110TH CONGRESS 1ST SESSION

S. 1977

To provide for sustained United States leadership in a cooperative global effort to prevent nuclear terrorism, reduce global nuclear arsenals, stop the spread of nuclear weapons and related material and technology, and support the responsible and peaceful use of nuclear technology.

IN THE SENATE OF THE UNITED STATES

August 2, 2007

Mr. Obama (for himself and Mr. Hagel) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

A BILL

To provide for sustained United States leadership in a cooperative global effort to prevent nuclear terrorism, reduce global nuclear arsenals, stop the spread of nuclear weapons and related material and technology, and support the responsible and peaceful use of nuclear technology.

- 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 "Nuclear Weapons
- 5 Threat Reduction Act of 2007".
- 6 SEC. 2. FINDINGS.
- 7 Congress makes the following findings:

- 1 (1) Sustained global leadership by the United 2 States will remain essential in a cooperative global 3 effort to prevent nuclear terrorism, reduce global nu-4 clear arsenals, stop the spread of nuclear weapons 5 and related material and technology, and support 6 the responsible and peaceful use of nuclear tech-7 nology.
 - (2) The National Commission on Terrorist Attacks Upon the United States (commonly referred to as the "9/11 Commission") concluded that "a trained nuclear engineer with an amount of highly enriched uranium or plutonium about the size of a grapefruit or an orange, together with commercially available material, could fashion a nuclear device that would fit in a van like the one Ramzi Yousef parked in the garage of the World Trade Center in 1993. Such a bomb would level Lower Manhattan."
 - (3) The International Atomic Energy Agency (IAEA) confirmed 16 incidents between 1993 and 2005 that involved trafficking in relatively small quantities of highly enriched uranium and plutonium.
 - (4) United States cooperative threat reduction programs have made significant progress in securing, monitoring, and reducing nuclear stockpiles, but

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- there are still significant quantities of weapons-usable nuclear material that remain vulnerable to theft or diversion.
 - (5) There are an estimated 60 tons of highly enriched uranium, enough to make over 1,000 nuclear bombs, that are located at facilities associated with civilian industries spread among over 40 countries around the world, and physical security standards governing such materials vary, creating vulnerabilities to theft or diversion.
 - (6) Securing nuclear weapons and weapons-usable material at their source is the most direct and reliable way to disrupt efforts by terrorist organizations to acquire such material. Interdiction and other measures based on international cooperation and collaboration must also be sustained.
 - (7) The dangers posed by the spread of nuclear weapons-related technology and the need to strengthen the global nonproliferation regime are highlighted by—
 - (A) the announcement by the Government of North Korea in 2003 that it was with-drawing from the Treaty on the Non-Proliferation of Nuclear Weapons, done at Washington, London, and Moscow July 1, 1968, and entered

- into force March 5, 1970 (commonly referred to as the "Nuclear Non-Proliferation Treaty"), and the nuclear test explosion carried out by that government in 2006; and
 - (B) the violations by the Government of Iran of its safeguards commitments and the refusal of that government to comply with United Nations Security Council resolutions demanding a suspension of its uranium enrichment program and other sensitive nuclear activities.
 - (8) The Nuclear Non-Proliferation Treaty permits countries to acquire a capability to produce fissile material for civilian purposes that brings them to the brink of a capability to produce weapons-usable nuclear material without necessarily violating the agreement, giving them the ability to then leave without penalty unless the United Nations Security Council or other countries take meaningful action.
 - (9) The threat of nuclear weapons to the United States and the rest of the world cannot be reduced without stronger international cooperation to achieve universal compliance with tighter nuclear nonproliferation rules and standards as part of a comprehensive and balanced nonproliferation strategy that recognizes legitimate, peaceful nuclear uses.

1 (10) To bolster international support for nu-2 clear nonproliferation and reduce the saliency of nu-3 clear weapons, nuclear weapons states should reaffirm their commitment to Article VI of the Nuclear 5 Non-Proliferation Treaty, and all states, particularly 6 nuclear weapons states, should actively reaffirm 7 their commitment to Article IV of the Nuclear Non-8 Proliferation Treaty and tangibly support the re-9 sponsible and peaceful use of nuclear technology.

