load;

“(B) on a showing of net benefits, may require 1 or more interregional transmission planning regions to meet or maintain a coincident interregional transfer capability that exceeds the applicable minimum interregional transfer capability described in subparagraph (A);

“(C) based on the applicable minimum interregional transfer capability, shall govern the establishment of minimum interregional transfer requirements for interconnections be-
between interregional transmission planning regions;

“(D) calculates the present-day coincident interregional transfer capabilities of the inter-regional transmission planning regions by—

“(i) defining the present-day coincident interregional transfer capability of each interregional transmission planning region as being equal to the greater of—

“(I) the coincident import capability of the interregional transmission planning region; and

“(II) the coincident export capability of the interregional transmission planning region;

“(ii) defining the coincident import capability of each interregional transmission planning region as being equal to the absolute value of the first $V_{10}$ of the first percentile (0.1th percentile) of the coincident hourly electrical transfers of that interregional transmission planning region;

“(iii) defining the coincident export capability of the interregional transmission planning region as being equal to the abso-
lute value of the last $\frac{1}{10}$ of the 99th percentile (99.9th percentile) of the coincident hourly electrical transfers of that inter-regional transmission planning region;

“(iv) defining the coincident hourly electrical transfers of each interregional transmission planning region as being equal to the sum obtained by adding, with respect to each hour, the hourly electrical transfers of all balancing authorities that, in the determination of the Commission, most closely correspond to the inter-regional transmission planning region in question using data from Form EIA–930 of the Energy Information Administration for the 5-year period ending on—

“(I) for each plan described in subparagraph (G) that is required to be submitted by the date described in that subparagraph, the date that is 1 year before the date of enactment of this section; and

“(II) for each plan submitted under paragraph (4)(A) and each updated plan submitted under para-
graph (4)(B), the date that is 1 year before the deadline for submission of that plan; and

“(v) defining the hourly electrical transfers of each interregional transmission planning region as being equal to, for each hour—

“(I) the hourly exports of that interregional transmission planning region; minus

“(II) the hourly imports of that interregional transmission planning region;

“(E) calculates the present-day coincident peak loads of the interregional transmission planning regions by—

“(i) defining the present-day coincident peak load of each interregional transmission planning region as being equal to the last 1⁄10 of the 99th percentile (99.9th percentile) of the coincident hourly load of that interregional transmission planning region; and

“(ii) defining the coincident hourly load of each interregional transmission
planning region as being equal to the sum obtained by adding, with respect to each hour, the hourly loads of all balancing authorities that, in the determination of the Commission, most closely correspond to the interregional transmission planning region in question using data from Form EIA–930 of the Energy Information Administration for the 5-year period ending on—

“(I) for each plan described in subparagraph (G) that is required to be submitted by the date described in that subparagraph, the date that is 1 year before the date of enactment of this section; and

“(II) for each plan submitted under paragraph (4)(A) and each updated plan submitted under paragraph (4)(B), the date that is 1 year before the deadline for submission of that plan;

“(F) for purposes of determining the adequacy of a plan described in subparagraph (G) to provide for the achievement of the minimum
interregional transfer capability applicable to an
interregional transmission planning region, de-
scribes and employs a clear methodology for
calculating anticipated changes to the coinci-
dent peak load and coincident interregional
transfer capability of an interregional trans-
mission planning region designed to correspond
approximately to what would be reasonably ex-
pected to be calculated under subparagraphs
(D) and (E) at a future date based on—

“(i) the construction or modification
of new or existing transmission facilities,
including facilities built between inter-
regional transmission planning regions and
facilities within interregional transmission
planning regions that impact the ability of
the interregional transmission planning re-
gions to move electric energy between
themselves and neighboring interregional
transmission planning regions;

“(ii) the use of nontransmission alter-
natives, including grid-enhancing tech-
nologies;

“(iii) changes to generation or load
within interregional transmission planning
regions, including energy efficiency and demand response programs; and

“(iv) other changes to the bulk-power system (as defined in section 215(a)) or the operation of the bulk-power system that are expected to meaningfully alter coincident peak loads or coincident interregional transfer capabilities, as determined by the Commission;

“(G) establishes a process for each interregional transmission planning region to submit, jointly with each other interregional transmission planning region with which the interregional transmission planning region has, or plans to establish, an interregional transfer capability, not later than 2 years after the effective date of the final rule, a plan that—

“(i) designates 1 or more entities for construction of new facilities or modification of existing facilities to achieve the applicable minimum interregional transfer capability in an efficient and timely manner for the benefit of ultimate consumers;

“(ii) allocates the costs of the facilities described in clause (i); and
“(iii) includes a timeline for the construction of the facilities described in clause (i)—

“(I) by December 31, 2035; or

“(II) if any construction will extend beyond that date, that includes an explanation of the reasons for that construction extending beyond that date; and

“(II) explains how the Commission will designate 1 or more entities to construct or modify, and how the Commission will allocate the costs of, the facilities described in clause (i) of subparagraph (G) in the event that an interregional transmission planning region fails to submit a plan in accordance with that subparagraph.

