# S. 517

To authorize funding the Department of Energy to enhance its mission areas through technology transfer and partnerships for fiscal years 2002 through 2006, and for other purposes.

### IN THE SENATE OF THE UNITED STATES

March 12, 2001

Mr. BINGAMAN (for himself, Mr. DOMENICI, and Mrs. MURRAY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

## A BILL

To authorize funding the Department of Energy to enhance its mission areas through technology transfer and partnerships for fiscal years 2002 through 2006, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "National Laboratories
- 5 Partnership Improvement Act of 2001".

### 1 SEC. 2. DEFINITIONS. 2 For purposes of this Act— (1) the term "Department" means the Depart-3 4 ment of Energy; (2) the term "departmental mission" means 5 6 any of the functions vested in the Secretary of En-7 ergy by the Department of Energy Organization Act 8 (42 U.S.C. 7101 et seq.) or other law; (3) the term "institution of higher education" 9 10 has the meaning given such term in section 1201(a) 11 of the Higher Education Act of 1965 (20 U.S.C. 12 1141(a)); (4) the term "National Laboratory" means any 13 14 of the following institutions owned by the Depart-15 ment of Energy— 16 (A) Argonne National Laboratory; 17 (B) Brookhaven National Laboratory; 18 (C) Idaho National Engineering and Envi-19 ronmental Laboratory; 20 (D) Lawrence Berkeley National Labora-21 tory; 22 (E) Lawrence Livermore National Labora-23 tory; 24 (F) Los Alamos National Laboratory; 25 (G) National Renewable Energy Labora-

tory;

1	(H) Oak Ridge National Laboratory;
2	(I) Pacific Northwest National Laboratory;
3	or
4	(J) Sandia National Laboratory;
5	(5) the term "facility" means any of the fol-
6	lowing institutions owned by the Department of
7	Energy—
8	(A) Ames Laboratory;
9	(B) East Tennessee Technology Park;
10	(C) Environmental Measurement Labora-
11	tory;
12	(D) Fermi National Accelerator Labora-
13	tory;
14	(E) Kansas City Plant;
15	(F) National Energy Technology Labora-
16	tory;
17	(G) Nevada Test Site;
18	(H) Princeton Plasma Physics Laboratory;
19	(I) Savannah River Technology Center;
20	(J) Stanford Linear Accelerator Center;
21	(K) Thomas Jefferson National Accel-
22	erator Facility;
23	(L) Waste Isolation Pilot Plant;
24	(M) Y-12 facility at Oak Ridge National
25	Laboratory; or

1	(N) other similar organization of the De-
2	partment designated by the Secretary that en-
3	gages in technology transfer, partnering, or li-
4	censing activities;
5	(6) the term "nonprofit institution" has the
6	meaning given such term in section 4 of the Steven-
7	son-Wydler Technology Innovation Act of 1980 (15
8	U.S.C. 3703(5));
9	(7) the term "Secretary" means the Secretary
10	of Energy;
11	(8) the term "small business concern" has the
12	meaning given such term in section 3 of the Small
13	Business Act (15 U.S.C. 632);
14	(9) the term "technology-related business con-
15	cern" means a for-profit corporation, company, asso-
16	ciation, firm, partnership, or small business concern
17	that—
18	(A) conducts scientific or engineering re-
19	search,
20	(B) develops new technologies,
21	(C) manufacturers products based on new
22	technologies, or
23	(D) performs technological services;
24	(10) the term "technology cluster" means a
25	concentration of—

1	(A) technology-related business concerns;
2	(B) institutions of higher education; or
3	(C) other nonprofit institutions,
4	that reinforce each other's performance through for-
5	mal or informal relationships;
6	(11) the term "socially and economically dis-
7	advantaged small business concerns" has the mean-
8	ing given such term in section 8(a)(4) of the Small
9	Business Act (15 U.S.C. 637(a)(4)); and
10	(12) the term "NNSA" means the National
11	Nuclear Security Administration established by title
12	XXXII of the National Defense Authorization Act
13	for Fiscal Year 2000 (Public Law 106–65).
14	SEC. 3. TECHNOLOGY INFRASTRUCTURE PILOT PROGRAM.
15	(a) Establishment.—The Secretary, through the
16	appropriate officials of the Department, shall establish a
17	Technology Infrastructure Pilot Program in accordance
18	with this section.
19	(b) Purpose.—The purpose of the program shall be
20	to improve the ability of National Laboratories or facilities
21	to support departmental missions by—
22	(1) stimulating the development of technology
23	clusters that can support the missions of the Na-
24	tional Laboratories or facilities;

