

119TH CONGRESS  
2D SESSION

# S. 3947

To amend the Federal Power Act to establish a categorical exclusion for reconductoring within existing rights-of-way, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

FEBRUARY 26, 2026

Mr. MCCORMICK (for himself and Mr. WELCH) 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 establish a categorical exclusion for reconductoring within existing rights-of-way, 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 “Reconductoring Exist-  
5 ing Wires for Infrastructure Reliability and Expansion  
6 Act” or the “REWIRE Act”.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

1           (1) ADVANCED TRANSMISSION CONDUCTOR.—

2           The term “advanced transmission conductor” means  
3           a conductor, including a carbon fiber conductor, a  
4           composite core conductor, a superconductor, and any  
5           other conductor, that—

6                   (A) has a direct current electrical resist-  
7                   ance at least 10 percent lower than a tradi-  
8                   tional ACSR conductor of a similar diameter  
9                   and weight;

10                   (B) has a potential energy carrying capaci-  
11                   ty at least 70 percent greater than a tradi-  
12                   tional ACSR conductor of a similar diameter  
13                   and weight; and

14                   (C) has a coefficient of thermal expansion  
15                   at least 50 percent lower than a traditional  
16                   ACSR conductor of a similar diameter and  
17                   weight.

18           (2) ACSR CONDUCTOR.—The term “ACSR  
19           conductor” means an aluminum conductor steel-rein-  
20           forced cable.

21           (3) BULK-POWER SYSTEM.—The term “bulk-  
22           power system” has the meaning given the term in  
23           section 215(a) of the Federal Power Act (16 U.S.C.  
24           824o(a)).

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

3           (5) EFFECTIVE LOAD CARRYING CAPABILITY;  
4 ELCC.—

5           (A) IN GENERAL.—The term “effective  
6 load carrying capability” or “ELCC” means the  
7 ability of a generating resource to produce elec-  
8 tricity when the grid needs it, measured as the  
9 additional load (or perfect replacement capac-  
10 ity) that the system can supply with a par-  
11 ticular generator of interest with no net change  
12 in reliability.

13           (B) CLARIFICATION.—The additional load  
14 (or perfect replacement capacity) referred to in  
15 subparagraph (A)—

16                   (i) may be measured using LOLE,  
17 EUE, or other metrics; and

18                   (ii) may be divided by the nameplate  
19 capacity of the generating resource to yield  
20 a percentage.

21           (6) ELECTRIC RELIABILITY ORGANIZATION.—  
22 The term “Electric Reliability Organization” has the  
23 meaning given the term in section 215(a) of the  
24 Federal Power Act (16 U.S.C. 824o(a)).

1           (7) ELECTRIC UTILITY.—The term “electric  
2 utility” has the meaning given the term in section  
3 of the Federal Power Act (16 U.S.C. 796).

4           (8) EXPECTED UNSERVED ENERGY; EUE.—The  
5 term “expected unserved energy” or “EUE” means  
6 the cumulative amount of energy (in megawatt-  
7 hours) per year that is not provided to customers  
8 due to outages.

9           (9) GRID-ENHANCING TECHNOLOGY.—The term  
10 “grid-enhancing technology” means any hardware or  
11 software that—

12                   (A) increases the capacity, efficiency, reli-  
13 ability, resilience, or safety of transmission fa-  
14 cilities and transmission technologies; and

15                   (B) is installed in addition to transmission  
16 facilities and transmission technologies—

17                           (i) to give operators of the trans-  
18 mission facilities and transmission tech-  
19 nologies more situational awareness and  
20 control over the electric grid;

21                           (ii) to make the transmission facilities  
22 and transmission technologies more effi-  
23 cient; or

1 (iii) to increase the transfer capacity  
2 of the transmission facilities and trans-  
3 mission technologies.

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

8 (11) INTEGRATED RESOURCE PLANNING.—The  
9 term “integrated resource planning” means mod-  
10 eling and evaluating how projected long-term elec-  
11 tricity demands (such as electricity demands over pe-  
12 riods of 5, 10, 20, or more years) within a service  
13 area can be met with a combination of electric gen-  
14 eration resources that best achieve desired metrics,  
15 such as metrics relating to reliability, resilience, and  
16 cost.

17 (12) LOSS OF LOAD EXPECTATION; LOLE.—

18 (A) IN GENERAL.—The term “loss of load  
19 expectation” or “LOLE” means the expected  
20 number of days per year that the available gen-  
21 eration capacity is less than the system load for  
22 the applicable power grid region or service area.

