

111TH CONGRESS
1ST SESSION

S. 2852

To establish, within the National Oceanic and Atmospheric Administration, an integrated and comprehensive ocean, coastal, Great Lakes, and atmospheric research, prediction, and environmental information program to support renewable energy.

IN THE SENATE OF THE UNITED STATES

DECEMBER 9, 2009

Mr. BEGICH (for himself and Ms. SNOWE) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To establish, within the National Oceanic and Atmospheric Administration, an integrated and comprehensive ocean, coastal, Great Lakes, and atmospheric research, prediction, and environmental information program to support renewable energy.

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 “Renewable Energy En-
5 vironmental Research Act of 2009”.

1 **SEC. 2. PURPOSE.**

2 The purpose of this Act is to establish an integrated
3 and comprehensive ocean, coastal, Great Lakes, and at-
4 mospheric research, prediction, and environmental infor-
5 mation program to support renewable energy.

6 **SEC. 3. RENEWABLE ENERGY RESEARCH PLAN.**

7 (a) IN GENERAL.—The Administrator shall develop
8 a plan—

9 (1) to define requirements for a comprehensive
10 and integrated ocean, coastal, Great Lakes, and at-
11 mosphere science program to support renewable en-
12 ergy development in the United States based on the
13 public hearings, public comments, and a review of
14 scientific and industry information;

15 (2) to identify and describe current climate,
16 weather, and water data programs, products, serv-
17 ices, and authorities within NOAA relevant to re-
18 newable energy development;

19 (3) to provide targeted research, data, moni-
20 toring, observation, and other information, products,
21 and services concerning climate, weather, and water
22 in support of renewable energy and “smart grid”
23 technology, including research to accurately quantify
24 the downstream micro-climate impacts of wind-
25 power turbines;

1 (4) to provide research, data, monitoring, and
2 other information, products, and services to inform
3 renewable energy decisions concerning coastal and
4 marine habitats, living marine resources and the
5 ecosystems on which they depend and coastal and
6 marine planning; and

7 (5) to reduce duplication and leverage the re-
8 sources of existing NOAA programs through coordi-
9 nation with—

10 (A) other offices and programs within
11 NOAA, including the atmospheric, ocean, and
12 coastal observation systems;

13 (B) Federal, State, tribal, and local obser-
14 vation systems; and

15 (C) other entities, including the private
16 sector organizations and institutions of higher
17 education; and

18 (6) to facilitate public-private cooperation, in-
19 cluding identification and assessment of current pri-
20 vate sector capabilities.

21 (b) PUBLIC HEARINGS.—In developing the plan, the
22 Administrator shall provide public notice and opportunity
23 for 1 or more public hearings and shall seek comments
24 from Federal and State agencies, tribes, local govern-
25 ments, representatives of the private sector, and other par-

1 ties interested in renewable energy observations, data, and
2 use in order to improve NOAA climate, weather, and
3 water observation data products and services to more ef-
4 fectively support renewable energy development.

5 **SEC. 4. ESTABLISHMENT OF RESEARCH, PREDICTION, AND**
6 **ENVIRONMENTAL INFORMATION PROGRAM.**

7 (a) IN GENERAL.—Within 18 months after the date
8 of enactment of this Act, the Administrator shall establish
9 a program to develop and implement an integrated and
10 comprehensive ocean, coastal, Great Lakes and atmos-
11 phere research and operations program, based on the plan
12 required by section 3, to support renewable energy devel-
13 opment in the United States.

14 (b) PROGRAM COMPONENTS.—At a minimum, the
15 program shall include—

16 (1) improvements in coordinated climate,
17 weather, and water research, monitoring, and obser-
18 vations to support—

19 (A) renewable energy development; and

20 (B) the understanding and mitigation of
21 the impact of renewable energy development on
22 living marine resources, including protected spe-
23 cies and the marine and coastal environment;

24 (2) coordinated weather, water, and climate
25 prediction capability focused on renewable energy

1 and “smart grid” technology to provide information
2 and decision services in support of renewable energy
3 development;

4 (3) support for the transition to, and reliable
5 delivery of, sustained operational weather, water,
6 and climate products from research, observation,
7 and prediction outputs;

8 (4) means of identifying biological and ecologi-
9 cal effects of marine renewable energy development
10 on living marine resources, the marine and coastal
11 environment, marine-dependent industries, and
12 coastal communities;

13 (5) baseline ecological characterization, includ-
14 ing research, data collection, and mapping, of the
15 coastal and marine environment and living marine
16 resources for marine renewable energy development;

17 (6) avoidance, minimization, and mitigation
18 strategies to address the potential impacts of marine
19 renewable energy on the marine, coastal, and Great
20 Lakes environment, including developing effective
21 monitoring protocols, use of adaptive management,
22 informed engineering design and operating param-
23 eters, and the establishment of protocols for mini-
24 mizing the environmental impacts of testing, devel-

1 oping, and deploying marine renewable energy de-
2 vices;

3 (7) support for the development of marine spe-
4 cial area management plan by states as defined by
5 the Coastal Zone Management Act of 1972 (16
6 U.S.C. 1451 et seq.) that would support renewable
7 energy development consistent with natural resource
8 protection and other coastal-dependent economic
9 growth;

10 (8) comprehensive digital mapping, modeling,
11 and other geospatial information and services to
12 support planning for renewable energy and steward-
13 ship of ecosystem and living marine ecosystems, in-
14 cluding protected species, in ocean and coastal areas;

15 (9) a coordinated approach for examining and
16 quantifying the micro-climate impacts of wind-power
17 farms on soil transpiration and drying; and

18 (10) provision for outreach to the public and
19 private sector about program research, information,
20 and products, including making non-proprietary in-
21 formation and best management practices developed
22 under this program available to the public.