(11) The Cold War rivalry that led to the stockpiling of tens of thousands of nuclear weapons ended
more than 15 years ago, but the nuclear weapons
doctrines of the United States and the Russian Federation have changed very little and large arsenals of
strategic and tactical nuclear weapons remain in
each country.

17 SEC. 3. SENSE OF CONGRESS.

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It is the sense of Congress that the United States 19 should have a balanced and comprehensive strategy to 20 strengthen global nuclear nonproliferation, prevent nu-21 clear terrorism, and uphold all of the commitments of the 22 Nuclear Non-Proliferation Treaty, including by—

(1) slowing and eventually halting the spread of sensitive nuclear technologies to enrich uranium or separate plutonium;

- 1 (2) establishing multilayered, multilateral nu2 clear fuel supply assurances, including an inter3 national nuclear fuel bank, consistent with United
 4 States nonproliferation objectives to dissuade coun5 tries from building their own uranium enrichment
 6 capability;
 - (3) strengthening the inspection and nuclear safety capabilities and authority of the IAEA and reaffirming support for appropriate measures to strengthen the Nuclear Non-Proliferation Treaty;
 - (4) taking steps to ensure that all countries adopt the Additional Protocol of the IAEA, which grants the IAEA expanded rights of access to information and nuclear-related sites;
 - (5) reaffirming the commitment of the United States to fulfill its obligations under the Nuclear Non-Proliferation Treaty, and encouraging other nuclear weapon states to reaffirm their commitments to fulfill obligations under the Treaty, including by taking steps to achieve deeper, verifiable reductions in global nuclear arsenals and their means of delivery;
 - (6) initiating talks with the Government of the Russian Federation to reduce the number of nonstrategic nuclear weapons and further reduce the

- number of strategic nuclear weapons in the respective nuclear stockpiles of the United States and the Russian Federation in a transparent and verifiable fashion and in a manner consistent with the security of the United States;
 - (7) taking measures to reduce the risk of an accidental, unauthorized, or mistaken launch of nuclear weapons, including by considering changes in the alert status in United States and Russian forces and rapidly completing the Joint Data Exchange Center, which would improve communications and transparency between the United States and the Russian Federation;
 - (8) continuing the United States moratorium on nuclear test explosions, initiating a bipartisan process to achieve ratification of the Comprehensive Test Ban Treaty, working to secure ratification by other key countries, and fully supporting United States commitments to fund the international monitoring system to help detect and deter possible nuclear explosions by other countries;
 - (9) pursuing and concluding an agreement to verifiably halt the production of fissile materials for nuclear weapons;

- (10) strengthening Nuclear Suppliers Group ex-national control guidelines, border port transhipment controls, and intelligence and law en-forcement efforts to investigate and block the trans-fer of sensitive nuclear materials and technologies in order to prevent future black-market nuclear net-works like the A.Q. Khan network;
 - (11) strengthening the Proliferation Security Initiative (PSI) through appropriate measures;
 - (12) fully implementing the Lugar-Obama initiative (sections 10, 11, and 12 of the State Department Authorities Act of 2006 (Public Law 109–472; 22 U.S.C. 2349bb–5, 22 U.S.C. 2349bb–6, and 22 U.S.C. 2751 note), which strengthens the ability of foreign countries friendly to the United States to detect and interdict weapons of mass destruction and related material;
 - (13) achieving increased and sustained financial and other support from Russia, the European Union and its member states, China, Japan, and other countries for stronger, standardized, and worldwide physical security for nuclear weapons and material as well as for other global nuclear nonproliferation efforts;

- 1 (14) accelerating United States programs to se-2 cure, consolidate, and reduce global stocks of nuclear 3 weapons and weapons-usable material and ensuring 4 that the highest priority is placed on the security for 5 those stockpiles that pose the greatest risk; and
- 6 (15) taking steps to delegitimize and eventually
 7 eliminate the use of highly enriched uranium in civil8 ian commerce.

