

DEPARTMENT OF ENERGY
DELEGATION ORDER NO. S1-DEL-S4-2023-2
TO THE UNDER SECRETARY FOR SCIENCE (AND INNOVATION)

1. DELEGATION. Under the authority vested in me as Secretary of Energy and pursuant to section 642 of the Department of Energy Organization Act (Public Law 95-91, 42 U.S.C. 7252), I delegate to the Under Secretary for Science (and Innovation) authority to take the following actions:
 - 1.1 Under section 643 of the Department of Energy Organization Act (42 U.S.C. 7253), establish, alter, consolidate, or discontinue such second tier or below organizational units or components within the Under Secretary for Science (and Innovation)'s assigned programs and organizational elements as the Under Secretary for Science (and Innovation) may deem to be necessary or appropriate.
 - A. In exercising this authority, or as redelegated pursuant thereto, the Under Secretary for Science (and Innovation) will be limited by approved budgets, staffing level allocations, and Senior Executive Service and other executive resource position allocations. Organizational changes shall not be announced or implemented until appropriate union coordination and other pre-release clearances have been obtained.
 - B. This authority does not include approval of additions, deletions, or transfers of mission and functions of or between Departmental Headquarters or Field Elements, which authority is reserved to the Secretary.
 - C. The authority to alter or consolidate second tier or below organizational elements may be redelegated, in whole or in part, consistent with the terms of the Department of Energy Organization Act, to assigned Heads of Departmental Headquarters and Field Elements and to an official or officials one level below the Head of the Departmental Headquarters or Field Elements.
 - D. The authority to establish or discontinue organizational elements at the second tier or below may be redelegated only to the Head of Departmental Headquarters or Field Elements.
 - 1.2 In reference to the sale or lease of real property at a Department of Energy defense nuclear facility, make the discretionary decision of whether to hold harmless and indemnify any eligible entity, pursuant to the conditions contained in 50 U.S.C. 2811. This authority may be exercised only after obtaining the concurrence of the General Counsel. This authority may be redelegated only to Department officials who have been appointed by the President with the advice and consent of the Senate who have oversight responsibilities for defense nuclear facilities and may not be redelegated further.

- 1.3 Under section 624 of the Department of Energy Organization Act (42 U.S.C. 7234) and in accordance with the Federal Advisory Committee Act (5 U.S.C. 10, et seq.), nominate, appoint, renew the term of, and terminate the service of members; convene meetings; and make the determination to close all or part of a meeting in accordance with 5 U.S.C. 552b(c) for all committees organized pursuant to the Federal Advisory Committee Act that are administratively supported by an organization reporting to the Under Secretary for Science (and Innovation). Pursuant to 18 U.S.C. 208(b)(3), after consultation with the Department's Designated Agency Ethics Official, issue conflict-of-interest waivers for special Government employees serving on a Federal Advisory Committee that is administratively supported by an organization that reports to the Under Secretary for Science (and Innovation).
- 1.4 Direct a Head of Field Organization to curtail or suspend the operation of nuclear reactors, nuclear facilities, or related activities when, in the opinion of the Under Secretary for Science (and Innovation), continuing operations might result in an undue risk to the environment or to the safety and health of Departmental or contractor employees or to the public. This authority may not be redelegated.
- 1.5 Under section 988 of the Energy Policy Act of 2005 (Public Law 109-58, codified at 42 U.S.C. 16352):
 - A. Approve requests for reduction or elimination of the cost sharing requirement for a research and development activity of an applied nature in accordance with section 988(b)(3);
 - B. Approve requests for reduction of the cost sharing requirement for the non-federal share of demonstration and commercial application activities in accordance with section 988(c)(2); and
 - C. Exclude research and development of a basic or fundamental nature from the cost sharing requirements, as described in section 988(b)(2).

These authorities may be exercised only after providing notification to the Office of the Secretary. Furthermore, the approval authorities delegated in subparagraphs A and B can be exercised only in coordination with the Secretarial Policy Statement entitled, "Application of Cost Share Requirements under Section 988 of Energy Policy Act (EPACT) of 2005, Pub. L. 109-58." These authorities may not be redelegated below the position of Principal Deputy Assistant Secretary.

- 1.6 Initiate condemnation proceedings and execute declarations of taking; sign all correspondence and other documents in connection with such proceedings; and take all other necessary and appropriate actions to acquire, in connection with the Government's power of eminent domain, real or personal property or

interests therein for the Department of Energy (Department or DOE). The authority to initiate condemnation proceedings and execute declarations of taking shall not be redelegated.