23 (B) CLARIFICATION.—As of November  
24 2023, a commonly acceptable value for loss of  
25 load expectation is 0.1 days per year, as de-

1           scribed in the standard of the North American  
2           Electric Reliability Corporation entitled “Plan-  
3           ning Resource Adequacy Analysis, Assessment  
4           and Documentation” and numbered BAL-502-  
5           RF-03.

6           (13) NATIONAL LABORATORY.—The term “Na-  
7           tional Laboratory” has the meaning given the term  
8           in section 2 of the Energy Policy Act of 2005 (42  
9           U.S.C. 15801).

10          (14) PLANNING RESERVE MARGIN.—

11                 (A) IN GENERAL.—The term “planning re-  
12                 serve margin” means the quotient, expressed as  
13                 a percentage, obtained by dividing—

14                         (i) the difference between—

15                                 (I) deliverable electric system  
16                                 supply capacity for a power grid re-  
17                                 gion or service area; and

18                                 (II) net demand in that power  
19                                 grid region or service area; by

20                         (ii) net demand in that power grid re-  
21                         gion or service area.

22                 (B) CLARIFICATION.—As of November  
23                 2023, a reserve margin falling within the range  
24                 from 15 percent to 25 percent is typical for a  
25                 power grid region or service area.

1           (15) POWER GRID.—The term “power grid”  
2 means that portion of an Interconnection (as defined  
3 in section 215(a) of the Federal Power Act (16  
4 U.S.C. 824o(a))) that is located within the United  
5 States, including the relevant portion of each of the  
6 following:

7                   (A) The Eastern Interconnection.

8                   (B) The Western Interconnection.

9                   (C) The Texas Interconnection.

10           (16) POWER GRID REGION.—The term “power  
11 grid region” means a geographic area—

12                   (A) located within a power grid; and

13                   (B) for which a regional entity (as defined  
14 in subsection (a) of section 215 of the Federal  
15 Power Act (16 U.S.C. 824o)) has enforcement  
16 authority under that section.

17           (17) PROBABILISTIC MODELING.—

18                   (A) IN GENERAL.—The term “probabilistic  
19 modeling” means a modeling approach that  
20 uses statistics to simulate and quantify the like-  
21 lihood of achieving desired metrics, taking into  
22 consideration all modeled uncertainties, for de-  
23 termination of the optimal resource portfolio,  
24 such as a modeling approach consistent with  
25 the document of the North American Electric

1 Reliability Corporation entitled “Probabilistic  
2 Assessment Technical Guideline Document”  
3 and dated August 2016, including the rec-  
4 ommendations described in that document.

5 (B) INCLUSION.—The term “probabilistic  
6 modeling” includes modeling that can identify  
7 the most important parameters that impact a  
8 simulated metric for further characterization or  
9 optimization.

10 (18) REGIONAL TRANSMISSION ORGANIZA-  
11 TION.—The term “Regional Transmission Organiza-  
12 tion” has the meaning given the term in section 3  
13 of the Federal Power Act (16 U.S.C. 796).

14 (19) RELIABILITY STANDARD.—The term “reli-  
15 ability standard” has the meaning given the term in  
16 section 215(a) of the Federal Power Act (16 U.S.C.  
17 824o(a)).

18 (20) RESOURCE ADEQUACY.—The term “re-  
19 source adequacy” means the adequate supply and  
20 provision of electricity from various electric genera-  
21 tion resources to meet projected electricity demands  
22 in a particular power grid region or service area.

23 (21) SECRETARY.—The term “Secretary”  
24 means the Secretary of Energy.

1           (22) SERVICE AREA.—The term “service area”  
2 means the area or region served by—

3           (A) an electric utility;

4           (B) a Regional Transmission Organization;

5           or

6           (C) an Independent System Operator.

7           (23) STATE REGULATORY AUTHORITY.—The  
8 term “State regulatory authority” has the meaning  
9 given the term in section 3 of the Federal Power Act  
10 (16 U.S.C. 796).

11 **SEC. 3. CATEGORICAL EXCLUSION FOR RECONDUCTORING.**

12       Part II of the Federal Power Act (16 U.S.C. 824 et  
13 seq.) is amended by inserting after section 216 the fol-  
14 lowing:

15 **“SEC. 216A. GRID CAPACITY EXPANSION IN EXISTING**  
16 **RIGHTS-OF-WAY.**

17       “(a) DEFINITION OF PREVIOUSLY DISTURBED OR  
18 DEVELOPED.—In this section, the term ‘previously dis-  
19 turbed or developed’ has the meaning given the term in  
20 section 1021.102(g)(1) of title 10, Code of Federal Regu-  
21 lations (or a successor regulation).