9 SEC. 4. ESTABLISHMENT OF AN INTERNATIONAL NUCLEAR

10 FUEL BANK.

- 11 (a) Authority.—The President is authorized to
- 12 make voluntary contributions to support the creation of
- 13 a low enriched uranium reserve administered by the IAEA
- 14 that would help guarantee the availability of fuel for com-
- 15 mercial nuclear reactors and dissuade countries from
- 16 building their own uranium enrichment capability.
- 17 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
- 18 authorized to be appropriated to the President
- 19 \$50,000,000 for voluntary contributions to support the es-
- 20 tablishment of an international nuclear fuel bank.
- 21 (c) Certification.—Voluntary contributions under
- 22 subsection (b) may be provided only if the Secretary of
- 23 State certifies to the Committee on Foreign Affairs of the
- 24 House of Representatives and the Committee on Foreign
- 25 Relations of the Senate that the IAEA has received a

1	pledge or pledges in a total amount of not less than
2	\$50,000,000 from a country or group of countries other
3	than the United States.
4	(d) Report.—
5	(1) IN GENERAL.—Not later than 1 year after
6	the date of the enactment of this Act, and annually
7	thereafter, the President shall submit to Congress a
8	report on efforts by the United States Government
9	to facilitate and support the establishment of a low-
10	enriched uranium reserve administered by the IAEA.
11	(2) Content.—The report required under
12	paragraph (1) shall include detailed descriptions
13	of—
14	(A) the international diplomatic efforts to
15	create global support for a fuel bank;
16	(B) financial support for a fuel bank from
17	other countries;
18	(C) any obstacles impeding the establish-
19	ment of the reserve;
20	(D) efforts by the United States Govern-
21	ment to remove or resolve such obstacles; and
22	(E) the structure, mandate, scope, loca-
23	tion, duration, decisionmaking authority, rules
24	and guidelines, and physical security measures
25	of a fuel bank

1 SEC. 5. STRENGTHENING THE CAPABILITIES OF THE IAEA.

- 2 (a) FINDING.—Congress finds that the International
- 3 Atomic Energy Agency plays a critical role in safe-
- 4 guarding the nuclear programs of countries around the
- 5 world and in promulgating security guidance for nuclear
- 6 materials.
- 7 (b) AUTHORIZATION OF APPROPRIATIONS.—There
- 8 are authorized to be appropriated for the President for
- 9 fiscal years 2008 through 2012, in addition to other
- 10 amounts available for such purposes, for voluntary con-
- 11 tributions to the IAEA—
- 12 (1) \$10,000,000 for each such fiscal year for
- the Department of Safeguards of the IAEA to im-
- prove, strengthen, and expand as necessary, the abil-
- ity of the IAEA to conduct effective monitoring and
- inspections to ensure compliance with safeguards
- and to monitor transfers of dual-use nuclear items
- and technologies that could be used to subvert those
- 19 safeguards; and
- 20 (2) \$5,000,000 for the Department of Nuclear
- 21 Safety and Security of the IAEA to strengthen the
- 22 efforts of the Department to develop guidelines for
- securing nuclear materials and to assist national au-
- thorities with implementation of these guidelines.
- 25 (c) Certification Requirement.—Voluntary con-
- 26 tributions under subsection (b) may be provided in fiscal

- 1 years 2010, 2011, and 2012 only if the Secretary of State
- 2 certifies to the Committee on Foreign Relations of the
- 3 Senate and the Committee on Foreign Affairs of the
- 4 House of Representatives that countries other than the
- 5 United States are providing, or have agreed to provide,
- 6 significant additional funds to the International Atomic
- 7 Energy Agency's Department of Safeguards, Department
- 8 of Nuclear Safety and Security, or both.

9 SEC. 6. FISSILE MATERIAL CUTOFF TREATY.

- 10 (a) STATEMENT OF POLICY.—It is in the interest of
- 11 the United States to achieve a comprehensive, verifiable,
- 12 and effective treaty to end the production of fissile mate-
- 13 rials for nuclear weapons worldwide, and to actively en-
- 14 courage countries that are producing fissile material for
- 15 nuclear weapons to suspend such activities.
- 16 (b) REPORT.—Not later than 1 year after the date
- 17 of the enactment of this Act, the National Academy of
- 18 Sciences shall submit to Congress a comprehensive report
- 19 on the nature of a verification regime that would be nec-
- 20 essary for an effectively verifiable fissile material cutoff
- 21 treaty.