- 1.7 On a nonexclusive basis, under section 4510 of the Atomic Energy Defense Act (50 U.S.C. 2661), take the actions described in subsection (b)(1) that are necessary for the development of a plan to mitigate the threat an unmanned aircraft system or unmanned aircraft poses to the safety or security of a covered facility or asset. This authority may not be redelegated.

Office of Electricity

- 1.8 Execute all activities necessary to carry out under section 40111 of the Infrastructure Investment and Jobs Act (Public Law 117-58) a study of codes and standards for the use of energy storage systems across sectors.
- 1.9 Under the Energy Independence Security Act of 2007 (Public Law 110-140):
 - A. Pursuant to section 137 (42 U.S.C. 17014), execute all activities necessary to carry out research, development, and demonstration to advance electric vehicle integration on the electric grid in coordination with the Grid Deployment Office and other program offices, as appropriate.
 - B. Pursuant to section 1304 (42 U.S.C. 17384), execute all activities necessary to carry out a smart grid technology research, development, and demonstration program in coordination with the Grid Deployment Office and other program offices, as appropriate.
 - C. Execute all activities necessary to carry out under section 1304A (42 U.S.C. 17384a) a program of research, development, demonstration, and commercial application on electric grid modeling, sensing, visualization, architecture development, and advanced operation and controls.
 - D. Execute all activities necessary to carry out under section 1310 (42 U.S.C. 17387) a research, development, and demonstration program to develop cost-effective integrated energy systems and develop a strategic plan pursuant to section 1310(b) (42 U.S.C. 17387(b)).
 - E. Execute all activities necessary to carry out section 1311 (42 U.S.C. 17014) to designate and solicit advice from an existing advisory committee on the authorization of research, development, and demonstration projects under sections 1304 and 1304A (42 U.S.C. 17384 and 17384a).
- 1.10 Under the Energy Policy Act of 2005 (Public Law 109-58):

- A. Pursuant to section 936 (42 U.S.C. 16236), execute all activities necessary to carry out a grid integration research, development, and demonstration program in coordination with the Grid Deployment Office.
- B. Execute all activities necessary to carry out under section 1224 (42 U.S.C. 16423) an Advanced Power System Technology Incentive Program to support the deployment of certain advanced power system technologies and improve and protect certain critical governmental, industrial, and commercial processes.
- C. Execute all activities necessary to carry out section 1234 (42 U.S.C. 16432) to conduct a study and submit an annual report on the benefits of economic dispatch.
- D. Execute all activities necessary to carry out programs of research, development, demonstration, and commercial application on distributed energy resources and systems reliability and efficiency, to improve the reliability and efficiency of distributed energy resources and systems, integrating advanced energy technologies with grid connectivity, including activities described in Subtitle B of Title IX of the Energy Policy Act of 2005 (42 U.S.C. 16211-15).

1.11 Under the Energy Act of 2020 (Public Law 116-260, Div. Z):

- A. Pursuant to section 8006 (42 U.S.C. 16215), consult with entities specified in section (b) in carrying out the amendments made by Title VIII, as appropriate under Federal law.
- B. Execute all activities necessary to carry out under section 8007 (42 U.S.C. 17389) a grant program to carry out eligible projects related to the modernization of the electric grid.
- C. Execute all activities necessary to carry out section 8008 (42 U.S.C. 17390) to develop voluntary model pathways for modernizing the electric grid, establish a steering committee to help develop those pathways, and provide technical assistance.
- D. Execute all activities necessary to carry out section 8009 to submit a report on performance metrics for electricity infrastructure providers.
- E. Exercise all activities necessary to carry out section 8010 (42 U.S.C. 17391) to provide assistance to States, regional organizations, and electric utilities to facilitate the development of State, regional, and local electricity distribution plans.

