110TH CONGRESS 1ST SESSION

S. 2076

To amend the Federal Power Act to require the President to designate certain geographical areas as national renewable energy zones, and for other purposes.

IN THE SENATE OF THE UNITED STATES

September 20, 2007

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

A BILL

To amend the Federal Power Act to require the President to designate certain geographical areas as national renewable energy zones, 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 "Clean Renewable En-
- 5 ergy and Economic Development Act".
- 6 SEC. 2. FINDINGS.
- 7 Congress finds that—
- 8 (1) electricity produced from renewable re-
- 9 sources—

1	(A) helps to reduce emissions of green-
2	house gases and other air pollutants;
3	(B) enhances national energy security;
4	(C) conserves water and finite resources;
5	and
6	(D) provides substantial economic benefits,
7	including job creation and technology develop-
8	ment;
9	(2) the potential exists for a far greater per-
10	centage of electricity generation in the United States
11	to be achieved through the use of renewable re-
12	sources, as compared to the percentage of electricity
13	generation using renewable resources in existence as
14	of the date of enactment of this Act;
15	(3) many of the best potential renewable energy
16	resources are located in rural areas far from popu-
17	lation centers;
18	(4) the lack of adequate electric transmission
19	capacity is a primary obstacle to the development of
20	electric generation facilities fueled by renewable en-
21	ergy resources;
22	(5) the economies of many rural areas would
23	substantially benefit from the increased development
24	of water-efficient electric generation facilities fueled
25	by renewable energy resources;

- 1 (6) more efficient use of existing transmission 2 capacity, better integration of resources, and greater 3 investments in distributed generation and off-grid 4 solutions may increase the availability of trans-5 mission and distribution capacity for adding renew-6 able resources and help keep ratepayer costs low;
 - (7) the Federal Government has not adequately invested in or implemented an integrated approach to accelerating the development, commercialization, and deployment of renewable energy technologies and renewable electricity generation, including through enhancing distributed generation or through vehicle- and transportation-sector use; and
 - (8) it is in the national interest for the Federal Government to implement policies that would enhance the quantity of electric transmission capacity available to take full advantage of the renewable energy resources available to generate electricity, and to more fully integrate renewable energy into the energy policies of the United States, and to address the tremendous national security and global warming challenges of the United States.

23 SEC. 3. NATIONAL RENEWABLE ENERGY ZONES.

(a) IN GENERAL.—Title II of the Federal Power Act
(16 U.S.C. 824 et seq.) is amended—

1	(1) by inserting before the section heading of
2	section 201 (16 U.S.C. 824 et seq.) the following:
3	"Subpart A—Regulation of Electric Utility
4	Companies";
5	and
6	(2) by adding at the end the following:
7	"Subpart B—National Renewable Energy Zones
8	"SEC. 231. DEFINITIONS.
9	"In this subpart:
10	"(1) Biomass.—
11	"(A) IN GENERAL.—The term 'biomass'
12	means—
13	"(i) any lignin waste material that is
14	segregated from other waste materials and
15	is determined to be nonhazardous by the
16	Administrator of the Environmental Pro-
17	tection Agency; and
18	"(ii) any solid, nonhazardous, cel-
19	lulosic material that is derived from—
20	"(I) mill residue, precommercial
21	thinnings, slash, brush, or non-
22	merchantable material;
23	"(II) solid wood waste materials,
24	including a waste pallet, a crate,
25	dunnage, manufacturing and con-

1	struction wood wastes, and landscape
2	or right-of-way tree trimmings;
3	"(III) agriculture waste, includ-
4	ing an orchard tree crop, a vineyard,
5	a grain, a legume, sugar, other crop
6	byproducts or residues, and livestock
7	waste nutrients; or
8	"(IV) a plant that is grown ex-
9	clusively as a fuel for the production
10	of electricity.
11	"(B) Inclusions.—The term 'biomass' in-
12	cludes animal waste that is converted to a fuel
13	rather than directly combusted, the residue of
14	which is converted to a biological fertilizer, oil,
15	or activated carbon.
16	"(C) Exclusions.—The term 'biomass'
17	does not include—
18	"(i) municipal solid waste;
19	"(ii) paper that is commonly recycled;
20	or
21	"(iii) pressure-treated, chemically-
22	treated, or painted wood waste.
23	"(2) Commission.—The term 'Commission'
24	means the Federal Energy Regulatory Commission.

