

plan or a revision to that State's implementation plan, to approve any fuel unless that fuel was, as of the date of such consideration, approved in at least one State implementation plan in the applicable Petroleum Administrator for Defense District. However, the Administrator may approve as part of a State implementation plan or State implementation plan revision a fuel with a summertime Reid Vapor Pressure of 7.0 psi. In no event shall such approval by the Administrator cause an increase in the total number of fuels on the list published under subclause (II) as of the date of consideration.

“(VI) Nothing in this clause shall be construed to have any effect regarding any available authority of States to require the use of any fuel additive registered in accordance with subsection (b), including any fuel additive registered in accordance with subsection (b) after the enactment of this subclause.

“(vii)(I) The provisions of clause (vi), including the limitations of the authority of the Administrator and the cap on the total number of fuels permitted, shall remain in effect until the harmonization of fuels under subclause V of this clause is accomplished. Once such harmonization has been accomplished, clause (v) shall sunset and the limitations of the authority of the Administrator under subclause (IV) of this clause shall apply.

“(II) The Administrator, in coordination with the Secretary of Energy (hereinafter in this clause referred to as the ‘Secretary’), shall identify and publish in the Federal Register, within 12 months after the enactment of this subclause and after notice and opportunity for public comment, a list of 5 gasolines and diesel fuels to be used in States that have not received a waiver under section 209(b) of this Act. The list shall be referred to as the ‘Federal Fuels List’ and shall include one Federal on-road diesel fuel (which shall grandfather the sulfur phase down in the Administrator's ultra low sulfur diesel fuel regulations in effect as of the date of enactment and shall permit the implementation of one alternative diesel fuel, approved under this subparagraph before enactment of this subclause for a State that has not received a section 209(b) waiver, only in the State in which it was approved prior to enactment), one conventional gasoline for ozone attainment areas, one reformulated gasoline (RFG) meeting the requirements of subsection (k), and 2 additional gasolines with Reid vapor pressure (RVP) controls for use in ozone attainment areas of varying degrees of severity. None of the fuels identified under this subclause shall control fuel sulfur or toxics levels beyond levels required by regulations of the Administrator.

“(III) Gasolines and diesel fuels shall be included on the Federal Fuels List based on the Administrator's analysis of their ability to reduce ozone emissions to assist States in attaining established ozone standards under this Act, and on an analysis by the Secretary that the adoption of the Federal Fuels List will not result in a reduction in supply or in producibility, including that caused by a reduction in domestic refining capacity as a result of the adoption of the Federal Fuels List. In the event the Secretary concludes that adoption of the Federal Fuels List will result in a reduction in supply or in producibility, the Administrator and the Secretary shall report that conclusion to Congress, and suspend implementation of this clause. The Administrator and the Secretary shall conduct the study required under section 1541(c) of the Energy Policy Act of 2005 on the timetable required in that section to provide Congress with legislative recommendations for modifications to the proposed Federal Fuels List only if the Sec-

retary concludes that adoption of the Federal Fuels List will result in a reduction in supply or in producibility.

“(IV) Upon publication of the Federal Fuels List, the Administrator shall have no authority, when considering a State implementation plan or State implementation plan revisions, to approve under this subparagraph any fuel included in such plan or plan revision if the proposed fuel is not one of the fuels on the Federal Fuels List; or to approve a State's plan or plan revision to move from one fuel on the Federal Fuels List to another unless, after consultation with the Secretary, the Administrator publishes in the Federal Register, after notice and opportunity for public comment, a finding that, in the Administrator's judgment, such plan or plan revision to adopt a different fuel on the Federal Fuels List will not cause fuel supply or distribution disruptions in the affected area or contiguous areas. The Administrator's finding shall include an assessment of reasonably foreseeable supply or distribution emergencies that could occur in the affected area or contiguous area and how adoption of the particular fuel revisions would effect alternative supply options during reasonably foreseeable supply or distribution emergencies.

“(V) The Administrator, in consultation with the Secretary, shall develop a plan to harmonize the currently approved fuels in State implementation plans with the fuels included on the Federal Fuels List and shall promulgate implementing regulations for this plan not later than 18 months after enactment of this subclause. This harmonization shall be fully implemented by the States by December 31, 2008.”

(b) BOUTIQUE FUELS.—Section 1541 of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 1106) is amended by striking subsection (c) and inserting the following:

“(C) STUDY AND REPORT TO CONGRESS ON BOUTIQUE FUELS.—

“(1) JOINT STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy shall undertake a study of the effects on air quality, on the number of fuel blends, on fuel availability, on fuel fungibility, and on fuel costs of the State plan provisions adopted pursuant to section 211(c)(4)(C) of the Clean Air Act (42 U.S.C. 7545(c)(4)(C)).