- F. Pursuant to section 8011 (42 U.S.C. 17392), execute all activities necessary to carry out a micro-grid and integrated micro-grid systems program in coordination with the Grid Deployment Office.
 - G. Exercise all activities necessary to carry out section 8014 to submit a report on electricity access and reliability.
- 1.12 Under section 646(a) of the DOE Organization Act (Public Law 95-91, 42 U.S.C. 7256(a)), enter and perform such contracts, leases, cooperative agreements, or other similar transactions with public agencies and private organizations and persons, and to make such payments as deemed necessary or appropriate to carry out functions delegated to the Assistant Secretary for Electricity.
 - 1.13 Implement section 13 of the Federal Energy Administration Act of 1974 (15 U.S.C. 772), to collect, assemble, evaluate, and analyze energy information and to exercise all information gathering authorities provided in this section.
 - 1.14 Implement section 11 of the Energy Supply and Environmental Coordination Act of 1974 (ESECA) (Public Law 93-319, 15 U.S.C. 796), to request, acquire and collect such energy information as the Under Secretary for Science (and Innovation) determines to be necessary to assist in the formulation of energy policy or to carry out the purposes of ESECA, and to exercise all energy information reporting authorities provided in this section.
 - 1.15 Participate in any proceeding before the Federal Energy Regulatory Commission, pursuant to the provisions of section 405 of the Department of Energy Organization Act (42 U.S.C. 7175), or in any proceeding before any Federal or State agency or commission, whenever such participation is related to the exercise of authority delegated to the Under Secretary for Science (and Innovation). The exercise of this authority is subject to the concurrence of the General Counsel.
 - 1.16 Exercise all authorities vested in the Secretary of Energy under the Stevenson Wydler Technology Innovation Act of 1980 (Public Law 96-480), as amended by section 105(a) of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010 (Public Law 111-358) and section 401(b) of the American Innovation and Competitiveness Act (Public Law 114-329), as set forth in 15 U.S.C. 3719.

Office of Energy Efficiency and Renewable Energy

- 1.17 In light of the policy process set forth in the Memorandum on the Rulemaking Process issued to all Departmental Elements by the Deputy Secretary on September 14, 2010, approve and issue all rulemaking and rule-related documents regarding energy efficiency and renewable energy as required or authorized by applicable law. This authority does not include the authority to issue subpoenas, test notices, or other enforcement-related documents. This authority may be redelegated.
- 1.18 Under section 656 of the Department of Energy Organization Act (42 U.S.C. 7266), periodically publish a list of certain Executive Agency Conservation Officers. This authority may be redelegated only to the Assistant Secretary for Energy Efficiency and Renewable Energy.
- 1.19 Under 10 C.F.R. 451.2, serve as the Deciding Official for the Renewable Energy Production Incentive Program, as described in 10 C.F.R. Part 451. This authority may not be redelegated beyond the Manager of the Golden Field Office. In exercising the authority in this paragraph, the delegate(s) shall be governed by the rules and procedures established in 10 C.F.R. Part 451.
- 1.20 Under the Energy Policy Act of 2005:
 - A. Under section 822 (added by Pub.L. 117-58, 42 U.S.C. 16166), execute all activities necessary to develop, issue and adjust, as necessary, clean hydrogen production qualifications.
 - B. Pursuant to section 1007 (42 U.S.C. 7256(g)), as amended by section 3118 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383), approve the award of Other Transaction Agreements and perform the other functions of the Secretary as set forth in 42 U.S.C. 7256(g)(9). This authority may be exercised only by an officer of the Department who has been appointed by the President by and with the advice and consent of the Senate, and with the concurrence of the Department's Senior Procurement Executive, on a transaction-by-transaction basis.
- 1.21 Exercise the authority of the Secretary of Energy under sections 1605(b)(1), 1605(b)(2) and 1605(b)(3) of the American Recovery and Reinvestment Act of 2009 ("Recovery Act") (Public Law 111-5) to waive, after making specific findings, the application of section 1605(a) of the Recovery Act to expenditures within the purview of responsibility of the Assistant Secretary for Energy Efficiency and Renewable Energy. Section 1605(a) requires that none of the funds appropriated or otherwise made available under the Recovery Act may be used for construction, alteration, maintenance, or repair of a public building or public work unless all of the iron, steel, and manufactured goods are produced

in the United States. Further, in exercising this authority, a delegate will carry out the responsibility contained in section 1605(c) to publish in the Federal Register a detailed written justification for each waiver as to why the provision is being waived. This authority shall not be redelegated below the position of Principal Deputy Assistant Secretary.