“(2) Presumptions; Consultation.—In establishing the methodology under paragraph (1)(F), the Commission may—

“(A) establish and use simplified, rebuttable presumptions relating to the extent to which coincident interregional transfer capabilities or coincident peak loads will be anticipated to be altered by facilities, technologies, or programs
described in clauses (i) through (iv) of that paragraph; and

“(B) consult with appropriate officials of the Department of Energy.

“(3) CONSIDERATIONS.—In carrying out paragraph (1), the Commission shall consider and determine the role of transfer capabilities between inter-regional transmission planning regions and other electrical systems in North America in meeting the requirements of that paragraph.

“(4) PLANS.—

“(A) NEW INTERREGIONAL TRANSMISSION PLANNING REGIONS.—Not later than 2 years after the establishment of any new interregional transmission planning region, the new inter-regional transmission planning region and each interregional transmission planning region with which the new interregional transmission planning region has, or plans to establish, an inter-regional transfer capability, shall jointly submit to the Commission a plan described in paragraph (1)(G) to meet the minimum inter-regional transfer capability applicable to that new interregional transmission planning region.

“(B) UPDATES.—
“(i) IN GENERAL.—The Commission shall require each plan submitted in accordance with paragraph (1)(G) or subparagraph (A) to be updated, and the updated plan submitted to the Commission, every 5 years after the deadline for submission of the initial plan.

“(ii) REQUIREMENT.—An updated plan submitted in accordance with clause (i) shall, at a minimum, account for any changes in regional coincident peak load since the most recent previous submission.

“(C) REVIEW.—The Commission shall review each plan submitted in accordance with paragraph (1)(G) or subparagraph (A) or (B) in a manner consistent with—

“(i) the principles described in subsection (g); and

“(ii) sections 205 and 206, with respect to the requirement that all rates, charges, terms, and conditions be just and reasonable and not unduly discriminatory or preferential.

“(c) EQUAL APPLICATION.—In carrying out this section, including with respect to the imposition of, and as-
sessing compliance with, any minimum interregional transfer requirement, the Commission shall apply all provisions of this section, and any regulations promulgated under this section, equally to all interregional transmission planning regions, including by using the same terms, definitions, and standards with respect to each interregional transmission planning region.

“(d) COMMISSION JURISDICTION.—The Commission shall have jurisdiction within the United States over all transmitting utilities for the purposes of establishing minimum interregional transfer capabilities in accordance with this section and establishing and enforcing compliance with minimum interregional transfer requirements.

“(e) ELECTRIC RELIABILITY COUNCIL OF TEXAS.—

“(1) IN GENERAL.—The Public Utility Commission of Texas may, at its sole discretion, choose to support the reliability and affordability of the ERCOT system by voluntarily complying with a minimum interregional transfer requirement relating to a coincident interregional transfer capability that is equal to a percentage, determined by ERCOT, of the coincident peak load of ERCOT.

“(2) SAVINGS CLAUSE.—

“(A) IN GENERAL.—The construction or operation of an interregional facility, or the al-
location of costs for that construction, to meet a minimum interregional transfer capability shall not affect the jurisdiction of the Commission with respect to—

“(i) ERCOT; or
“(ii) any ERCOT utility.

“(B) Not public utilities.—The construction or operation of a facility described in subparagraph (A), or the allocation of costs for that construction, shall not render ERCOT or any ERCOT utility a public utility.

“(f) Data quality.—

“(1) In general.—Not later than 180 days after the date of enactment of this section, the Administrator of the Energy Information Administration shall submit to the Commission an updated version of the data from Form EIA–930 for use in accordance with subparagraphs (D) and (E) of subsection (b)(1).

“(2) Errors.—In updating the Form EIA–930 data for purposes of paragraph (1), the Administrator of the Energy Information Administration, to the maximum extent practicable, shall control for the quality of the data by—
“(A) identifying any suspected erroneous values; and

“(B) removing those suspected erroneous values or overwriting those suspected erroneous values with data that, in the determination of the Administrator, is likely to be more accurate.

“(g) REQUIREMENT.—In carrying out this section, the Commission shall endeavor—

“(1) to improve the reliability and resilience of the electric grid of the United States, including during—

“(A) extreme weather scenarios;

“(B) physical attacks; and

“(C) cyber attacks; and

“(2) to reduce the cost of delivered power to ultimate consumers by increasing access to low-cost generating resources.”.

(b) CONFORMING AMENDMENTS.—Section 201 of the Federal Power Act (16 U.S.C. 824) is amended—

(1) in subsection (b)(2)—

(A) in the first sentence—

(i) by striking “section 201(f)” and inserting “subsection (f)”; and

(ii) by striking “and 222” and inserting “222, and 224”; and

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(B) in the second sentence, by striking “or 222” and inserting “222, or 224”; and

(2) in subsection (e)—

(A) by striking “206(f),”; and

(B) by striking “or 222” and inserting “222, or 224”.

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