“(2) FOCUS OF STUDY.—The primary focus of the study required under paragraph (1) shall be to determine how to develop a Federal fuels system that maximizes motor fuel fungibility and supply, preserves air quality standards, and reduces motor fuel price volatility that results from the proliferation of boutique fuels, and to recommend to Congress such legislative changes as are necessary to implement such a system. The study should include the impacts on overall energy supply, distribution, and use as a result of the legislative changes recommended. The study should include an analysis of the impact on ozone emissions and supply of a mandatory reduction in the number of fuel blends to 5, including one on-road Federal diesel fuel (which shall grandfather the sulfur phase down in the Administrator's ultra low sulfur diesel fuel regulations and shall permit the implementation of, one alternative diesel fuel, blend approved under this subparagraph before enactment of this subclause for a State that has not received a section 209(b) waiver, only in the State in which it was approved prior to enactment), one conventional gasoline for ozone attainment areas, one reformulated gasoline (RFG) meeting the requirements of subsection (k), and 2 additional gasolines blends with Reid vapor pressure (RVP) controls for use in ozone attainment areas of varying degrees of severity.

“(3) CONDUCT OF STUDY.—In carrying out their joint duties under this section, the Administrator and the Secretary shall use sound science and objective science practices, shall consider the best available science, shall use data collected by accepted means and shall consider and include a description of the weight of the scientific evidence. The Administrator and the Secretary shall coordinate the study required by this section with other studies required by the act and shall endeavor to avoid duplication of effort with regard to such studies.

“(4) RESPONSIBILITY OF ADMINISTRATOR.—In carrying out the study required by this section, the Administrator shall coordinate obtaining comments from affected parties interested in the air quality impact assessment portion of the study. The Administrator shall use sound and objective science practices, shall consider the best available science, and shall consider and include a description of the weight of the scientific evidence.

“(5) RESPONSIBILITY OF SECRETARY.—In carrying out the study required by this section, the Secretary shall coordinate obtaining comments from affected parties interested in the fuel availability, number of fuel blends, fuel fungibility and fuel costs portion of the study.

“(6) REPORT TO CONGRESS.—The Administrator and the Secretary jointly shall submit the results of the study required by this section in a report to the Congress not later than 12 months after the date of the enactment of this Act, together with any recommended regulatory and legislative changes. Such report shall be submitted to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate.

“(7) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated jointly to the Administrator and the Secretary \$500,000 for the completion of the study required under this subsection.”

By Mr. DOMENICI (for himself,
Mr. BINGAMAN, Mr. FRIST, and
Mr. ALEXANDER):

S. 1860. A bill to amend the Energy Policy Act of 2005 to improve energy production and reduce energy demand through improved use of reclaimed waters, and for other purposes; to the Committee on Energy and Natural Resources.

Mr. DOMENICI. Mr. President, nearly every form of energy production requires the use of large quantities of water. Electricity production, oil and gas production, and certain renewable energy sources are all dependent on having adequate access to water. Because water availability, particularly for human consumption, is an increasingly important international and domestic issue, it is important for us to ensure that we use our water resources in the most efficient manner in the production of energy. As the world's population grows and stores of fresh water are depleted, finding additional sources of fresh water is vital to meeting our energy needs and ensuring peace and security domestically and abroad. For this reason, developing cost-effective technologies that allow us better access to water for human use and energy production is of great significance.

Electricity production is entirely dependent on the availability of water, regardless of fuel source. Much of our fossil fuel energy production is entirely dependent on having adequate access to water. Sandia National Laboratories estimates that for every barrel of oil produced, ten gallons of water are required. For this reason, ensuring an adequate supply of water, coupled with efficient use of that water supply in our energy processes, is critical to the United States' energy portfolio. Similarly, making water available to our citizens is largely dependent on energy. Transportation, distribution, acquisition and purification of water require large amounts of energy.

Providing water to meet population growth will become increasingly important in the coming years. Nearly 1.2 billion people, roughly one fifth of the world's population, live without reliable access to water. It is estimated that by 2025, roughly one-third of the world will have inadequate access to water. By 2030 there will be an additional 3 billion people. By 2025, it is estimated that the population of the Arab world will reach 600 million, twice the population of 2000. At the World Economic Forum this summer, experts testified that most of the countries in the Arab world had exhausted their water resources and that the only way to provide water is the expensive prospect of desalination. At the forum, former Jordanian water minister told those in attendance "We are not secure about water supplies. Supplies are simply not enough . . . This is a scary issue." He went on to estimate that the water deficit in the Arab world will grow by more than 600 percent by 2025.