- 1.22 Exercise all authorities vested in the Secretary of Energy under the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96-480), as amended by section 105(a) of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010 (Public Law 111-358) and section 401(b) of the American Innovation and Competitiveness Act (Public Law 114-329), as set forth in 15 U.S.C. 3719.
- 1.23 Under the Infrastructure Investment and Jobs Act, execute all activities necessary to carry out under section 40207(c) (Public Law 117-58; 42 U.S.C. 18741(c)) a Battery Manufacturing and Recycling Grant Program, in coordination with the Office of Manufacturing and Energy Supply Chains.
- 1.24 Under the Energy Information and Security Act of 2007 (Public Law 110-140), under subsection (k) of section 641 (42 U.S.C. 17231(k)), execute all activities necessary to carry out an electric drive vehicle battery second-life applications and recycling program.
- 1.25 Under the Energy Act of 2020 (Public Law 116-260, Div. Z), in coordination with other offices so authorized:
 - A. Perform the functions vested in the Secretary of Energy by section 7002(a)(2) (30 U.S.C. 1606(a)(2)) to determine that any non-fuel mineral, element, substance, or material is a “critical material,” defined to mean it (i) has a high risk of a supply chain disruption, and (ii) serves an essential function in one or more energy technologies, including technologies that produce, transmit, store, and conserve energy. This authority may not be redelegated below the position of the Assistant Secretary for Energy Efficiency and Renewable Energy.
 - B. Execute all activities necessary to carry out under section 7002(g) (30 U.S.C. 1606(g)) a program of research, development, demonstration, and commercialization-- (A) to develop alternatives to critical materials that do not occur in significant abundance in the United States; (B) to promote the efficient production, use, and recycling of critical materials, with special consideration for domestic critical materials, throughout the supply chain; (C) to ensure the long-term, secure, and sustainable supply of critical materials; and (D) to prioritize work in areas that the private sector by itself is not likely to undertake due to financial or technical limitations.

- C. Execute all activities necessary to support under section 7002(h) (30 U.S.C. 1606(h)) construction of a Critical Materials Supply Chain Research Facility.
 - D. Execute all activities necessary to carry out under section 7002(i) (30 U.S.C. 1606(i)), in coordination with the Department of the Interior, and in consultation with the Director of the National Science Foundation, a Critical Materials Information Portal to collect, catalogue, disseminate, and archive information on critical materials.
- 1.26 Under section 34 of the National Institute of Standards and Technology Act (Pub. L. 113-235, 15 U.S.C. § 278s), execute all activities necessary to carry out under section 34(e) (15 U.S.C. 15 U.S.C. § 278s(e)) to establish and support Manufacturing USA Institutes.
- 1.27 Under the CHIPS and Science Act of 2022 (Public Law 117-262), establish policies under section 10263(a)(1)(42 U.S.C. § 18972) to promote the domestic production of technologies developed by the Manufacturing USA Network, in consultation with the Secretary of Commerce.

Office of Fossil Energy and Carbon Management

- 1.28 In reference to the regulation of imports and exports of natural gas:
- A. Perform the functions vested in the Secretary of Energy by sections 301(b) and 402(f) of the Department of Energy Organization Act to regulate natural gas under section 3 of the Natural Gas Act (15 U.S.C. 717b), as amended by section 201 of the Energy Policy Act of 1992 (Public Law 102-486) and section 311 of the Energy Policy Act of 2005 (Public Law 109-58):
 - 1. Consistent with the authority delegated by this Order, the Under Secretary for Science (and Innovation) or a delegate may attach such terms and conditions to import and export authorizations as the Under Secretary for Science (and Innovation) or a delegate shall determine to be appropriate.
 - 2. The authority delegated by this Order does not include the authority to approve the construction and operation of particular facilities, the site at which such facilities shall be located, and, with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports, except the Under Secretary for Science (and Innovation) or a delegate is authorized to disapprove the construction and operation of particular facilities, the site at which such facilities shall be located, and, with respect to natural gas that involves the

construction of new domestic facilities, the place of entry for imports or exit for exports.

- B. Establish and review priorities for the curtailment of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717 et seq.) and sections 401, 402, and 403 of the Natural Gas Policy Act of 1978 (Public Law 95-621, 15 U.S.C. 3391-3393); and consult with the Deputy Secretary concerning energy emergency-related curtailment policy guidance, as necessary or appropriate.
- 1.29 For all programs funded by Fossil Energy appropriations, exercise the authority of the Secretary of Energy under the Energy and Water Development and Related Agencies Appropriations Act, 2010 (Public Law 111-85), Title III, Department of Energy, Energy Programs, Fossil Energy Research and Development, to vest fee title or other property interests acquired in any entity, including the United States.
- 1.30 Participate in any proceeding before the Federal Energy Regulatory Commission, pursuant to the provisions of section 405 of the Department of Energy Organization Act (42 U.S.C. 7175), or in any proceeding before any Federal or State agency or commission whenever such participation is related to the exercise of authority delegated to the Under Secretary for Science (and Innovation). The exercise of this authority is subject to the concurrence of the General Counsel.
- 1.31 Under the Energy Policy Act of 2005 (Public Law 109-58):
- A. Execute all activities necessary to carry out the Secretary's responsibilities in section 349 (42 U.S.C. 15907) related to orphaned well site plugging, remediation, and restoration.
 - B. Exercise the authority of the Secretary of Energy under Title IV, Subtitle A, Section 402(f) (42 U.S.C. 15962) with respect to scheduled completion of selected Clean Coal Power Initiative projects.
 - C. Execute all activities necessary to carry out under section 961 (42 U.S.C. 16291) a research, development, demonstration, and commercial application programs in fossil energy.
 - D. Execute all activities necessary to carry out under section 962 (42 U.S.C. 16292) a carbon capture technology program in coordination with the Office of Clean Energy Demonstrations.
 - E. Execute all activities necessary to carry out under section 963 (42 U.S.C. 16293) carbon storage validation and testing program.