1	"(3) DISTRIBUTED GENERATION.—The term
2	'distributed generation' means—
3	"(A) reduced electricity consumption from
4	the electric grid because of use by a customer
5	of renewable energy generated at a customer
6	site; and
7	"(B) electricity or thermal energy produc-
8	tion from a renewable energy resource for a
9	customer that is not connected to an electric
10	grid or thermal energy source pipeline.
11	"(4) ELECTRICITY CONSUMING AREA.—The
12	term 'electricity consuming area' means the area
13	within which electric energy would be consumed if
14	new high-voltage electric transmission facilities were
15	to be constructed to access renewable electricity in
16	a national renewable energy zone.
17	"(5) Electricity from renewable en-
18	ERGY.—The term 'electricity from renewable energy'
19	means—
20	"(A) electric energy generated from solar
21	energy, wind, biomass, landfill gas, the ocean
22	(including tidal, wave, current, and thermal en-
23	ergy), geothermal energy, or municipal solid
24	waste; or

1	"(B) new hydroelectric generation capacity
2	achieved from increased efficiency, or an addi-
3	tion of new capacity, at an existing hydro-
4	electric project.
5	"(6) Federal transmitting utility.—The
6	term 'Federal transmitting utility' means—
7	"(A) a Federal power marketing agency
8	that owns or operates an electric transmission
9	facility; and
10	"(B) the Tennessee Valley Authority.
11	"(7) FUEL CELL VEHICLE.—The term 'fuel cell
12	vehicle' means an onroad vehicle or nonroad vehicle
13	that uses a fuel cell (as defined in section 803 of the
14	Spark M. Matsunaga Hydrogen Act of 2005 (42
15	U.S.C. 16152)).
16	"(8) Grid-enabled vehicle.—The term
17	'grid-enabled vehicle' means an electric drive vehicle
18	or fuel cell vehicle that has the ability to commu-
19	nicate electronically with an electric power provider
20	or with a localized energy storage system with re-
21	spect to charging and discharging an onboard energy
22	storage device, such as a battery.
23	"(9) High-voltage electric transmission
24	FACILITY.—The term 'high-voltage electric trans-

1	mission facility' means an electric transmission facil-
2	ity that—
3	"(A) is necessary for the transmission of
4	electric power from a national renewable energy
5	zone to an electricity-consuming area in inter-
6	state commerce; and
7	"(B) has a capacity in excess of 200 kilo-
8	volts.
9	"(10) Indian Land.—The term 'Indian land'
10	means—
11	"(A) any land within the limits of any In-
12	dian reservation, pueblo, or rancheria;
13	"(B) any land not within the limits of any
14	Indian reservation, pueblo, or rancheria title to
15	which was, on the date of enactment of this
16	subpart—
17	"(i) held in trust by the United States
18	for the benefit of any Indian tribe or indi-
19	vidual; or
20	"(ii) held by any Indian tribe or indi-
21	vidual subject to restriction by the United
22	States against alienation;
23	"(C) any dependent Indian community;
24	and

"(D) any land conveyed to any Alaska Na-
tive corporation under the Alaska Native
Claims Settlement Act (42 U.S.C. 1601 et
seq.).
"(11) Network upgrade.—The term 'net-
work upgrade' means an addition, modification, or
upgrade to the transmission system of a trans-
mission provider required at or beyond the point at
which the generator interconnects to the trans-
mission system of the transmission provider to ac-
commodate the interconnection of 1 or more genera-
tion facilities to the transmission system of the
transmission provider.
"(12) Renewable electricity connection
FACILITY.—
"(A) IN GENERAL.—The term 'renewable
electricity connection facility' means an elec-
tricity generation or transmission facility that
uses renewable energy sources.
"(B) Inclusions.—The term 'renewable
electricity connection facility' includes inverters,
substations, transformers, switching units, stor-
age units and related facilities, and other elec-

trical equipment necessary for the development,

siting, transmission, storage, and interconnec-

24

tion of electricity generated from renewable en ergy sources.