The need for renewed Federal investment to develop technologies that will ensure efficient use of scarce water resources in energy production is critically important for domestic growth and prosperity. A study by the Governmental Accountability Office stated that "water managers in thirty-six States anticipate shortages in localities, regions, or state-wide in the next 10 years." In the West, the competing demands of population growth, drought, energy resources development, agricultural needs, environmental needs, and tribal interests have resulted in a paucity of available water. Unbridled population growth in the western U.S. has stretched water resources even thinner. The U.S. Census Bureau recently estimated that by 2030 Nevada will have more than four million residents, twice as many as in 2000. In a region already critically short of water and subject to the unpredictable nature of an already over-allocated Colorado River, even a mild drought could stymie growth and economic development. For this reason, we need to investigate new technologies that allow us to access additional water, and just as importantly, to use water in the most efficient ways, particularly in the production of all forms of energy.

While stories are legion about the deleterious effects of the prolonged drought in the West, including my home State of New Mexico, the availability of water is an increasingly critical issue in the eastern United States. Usable supplies of water in the east coast have been stretched thin. Despite receiving substantially more rainfall than the western U.S., much of the east coast is facing water shortages. For example, Boston, Atlanta and much of Florida are nearing the end of readily available water. Just as with our current oil and natural gas energy crisis, the answer for our looming water crisis is not just to produce more, but to foster new technologies that will both aid in more production, and just as significantly, reduce the amount of water required for energy production and other needs.

I rise today to introduce the Energy-Water Efficiency Technology Research, Development, and Transfer Program Act of 2005. The emphasis of this program is to address the inextricable relationship between energy and water. Large amounts of water are required for electric generation and oil and gas production. Additionally, large amounts of energy are required for reclaiming and transporting water. Water shortages impair our ability to meet our energy needs and conversely, energy shortages impair our ability to provide adequate supplies of water. The bill would establish an ambitious program within the National Laboratories to develop, transfer and demonstrate in real world applications energy and water efficiency technologies to meet the increased demand for water internationally and domestically. The bill establishes a merit-based competitive grant program for research grants, provides that a set percentage of funding received by the program be used to demonstrate promising technologies, and provides for research undertaken by our National Laboratories. Our National Laboratories have shown an ability to push the state of the art forward, furthering technologies such as highspeed computing, nano-technology, and advanced engineering and science. Federal investment in these areas has resulted in thousands of new technologies that benefit humanity. We now have the opportunity to direct a portion of this immense capability to solve our water and related energy issues. I have no doubt that this legislation would help to push the state of the art forward to ensure that the world has access to this life sustaining resource for years to come.

For the reasons I have articulated, renewed Federal investment in this area is of critical importance both domestically and abroad. I thank Senator BINGAMAN, ranking member of the Energy and Natural Resources Committee, Majority Leader FRIST and Senator ALEXANDER for being original co-sponsors of this legislation.

I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1860

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 "Energy-Water Efficiency Technology Research, Development, and Transfer Program Act of 2005".

SEC. 2. ENERGY-WATER EFFICIENCY AND SUPPLY TECHNOLOGY RESEARCH, DEVELOPMENT, AND TRANSFER PROGRAM.

The Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 594) is amended by inserting after section 111 the following:

"SEC. 112. ENERGY-WATER EFFICIENCY AND SUPPLY TECHNOLOGY RESEARCH, DEVELOPMENT, AND TRANSFER PROGRAM.

"(a) DEFINITIONS.—In this section:

"(1) ADVISORY PANEL.—The term 'Advisory Panel' means the Energy-Water Efficiency and Supply Technology Advisory Panel established under subsection (f).

"(2) ENERGY-WATER EFFICIENCY AND SUPPLY TECHNOLOGY.—The term 'energy-water efficiency and supply technology' means—

"(A) technologies for—

"(i) reducing the amount of energy required to provide adequate water supplies;

"(ii) reducing water consumption in the production or generation of energy;

"(iii) the reclamation of previously unusable water;

"(iv) water reuse;

"(v) agricultural, industrial, and municipal efficiency and conservation; and

"(vi) water monitoring and systems analysis; and

"(B) any other technologies identified by the Secretary as necessary to carry out the program.

"(3) LEAD LABORATORY.—The term 'lead laboratory' means each of the program lead laboratories designated under subsection (d)(1).