- F. Execute all activities necessary to carry out under section 964 (42 U.S.C. 16294) a program for research and development on coal mining technologies.
- G. Execute all activities necessary to carry out under section 965 (42 U.S.C. 16295) oil and gas research, development, demonstration, and commercial application programs.
- H. Execute all activities necessary to carry out under section 966 (42 U.S.C. 16296) a program of research, development, demonstration, and commercial application to maximize the productive capacity of marginal wells and reservoirs.
- I. Execute all activities necessary to establish and carry out under section 967 (42 U.S.C. 16297) a Complex Well Technology Testing Facility at the Rocky Mountain Oilfield Testing Center to increase the range of extended drilling technologies.
- J. Execute all activities necessary to carry out under section 969 (42 U.S.C. 16298) a program of research, development, demonstration, and commercialization related to carbon utilization.
- K. Execute all activities necessary to carry out under section 969A (42 U.S.C. 16298a) a program of research, development, and demonstration for carbon utilization.
- L. Execute all activities necessary to carry out under section 969B (42 U.S.C. 16298b) a multiyear, multiphase program of research, development, and technology demonstration to improve the efficiency of gas turbines used in power generation systems and aviation.
- M. Execute all activities necessary to carry out under section 969D (42 U.S.C. 16298d) a research, development, and demonstration program to test, validate, or improve technologies and strategies to remove carbon dioxide from the atmosphere on a large scale in coordination with other DOE offices and Federal agencies as appropriate.
- N. Execute all activities necessary to carry out under Subtitle J (42 U.S.C. 16371-78) a carbon dioxide transportation infrastructure finance and innovation program, in coordination with the Loan Programs Office.

1.32 Under the Energy Act of 2020 (Public Law 116-260, Div. Z):

- A. Execute all activities necessary to carry out under section 4007 a study to examine opportunities for research and development in integrating blue hydrogen technology in the industrial power sector and to submit a report that describes the results of that study.

- B. Execute all activities necessary to carry out under section 4008 (42 U.S.C. 10310) a research and development program on produced water.
 - C. Execute all activities necessary to carry out under section 7001 (42 U.S.C. 13344) a program of research and development on advanced separation technologies for the extraction and recovery of rare earth elements and other critical materials from coal and coal byproducts and to fund a full-scale integrated rare earth element extraction and separation demonstration facility and refinery, in coordination with the Office of Manufacturing and Energy Supply Chains.
 - D. Execute all activities necessary to carry out under section 7002(g) (30 U.S.C. 1606(g)) a program of research, development, demonstration, and commercialization-- (A) to develop alternatives to critical materials that do not occur in significant abundance in the United States; (B) to promote the efficient production, use, and recycling of critical materials, with special consideration for domestic critical materials, throughout the supply chain; (C) to ensure the long-term, secure, and sustainable supply of critical materials; and (D) to prioritize work in areas that the private sector by itself is not likely to undertake due to financial or technical limitations.
 - E. Execute all activities necessary to support under section 7002(h) (30 U.S.C. 1606(h)) construction of a Critical Materials Supply Chain Research Facility.
 - F. Execute all activities necessary to carry out under section 7002(i) (30 U.S.C. 1606(i)), in coordination with the Department of the Interior, and in consultation with the Director of the National Science Foundation, a Critical Materials Information Portal to collect, catalogue, disseminate, and archive information on critical materials.
- 1.33 Under the Energy Policy Act of 1992 (Public Law 102-486), execute all activities necessary to carry out under subtitles A and B of Title XIII (42 U.S.C. 13331-13343, 13351) coal research, development, demonstration, and commercial application program.
- 1.34 Under the DOE Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007 (Public Law 110-140, Title VII, Subtitle A), execute all activities necessary to carry out under section 703 (42 U.S.C. 17251) a program to demonstrate technologies for the large-scale capture of carbon dioxide from industrial sources.
- 1.35 Under the Methane Hydrate Research and Development Act of 2000 (Public Law 106-193, 30 U.S.C. 2001 et seq.), execute all activities necessary to carry out a methane hydrate research and development program.

