116TH CONGRESS
2D Session

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To provide for the demonstration and deployment of water-energy technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Ms. MCSALLY introduced the following bill; which was read twice and referred to the Committee on ____________________

A BILL

To provide for the demonstration and deployment of water-energy technologies, and for other purposes.

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

SECTION 1. SHORT TITLE.

This Act may be cited as the “Water-Energy Technology Demonstration and Deployment Act”.

SEC. 2. DEFINITIONS.

In this Act:

(1) CENTER.—The term “Center” means the Western Water Resilience Center established under section 4(a).
(2) ELIGIBLE DESALINATION PROJECT.—The term “eligible desalination project” means a desalination or salinity reduction facility or project—
(A) to which the Bureau of Reclamation holds title;
(B) that is operated by the Bureau of Reclamation; or
(C) with respect to which the Bureau of Reclamation is providing financial assistance.

(3) ELIGIBLE ENERGY EFFICIENCY PROJECT.—The term “eligible energy efficiency project” means the design, study, construction, expansion, upgrade, or capital repair of a water delivery system to reduce energy consumption associated with water delivery.

(4) ELIGIBLE REUSE PROJECT.—The term “eligible reuse project” means a non-Federal water reuse and recycling facility or project that contributes water to a region served by 1 or more projects of the Bureau of Reclamation.

(5) NATIONAL LABORATORY.—The term “National Laboratory” has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(6) PROGRAM.—The term “program” means the pilot program established under section 3(a)(1).
(7) **Reclamation State.**—The term “Reclamation State” has the meaning given the term in section 4014 of the Water Infrastructure Improvements for the Nation Act (43 U.S.C. 390b note; Public Law 114–322).

(8) **Secretary.**—The term “Secretary” means the Secretary of the Interior.

(9) **Selected Project.**—The term “selected project” means an eligible desalination project, eligible reuse project, or eligible energy efficiency project selected for the program under section 3(b).

**SEC. 3. WATER-ENERGY TECHNOLOGY DEPLOYMENT PILOT PROGRAM.**

(a) **Establishment.**—

(1) **In General.**—To advance Federal energy-water nexus research, technology development, policy, and other goals by combining the resources of the Department of the Interior and Department of Energy, the Secretary, in consultation with the Secretary of Energy, shall establish within the Bureau of Reclamation a pilot program that provides for the participation of the Secretary of Energy in selected projects, in accordance with paragraph (2).
(2) Participation of Secretary of Energy in selected projects.—The Secretary of Energy shall participate in a selected project by—

(A) identifying research and programs at the Department of Energy (including the National Laboratories) applicable to the selected project;

(B) contributing funds to carry out the selected project; or

(C) carrying out modeling, planning, designing, or construction activities with respect to the selected project.

(3) Agreement.—The Secretary and the Secretary of Energy shall enter into an agreement describing the responsibilities of the Secretary and the Secretary of Energy, respectively, with respect to, and the sources of funding for, each selected project.

(4) Required consultation.—The Secretary shall consult with the Secretary of Energy with respect to any activities carried out by the Secretary of Energy under the program.

(b) Selection of Projects for Program.—

(1) Eligible desalination projects.—

(A) In general.—The Secretary shall select not fewer than 2, but not more than 5, eli-
eligible desalination projects for the program that the Secretary determines would—

(i) benefit from the participation of the Secretary of Energy; and

(ii) advance the objectives of existing research and development, technology commercialization, or grant programs being carried out by the Secretary of Energy (including at the National Laboratories) by—

(I) lowering energy costs;

(II) increasing the amount or efficiency of salt removal;

(III) reducing salt discharge into waterways;

(IV) improving water supply reliability; or

(V) demonstrating a new technology or process.