"(4) PROGRAM.—The term 'program' means the energy-water efficiency and supply technology research, development, and transfer program established under subsection (b).

"(b) ESTABLISHMENT.—In accordance with this section, the Secretary shall establish a National Laboratories energy-water efficiency and supply technology research, development, and transfer program that provides for the conduct of research on, and the development, demonstration, transfer, and commercialization of, economically viable and cost-effective energy-water efficiency and supply technologies to—

"(1) promote the sustainable use of water for energy production activities, including—

"(A) developing less water-intensive electric generation sources; and

"(B) developing and implementing systems analyses to balance energy and water demands;

"(2) facilitate the widespread commercialization of newly developed energy-water efficiency and supply technologies for use in real-world applications, including the conduct of an assessment of economic factors relating to the introduction and adoption of energy-water efficiency and supply technologies in practical applications;

"(3) facilitate collaboration among Federal agencies to provide for the integration of research on, and disclosure of information relating to, energy-water efficiency and supply technologies;

"(4) reclaim and improve access to previously unusable and nontraditional water resources; and

"(5) increase the amount of water available for human use.

“(c) OTHER AGREEMENTS.—The Secretary may enter into any grant, contract, cooperative agreement, interagency agreement, or other transaction, as the Secretary determines to be necessary to carry out this section.

“(d) PROGRAM LEAD LABORATORIES.—

“(1) IN GENERAL.—The program shall be carried out by Sandia National Laboratory, New Mexico, Oak Ridge National Laboratory, Tennessee, and Lawrence Livermore National Laboratory, California.

“(2) SELECTION OF UNIVERSITY PARTNERS.—Each of the lead laboratories, in consultation with the Advisory Panel, shall select at least 1 university partner to assist in carrying out the program.

“(e) WATER SUPPLY TECHNOLOGY ASSESSMENT.—

“(1) ASSESSMENT DUTIES.—In consultation with the Secretary of Agriculture, the Administrator of the Environmental Protection Agency, the Secretary of Defense, the Administrator of the National Aeronautics and Space Administration, the Director of the National Science Foundation, the Secretary of the Interior, and other appropriate Federal agencies, the Secretary, acting through the lead laboratories, shall—

“(A) assess energy-water efficiency and supply technology research being performed;

“(B) assess the annual amount of Federal funding levels and authorizations for energy-water efficiency and supply technology research;

“(C) assess the scope of the energy-water efficiency and supply technology research performed by other agencies;

“(D) assess whether and to what extent Federal energy-water efficiency and supply technology research is duplicative;

“(E) identify energy-water efficiency and supply technology research and development priorities; and

“(F) develop a technology roadmap to identify critical energy-water efficiency and supply technology research, development, demonstration and commercialization activities to guide program activities.

“(2) REPORT.—Not later than 2 years after the date of enactment of this section, the Secretary, acting through the lead laboratories, shall submit to the Committee on Energy and Natural Resources of the Senate, the Committee on Resources of the House of Representatives, and the Committee on Energy and Commerce of the House of Representatives a detailed report on the assessment conducted under paragraph (1).

“(f) ADVISORY PANEL.—

“(1) IN GENERAL.—The Secretary shall establish an advisory panel, to be known as the ‘Energy-Water Efficiency and Supply Technology Advisory Panel’, to advise the Secretary on the activities carried out under this section.

“(2) MEMBERSHIP.—Members of the Advisory Panel shall—

“(A) have expertise in—

“(i) energy-water efficiency and supply technology; or

“(ii) legal or regulatory issues associated with adopting energy-water efficiency and supply technologies in real-world applications; and

“(B) be representative of institutions of higher education, industry, State and local governments, international energy-water efficiency and supply technology institutions, Federal agencies, and nongovernmental organizations.

“(3) DUTIES.—The Advisory Panel shall—

“(A) periodically assess the performance of energy-water efficiency and supply technology research being carried out under this section;

“(B) advise the Secretary on research priorities to be carried out under this section;

“(C) make recommendations to the Secretary for awarding research grants and demonstration project grants; and

“(D) identify legal, policy, or regulatory barriers to implementing energy-water efficiency and supply technologies in real-world applications.

“(g) PROGRAM GRANTS.—

“(1) IN GENERAL.—The Secretary shall provide competitive grants to entities with expertise in the conduct of energy-water efficiency and supply technology research, development, and demonstration projects.

“(2) REQUIREMENTS.—The grants under paragraph (1) shall be provided—

“(A) in consultation with the Advisory Panel;

“(B) in coordination with the research, development, demonstration, and commercialization activities conducted by the lead laboratories; and

“(C) consistent with the technology roadmap developed under subsection (e)(1)(F).