- 1.36 Exercise all authorities vested in the Secretary of Energy under the Stevenson Wydler Technology Innovation Act of 1980 (Public Law 96-480), as amended by section 105(a) of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010 (Public Law 111-358) and section 401(b) of the American Innovation and Competitiveness Act (Public Law 114-329), as set forth in 15 U.S.C. 3719.
- 1.37 Under the Infrastructure Investment and Jobs Act (Public Law 117-58), execute all activities necessary to carry out under section 40207(b) (42 U.S.C. 18741(b)) a Battery Material Processing Grant Program, in coordination with the Office of Manufacturing and Energy Supply Chains.

Office of Nuclear Energy

- 1.38 Under section 91.b of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2121), and National Security Decision Directive Number 282 (September 30, 1987) on matters related to the Office of Nuclear Energy:
 - A. Authorize the transfer of special nuclear material to the Departments of the Army, Air Force, and Navy (Navy Facilities Engineering Command only) in such quantities and at such times as necessary for cores for new military reactors and for replacement cores for existing military reactors, and for miscellaneous purposes (other than use in atomic weapons) for which material, fabrication, and new reactors the Congress shall have authorized funds.
 - B. Authorize the Departments of the Army, Air Force, and Navy to manufacture, produce, or acquire utilization facilities, other than with respect to nuclear powered ships, for which Congress shall have authorized funds.
- 1.39 Execute all activities necessary to provide research and development assistance under section 31(a) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2051(a)).
- 1.40 On matters pertaining to the former Office of Civilian Radioactive Waste Management:
 - A. Sign all documents and take such other actions as may be necessary and appropriate for the submission for publication to the Federal Register of notices concerning actions undertaken to implement the authorities and functions provided in the Nuclear Waste Policy Act of 1982 (Public Law 97-425). The authority delegated does not include rulemaking authority.
 - B. Assert, on a nonexclusive basis, the Federal Government's deliberative process privilege.

- 1.41 Execute all activities necessary to carry out the HALEU Availability Program under section 2001(a) of the Energy Act of 2020 (42 U.S.C. 16281(a)), which mandates establishing and carrying out a program to support the availability of HALEU for civilian domestic research, development, demonstration, and commercial use.
- 1.42 Execute all activities necessary to offer financial and technical assistance to entities to conduct feasibility studies for the purpose of identifying suitable locations for the deployment of micro-reactors, small modular reactors, and advanced nuclear reactors in isolated communities, as directed by section 40321(d) of the Infrastructure Investment and Jobs Act (42 U.S.C. 18751(d)).
- 1.43 Under the Energy Policy Act of 2005 (Public Law 109-58):
 - A. Execute all activities under section 951 (42 U.S.C. 16271) necessary to carry out programs of civilian nuclear research, development, demonstration, and commercial application, including activities under this subtitle.
 - B. Execute all activities under section 953 (42 U.S.C. 16273) necessary to conduct an advanced fuel cycle research, development, demonstration, and commercial application program to support the goals described in this section.
 - C. Execute all activities under section 954, as amended (42 U.S.C. 16274 (5)), necessary to carry out the Advanced Nuclear Research Infrastructure Enhancement Subprogram.
 - D. Execute all activities under section 955 (42 U.S.C. 16275) necessary to operate and maintain infrastructure and facilities to support the nuclear energy research, development, demonstration, and commercial application programs, including radiological facilities management, isotope production, and facilities management.
 - E. Execute all activities under section 957, as amended (42 U.S.C. 16277), to carry out a program to enhance the capabilities of the U.S. to develop new reactor technologies through high-performance computation modeling and simulation techniques.
 - F. Under section 959A (42 U.S.C. 16279a), establish and carry out the Advanced Reactor Demonstration Program.
 - G. Execute all activities necessary to carry out section 959C, as amended (42 U.S.C. 16279c), in the organization and administration of nuclear energy programs.