1	(2) improving the ability of National Labora-
2	tories or facilities to leverage and benefit from com-
3	mercial research, technology, products, processes,
4	and services; and
5	(3) encouraging the exchange of scientific and
6	technological expertise between National Labora-
7	tories or facilities and—
8	(A) institutions of higher education,
9	(B) technology-related business concerns,
10	(C) nonprofit institutions, and
11	(D) agencies of State, tribal, or local gov-
12	ernments,
13	that can support the missions of the National Lab-
14	oratories and facilities.
15	(c) PILOT PROGRAM.—In each of the first three fiscal
16	years after the date of enactment of this section, the Sec-
17	retary may provide no more than \$10,000,000, divided
18	equally, among no more than ten National Laboratories
19	or facilities selected by the Secretary to conduct Tech-
20	nology Infrastructure Program Pilot Programs.
21	(d) Projects.—The Secretary shall authorize the
22	Director of each National Laboratory or facility des-
23	ignated under subsection (c) to implement the Technology
24	Infrastructure Pilot Program at such National Laboratory

1	or facility through projects that meet the requirements of
2	subsections (e) and (f).
3	(e) Program Requirements.—Each project funded
4	under this section shall meet the following requirements:
5	(1) MINIMUM PARTICIPANTS.—Each project
6	shall at a minimum include—
7	(A) a National Laboratory or facility; and
8	(B) one of the following entities—
9	(i) a business,
10	(ii) an institution of higher education,
11	(iii) a nonprofit institution, or
12	(iv) an agency of a State, local, or
13	tribal government.
14	(2) Cost sharing.—
15	(A) MINIMUM AMOUNT.—Not less than 50
16	percent of the costs of each project funded
17	under this section shall be provided from non-
18	Federal sources.
19	(B) Qualified funding and re-
20	SOURCES.—
21	(i) The calculation of costs paid by
22	the non-Federal sources to a project shall
23	include cash, personnel, services, equip-
24	ment, and other resources expended on the
25	project.

- (ii) Independent research and develop-ment expenses of government contractors that qualify for reimbursement under section 31–205–18(e) of the Federal Acquisition Regulations issued pursuant to section 25(c)(1) of the Office of Federal Procure-ment Policy Act (41 U.S.C. 421(c)(1)) may be credited towards costs paid by non-Federal sources to a project, if the ex-penses meet the other requirements of this section.
  - (iii) No funds or other resources expended either before the start of a project under this section or outside the project's scope of work shall be credited toward the costs paid by the non-Federal sources to the project.
  - (3) Competitive selection.—All projects where a party other than the Department or a National Laboratory or facility receives funding under this section shall, to the extent practicable, be competitively selected by the National Laboratory or facility using procedures determined to be appropriate by the Secretary or his designee.

1	(4) Accounting standards.—Any participant
2	receiving funding under this section, other than a
3	National Laboratory or facility, may use generally
4	accepted accounting principles for maintaining ac-
5	counts, books, and records relating to the project.
6	(5) Limitations.—No Federal funds shall be
7	made available under this section for—
8	(A) construction; or
9	(B) any project for more than five years.
10	(f) SELECTION CRITERIA.—
11	(1) Threshold funding criteria.—The Sec-
12	retary shall authorize the provision of Federal funds
13	for projects under this section only when the Direc-
14	tor of the National Laboratory or facility managing
15	such a project determines that the project is likely
16	to improve the participating National Laboratory or
17	facility's ability to achieve technical success in meet-
18	ing departmental missions.
19	(2) Additional Criteria.—The Secretary
20	shall also require the Director of the National Lab-
21	oratory or facility managing a project under this sec-
22	tion to consider the following criteria in selecting a
23	project to receive Federal funds—
24	(A) the potential of the project to succeed,
25	based on its technical merit, team members,