"(13) Renewable energy credit' means a unique instrument representing 1 or more units of electricity generated from renewable energy that is designated by a widely-recognized certification organization approved by the Commission or the Secretary of Energy.

"(14) Renewable energy trunkline.—

"(A) In General.—The term 'renewable energy trunkline' means all transmission facilities and equipment within a national renewable energy zone owned, controlled, or operated by a transmission provider that is used to deliver electricity from renewable energy to the point at which the facility connects to a high-voltage transmission facility, including any modifications, additions or upgrades to the facilities and equipment, at a voltage of 115 kilovolts or more.

"(B) Exclusion.—The term 'renewable energy trunkline' does not include a network upgrade.

1	"SEC. 232. DESIGNATION OF NATIONAL RENEWABLE EN-
2	ERGY ZONES.
3	"(a) Designations.—
4	"(1) In general.—Except as provided in para-
5	graph (2), not later than 1 year after the date of en-
6	actment of this subpart, the President shall des-
7	ignate as a national renewable energy zone each geo-
8	graphical area that, as determined by the Presi-
9	dent—
10	"(A) has the potential to generate in ex-
11	cess of 1 gigawatt of electricity from renewable
12	energy, a significant portion of which could be
13	generated in a rural area or on Federal land
14	within the geographical area;
15	"(B) has an insufficient level of electric
16	transmission capacity to achieve the potential
17	described in subparagraph (A); and
18	"(C) has the capability to contain addi-
19	tional renewable energy electric generating fa-
20	cilities that would generate electricity consumed
21	in 1 or more electricity consuming areas if
22	there were a sufficient level of transmission ca-
23	pacity.
24	"(2) Exclusions.—The President shall not in-
25	clude in any national renewable energy zone des-
26	ignated under paragraph (1) any Federal land that

1	(as of the date of enactment of this subpart) is des-
2	ignated as a wilderness study area, national park,
3	national monument, national wildlife refuge, or area
4	of critical environmental concern, if the Federal land
5	is subject to protective management policies that are
6	inconsistent with energy development.
7	"(b) Renewable Energy Requirements.—In
8	making the designations required by subsection (a), the
9	President shall take into account Federal and State re-
10	quirements for utilities to incorporate renewable energy as
11	part of the load of electric generating facilities.
12	"(c) Consultation.—Before making any designa-
13	tion under subsection (a), the President shall consult
14	with—
15	"(1) the Governors of affected States;
16	"(2) the public;
17	"(3) public and private electricity and trans-
18	mission utilities and cooperatives;
19	"(4) public utilities commissions and regional
20	electricity planning organizations;
21	"(5) Federal and State land management and
22	energy and environmental agencies;
23	"(6) renewable energy companies;

"(7) local government officials;

1	"(8) renewable energy and energy efficiency in-
2	terest groups;
3	"(9) Indian tribes; and
4	"(10) environmental protection and land, water,
5	and wildlife conservation groups.
6	"(d) Recommendations.—Not sooner than 3 years
7	after the date of enactment of this subpart, and triennially
8	thereafter, the Secretary of Energy and the Federal trans-
9	mitting utilities, in cooperation with the Director of the
10	Bureau of Land Management, the Director of the United
11	States Geological Survey, the Commissioner of Reclama-
12	tion, the Director of the Forest Service, the Director of
13	the United States Fish and Wildlife Service, and the Sec-
14	retary of Defense, and after consultation with the Gov-
15	ernors of the States, shall recommend to the President
16	and Congress—
17	"(1) specific areas with the greatest potential
18	for environmentally acceptable renewable energy re-
19	source development; and
20	"(2) any modifications of laws (including regu-
21	lations) and resource management plans necessary
22	to fully achieve that potential, including identifying
23	improvements to permit application processes involv-
24	ing military and civilian agencies.