- 1.44 Pursuant to section 107(a) of the Energy Reorganization Act of 1974 (42 U.S.C. 5817(a)), take such steps as the Under Secretary for Science (and Innovation) deems necessary to ensure the continued conduct of research and development and related activities in areas or fields the Under Secretary for Science (and Innovation) deems to be pertinent to the acquisition of an expanded fund of scientific, technical, and practical knowledge in energy matters.
- 1.45 Under section 646(a) of the Department of Energy Organization Act (42 U.S.C. 7256(a)), enter and perform such contracts, leases, cooperative agreements, or other similar transactions with public agencies and private organizations and persons, and make such payments as deemed necessary or appropriate to carry out functions delegated to the Under Secretary for Science (and Innovation).
- 1.46 Perform activities related to international energy cooperation:
 - A. Execute all activities necessary to carry out a program for international nuclear energy cooperation under section 959B of the Energy Policy Act of 2005 (42 U.S.C. 16279b).
 - B. Execute all activities necessary to encourage and participate in international cooperation in energy and related environmental research and development, as permitted by section 103(9) of the Energy Reorganization Act of 1974 (42 U.S.C. 5813(9)).
 - C. Execute all activities necessary to carry out a program under section 985(a) of the Energy Policy Act of 2005, as amended (42 U.S.C. 16341(a)) to promote cooperation on energy issues with countries of the Western Hemisphere.
- 1.47 Under Section 2(a) of Presidential Proclamation 10371, pursuant to the instructions at 87 FR 25629 (May 2, 2022), in consultation with the Secretaries of State and Commerce, or their delegates, make determinations that no viable source of supply of source material, special nuclear material, and nuclear byproduct material is available that would not require transport by Russian-affiliated vessels.

Office of Science

- 1.48 Execute all activities necessary to carry out the Computational Science Graduate Fellowship program under section 10104(j) of the CHIPS Act of 2022 (42 U.S.C. 18642), which authorizes the Secretary to support the Computational Science Graduate Fellowship program in order to facilitate collaboration between graduate students and researchers at the National Laboratories, and contribute to the development of a diverse and inclusive computational workforce to help advance research in all areas of computational science relevant to the mission of

the Department, including quantum computing, and administer authorized funding to carry out the activities under this subsection.

- 1.49 Under the National Quantum Initiative Act (15 U.S.C. 8851):
 - A. Execute all activities necessary under section 403 to carry out a research, development, and demonstration program to accelerate innovation in quantum network infrastructure and administer authorized funding to carry out the activities under this subsection.
 - B. Execute all activities necessary under section 404 to establish and carry out a program, to be known as the 'Quantum User Expansion for Science and Technology program' or 'QUEST program,' to encourage and facilitate access to United States quantum computing hardware and quantum computing clouds for research purposes and administer authorized funding to carry out the activities under this subsection
- 1.50 Execute all activities necessary to carry out a program under section 307 of the Department of Energy Research and Innovation Act (42 U.S.C. 18645) to conduct and support collaborative research, development, and demonstration of fusion energy technologies, through high-performance computation modeling and simulation techniques and administer authorized funding to carry out the activities under this subsection.
- 1.51 Under section 2 of the American Super Computing Leadership Act of 2017 (15 U.S.C. 5542), execute all activities necessary to carry out a coordinated program across the Department of research and development (including development of software and hardware) to advance high-end computing systems, including program for Exascale computing under this section, to promote the missions of the Department.
- 1.52 Under Section 9005 of the Energy Act of 2020 (42 U.S.C. 7256c), execute all activities necessary to carry out demonstration projects as a milestone-based demonstration project that requires particular technical and financial milestones to be met before a participant is awarded grants by the Department through a competitive award process.
- 1.53 Using authority of the Secretary under section 646(g) of the Department of Energy Organization Act (42 U.S.C. 7256(g)) to enter into transactions (other than contracts, cooperative agreements, and grants), execute all activities under section 2008 of the Energy Act of 2020 (42 U.S.C. 18645) necessary to carry out the milestone-based fusion energy development program under this section, which requires projects to meet particular technical milestones before a participant is awarded funds by the Department. These authorities, with the exception of those under section 646(g) of the DOE Act, may be redelegated.