- 1 management approach, resources, and project 2 plan;
  - (B) the potential of the project to promote the development of a commercially sustainable technology cluster, one that will derive most of the demand for its products or services from the private sector, that can support the missions of the participating National Laboratory or facility;
  - (C) the potential of the project to promote the use of commercial research, technology, products, processes, and services by the participating National Laboratory or facility to achieve its departmental mission or the commercial development of technological innovations made at the participating National Laboratory or facility;
  - (D) the commitment shown by non-Federal organizations to the project, based primarily on the nature and amount of the financial and other resources they will risk on the project;
  - (E) the extent to which the project involves a wide variety and number of institutions of higher education, nonprofit institutions, and technology-related business concerns that can

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- support the missions of the participating National Laboratory or facility and that will make substantive contributions to achieving the goals of the project;
  - (F) the extent of participation in the project by agencies of State, tribal, or local governments that will make substantive contributions to achieving the goals of the project; and
  - (G) the extent to which the project focuses on promoting the development of technology-related business concerns that are small business concerns or involves such small business concerns substantively in the project.
  - (3) SAVINGS CLAUSE.—Nothing in this subsection shall limit the Secretary from requiring the consideration of other criteria, as appropriate, in determining whether projects should be funded under this section.
- 19 (g) Report to Congress on Full Implementa-20 tion.—Not later than 120 days after the start of the third 21 fiscal year after the date of enactment of this section, the 22 Secretary shall report to Congress on whether the Tech-23 nology Infrastructure Program should be continued be-24 youd the pilot stage, and, if so, how the fully implemented 25 program should be managed. This report shall take into

6

7

8

9

10

11

12

13

14

15

16

17

- 1 consideration the results of the pilot program to date and
- 2 the views of the relevant Directors of the National labora-
- 3 tories and facilities. The report shall include any proposals
- 4 for legislation considered necessary by the Secretary to
- 5 fully implement the program.

#### 6 SEC. 4. SMALL BUSINESS ADVOCACY AND ASSISTANCE.

- 7 (a) ADVOCACY FUNCTION.—The Secretary shall di-
- 8 rect the Director of each National Laboratory, and may
- 9 direct the Director of each facility the Secretary deter-
- 10 mines to be appropriate, to establish a small business ad-
- 11 vocacy function that is organizationally independent of the
- 12 procurement function at the National Laboratory or facil-
- 13 ity. The person or office vested with the small business
- 14 advocacy function shall—
- 15 (1) work to increase the participation of small
- business concerns, including socially and economi-
- 17 cally disadvantaged small business concerns, in pro-
- curements, collaborative research, technology licens-
- ing, and technology transfer activities conducted by
- the National Laboratory or facility;
- 21 (2) report to the Director of the National Lab-
- oratory or facility on the actual participation of
- small business concerns in procurements and col-
- laborative research along with recommendations, if
- appropriate, on how to improve participation;

- 1 (3) make available to small business concerns 2 training, mentoring, and clear, up-to-date informa-3 tion on how to participate in the procurements and 4 collaborative research, including how to submit effec-5 tive proposals;
  - (4) increase the awareness inside the National Laboratory or facility of the capabilities and opportunities presented by small business concerns; and
  - (5) establish guidelines for the program under subsection (b) and report on the effectiveness of such program to the Director of the National Laboratory or facility.
- 13 (b) ESTABLISHMENT OF SMALL BUSINESS ASSIST14 ANCE PROGRAM.—The Secretary shall direct the Director
  15 of each National Laboratory, and may direct the Director
  16 of each facility the Secretary determines to be appropriate,
  17 to establish a program to provide small business
  18 concerns—
  - (1) assistance directed at making them more effective and efficient subcontractors or suppliers to the National Laboratory or facility; or
- 22 (2) general technical assistance, the cost of 23 which shall not exceed \$10,000 per instance of as-24 sistance, to improve the small business concern's 25 products or services.

