

117TH CONGRESS
2D SESSION

S. 3879

To require the Federal Energy Regulatory Commission to promulgate regulations on regional and interregional transmission planning, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 17, 2022

Mr. MARKEY (for himself, Ms. SMITH, Mr. WHITEHOUSE, and Ms. WARREN) 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 promulgate regulations on regional and interregional transmission planning, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Connecting Hard-to-
5 reach Areas with Renewably Generated Energy Act of
6 2022” or the “CHARGE Act of 2022”.

7 **SEC. 2. FINDINGS.**

8 Congress finds that—

1 (1) current transmission planning is fractured
2 across many jurisdictions, prioritizes incumbent enti-
3 ties and highly localized transmission, and fails to
4 identify cost-effective solutions for 21st century
5 needs;

6 (2) the historical structure, regulations, and in-
7 centives of the electric power system lead to under-
8 planning and under-investment in the regional and
9 interregional transmission lines that are needed for
10 a reliable and resilient grid;

11 (3) much of the existing transmission infra-
12 structure of the United States is in need of signifi-
13 cant upgrade or replacement;

14 (4) the energy sector of the United States is at
15 a critical juncture, with a rapidly changing power
16 generation mix and new public policy mandates;

17 (5) it is imperative to proactively plan for elec-
18 tricity transmission in the future, including by tak-
19 ing into account long-term changes to demand and
20 load growth;

21 (6) renewable energy resources must be incor-
22 porated into the grid efficiently in order to meet
23 State and Federal decarbonization goals;

1 (7) the public desires, and has a right to, elec-
2 tricity data that is transparent, organized, and ac-
3 cessible;

4 (8) having reliable and diverse sources of elec-
5 tricity generation is a foundational need for the en-
6 tire economy;

7 (9) climate change has increased the frequency
8 and intensity of severe weather events that affect the
9 grid;

10 (10) it is in the national interest to implement
11 policies that provide effective electric infrastructure
12 to save consumers money, avoid preventable damage,
13 ensure energy reliability, and save lives;

14 (11) the Federal Government has a responsi-
15 bility to combat rising transmission costs and ensure
16 customers receive just and reasonable rates for elec-
17 tricity; and

18 (12) industry experience, scientific studies, and
19 modern examples of reformed electricity trans-
20 mission provide confidence that new public policies
21 and regulatory guidance will achieve more efficient
22 and beneficial planning than the status quo.

23 **SEC. 3. DEFINITIONS.**

24 In this Act:

1 (1) COMMISSION.—The term “Commission”
2 means the Federal Energy Regulatory Commission.

3 (2) INDEPENDENT SYSTEM OPERATOR.—The
4 term “Independent System Operator” has the mean-
5 ing given the term in section 3 of the Federal Power
6 Act (16 U.S.C. 796).

7 (3) INTERCONNECTION CUSTOMER.—The term
8 “interconnection customer” means an individual or
9 entity that has submitted to the owner or operator
10 of a transmission facility or transmission system a
11 request to interconnect a generation project or en-
12 ergy storage project that is subject to the jurisdic-
13 tion of the Commission.

14 (4) INTERREGIONAL TRANSMISSION PLANNING
15 PROCESS.—The term “interregional transmission
16 planning process” means a joint process by trans-
17 mission providers in 2 or more adjacent transmission
18 planning regions to evaluate electric energy trans-
19 mission needs.

20 (5) LOAD-SERVING ENTITY.—The term “load-
21 serving entity” has the meaning given the term in
22 section 217(a) of the Federal Power Act (16 U.S.C.
23 824q(a)).

24 (6) PRICING NODE.—The term “pricing node”
25 means a specific electrical bus location on the grid

1 where an injection or withdrawal of power is mod-
2 eled.

3 (7) REGIONAL TRANSMISSION ORGANIZATION.—
4 The term “Regional Transmission Organization”
5 has the meaning given the term in section 3 of the
6 Federal Power Act (16 U.S.C. 796).

7 (8) TRANSMISSION FACILITY.—The term
8 “transmission facility” means a facility that is used
9 for the transmission of electric energy in interstate
10 commerce.

11 (9) TRANSMISSION PLANNING REGION.—The
12 term “transmission planning region” means a region
13 for which electric energy transmission planning is
14 appropriate, as determined by the Commission, such
15 as a region established pursuant to the guidance in
16 the final rule of the Commission entitled “Trans-
17 mission Planning and Cost Allocation by Trans-
18 mission Owning and Operating Public Utilities” (76
19 Fed. Reg. 49842 (August 11, 2011)).