- 1.54 Execute all activities necessary to conduct programs under section 971(a) of the Energy Policy Act of 2005 (42 U.S.C. 16311(a)) of research, development, demonstration, and commercial application in high energy physics, nuclear physics, biological and environmental research, basic energy sciences, advanced scientific computing research, and fusion energy sciences, including include support for facilities and infrastructure, education, outreach, information, analysis, and coordination activities.
- 1.55 Under the Energy Act of 2020 (Public Law 116-260, Div. Z):
 - A. Execute all activities necessary to carry out under section 7002(g) (30 U.S.C. 1606(g)) a program of research, development, demonstration, and commercialization-- (A) to develop alternatives to critical materials that do not occur in significant abundance in the United States; (B) to promote the efficient production, use, and recycling of critical materials, with special consideration for domestic critical materials, throughout the supply chain; (C) to ensure the long-term, secure, and sustainable supply of critical materials; and (D) to prioritize work in areas that the private sector by itself is not likely to undertake due to financial or technical limitations.
 - B. Execute all activities necessary to support under section 7002(h) (30 U.S.C. 1606(h)) construction of a Critical Materials Supply Chain Research Facility.
 - C. Execute all activities necessary to carry out under section 7002(i) (30 U.S.C. 1606(i)), in coordination with the Department of the Interior, and in consultation with the Director of the National Science Foundation, a Critical Materials Information Portal to collect, catalogue, disseminate, and archive information on critical materials.
- 1.56 Under section 8 of the Federal Nonnuclear Energy Research and Development Act of 1974 (Public Law 93-577, 42 U.S.C. 5907(a)) carry out functions relating to identification of opportunities to accelerate the commercial applications of new energy technologies.
- 1.57 Approve determinations preceding Program Opportunity Notices (PONs).
- 1.58 Under Title IV of Public Law 106-554 in reference to the American Museum of Science and Energy (Museum):
 - A. Accept and dispose of any gift, devise, or bequest of services or property, real or personal, valued at or under \$25,000, that is designated in a written document by the person making the gift, devise, or bequest as intended for the Museum, having determined that such gift, devise, or bequest is suitable and beneficial for use by the Museum. The acceptance

of any such gift, devise, or bequest must be concurred on by the Office of Chief Counsel, Oak Ridge Operations Office, or the Office of the Assistant General Counsel for General Law. All donations of any gift, devise, or bequest of services or property, real or personal, valued above \$25,000 shall be approved by the Secretary of Energy.

- B. Operate a retail outlet on the premises of the Museum for the purpose of selling or distributing items that are relevant to the contents of the Museum and are informative, educational, and tasteful.
- C. Collect reasonable fees, where feasible and appropriate, for admission to the Museum and use of Museum facilities for special meetings and events.
- D. Exhibit, perform, display, and publish materials and information of or relating to the Museum in any media or place.
- E. Approve guidelines for leasing space on the premises of the Museum, and lease space on the premises of the Museum at reasonable rates and for uses consistent with such guidelines.
- F. Recruit, train, and accept the services of individuals or entities as volunteers for services or activities related to the Museum.
- G. Use the proceeds from the aforementioned activities to pay the costs of the Museum.

1.59 Operate, manage, and administer the Department of Energy Isotope Program, as authorized under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and manage and administer the Department of Energy Isotope Program Revolving Fund, established under Public Law 101-101 and Public Law 103-316. This delegated authority shall include all functions relating to, and necessary for, the production, sale, and distribution of isotopes authorized by Federal law and regulation.

2. RESCISSION. Delegation Order No. S1-DEL-S4-2023 is hereby rescinded.

3. LIMITATION.

- 3.1 In exercising the authority delegated in this Order, a delegate shall be governed by the rules and regulations of the Department of Energy and the policies and procedures prescribed by the Secretary or delegate(s).
- 3.2 Nothing in this Order precludes the Secretary from exercising any of the authority delegated by this Order.

3.3 Nothing in this Order shall be construed to supersede or otherwise interfere with the authorities provided to the Administrator for Nuclear Security by law or by delegation. Furthermore, nothing herein constitutes authority to exercise authority, direction, or control of an employee of the National Nuclear Security Administration or its contractors.

3.4 Any amendments to this Order shall be made in consultation with the Department of Energy General Counsel.

4. AUTHORITY TO REDELEGATE.

4.1 Except as expressly prohibited by law, regulation, or this Order, the Under Secretary for Science (and Innovation) may delegate this authority further, in whole or in part.

4.2 Copies of redelegations and any subsequent redelegations shall be provided to the Office of Management, which manages the Secretarial Delegations of Authority system.

5. DURATION AND EFFECTIVE DATE.

5.1 All actions pursuant to any authority delegated prior to this Order or pursuant to any authority delegated by this Order taken prior to and in effect on the date of this Order are ratified and remain in force as if taken under this Order, unless or until rescinded, amended, or superseded.

5.2 This Delegation Order is effective 05/30/2023.



Jennifer M. Granholm
Secretary of Energy