23 (c) USE IN AGENCY DECISIONS.—The program es-
24 tablished under subsection (b) shall be designed to collect,
25 synthesize, and distribute data in a manner that can be

1 used by marine resource managers responsible for making
2 decisions about marine renewable energy projects. The
3 Army Corps of Engineers, Department of Commerce, Min-
4 erals Management Service, Federal Energy Regulatory
5 Commission, and Department of Energy shall consider
6 this information when making planning, siting, and per-
7 mitting decisions for marine renewable energy.

8 (d) SUPPORT FOR PUBLIC-PRIVATE COOPERA-
9 TION.—To the extent practicable, in implementing the
10 program established under this section, the Administrator
11 shall seek appropriate opportunities to facilitate and ex-
12 pand cooperation with private sector entities to develop
13 and expand information services that serve the renewable
14 energy industry.

15 **SEC. 5. BIENNIAL REPORTS.**

16 Not later than 2 years after the date of the enact-
17 ment of this Act and every 2 years thereafter, the Admin-
18 istrator shall prepare and transmit a report to the Senate
19 Committee on Commerce, Science, and Transportation,
20 the House of Representatives Committee on Natural Re-
21 sources, and the House of Representatives Committee on
22 Science and Technology on progress made in imple-
23 menting this Act, including—

24 (1) a description of activities carried out under
25 this Act;

1 (2) recommendations for priority activities
2 under this Act for fiscal years beginning after the
3 date on which the report is submitted; and

4 (3) funding levels for activities under this Act
5 in those fiscal years.

6 **SEC. 6. LIBRARY.**

7 Within 1 year after the date of the enactment of this
8 Act, the Administrator, in consultation with relevant Fed-
9 eral agencies, shall establish a renewable energy informa-
10 tion library and data portal. The library shall include, at
11 a minimum—

12 (1) links to data and information products for
13 use in renewable energy development;

14 (2) links to planning and decision support tools
15 for use in renewable energy development;

16 (3) data about the baseline condition of ocean
17 and coastal resources; and

18 (4) links to digital mapping and geospatial in-
19 formation, products, and services described in sec-
20 tion 4(b).

21 **SEC. 7. FEDERAL COORDINATION.**

22 In carrying out activities under this Act, the Adminis-
23 trator shall coordinate with the Secretary of the Interior,
24 the Secretary of Energy, the Secretary of Transportation,
25 the Secretary of Defense, the Federal Energy Regulatory

1 Commission, the Department in which the Coast Guard
2 is operating, and the heads of other relevant Federal agen-
3 cies.

4 **SEC. 8. AGREEMENTS.**

5 The Administrator may enter into and perform such
6 contracts, leases, grants, cooperative agreements, or other
7 agreements and transactions with any agency or instru-
8 mentality of the United States, or with any State, local,
9 tribal, territorial or foreign government, or with any per-
10 son, corporation, firm, partnership, educational institu-
11 tion, nonprofit organization, or international organization
12 as may be necessary to carry out the purposes of this Act.

13 **SEC. 9. AUTHORITY TO RECEIVE FUNDS.**

14 The Administrator may accept, retain, and use funds
15 received from any party pursuant to an agreement entered
16 into under section 8 for activities furthering the purposes
17 of this Act.

18 **SEC. 10. USE OF OCEAN OBSERVING OFFSHORE INFRA-
19 STRUCTURE.**

20 (a) IN GENERAL.—Any offshore exploration and pro-
21 duction facility, at the discretion of the Administrator,
22 may execute a memorandum of understanding authorizing
23 the use of offshore platforms and infrastructure for the
24 placement of meteorological and oceanographic observa-
25 tion sensors of a type to be designated by the Adminis-

1 trator in support of the Integrated Ocean Observing Sys-
2 tem.

3 (b) AVAILABILITY OF INFORMATION.—All informa-
4 tion collected by such sensors will be managed by NOAA
5 and be readily available for use in spill response as well
6 as available to the National Weather Service, other NOAA
7 programs, and the general public.

8 **SEC. 11. DEFINITIONS.**

9 In this Act:

10 (1) ADMINISTRATOR.—The term “Adminis-
11 trator” means the Under Secretary of Commerce for
12 Oceans and Atmosphere in the Under Secretary’s
13 capacity as Administrator of NOAA.

14 (2) MARINE RENEWABLE ENERGY.—The term
15 “marine renewable energy” means any form of re-
16 newable energy derived from the sea including wave
17 energy, tidal energy, ocean current energy, offshore
18 wind energy, salinity gradient energy, ocean thermal
19 gradient energy, and ocean thermal energy conver-
20 sion.

21 (3) NOAA.—The term “NOAA” means the Na-
22 tional Oceanic and Atmospheric Administration.

23 **SEC. 12. AUTHORIZATION OF APPROPRIATIONS.**

24 (a) IMPLEMENTATION AND EXECUTION.—There are
25 authorized to be appropriated to the Administrator

1 \$100,000,000 for each of fiscal years 2010 through 2014
2 to carry out this Act.

3 (b) GRANTS TO EDUCATIONAL INSTITUTIONS AND
4 COASTAL STATES.—Of the amounts appropriated pursu-
5 ant to subsection (b), the Administrator shall make up to
6 50 percent available to educational institutions, and to
7 States with coastal zone management programs approved
8 under the Coastal Zone Management Act of 1972 (16
9 U.S.C. 1451 et seq.), to carry out activities that support
10 the program established under section 4.

11 **SEC. 13. SAVINGS PROVISION.**

12 Nothing in this Act shall be construed to supersede
13 or modify the jurisdiction, responsibilities, or authority of
14 any Federal or State agency under any provision of law
15 in effect on the date of enactment of this Act.

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