20 (10) TRANSMISSION PROVIDER.—The term
21 “transmission provider” means a public utility (as
22 defined in section 201(e) of the Federal Power Act
23 (16 U.S.C. 824(e))) that owns, operates, or controls
24 1 or more transmission facilities.

1 **SEC. 4. TRANSMISSION PLANNING AND COST ALLOCATION.**

2 (a) RULEMAKING.—Not later than 18 months after
3 the date of enactment of this Act, the Commission shall
4 promulgate a final rule that establishes transmission plan-
5 ning processes and cost-allocation processes that—

6 (1) ensure that transmission providers—

7 (A) engage in formalized interregional
8 transmission planning processes and inter-
9 connection-wide transmission planning proc-
10 esses, in conjunction with transmission planning
11 processes within transmission planning regions;

12 (B) harmonize interregional transmission
13 planning processes and interconnection-wide
14 transmission planning processes with other
15 transmission planning regions, such as by using
16 a joint model on a consistent timeline with a
17 unified set of minimum requirements regarding
18 needs, input assumptions, and benefit metrics;

19 (C) include as part of planning and cost-
20 allocation processes the use of grid-enhancing
21 transmission technologies and nontransmission
22 alternatives that increase delivery of power over
23 transmission networks, including, at a min-
24 imum—

25 (i) dynamic line ratings;

26 (ii) topology optimization;

1 (iii) power flow control;

2 (iv) advanced conductors; and

3 (v) storage-as-transmission;

4 (D) conduct interregional and interconnec-
5 tion-wide planning regularly and not less fre-
6 quently than once every 3 years;

7 (E) conduct system-wide planning based
8 on a range of possible future load and genera-
9 tion scenarios; and

10 (F) are required to incorporate in a trans-
11 mission planning process the full scope of bene-
12 fits of transmission investment, including, at a
13 minimum—

14 (i) reduced costs of electric energy to
15 customers, including reduced costs associ-
16 ated with lower quantities of necessary ca-
17 pacity, ancillary services, and reserve mar-
18 gins;

19 (ii) access to resources in neighboring
20 transmission planning regions;

21 (iii) the transmission of renewable en-
22 ergy or the ability of renewable energy to
23 connect to the grid;

(iv) improvements in reliability, resilience, and flexibility of the grid, including, at a minimum—

(I) reduced loss of load probability;

(II) increased resource diversity;

(III) increased climate hardening;

and

(IV) increased ability to maintain functionality during regionally appropriate weather conditions and severe weather scenarios;

(v) leveraging resources across climatological patterns or time zones to account for resource availability and weather patterns;

(vi) avoidance, to the maximum extent practicable, of sensitive environmental areas and cultural heritage sites;

(vii) reasonable and economical use of existing rights-of-way;

(viii) market facilitation benefits, including, at a minimum, increased competitiveness, liquidity, and integrity of broader geographic markets;

1 (ix) avoided costs and deferred cost
2 savings, including reduced generation costs
3 and reduced future transmission invest-
4 ment costs;

5 (x) the integration of grid-enhancing
6 technologies;

7 (xi) meeting local, State, and Federal
8 policy goals, including goals established in
9 decarbonization, climate, and clean energy
10 laws (including regulations);

11 (xii) protections to maintain just and
12 reasonable rates for customers; and

13 (xiii) any other production costs sav-
14 ings or other economic benefits from pro-
15 posed transmission projects;

16 (2) require that regional and interregional cost-
17 allocation methodologies allocate costs on the basis
18 of the multiple benefits described in clauses (i)
19 through (xiii) of paragraph (1)(F);

20 (3) incorporate a 10- to 20-year future resource
21 mix for each load-serving entity and State, which
22 may require a load-serving entity to make publicly
23 available the resource plans of the load-serving enti-
24 ty if, in the determination of the Commission, those
25 plans are not adequately described in publicly stated

1 plans in Securities and Exchange Commission fil-
2 ings, State agency filings, and power purchase con-
3 tracts;

4 (4) prioritize interregional cost-benefit consider-
5 ations over regional cost-benefit considerations;

6 (5) require transmission providers to maximize
7 the use of portfolio-based cost allocations;

8 (6) in cases in which costs and benefits are dif-
9 ficult to quantify, may allocate transmission invest-
10 ment costs among transmission system customers in
11 proportion to—

12 (A) in the case of regional projects, the
13 share of electricity of each customer in the re-
14 gion; or

15 (B) in the case of interregional projects,
16 the share of electricity of each customer in each
17 applicable region; and

18 (7) to the extent practicable, prevent trans-
19 mission providers from using cost-allocation meth-
20 odologies that—

21 (A) discourage distributed generation, en-
22 ergy efficiency, demand response, or storage if
23 more economic than transmission;

24 (B) are constrained by consideration only
25 of benefits that are easy to allocate; or

1 (C) undermine previous cost-allocation
2 agreements for projects already in operation.