7

8

9

10

11

12

19

20

1	(c) USE OF FUNDS.—None of the funds expended
2	under subsection (b) may be used for direct grants to the
3	small business concerns.
4	SEC. 5. TECHNOLOGY PARTNERSHIPS OMBUDSMAN.
5	(a) Appointment of Ombudsman.—The Secretary
6	shall direct the Director of each National Laboratory, and
7	may direct the Director of each facility the Secretary de-
8	termines to be appropriate, to appoint a technology part-
9	nership ombudsman to hear and help resolve complaints
10	from outside organizations regarding each laboratory's
11	policies and actions with respect to technology partner-
12	ships (including cooperative research and development
13	agreements), patents, and technology licensing. Each om-
14	budsman shall—
15	(1) be a senior official of the National Labora-
16	tory or facility who is not involved in day-to-day
17	technology partnerships, patents, or technology li-
18	censing, or, if appointed from outside the laboratory,
19	function as such a senior official; and
20	(2) have direct access to the Director of the
21	National Laboratory or facility.
22	(b) Duties.—Each ombudsman shall—
23	(1) serve as the focal point for assisting the
24	public and industry in resolving complaints and dis-

1	putes with the laboratory regarding technology part-
2	nerships, patents, and technology licensing;
3	(2) promote the use of collaborative alternative
4	dispute resolution techniques such as mediation to
5	facilitate the speedy and low-cost resolution of com-
6	plaints and disputes, when appropriate; and
7	(3) report, through the Director of the National
8	Laboratory or facility, to the Department annually
9	on the number and nature of complaints and dis-
10	putes raised, along with the ombudsman's assess-
11	ment of their resolution, consistent with the protec-
12	tion of confidential and sensitive information.
13	(c) DUAL APPOINTMENT.—A person vested with the
14	small business advocacy function of section 4 may also
15	serve as the technology partnership ombudsman.
16	SEC. 6. STUDIES RELATED TO IMPROVING MISSION EFFEC-
17	TIVENESS, PARTNERSHIPS, AND TECH-
18	NOLOGY TRANSFER AT NATIONAL LABORA-
19	TORIES.
20	(a) Studies.—The Secretary shall direct the Lab-
21	oratory Operations Board to study and report to him, not
22	later than one year after the date of enactment of this
23	section, on the following topics—
24	(1) the possible benefits from and need for poli-
25	cies and procedures to facilitate the transfer of sci-

1	entific, technical, and professional personnel among
2	National Laboratories and facilities; and
3	(2) the possible benefits from and need for
4	changes in—
5	(A) the indemnification requirements for
6	patents or other intellectual property licensed
7	from a National Laboratory or facility;
8	(B) the royalty and fee schedules and
9	types of compensation that may be used for
10	patents or other intellectual property licensed to
11	a small business concern from a National Lab-
12	oratory or facility;
13	(C) the licensing procedures and require-
14	ments for patents and other intellectual prop-
15	erty;
16	(D) the rights given to a small business
17	concern that has licensed a patent or other in-
18	tellectual property from a National Laboratory
19	or facility to bring suit against third parties in-
20	fringing such intellectual property;
21	(E) the advance funding requirements for
22	a small business concern funding a project at a
23	National Laboratory or facility through a
24	Funds-In-Agreement:

- 1 (F) the intellectual property rights allo-2 cated to a business when it is funding a project 3 at a National Laboratory or facility through a 4 Funds-In-Agreement; and
- (G) policies on royalty payments to inven tors employed by a contractor-operated National Laboratory or facility, including those for
   inventions made under a Funds-In-Agreement.
- 9 (b) DEFINITION.—For the purposes of this section, 10 the term "Funds-In-Agreement" means a contract be-11 tween the Department and a non-Federal organization
- 12 where that organization pays the Department to provide
- 13 a service or material not otherwise available in the domes-
- 14 tic private sector.
- (c) Report to Congress.—Not later than one
- 16 month after receiving the report under subsection (a), the
- 17 Secretary shall transmit the report, along with his rec-
- 18 ommendations for action and proposals for legislation to
- 19 implement the recommendations, to Congress.
- 20 SEC. 7. OTHER TRANSACTIONS AUTHORITY.
- 21 (a) New Authority.—Section 646 of the Depart-
- 22 ment of Energy Organization Act (42 U.S.C. 7256) is
- 23 amended by adding at the end the following new sub-
- 24 section:

- 1 "(g) Other Transactions Authority.—(1) In ad-
- 2 dition to other authorities granted to the Secretary to
- 3 enter into procurement contracts, leases, cooperative
- 4 agreements, grants, and other similar arrangements, the
- 5 Secretary may enter into other transactions with public
- 6 agencies, private organizations, or persons on such terms
- 7 as the Secretary may deem appropriate in furtherance of
- 8 basic, applied, and advanced research functions now or
- 9 hereafter vested in the Secretary. Such other transactions
- 10 shall not be subject to the provisions of section 9 of the
- 11 Federal Nonnuclear Energy Research and Development
- 12 Act of 1974 (42 U.S.C. 5908).
- 13 "(2)(A) The Secretary of Energy shall ensure that—
- 14 "(i) to the maximum extent practicable, no
- transaction entered into under paragraph (1) pro-
- vides for research that duplicates research being
- 17 conducted under existing programs carried out by
- the Department of Energy; and
- "(ii) to the extent that the Secretary determines
- practicable, the funds provided by the Government
- 21 under a transaction authorized by paragraph (1) do
- 22 not exceed the total amount provided by other par-
- 23 ties to the transaction.
- 24 "(B) A transaction authorized by paragraph (1) may
- 25 be used for a research project when the use of a standard

- 1 contract, grant, or cooperative agreement for such project
- 2 is not feasible or appropriate.
- 3 "(3)(A) The Secretary shall not disclose any trade
- 4 secret or commercial or financial information submitted
- 5 by a non-Federal entity under paragraph (1) that is privi-
- 6 leged and confidential.
- 7 "(B) The Secretary shall not disclose, for five years
- 8 after the date the information is received, any other infor-
- 9 mation submitted by a non-Federal entity under para-
- 10 graph (1), including any proposal, proposal abstract, docu-
- 11 ment supporting a proposal, business plan, or technical
- 12 information that is privileged and confidential.
- 13 "(C) The Secretary may protect from disclosure, for
- 14 up to five years, any information developed pursuant to
- 15 a transaction under paragraph (1) that would be protected
- 16 from disclosure under section 552(b)(4) of title 5, United
- 17 States Code, if obtained from a person other than a Fed-
- 18 eral agency.".
- 19 (b) Implementation.—Not later than six months
- 20 after the date of enactment of this section, the Depart-
- 21 ment shall establish guidelines for the use of other trans-
- 22 actions. Other transactions shall be made available, if
- 23 needed, in order to implement projects funded under sec-
- 24 tion 3.

1	SEC. 8. CONFORMANCE WITH NNSA ORGANIZATIONAL
2	STRUCTURE.
3	All actions taken by the Secretary in carrying out this
4	Act with respect to National Laboratories and facilities
5	that are part of the NNSA shall be through the Adminis-
6	trator for Nuclear Security in accordance with the require-
7	ments of title XXXII of the National Defense Authoriza-
8	tion Act for Fiscal Year 2000.
9	SEC. 9. COOPERATIVE RESEARCH AND DEVELOPMENT
10	AGREEMENTS FOR GOVERNMENT-OWNED,
11	CONTRACTOR-OPERATED LABORATORIES.
12	(a) Strategic Plans.—Subsection (a) of section 12
13	of the Stevenson-Wydler Technology Innovation Act of
14	1980 (15 U.S.C. 3710a) is amended by striking "joint
15	work statement," and inserting "joint work statement or,
16	if permitted by the agency, in an agency-approved annual
17	strategic plan,".
18	(b) Experimental Federal Waivers.—Sub-
19	section (b) of that section is amended by adding at the
20	end the following new paragraph:
21	"(6)(A) In the case of a Department of Energy
22	laboratory, a designated official of the Department
23	of Energy may waive any license retained by the
24	Government under paragraph $(1)(A)$ , $(2)$ , or $(3)(D)$ ,
25	in whole or in part and according to negotiated
26	terms and conditions, if the designated official finds