22       “(b) ESTABLISHMENT OF CATEGORICAL EXCLU-  
23 SION.—Activities to increase the capacity of the electric  
24 grid within existing rights-of-way or on previously dis-  
25 turbed or developed land are a category of actions des-

1 ignated as being categorically excluded from the prepara-  
2 tion of an environmental assessment or an environmental  
3 impact statement under the National Environmental Pol-  
4 icy Act of 1969 (42 U.S.C. 4321 et seq.).

5 “(c) INCLUSIONS.—The activities to which the cat-  
6 egorical exclusion established by subsection (b) shall apply  
7 include any repair, maintenance, replacement, upgrade,  
8 modification, optimization, or minor relocation of, addition  
9 to, or addition of energy storage at or near, an existing  
10 electric transmission or distribution facility or associated  
11 infrastructure, including electrical substations, within an  
12 existing right-of-way or on otherwise previously disturbed  
13 or developed land, including reconductoring and installa-  
14 tion of grid-enhancing technologies.”.

15 **SEC. 4. RETURN ON EQUITY FOR ADVANCED TRANS-**  
16 **MISSION CONDUCTORS.**

17 Section 219 of the Federal Power Act (16 U.S.C.  
18 824s) is amended—

19 (1) in subsection (a), by striking “Not later  
20 than 1 year after the date of enactment of this sec-  
21 tion, the” and inserting “The”;

22 (2) in subsection (b), in the matter preceding  
23 paragraph (1), by inserting “issued under subsection  
24 (a)” after “rule”;

25 (3) in subsection (c)—

1 (A) in the second sentence, by striking  
2 “The Commission” and inserting the following:  
3 “(2) RECOVERABLE COSTS.—The Commission”;

4 and

5 (B) in the first sentence, by striking “In  
6 the rule issued under this section” and insert-  
7 ing the following:

8 “(1) IN GENERAL.—In the rule issued under  
9 subsection (a)”;

10 (4) in subsection (d), by striking “All rates ap-  
11 proved under the rules adopted pursuant to this sec-  
12 tion, including any revisions to the rules, are” and  
13 inserting “Any rate approved under a rule issued  
14 pursuant to this section (including a revision to a  
15 rule) shall be”; and

16 (5) by adding at the end the following:

17 “(e) ADVANCED TRANSMISSION CONDUCTORS.—

18 “(1) RETURN ON EQUITY.—Not later than 1  
19 year after the date of enactment of the REWIRE  
20 Act, the Commission shall promulgate new, or revise  
21 existing, rules under this section to improve the re-  
22 turn on equity for investments in advanced trans-  
23 mission conductors (as defined in section 2 of that  
24 Act).

1           “(2) CONSUMER PROTECTIONS.—The Commis-  
2           sion shall ensure that all rates approved under the  
3           rules promulgated or revised under this subsection  
4           (including any subsequent revisions to those rules)  
5           are just and reasonable and not unduly discrimina-  
6           tory or preferential, as required by subsection (d).”.

7   **SEC. 5. STATE ENERGY PROGRAMS.**

8           Section 362(c)(7)(B) of the Energy Policy and Con-  
9           servation Act (42 U.S.C. 6322(c)(7)(B)) is amended by  
10          inserting “, including reconductoring with advanced trans-  
11          mission conductors (as defined in section 2 of the RE-  
12          WIRE Act) and the installation of grid-enhancing tech-  
13          nologies (as defined in that section)” before the semicolon  
14          at the end.

15   **SEC. 6. NATIONAL LABORATORY MODELING AND EVALUA-**  
16                                   **TION PROGRAM.**

17          (a) IN GENERAL.—The Secretary, acting through 1  
18          or more National Laboratories, in consultation with the  
19          Commission and the Electric Reliability Organization,  
20          shall establish a program to model and evaluate the per-  
21          formance of the electric grid.

22          (b) REQUIREMENTS.—In carrying out the program  
23          established under subsection (a), the Secretary shall de-  
24          velop 1 or more probabilistic models for transmission plan-

1 ning, resource adequacy modeling, and integrated resource  
2 planning that—

3 (1) reflect the specific needs, resources, and at-  
4 tributes of a given power grid region or service area;

5 (2) ensure consistent methods based on best  
6 practices;

7 (3) include consideration of uncertainties relat-  
8 ing to—

9 (A) transmission systems and infrastruc-  
10 ture;

11 (B) the impact of weather (such as the im-  
12 pact of temperature on transmission facilities,  
13 including line ratings);

14 (C) congestion and thermal overload; and

15 (D) the costs of new or modified trans-  
16 mission infrastructure, including reconductoring  
17 with advanced transmission conductors and the  
18 deployment of grid-enhancing technologies; and

19 (4) include consideration of other relevant  
20 transmission uncertainties, including those which  
21 may be unique to a given power grid region or serv-  
22 ice area, as determined by the Secretary in consulta-  
23 tion with the Commission.