3 (b) TECHNICAL CONFERENCE.—

4 (1) IN GENERAL.—As part of the rulemaking
5 process under subsection (a), the Commission may
6 convene a technical conference to consider implemen-
7 tation details, as the Commission determines to be
8 appropriate.

9 (2) PARTICIPATION.—

10 (A) LEADERSHIP.—A technical conference
11 convened under paragraph (1) may be led by
12 the members of the Commission.

13 (B) PARTICIPATION.—The Commission
14 may invite to participate in a technical con-
15 ference convened under paragraph (1) rep-
16 resentatives of residential ratepayers, trans-
17 mission providers, environmental justice and eq-
18 uity groups, Tribal communities, Independent
19 System Operators, Regional Transmission Or-
20 ganizations, consumer protection groups, renew-
21 able energy advocates, State utility commission
22 and energy offices, and such other entities as
23 the Commission determines appropriate.

24 (C) TIMELINE.—The Commission may es-
25 tablish and enforce a timeline for a technical

1 conference convened under paragraph (1) that
2 discourages actions by participants that may
3 unnecessarily delay the conference.

4 (3) PUBLIC COMMENT.—The Commission may
5 provide an opportunity for public comment on the
6 topics considered by a technical conference convened
7 under paragraph (1).

8 (c) OFFICE OF PUBLIC PARTICIPATION.—The Com-
9 mission shall consult the Office of Public Participation
10 during the rulemaking process under subsection (a), in-
11 cluding with respect to—

12 (1) guidance on public participation require-
13 ments;

14 (2) communications with the public concerning
15 transmission planning that may impact local com-
16 munities and land owners, including Tribal, indige-
17 nous, and environmental justice communities; and

18 (3) minimum data transparency and access re-
19 quirements.

20 (d) JOINT FEDERAL-STATE TASK FORCE ON ELEC-
21 TRIC TRANSMISSION.—The Commission may consult the
22 Joint Federal-State Task Force on Electric Transmission
23 in any actions that—

24 (1) involve shared Federal and State regulatory
25 authority and processes; or

1 (2) would benefit from a combined Federal and
2 State perspective.

3 **SEC. 5. INTERREGIONAL MINIMUM TRANSFER REQUIRE-**
4 **MENTS.**

5 (a) **ELECTRIC RELIABILITY.**—Section 215(i)(2) of
6 the Federal Power Act (16 U.S.C. 824o(i)(2)) is amended
7 by striking “or transmission”.

8 (b) **RULEMAKING.**—Not later than 18 months after
9 the date of enactment of this Act, the Commission shall
10 promulgate a final rule that establishes a minimum trans-
11 fer capability that—

12 (1) shall govern minimum transfer require-
13 ments between transmission planning regions;

14 (2) achieves reliability and resilience standards
15 during plausible extreme weather scenarios;

16 (3) optimizes efficiency of delivering renewable
17 energy to demand centers; and

18 (4) incorporates the best available science relat-
19 ing to energy transmission, climatological patterns,
20 climate change causes and impacts, grid reliability,
21 and grid resiliency, including study results from the
22 Department of Energy or National Laboratories (as
23 defined in section 2 of the Energy Policy Act of
24 2005 (42 U.S.C. 15801)).

1 **SEC. 6. DATA TRANSPARENCY.**

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

4 **“SEC. 224. DATA TRANSPARENCY.**

5 “(a) IN GENERAL.—The Commission shall require all
6 public utilities and other entities subject to the jurisdiction
7 of the Commission to make hourly operating data trans-
8 parent and accessible to the public, including—

9 “(1) as original source data posted in a timely
10 manner; and

11 “(2) through coordination with an online data-
12 base operated by the Administrator of the Energy
13 Information Administration.

14 “(b) DATA.—Data made publicly available under sub-
15 section (a) shall—

16 “(1) be organized and easy to understand;

17 “(2) be centralized and provided in usable for-
18 mats, including an application programming inter-
19 face;

20 “(3) be available free of charge or at-cost;

21 “(4) be published in a timely manner;

22 “(5) include generation by fuel type; and

23 “(6) include average and hourly, or more fre-
24 quent if technologically feasible, marginal green-
25 house gas emissions per megawatt hour of electricity

1 generated within the metered boundaries of each en-
 2 tity and for each pricing node.