1	that the retention of the license by the Department
2	of Energy would substantially inhibit the commer-
3	cialization of an invention that would otherwise serve
4	an important Federal mission.
5	"(B) The authority to grant a waiver under
6	subparagraph (A) shall expire on the date that is 5
7	years after the date of the enactment of the Na-
8	tional Defense Authorization Act for Fiscal Year
9	2001.
10	"(C) The expiration under subparagraph (B) of
11	authority to grant a waiver under subparagraph (A)
12	shall not effect any waiver granted under subpara-
13	graph (A) before the expiration of such authority.".
14	(c) Time Required for Approval.—Subsection
15	(c)(5) of that section is amended—
16	(1) by striking subparagraph (C);
17	(2) by redesignating subparagraph (D) as sub-
18	paragraph (C); and
19	(3) in subparagraph (C) as so redesignated—
20	(A) in clause (i)—
21	(i) by striking "with a small business
22	firm"; and
23	(ii) by inserting "if" after "state-
24	ment"; and

1	(B) by adding at the end the following new
2	clauses:
3	"(iv) Any agency that has contracted
4	with a non-Federal entity to operate a lab-

with a non-Federal entity to operate a laboratory may develop and provide to such laboratory one or more model cooperative research and development agreements, for the purposes of standardizing practices and procedures, resolving common legal issues, and enabling review of cooperative research and development agreements to be carried out in a routine and prompt manner.

"(v) A Federal agency may waive the requirements of clause (i) or (ii) under such circumstances as the agency considers appropriate. However, the agency may not take longer than 30 days to review and approve, request modifications to, or disapprove any proposed agreement or joint work statement that it elects to receive.".

1	SEC. 10. COOPERATIVE RESEARCH AND DEVELOPMENT OF
2	THE NATIONAL NUCLEAR SECURITY ADMIN-
3	ISTRATION.
4	(a) Objective for Obligation of Funds.—It
5	shall be an objective of the Administrator of the National
6	Nuclear Security Administration to obligate funds for co-
7	operative research and development agreements (as that
8	term is defined in section 12(d)(1) of the Stevenson-
9	Wydler Technology Innovation Act of 1980 (15 U.S.C.
10	3710a(d)(1))), or similar cooperative, cost-shared research
11	partnerships with non-Federal organizations, in a fiscal
12	year covered by subsection (b) in an amount at least equal
13	to the percentage of the total amount appropriated for the
14	Administration for such fiscal year that is specified for
15	such fiscal year under subsection (b).
16	(b) FISCAL YEAR PERCENTAGES.—The percentages
17	of funds appropriated for the National Nuclear Security
18	Administration that are obligated in accordance with the
19	objective under subsection (a) are as follows:
20	(1) In each of fiscal years 2001 and 2002, $0.5$
21	percent.
22	(2) In any fiscal year after fiscal year 2002, the
23	percentage recommended by the Administrator for
24	each such fiscal year in the report under subsection
25	(c)

- 1 (c) Recommendations for Percentages in Later
- 2 Fiscal Years.—Not later than one year after the date
- 3 of the enactment of this Act, the Administrator shall sub-
- 4 mit to the congressional defense committees a report set-
- 5 ting forth the Administrator's recommendations for appro-
- 6 priate percentages of funds appropriated for the National
- 7 Nuclear Security Administration to be obligated for agree-
- 8 ments described in subsection (a) during each fiscal year
- 9 covered by the report.
- 10 (d) Consistency of Agreements.—Any agree-
- 11 ment entered into under this section shall be consistent
- 12 with and in support of the mission of the National Nuclear
- 13 Security Administration.
- (e) Reports on Achievement of Objective.—(1)
- 15 Not later than March 30, 2002, and each year thereafter,
- 16 the Administrator shall submit to the congressional de-
- 17 fense committees a report on whether funds of the Na-
- 18 tional Nuclear Security Administration were obligated in
- 19 the fiscal year ending in the preceding year in accordance
- 20 with the objective for such fiscal year under this section.
- 21 (2) If funds were not obligated in a fiscal year in ac-
- 22 cordance with the objective under this section for such fis-
- 23 cal year, the report under paragraph (1) shall—
- 24 (A) describe the actions the Administrator pro-
- poses to take to ensure that the objective under this

1	section for the current fiscal year and future fiscal
2	years will be met; and
3	(B) include any recommendations for legislation

 $\bigcirc$ 

required to achieve such actions.