22 SEC. 7. COMPREHENSIVE NUCLEAR THREAT REDUCTION

- 23 AND SECURITY PLAN.
- 24 (a) Statement of Policy.—It shall be the policy
- 25 of the United States to work cooperatively with other

- 1 countries and the IAEA to develop, promulgate, and im-
- 2 plement a comprehensive set of standards and best prac-
- 3 tices to fulfill the requirement of United Nations Security
- 4 Council Resolution 1540 (2004) to provide "appropriate
- 5 effective" physical protection and accounting for all stock-
- 6 piles of nuclear weapons and weapons-usable material.
- 7 (b) Sense of Congress.—It is the sense of Con-
- 8 gress that—
- 9 (1) the United States should work with other
- 10 countries and the IAEA to reach a common under-
- standing of the essential elements of an effective
- physical protection system for nuclear weapons-usa-
- ble materials stockpiles, including best practices and
- security measures that will ensure that such systems
- will be effective in defeating the threats that terror-
- ists and criminals have demonstrated they can pose;
- 17 and
- 18 (2) the United States should encourage and
- materially assist other countries to the extent needed
- 20 to put such effective nuclear security systems in
- 21 place as rapidly as possible.
- (c) Plan Required.—Not later than 180 days after
- 23 the date of the enactment of this Act, the President shall
- 24 submit to Congress a comprehensive nuclear threat reduc-
- 25 tion and security plan, in classified and unclassified forms,

- 1 for ensuring that all nuclear weapons and weapons usable
- 2 material at vulnerable sites worldwide are secure by 2012
- 3 and for working with other countries to ensure adequate
- 4 accounting and security for such materials on an ongoing
- 5 basis thereafter.
- 6 (d) Content.—For each element of the accounting
- 7 and security effort, the plan submitted under subsection
- 8 (c) shall—
- 9 (1) clearly designate agency and departmental
- 10 responsibility and accountability;
- 11 (2) specify program goals, with metrics for
- measuring progress, estimated schedules, and speci-
- fied milestones to be achieved;
- 14 (3) provide estimates of the program budget re-
- 15 quirements and resources to meet the goals for each
- 16 year;
- 17 (4) provide the strategy for diplomacy and re-
- lated tools and authority to accomplish the program
- 19 element;
- 20 (5) provide a strategy for expanding the re-
- sources, financing, and other support and assistance
- provided by other countries, particularly Russia, the
- European Union and its member states, China, and
- Japan, for the purposes of securing nuclear weapons
- and weapons-usable material worldwide;

- 1 (6) outline the progress in and impediments to 2 securing agreement from all countries that possess 3 nuclear weapons or weapons-usable material on a set 4 of global nuclear security standards, consistent with 5 their obligation to comply with United Nations Secu-6 rity Council Resolution 1540;
 - (7) describe the steps required to overcome impediments that have been identified; and
 - (8) describe global efforts to promulgate best practices for securing nuclear materials and outline options to support the establishment of an international voluntary organization to promote best practices for nuclear material security among nuclear facility operators worldwide.
- 15 (e) Annual Report.—Not later than September 30,
- 16 2008, and annually thereafter, the President shall submit
- 17 to Congress an integrated annual report, in classified and
- 18 unclassified form, that describes the progress made by the
- 19 Department of Defense, the Department of Energy, and
- 20 the Department of State in implementing the comprehen-
- 21 sive threat reduction plan submitted under subsection (c),
- 22 including an assessment of progress relative to the mile-
- 23 stones set forth in the plan.
- 24 (f) Authorization of Appropriations for Glob-
- 25 AL THREAT REDUCTION INITIATIVE.—There is author-

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- 1 ized to be appropriated to the Secretary of Energy
- 2 \$20,000,000 for fiscal years 2008 through 2010 for the
- 3 Global Threat Reduction Initiative (GTRI), in addition to
- 4 other amounts made available for such purposes, to ex-
- 5 pand the scope of facilities covered under the initiative,
- 6 encourage countries and sites to relinquish vulnerable nu-
- 7 clear material, accelerate security upgrades at research re-
- 8 actors, and encourage the conversion of civilian reactors
- 9 from the use of highly enriched uranium fuel to low en-
- 10 riched uranium fuel.