1 (c) USE OF MODELING.—The Secretary shall ensure  
2 that the models developed pursuant to the program estab-  
3 lished under subsection (a) may be used, at a minimum—

4 (1) to simulate and quantify desired metrics,  
5 taking into consideration the relevant uncertainties  
6 described in paragraphs (3) and (4) of subsection  
7 (b), which may be used to assist in transmission  
8 planning and the determination of the optimal re-  
9 source portfolio for the applicable power grid region  
10 or service area, including—

11 (A) loss of load expectation;

12 (B) expected unserved energy;

13 (C) effective load carrying capability (also  
14 known as “capacity value”);

15 (D) planning reserve margin;

16 (E) electricity transmission losses;

17 (F) congestion; and

18 (G) cost;

19 (2) to identify the parameters and processes  
20 considered under subsection (b) that—

21 (A) have the most impact on the mag-  
22 nitude or uncertainty of the applicable simu-  
23 lated metrics; and

24 (B) can be further characterized or opti-  
25 mized to improve the modeling and determina-

1           tion of the optimal resource portfolio and trans-  
2           mission system for the applicable power grid re-  
3           gion or service area; and

4           (3) to identify areas where the deployment of  
5           advanced transmission technologies, such as ad-  
6           vanced transmission conductors or grid-enhancing  
7           technologies, may improve electric grid performance.

8           (d) REGIONAL COLLABORATIVES.—

9           (1) IN GENERAL.—In carrying out the program  
10          under subsection (a), the Secretary shall establish  
11          regional collaboratives between the National Labora-  
12          tories and institutions of higher education.

13          (2) CONSIDERATIONS.—The Secretary shall, to  
14          the maximum extent practicable, prioritize estab-  
15          lishing regional collaboratives under paragraph (1)  
16          that—

17                (A) are between regional institutions of  
18                higher education and National Laboratories  
19                that are owned and operated by the Federal  
20                Government;

21                (B) include institutions of higher education  
22                with existing demonstration capability, such as  
23                field-scale systems of not less than 100 kilovolt-  
24                amperes or laboratory capabilities of not less  
25                than 10 kilovolt-amperes, to support technology

1 validation, utility adoption, industry engage-  
2 ment, and workforce development;

3 (C) demonstrate rural grid planning mod-  
4 els (including transmission and distribution co-  
5 simulation and digital twin capabilities); or

6 (D) utilize existing active data sharing and  
7 joint modeling programs between institutions of  
8 higher education and participating utilities at a  
9 statewide scale.

10 **SEC. 7. TECHNICAL ASSISTANCE RELATING TO THE USE OF**  
11 **ADVANCED TRANSMISSION CONDUCTORS.**

12 (a) DEFINITIONS.—In this section:

13 (1) DEVELOPER.—The term “developer” means  
14 a developer of electric transmission facilities or tech-  
15 nologies that pays to install a high-voltage trans-  
16 mission conductor.

17 (2) ELIGIBLE ENTITY.—The term “eligible enti-  
18 ty” means—

19 (A) a developer;

20 (B) an electric utility;

21 (C) a State;

22 (D) a Regional Transmission Organization  
23 or Independent System Operator; or

24 (E) any other relevant entity, as deter-  
25 mined by the Secretary.

1 (b) TECHNICAL ASSISTANCE AND APPLICATION  
2 GUIDE.—

3 (1) APPLICATION GUIDE.—Not later than 1  
4 year after the date of enactment of this Act, the  
5 Secretary shall establish an application guide for eli-  
6 gible entities seeking to implement—

7 (A) advanced transmission conductors, in-  
8 cluding through reconditioning with advanced  
9 transmission conductors; and

10 (B) grid-enhancing technologies.

11 (2) UPDATES.—The guide established under  
12 paragraph (1) shall be reviewed and updated annu-  
13 ally.

14 (3) TECHNICAL ASSISTANCE.—

15 (A) IN GENERAL.—On request of an eligi-  
16 ble entity using the guide established under  
17 paragraph (1), the Secretary shall provide tech-  
18 nical assistance to that eligible entity with re-  
19 spect to the use of advanced transmission con-  
20 ductors and grid-enhancing technologies for  
21 particular applications.

22 (B) CLEARINGHOUSE.—In carrying out  
23 subparagraph (A), the Secretary shall establish  
24 a clearinghouse of previously completed projects

1           that the Secretary and eligible entities may use  
2           to identify issues and solutions relating to—

3                   (i) the use of advanced transmission  
4                   conductors;

5                   (ii) reconductoring with advanced  
6                   transmission conductors; and

7                   (iii) the use of grid-enhancing tech-  
8                   nologies.

○