1	"(e) REVISION OF DESIGNATIONS.—Based on the
2	recommendations received under subsection (d), the Presi-
3	dent may revise the designations made under subsection
4	(a), as appropriate.
5	"SEC. 233. ENCOURAGING CLEAN ENERGY DEVELOPMENT
6	IN NATIONAL RENEWABLE ENERGY ZONES.
7	"(a) Cost Recovery.—The Commission shall pro-
8	mulgate such regulations as are necessary to ensure that
9	a public utility transmission provider that finances a high-
10	voltage electric transmission facility or other renewable
11	electricity connection facility located in 2 or more States
12	and added in a national renewable energy zone after the
13	date of enactment of this subpart recovers all prudently
14	incurred costs, and a reasonable return on equity, associ-
15	ated with the new transmission capacity.
16	"(b) ALTERNATIVE TRANSMISSION FINANCING
17	MECHANISM.—
18	"(1) In General.—The Commission shall per-
19	mit a renewable energy trunkline built by a public
20	utility transmission provider in a national renewable
21	energy zone to be initially funded through a trans-
22	mission charge imposed on all transmission cus-
23	tomers of the transmission provider or, if the renew-
24	able energy trunkline is built in an area served by

a regional transmission organization or independent

1	system operator, all of the transmission customers of
2	the transmission operator, if the Commission finds
3	that—
4	"(A) the renewable energy resources that
5	would use the renewable energy trunkline are
6	remote from the grid and load centers;
7	"(B) the renewable energy trunkline will
8	likely result in multiple individual renewable en-
9	ergy electric generation projects being developed
10	by multiple competing developers; and
11	"(C) the renewable energy trunkline has at
12	least 1 project subscribed through an executed
13	generation interconnection agreement with the
14	transmission provider and has tangible dem-
15	onstration of additional interest.
16	"(2) New electric generation projects.—
17	As new electric generation projects are constructed
18	and interconnected to the renewable energy trunk-
19	line, the transmission services contract holder for
20	the generation project shall, on a prospective basis,
21	pay a pro rata share of the facility costs of the re-
22	newable energy trunkline, thus reducing the effect
23	on the rates of customers of the public utility trans-
24	mission provider.
25	"(c) Federal Transmitting Utilities.—

"(1) IN GENERAL.—Not later than 1 year after the designation of a national renewable energy zone, a Federal transmitting utility that owns or operates 1 or more electric transmission facilities in a State with a national renewable energy zone shall identify specific additional high-voltage or other renewable electricity connection facilities required to substantially increase the generation of electricity from renewable energy in the national renewable energy zone.

"(2) LACK OF PRIVATE FUNDS.—If, by the date that is 3 years after the date of enactment of this subpart, no privately-funded entity has committed to financing (through self-financing or through a third-party financing arrangement with a Federal transmitting utility) to ensure the construction and operation of a high-voltage or other renewable electricity connection facility identified pursuant to paragraph (1) by a specified date, the Federal transmitting utility responsible for the identification shall finance such a transmission facility if the Federal transmitting utility has sufficient bonding authority under paragraph (3).

"(3) Bonding Authority.—

1	"(A) In general.—In addition to any
2	other authority to issue and sell bonds, notes,
3	and other evidence of indebtedness, a Federal
4	transmitting utility may issue and sell bonds,
5	notes, and other evidence of indebtedness in an
6	amount not to exceed, at any 1 time, an aggre-
7	gate outstanding balance of \$10,000,000,000
8	to finance the construction of transmission fa-
9	cilities identified pursuant to paragraph (1) for
10	the principal purposes of—
11	"(i) increasing the generation of elec-
12	tricity from renewable energy; and
13	"(ii) conveying that electricity to an
14	electricity consuming area.
15	"(B) Recovery of Costs.—A Federal
16	transmitting utility shall recover the costs of re-
17	newable electricity connection facilities financed
18	pursuant to paragraph (2) from entities using
19	the transmission facilities over a period of 50
20	years.
21	"(C) Nonliability of certain cus-
22	TOMERS.—Individuals and entities that, as of
23	the date of enactment of this subpart, are cus-
24	tomers of a Federal transmitting utility shall

not be liable for the costs, in the form of in-

creased rates charged for electricity or transmission, of renewable electricity connection facilities constructed pursuant to this section, except to the extent the customers are treated in
a manner similar to all other users of the renewable electricity connection facilities.