11 SEC. 8. ATTRIBUTION CAPABILITY TO DETER NUCLEAR

- 12 TERRORISM.
- 13 (a) STATEMENT OF POLICY.—It shall be the policy
- 14 of the United States to cooperate with the IAEA, Russia,
- 15 and other countries that possess nuclear weapons-usable
- 16 material to develop greater technical expertise and data
- 17 necessary to identify the source of any nuclear weapons-
- 18 usable material that might be transferred illegally or that
- 19 might be used in a terrorist attack in order to help dis-
- 20 suade countries from participating in nuclear prolifera-
- 21 tion.
- 22 (b) Authorization of Appropriations.—There
- 23 are authorized to be appropriated to the Secretary of En-
- 24 ergy \$15,000,000 for fiscal year 2008 and \$10,000,000
- 25 for fiscal years 2009 through 2012, in addition to other

1	amounts available for such purposes, to establish a na-
2	tional technical forensics program to develop the best
3	practicable technologies and procedures for determining
4	the origin of nuclear materials, whether seized while still
5	intact or collected after the detonation of a nuclear bomb
6	SEC. 9. REVIEW CONFERENCE OF THE NUCLEAR NON-
7	PROLIFERATION TREATY.
8	(a) STATEMENT OF POLICY.—It shall be the policy
9	of the United States—
10	(1) to strongly support the objectives of the Nu-
11	clear Non-Proliferation Treaty;
12	(2) to strongly support all appropriate measures
13	to strengthen the Treaty and to attain its objectives:
14	and
15	(3) to pursue a comprehensive and balanced ap-
16	proach to strengthen the global nuclear nonprolifera-
17	tion system in advance of and during the 2010 Nu-
18	clear Non-Proliferation Treaty Review Conference to
19	realize a more robust and effective global nuclear
20	nonproliferation system for the 21st century.
21	(b) Reports.—
22	(1) Report on comprehensive objectives.
23	STRATEGY, AND POLICIES.—
24	(A) IN GENERAL.—Not later than October
25	31, 2009, the President shall submit to Con-

1	gress a report, in classified and unclassified
2	forms, that details the comprehensive objectives,
3	strategy, and policies of the United States re-
4	garding the 2010 Nuclear Non-Proliferation
5	Treaty Review Conference.
6	(B) Content.—The report required under
7	subparagraph (A) shall describe—
8	(i) overall changes or revisions to the
9	international nuclear nonproliferation
10	framework, including the Nuclear Non-
11	Proliferation Treaty, that may be needed
12	to realize a more robust and effective glob-
13	al nuclear nonproliferation system;
14	(ii) the spread of sensitive nuclear
15	technologies, in particular uranium enrich-
16	ment and nuclear fuel reprocessing;
17	(iii) country-specific nuclear prolifera-
18	tion concerns;
19	(iv) efforts to uphold Article IV com-
20	mitments on peaceful nuclear use, includ-
21	ing the establishment of a nuclear fuel
22	bank;
23	(v) accelerated implementation of obli-
24	gations and commitments under the Nu-
25	clear Non-Proliferation Treaty for the pur-

1	pose of reducing the world's stockpiles of
2	nuclear weapons and weapons-grade fissile
3	material;
4	(vi) nuclear and other nonproliferation
5	initiatives such as the Proliferation Secu-
6	rity Initiative;
7	(vii) the United States assessment of
8	the objectives and strategies of other states
9	with regard to the 2010 Nuclear Non-Pro-
10	liferation Treaty Review Conference, in-
11	cluding the Nuclear Weapons States, mem-
12	bers of the Nuclear Suppliers Group, and
13	leading member states associated with the
14	Non-Aligned Movement; and
15	(viii) the United States diplomatic
16	strategy leading up to the Conference to
17	build and strengthen the international con-
18	sensus regarding United States objectives.
19	(2) Report on outcomes on conference.—
20	(A) In general.—Not later than 60 days
21	after the conclusion of the 2010 Nuclear Non-
22	Proliferation Treaty Review Conference, the
23	President shall submit to Congress a report, in
24	classified and unclassified forms, regarding the
25	outcomes of the Conference.