“(3) LIMITATION.—Of amounts made available for grants under subsection (j)(2)(C), not more than 25 percent shall be provided to National Laboratories and Federal agencies.

“(4) CRITERIA.—The Secretary shall establish criteria for the submission and review of grant applications and the provision of grants under paragraph (1).

“(h) PROGRAM REVIEW.—

“(1) IN GENERAL.—The Secretary shall enter into an arrangement with the National Academy of Sciences to conduct periodic peer reviews of the program.

“(2) REQUIREMENTS.—In conducting a review under paragraph (1), the National Academy of Sciences shall—

“(A) review the technology roadmap, technical milestones, and plans for technology transfer developed under the program; and

“(B) assess the progress of the program in achieving the technical milestones and plans for technology transfer.

“(i) REPORT TO CONGRESS.—Not later than 3 years after the date of enactment of this section and each year thereafter, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate, the Committee on Resources of the House of Representatives, and the Committee on Energy and Commerce of the House of Representatives a report that describes the activities carried out under this section, including the activities carried out under subsection (f)(3)(D).

“(j) AUTHORIZATION OF APPROPRIATIONS.—

“(1) IN GENERAL.—There are authorized to be appropriated to the Secretary to carry out this section, including the completion of the roadmap under subsection (e)(1)(F)—

“(A) \$5,000,000 for fiscal year 2006; and

“(B) such sums as are necessary for each fiscal year thereafter.

“(2) ALLOCATION.—Of amounts made available under paragraph (1) for fiscal year 2007 and each fiscal year thereafter—

“(A) at least 30 percent shall be distributed equally between the lead laboratories for the conduct of activities under the program;

“(B) at least 10 percent shall be provided to the lead laboratories to carry out subsection (b)(2);

“(C) at least 40 percent shall be made available for program grants under subsection (g)(1); and

“(D) not more than 15 percent shall be used to pay the administrative costs of carrying out the program, including costs to support the activities of the Advisory Panel.”

By Mr. GREGG (for himself and Mr. KENNEDY):

S. 1863. A bill to establish the Gulf Coast Recovery and Disaster Preparedness Agency, and for other purposes; to

the Committee on Homeland Security and Governmental Affairs.

Mr. GREGG. Mr. President, our Nation's history is not only one of growing prosperity, opportunity, and the steady progress of a free and industrious society, but it is also uniquely identified by the challenges that we have faced and overcome. Sometimes, these challenges have been natural disasters—earthquakes, floods, and hurricanes that have devastated entire towns and cities, uprooted communities, and tragically killed hundreds, if not thousands, of people. Disasters such as the Galveston Hurricane of 1900, the 1906 San Francisco earthquake, the Great Flood of 1927, and Hurricane Camille are the first ones that come to mind, although there are others that we could also add to this list of superdisasters.

Unfortunately, it now appears that the list of these superdisasters has gotten longer. In a number of respects, the devastation inflicted by Hurricane Katrina has so far exceeded any natural disaster that our country has faced: the official death toll is around 1,000 and could go higher; approximately 90,000 square miles, nearly the size of the United Kingdom, has been impacted; a city of nearly half a million was almost entirely emptied; as many as 1 million jobs have been directly affected; and recovery and reconstruction costs could go to as high as \$200 billion, if not more. Figures aside, the tragic and widespread devastation that this storm has wreaked is apparent to anyone who has watched news footage from the gulf coast region. The images are heart wrenching, and our prayers go out to those who have suffered and have lost loved ones.

Weeks after Hurricane Katrina hit the gulf coast region, Hurricane Rita brought further devastation to areas that were either already impacted or to areas further south and to the west. Although not as powerful as Katrina, Rita dealt a strong blow to many communities. Lives were lost, entire neighborhoods were completely destroyed, and many families were displaced. Again, we extend our prayers and wishes to those who were directly affected by this storm.

While the combined impact of Hurricanes Katrina and Rita is similar to other superdisasters, it also unprecedented in a few key aspects. In particular, the Federal Government is now expected to play, and is playing, a significant role in the response and recovery efforts. This is partly due to the significant growth in the Federal Government over the past 100 years. Back in 1900 when the Galveston Hurricane occurred, there were only eight executive departments in the entire government—the Department of Commerce, the Department of Labor, the Department of Health and Human Services, HUD, the U.S. Coast Guard, the EPA, FEMA, and, of course, the Department of Homeland Security had yet to be established. Today, the federal government is much more expansive than