- 7 "(d) Operation of High-Voltage Transmission 8 Lines Using Renewable Energy Resources.—
- "(1) PUBLIC UTILITIES FINANCING LIMITA10 TION.—The regulations promulgated pursuant to
 11 this section shall, to the maximum extent prac12 ticable, ensure that not less than 75 percent of the
 13 capacity of any high-voltage transmission lines fi14 nanced pursuant to subsection (c) is used for elec15 tricity from renewable energy.
 - "(2) Non-Public utilities access limitation.—Notwithstanding section 368 of the Energy Policy Act of 2005 (42 U.S.C. 15926), the Commission shall promulgate regulations to ensure, to the maximum extent practicable, that not less than 75 percent of the capacity of high-voltage transmission facilities sited primarily or partially on Federal land and constructed after the date of enactment of this subpart is used for electricity from renewable energy.

1 "SEC. 234. FEDERAL POWER MARKETING AGENCIES.

2	"(a) Promotion of Renewable Energy and En-
3	ERGY EFFICIENCY.—Each Federal transmitting utility
4	shall—
5	"(1) identify and take steps to promote energy
6	conservation and renewable energy electric resource
7	development in the regions served by the Federal
8	transmitting utility;
9	"(2) use the purchasing power of the Federal
10	transmitting utility to acquire, on behalf of the Fed-
11	eral Government, electricity from renewable energy
12	and renewable energy credits in sufficient quantities
13	to meet the requirements of section 203 of the En-
14	ergy Policy Act of 2005 (42 U.S.C. 15852); and
15	"(3) identify opportunities to promote the de-
16	velopment of facilities generating electricity from re-
17	newable energy on Indian land.
18	"(b) Wind Integration Programs.—The Bonne-
19	ville Power Administration and the Western Area Power
20	Administration shall each establish a program focusing on
21	the improvement of the integration of wind energy into
22	the transmission grids of those Administrations through
23	the development of transmission products, including
24	through the use of Federal hydropower resources, that—
25	"(1) take into account the intermittent nature
26	of wind electric generation; and

1	" (2) do not impair electric reliability.	
2	"(c) Solar Integration Program.—Each of the	
3	Federal Power Administrations and the Tennessee Valley	
4	Authority shall establish a program to carry out projects	
5	focusing on the integration of solar energy, through photo-	
6	voltaic concentrating solar systems and other forms an	
7	systems, into the respective transmission grids and into	
8	remote and distributed applications in the respective serv-	
9	ice territories of the Federal Power Administrations and	
10	Tennessee Valley Authority, that—	
11	"(1) take into account the solar energy cycle;	
12	"(2) maximize the use of Federal land for gen-	
13	eration or energy storage, where appropriate; and	
14	"(3) do not impair electric reliability.	
15	"(d) Geothermal Integration Program.—The	
16	Bonneville Power Administration and the Western Area	
17	Power Administration shall establish a joint program to	
18	carry out projects focusing on the development and inte-	
19	gration of geothermal energy resources into the respective	
20	transmission grids of the Bonneville Power Administration	
21	and the Western Area Power Administration, as well as	
22	non-grid, distributed applications in those service terri-	
23	tories, including projects combining geothermal energy re-	
24	sources with biofuels production or other industrial or	
25	commercial uses requiring process heat inputs, that—	