1	(B) CONTENT.—The report required under
2	subparagraph (A) shall provide an assessment
3	of the overall outcome of the Conference as well
4	as United States consultations and negotiations
5	and outcomes regarding the items listed in
6	paragraph (1)(B).
7	SEC. 10. COMMISSION ON NUCLEAR NONPROLIFERATION
8	AND PEACEFUL USE OF NUCLEAR TECH-
9	NOLOGY.
10	(a) Establishment.—There is hereby established a
11	commission to be known as the Commission on United
12	States Objectives and Strategy for Nuclear Nonprolifera-
13	tion and Peaceful Use of Nuclear Technology (in this sec-
14	tion referred to as the "Commission").
15	(b) Membership.—
16	(1) In General.—The Commission shall be
17	comprised of 15 members appointed by the Presi-
18	dent. In selecting individuals for appointment, the
19	President shall consult with—
20	(A) the Majority Leader of the Senate re-
21	garding the appointment of 4 of the members
22	of the Commission;
23	(B) the Speaker of the House of Rep-
24	resentatives regarding the appointment of 4 of
25	the members of the Commission;

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1	(C) the minority leader of the Senate re-
2	garding the appointment of 2 of the members
3	of the Commission; and
4	(D) the minority leader of the House of
5	Representatives regarding the appointment of 2
6	of the members of the Commission.
7	(2) Chairman.—The Majority Leader of the
8	Senate, in consultation with the Speaker of the
9	House of Representatives and the respective minor-
10	ity leaders of the Senate and the House of Rep-
11	resentatives, shall designate 1 of the Commission
12	members to serve as chairman of the Commission.
13	(3) QUALIFICATIONS.—Members of the Com-
14	mission shall be appointed from among private
15	United States citizens with knowledge and expertise
16	in the political, security, military, and energy aspects
17	of nuclear proliferation, disarmament, and peaceful
18	use.
19	(4) Security Clearances.—All Commission
20	members shall hold appropriate security clearances.
21	(5) Deadline for appointments.—All ap-
22	pointments to the Commission shall be made not
23	later than 45 days after the date of the enactment

of this Act.

1	(6) Term.—Members shall be appointed for the
2	life of the Commission. Any vacancies shall be filled
3	in the same manner as the original appointment.
4	(c) Duties.—The duties of the Commission shall in-
5	clude—
6	(1) assessing and providing recommendations
7	for United States objectives, strategy, and policies
8	regarding the nature, scope, and magnitude of the
9	threat posed by the spread of nuclear weapons and
10	nuclear weapons-related technology, including the
11	threat of nuclear terrorism; and
12	(2) reporting on—
13	(A) the status of efforts by nuclear weap-
14	ons states to reduce global nuclear arsenals;
15	(B) the development by nuclear weapons
16	states of next generation nuclear weapons and
17	nuclear warheads;
18	(C) the need and requirements of peaceful
19	nuclear use, including nuclear energy; and
20	(D) the role and capabilities of existing
21	multilateral and international entities related to
22	nuclear issues.
23	(d) Initial Meeting.—The Commission shall con-
24	vene its first meeting not later than 30 days after the date
25	as of which all Commission members have been appointed.

- 1 (e) Procedures.—Procedures for the operation of
- 2 the Commission shall be established upon the approval of
- 3 10 of the 15 members of the Commission.
- 4 (f) Cooperation From Other Federal Agen-
- 5 CIES.—The Commission shall receive the full and timely
- 6 cooperation of the Secretary of State, the Secretary of De-
- 7 fense, the Director of National Intelligence, and the heads
- 8 of other relevant Federal agencies, including analyses,
- 9 briefings, and other information necessary for the fulfill-
- 10 ment of the Commission's responsibilities.
- 11 (g) Report.—Not later than 270 days after the date
- 12 if its first meeting, the Commission shall submit to Con-
- 13 gress the assessment and report described under sub-
- 14 section (c).
- 15 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
- 16 authorized to be appropriated \$5,000,000 for the Presi-
- 17 dent to establish the Commission.

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