3 “(c) COMMERCIAL PRODUCTS.—The Commission
 4 may identify and reduce regulatory barriers to the devel-
 5 opment of commercial products that use the data made
 6 publicly available under subsection (a) in order to provide
 7 verifiable emissions reductions, including short- and long-
 8 term nodal congestion products.

9 “(d) APPROPRIATION.—In addition to amounts oth-
 10 erwise made available to the Administrator of the Energy
 11 Information Administration, there is appropriated to the
 12 Administrator of the Energy Information Administration
 13 for fiscal year 2023, out of any funds in the Treasury not
 14 otherwise appropriated, \$10,000,000 to develop and oper-
 15 ate the database described in subsection (a)(2), to remain
 16 available until expended.”.

17 **SEC. 7. PROMOTING COMPETITION FOR GENERATION.**

18 Part II of the Federal Power Act (16 U.S.C. 824 et
 19 seq.) (as amended by section 6) is amended by adding at
 20 the end the following:

21 **“SEC. 225. DUE REGARD FOR FAIR COMPETITION.**

22 “(a) IN GENERAL.—In order to effectively protect
 23 against the exercise of market power through affiliate
 24 abuse, the Commission shall require that any new genera-
 25 tion described in subsection (b) is procured through a

1 competitive process and without any right of first refusal
 2 for an incumbent utility, subject to subsection (c).

3 “(b) NEW GENERATION DESCRIBED.—The new gen-
 4 eration referred to in subsection (a) is new generation that
 5 is—

6 “(1) above a Commission-determined size
 7 threshold;

8 “(2) above a Commission-determined cost mate-
 9 riality threshold; and

10 “(3) ultimately used to sell power in interstate
 11 commerce.

12 “(c) EXEMPTION.—New generation that is procured
 13 through a process administered by a Regional Trans-
 14 mission Organization or an Independent System Operator
 15 is exempted from the requirements of subsection (a).”.

16 **SEC. 8. STATE SUBSIDIES.**

17 Part II of the Federal Power Act (16 U.S.C. 824 et
 18 seq.) (as amended by section 7) is amended by adding at
 19 the end the following:

20 **“SEC. 226. STATE SUBSIDIES.**

21 “In order to promote competition in wholesale mar-
 22 kets, reliability, and affordability, the Commission shall
 23 not use price mitigation methods to counteract the effects
 24 of State subsidies for renewable energy resources.”.

1 **SEC. 9. OFFICE OF TRANSMISSION.**

2 Part III of the Federal Power Act is amended by in-
3 serting after section 317 (16 U.S.C. 825p) the following:

4 **“SEC. 318. OFFICE OF TRANSMISSION.**

5 “(a) ESTABLISHMENT.—There shall be established in
6 the Commission an office, to be known as the ‘Office of
7 Transmission’ (referred to in this section as the ‘Office’).

8 “(b) DIRECTOR.—The Office shall be administered
9 by a Director, who shall be appointed by the Chairman
10 of the Commission.

11 “(c) DUTIES.—The Director of the Office shall—

12 “(1) review transmission plans submitted by
13 public utilities in accordance with the regional and
14 interregional transmission planning processes, in-
15 cluding the processes established pursuant to section
16 206;

17 “(2) coordinate transmission-related matters of
18 the Commission, as the Commission determines ap-
19 propriate;

20 “(3) carry out the responsibilities of the Com-
21 mission under section 216, in coordination with the
22 Office of Energy Projects of the Commission;

23 “(4) review opportunities for innovation in
24 transmission planning and operation, including de-
25 ployment of grid-enhancing technologies, advanced
26 conductors, and other approaches; and

1 “(5) provide oversight of interregional trans-
2 mission planning activities.”.

3 **SEC. 10. INTERCONNECTION.**

4 Not later than 1 year after the date of enactment
5 of this Act, the Commission shall promulgate regulations,
6 or revise existing regulations—

7 (1) to prohibit a public utility from requiring an
8 interconnection customer to exclusively or dispropor-
9 tionately fund, without reimbursement, the costs of
10 any network upgrade identified as necessary for the
11 interconnect request of the interconnection customer;

12 (2) to encourage cost-sharing models that re-
13 flect the broad set of benefits and beneficiaries for
14 any network upgrades identified as needed in an
15 interconnection or affected system study, subject to
16 the requirement that the model adheres to any re-
17 quirements established under paragraph (1); and

18 (3) to alleviate interconnection backlogs and re-
19 duce informational and procedural barriers in inter-
20 connection, which may include—

21 (A) the establishment of an interconnection
22 analysis center within the Office of Trans-
23 mission established under section 318 of the
24 Federal Power Act; and

1 (B) consultation with staff and the use of
 2 other resources of the Department of Energy.