1	"(1) maximize the use of Federal land for the
2	projects and activities;
3	"(2) displace fossil fuel baseload generation or
4	petroleum imports; and
5	"(3) improve electric reliability.
6	"(e) Renewable Electricity and Energy Secu-
7	RITY PROJECTS.—
8	"(1) In General.—The Federal transmitting
9	utilities, shall, in consultation with the Commission,
10	the Secretary, the National Association of Regu-
11	latory Utility Commissioners, and such other individ-
12	uals and entities as are necessary, undertake geo-
13	graphically diverse projects within the respective
14	service territories of the utilities to acquire and dem-
15	onstrate grid-enabled and nongrid-enabled plug-in
16	electric and hybrid electric vehicles and related tech-
17	nologies as part of their fleets of vehicles.
18	"(2) Increase in renewable energy use.—
19	To the maximum extent practicable, each project
20	conducted pursuant to any of subsections (b)
21	through (d) shall include a component to develop ve-
22	hicle technology, utility systems, batteries, power
23	electronics, or such other related devices as are able

to substitute, as the main fuel source for vehicles,

1 transportation-sector petroleum consumption with 2 electricity from renewable energy sources. 3 "SEC. 235. RELATIONSHIP TO OTHER LAWS. 4 "Nothing in this subpart supersedes or affects any Federal environmental, public health or public land protection, or historic preservation law, including— 6 "(1) the National Environmental Policy Act of 7 8 1969 (42 U.S.C. 4321 et seq.); 9 "(2) the Endangered Species Act of 1973 (16) 10 U.S.C. 1531 et seq.); and 11 "(3) the National Historic Preservation Act (16) 12 U.S.C. 470 et seq.).". 13 (b) Transmission Cost Allocation.—Section 206 of the Federal Power Act (16 U.S.C. 824e) is amended 14 15 by adding at the end the following: 16 "(f) Transmission Cost Allocation.— 17 "(1) In General.—Not later than 180 days 18 after the date on which the President designates an 19 area as a national renewable energy zone under sec-20 tion 232, the State utility commissions or other ap-21 propriate bodies having jurisdiction over the public 22 utilities providing service in the national renewable 23 energy zone or an adjacent electricity consuming 24 area may jointly propose to the Commission a cost

allocation plan for high-voltage electric transmission

1	facilities built by a public utility transmission pro-
2	vider that would serve the electricity consuming
3	area.
4	"(2) Approval.—The Commission may ap-
5	prove a plan proposed under paragraph (1) if the
6	Commission determines that—
7	"(A) taking into account the users of the
8	transmission facilities, the plan will result in
9	rates that are just and reasonable and not un-
10	duly discriminatory or preferential; and
11	"(B) the plan would not unduly inhibit the
12	development of renewable energy electric gen-
13	eration projects.
14	"(3) Cost allocation.—Unless a plan is ap-
15	proved by the Commission under paragraph (2), the
16	Commission shall fairly allocate the costs of new
17	high-voltage electric transmission facilities built in
18	the area by 1 or more public utility transmission
19	providers (recognizing the national and regional ben-
20	efits associated with increased access to electricity
21	from renewable energy) pursuant to a rolled-in
22	transmission charge.
23	"(4) Federal transmitting utility.—Noth-
24	ing in this subsection expands, directly or indirectly,

1	the jurisdiction of the Commission with respect to
2	any Federal transmitting utility.".
3	(c) Conforming Amendments.—
4	(1) Section 3 of the Federal Power Act (42
5	U.S.C. 796) is amended by adding at the end the
6	following:
7	"(30) Electric drive vehicle.—
8	"(A) In General.—The term 'electric
9	drive vehicle' means a vehicle that uses—
10	"(i) an electric motor for all or part
11	of the motive power of the vehicle; and
12	"(ii) off-board electricity wherever
13	practicable.
14	"(B) Inclusions.—The term 'electric
15	drive vehicle' includes—
16	"(i) a battery electric vehicle;
17	"(ii) a plug-in hybrid electric vehicle;
18	and
19	"(iii) a plug-in hybrid fuel cell vehi-
20	cle.".
21	(2) Subpart A of part II of the Federal Power
22	Act (as redesignated by subsection (a)) is amend-
23	ed —
24	(A) in the heading of section 201, by strik-
25	ing "PART" and inserting "SUBPART" and

1	(B) by striking "this Part" each place it
2	appears and inserting "this subpart".

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