(B) INCLUSIONS.—Of the eligible desalination projects selected under subparagraph (A)—

(i) not less than 1 shall be an eligible desalination project conducted in the upper Colorado River Basin that—
(I) is authorized under the Colorado River Basin Salinity Control Act (43 U.S.C. 1571 et seq.); and

(II) uses zero liquid discharge technology to remove naturally occurring salinity from entering a Colorado River Tributary; and

(ii) not less than 1 shall be an eligible desalination project conducted in the lower Colorado River Basin that—

(I)(aa) is authorized under the Colorado River Basin Salinity Control Act (43 U.S.C. 1571 et seq.); and

(bb) processes water to remove salt and returns the water to the mainstem of the Colorado River; or

(II) would provide similar amounts of water to support Colorado River drought contingency operations, consistent with the Colorado River Drought Contingency Plan Authorization Act (Public Law 116–14; 133 Stat. 850), by improving efficiency in deliveries of Colorado River water, consistent with the treaty obligation

(2) Eligible Energy Efficiency Projects.—The Secretary shall select not more than 5 eligible energy efficiency projects for the program that the Secretary determines would—

(A) benefit from the participation of the Secretary of Energy; and

(B) advance the objectives of existing research and development, technology commercialization, or grant programs being carried out by the Secretary of Energy (including at the National Laboratories) by—

(i) improving the efficiency of existing surface or groundwater pumps;

(ii) developing or improving a surface water conveyance that reduces surface or groundwater pumping;
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(iii) reducing energy use needed for
water treatment;

(iv) demonstrating a new technology
or process; or

(v) incorporating energy generation
into water conveyance systems.

(3) ELIGIBLE REUSE PROJECTS.—The Sec-
retary shall select not more than 5 eligible reuse
projects for the program that the Secretary deter-
mines would—

(A) benefit from the participation of the
Secretary of Energy; and

(B) advance the objectives of existing re-
search and development, technology commer-
cialization, or grant programs being carried out
by the Secretary of Energy (including at the
National Laboratories) by—

(i) lowering energy costs;

(ii) improving water supply reliability;

or

(iii) demonstrating—

(I) a new technology or process;

or

(II) a combination of new and ex-
isting technologies or processes.
(4) Submission of list of selected projects.—As soon as practicable after the date of completion of the selection process under paragraphs (1) through (3), the Secretary shall submit a list of the selected projects to—

(A) the Secretary of Energy;

(B) the Committee on Natural Resources of the House of Representatives;

(C) the Committee on Energy and Commerce of the House of Representatives; and

(D) the Committee on Energy and Natural Resources of the Senate.

(c) Funding.—

(1) Use of existing funds.—Out of any amounts made available to the Secretary and the Secretary of Energy that are not otherwise obligated, the Secretary and the Secretary of Energy, respectively, shall use such sums as are necessary to carry out this section.

(2) Treatment of funds contributed by the Secretary of Energy.—Amounts contributed by the Secretary of Energy to a selected project under paragraph (1) shall be nonreimbursable.

(3) Treatment of funds contributed by Secretary.—Amounts contributed by the Secretary
to a selected project under paragraph (1) shall be reimbursed in accordance with any applicable con-
tract or agreement.

(d) Effect.—Nothing in this section—

(1) creates, impairs, alters, or supersedes a Federal or State water right or interstate compact;

or

(2) affects or modifies any authorized purpose of a selected project.

SEC. 4. WESTERN WATER RESILIENCE CENTER.

(a) Establishment.—Not later than 180 days after the date of enactment of this Act, the Secretary and the Secretary of Energy shall enter into a partnership with 1 or more institutions of higher education to establish a center to conduct research on the development, commercialization, and deployment of innovations in water and energy technologies, to be known as the “Western Water Resilience Center”.

(b) Authorized Activities.—The Center shall con-
duct research on—

(1) data collection, modeling, and advanced data analytics of precipitation, runoff, and water re-
resources at the regional level;
(2) the development of technology and systems that improve management and assist in the development of water infrastructure;

(3) addressing—

(A) Tribal water supply and quality; and

(B) any other factors that affect the reliable access of Indian Tribes to water resources; and

(4) the establishment of a, or a partnership with an existing, water technology accelerator that—

(A) would bring water innovations to market by addressing multiple phases of technology development, including validation, development, startup, and scaling; and

(B) has an emphasis on binational collaboration between the United States and Middle Eastern countries, such as Israel.

(c) PRIORITY.—In entering into a partnership under subsection (a), the Secretary and the Secretary of Energy shall give priority to a partnership with an institution of higher education that—

(1) has experience conducting research on water scarcity issues;

(2) is located in a Reclamation State;
(3) has an established background of coordinating with Indian Tribes on water issues; and

(4) is located in a State that has an established presence in Israel for the promotion of trade.