3 **SEC. 11. INDEPENDENT TRANSMISSION MONITOR.**

4 (a) IN GENERAL.—Not later than 1 year after the
 5 date of enactment of this Act, for the purpose of moni-
 6 toring the planning and operation of transmission facilities
 7 in transmission planning regions, the Commission shall—

8 (1)(A) require each transmission planning re-
 9 gion to establish an independent entity to monitor
 10 the planning and operation of transmission facilities
 11 in the transmission planning region; and

12 (B) establish a council, to be known as the
 13 “Council of Transmission Monitors”—

14 (i) to provide oversight of each inde-
 15 pendent entity established pursuant to subpara-
 16 graph (A); and

17 (ii) to ensure interregional collaboration
 18 and consistency; or

19 (2) establish an independent entity to monitor
 20 the planning and operation of transmission facilities
 21 in all transmission planning regions.

22 (b) ROLE OF TRANSMISSION MONITOR.—An inde-
 23 pendent entity described in paragraph (1)(A) or (2) of
 24 subsection (a) shall, as applicable—

1 (1) review the operation of applicable trans-
 2 mission planning regions for inefficiency and prac-
 3 tices that may lead to unjust and unreasonable
 4 rates;

5 (2) review transmission planning processes;

6 (3) review costs of transmission facilities, in-
 7 cluding identifying inefficiencies among local, re-
 8 gional, and interregional planning;

9 (4) provide examples and advice to transmission
 10 providers on appropriate regional transmission oper-
 11 ations, planning, and cost-allocation processes; and

12 (5) identify situations in which, with respect to
 13 a transmission planning process—

14 (A) nonwire alternatives may be more cost-
 15 effective than transmission;

16 (B) grid-enhancing technologies may be
 17 appropriate; or

18 (C) high-capacity, interregional lines may
 19 be—

20 (i) more cost-effective; or

21 (ii) a more appropriate reliability and
 22 resilience alternative.

23 **SEC. 12. ADVISORY COMMITTEE.**

24 (a) IN GENERAL.—Not later than 1 year after the
 25 date of enactment of this Act, the Commission shall estab-

lish an advisory committee (referred to in this section as the “committee”) to make recommendations on—

(1) oversight and governance of Independent System Operators or Regional Transmission Organizations;

(2) stakeholder participation best practices—

(A) that ensure transparency, accountability, independence, oversight, and fair representation; and

(B) the purpose of which are to promote competition, reliability, and affordability in all transmission planning regions;

(3) enhancing transparency and open decision-making in regions not classified as Independent System Operators or Regional Transmission Organizations; and

(4) the requirements of governing boards within Independent System Operators or Regional Transmission Organizations.

(b) REPRESENTATION.—The committee shall be composed of not more than 30 members, including—

(1) at least 2 representatives of end-use customers;

(2) at least 1 representative of transmission providers;

1 (3) at least 2 representatives of environmental
2 justice and equity groups;

3 (4) at least 1 representative of Tribal commu-
4 nities;

5 (5) at least 1 representative of Independent
6 System Operators;

7 (6) at least 1 representative of Regional Trans-
8 mission Organizations;

9 (7) at least 1 representative of consumer pro-
10 tection groups;

11 (8) at least 2 representatives of renewable en-
12 ergy advocates;

13 (9) at least 1 representative of State commis-
14 sions;

15 (10) at least 1 representative of public power
16 entities;

17 (11) at least 1 representative of marketers; and

18 (12) at least 1 representative of generators.

19 (c) FACA APPLICABILITY.—The Federal Advisory
20 Committee Act (5 U.S.C. App.) shall apply to the com-
21 mittee.

22 **SEC. 13. APPROPRIATIONS.**

23 In addition to amounts otherwise available, there is
24 appropriated to the Commission for fiscal year 2023, out
25 of any funds in the Treasury not otherwise appropriated,

- 1 \$200,000,000, to remain available until expended, to carry
2 out—
- 3 (1) sections 4, 5, and 10; and
4 (2) the amendment made by section 9.

