

113TH CONGRESS
2^D SESSION

H. R. 4883

To provide for the establishment of a National Rare-Earth Refinery Cooperative, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 17, 2014

Mr. STOCKMAN introduced the following bill; which was referred to the Committee on Armed Services

A BILL

To provide for the establishment of a National Rare-Earth Refinery Cooperative, 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 Rare-Earth
5 Cooperative Act of 2014”.

6 **SEC. 2. FINDINGS; STATEMENT OF POLICY.**

7 (a) FINDINGS.—Congress makes the following find-
8 ing:

9 (1) Heavy rare-earth elements are critical for
10 the national defense of the United States, advanced

1 energy technologies, and other desirable commercial
2 and industrial applications.

3 (2) The Government Accountability Office has
4 confirmed that the monopoly control of the People's
5 Republic of China over the rare-earth value chain
6 has resulted in vulnerabilities in the procurement
7 process of multiple United States weapons systems.

8 (3) China has leveraged its monopoly control
9 over the rare-earth value chain to force American,
10 European, Japanese, and Korean corporations to
11 transfer manufacturing facilities, technology, and
12 jobs to China in exchange for secure supply con-
13 tracts.

14 (4) China's increasingly aggressive mercantilist
15 behavior has resulted in involuntary transfers of
16 technology, manufacturing facilities, and jobs as well
17 as onerous trade imbalances with the United States
18 and trading partners of the United States.

19 (5) Direct links exist between heavy rare-earth
20 mineralogy and thorium.

21 (6) Thorium is a mildly radioactive element
22 commonly associated with the lanthanide elements in
23 the most heavy rare-earth deposits that are located
24 in the United States and elsewhere.

1 (7) Regulations regarding thorium represent a
2 barrier to the development of the heavy rare-earth
3 industry that is based in the United States.

4 (8) Balancing the strategic national interest ob-
5 jectives of the United States against economic and
6 environmental risks is best met through the creation
7 of a rare-earth cooperative.

8 (9) A rare-earth cooperative could—

9 (A) greatly increase rare-earth production;

10 (B) ensure environmental safety; and

11 (C) lower the cost of production and finan-

12 cial risks faced by rare-earth producers in the

13 United States.

14 (10) Historically, agricultural and electric co-
15 operatives have stood as some of the greatest success
16 stories of the United States.

17 (b) STATEMENT OF POLICY.—It is the policy of the
18 United States to advance domestic refining of heavy rare-
19 earth materials and the safe storage of thorium in antici-
20 pation of the potential future industrial uses of thorium,
21 including energy, as—

22 (1) thorium has a mineralogical association
23 with valuable heavy rare-earth elements;

1 (2) there is a great need to develop domestic re-
2 fining capacity to process domestic heavy rare-earth
3 deposits; and

4 (3) the economy of the United States would
5 benefit from the rapid development and control of
6 intellectual property relating to the commercial de-
7 velopment of thorium-utilizing technology.

8 **SEC. 3. DEFINITIONS.**

9 In this Act:

10 (1) **ACTINIDE.**—The term “actinide” means all
11 elements with atomic numbers of 89 or greater on
12 the periodic table.

13 (2) **CONSUMER MEMBER.**—

14 (A) **IN GENERAL.**—The term “consumer
15 member” means a member of the Cooperative
16 that is—

17 (i) an entity that is part of, or has a
18 role in, the value chain for rare-earth ma-
19 terials or rare-earth products, including
20 from the refined oxide state to the stage in
21 which the rare-earth elements are finished
22 in any physical or chemical form (including
23 oxides, metals, alloys, catalysts, or compo-
24 nent); or

25 (ii) a consumer of rare-earth products.

1 (B) INCLUSIONS.—The term “consumer
2 member” includes—

3 (i) a producer of or other entity that
4 is part of the value chain for rare-earth
5 materials, including original equipment
6 manufacturer producers, whose place of
7 business is located in or outside the United
8 States;

9 (ii) a defense contractor or contrac-
10 tors in the United States; and

11 (iii) any government agency in the
12 United States or outside the United States
13 that invests in the Cooperative.

14 (3) COOPERATIVE.—The term “Cooperative”
15 means the Thorium-Bearing Rare-Earth Refinery
16 Cooperative established by section 4(a)(1).

17 (4) COOPERATIVE BOARD.—The term “Cooper-
18 ative Board” means the Board of Directors of the
19 Cooperative established under section 4(b)(2).

20 (5) CORPORATION.—The term “Corporation”
21 means the Thorium Storage, Energy, and Industrial
22 Products Corporation established under section
23 5(a)(1).

1 (6) CORPORATION BOARD.—The term “Cor-
2 poration Board” means the Board of Directors of
3 the Corporation established under section 5(b)(1).

4 (7) EXECUTIVE COMMITTEE.—The term “Exec-
5 utive Committee” means the executive committee es-
6 tablished under section 5(b)(2).

7 (8) INITIAL BOARD OF DIRECTORS.—The term
8 “Initial Board of Directors” means the initial Board
9 of Directors for the Cooperative established under
10 section 4(b)(1)(A).

11 (9) INSTITUTION OF HIGHER EDUCATION.—The
12 term “institution of higher education” has the
13 meaning given that term in section 101(a) of the
14 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

15 (10) NATIONAL LABORATORY.—The term “na-
16 tional laboratory” has the meaning given that term
17 in section 2 of the Energy Policy Act of 2005 (42
18 U.S.C. 15801).

19 (11) SECRETARY.—The term “Secretary”
20 means the Secretary of Defense.

21 (12) SUPPLIER MEMBER.—The term “supplier
22 member” means a rare-earth producer that enters
23 into a contract to supply the Cooperative with rare-
24 earth ores.

1 (13) TOLLING.—The term “Tolling” means a
2 fee-for-services contract between the Cooperative and
3 a primary rare-earth producer under which—

4 (A) the producer retains ownership and
5 control of the finished product; and

6 (B) pays to the Cooperative a fee for serv-
7 ices rendered by the Cooperative.

8 (14) UNPROCESSED AND UNREFINED ORE.—
9 The term “unprocessed and refined ore” includes
10 any ores or residual ores resulting from the mining,
11 extraction, beneficiation, and processing of other
12 natural resources.

13 **SEC. 4. THORIUM-BEARING RARE-EARTH REFINERY COOP-**
14 **ERATIVE.**

15 (a) ESTABLISHMENT.—

16 (1) IN GENERAL.—There is established a Coop-
17 erative, to be known as the “Thorium-Bearing Rare-
18 Earth Refinery Cooperative”, to provide for the do-
19 mestic processing of thorium-bearing rare-earth con-
20 centrates as residual unprocessed and unrefined
21 ores, in accordance with 10 CFR 40.12 and 13b as
22 it relates to the Cooperative.

23 (2) FEDERAL CHARTER; OWNERSHIP.—The Co-
24 operative shall operate under a Federal charter.

25 (3) MEMBERSHIP.—

1 (A) COMPOSITION.—The Cooperative shall
2 comprise—

3 (i) supplier members; and

4 (ii) consumer members.

5 (B) SUPPLIER MEMBERS.—

6 (i) IN GENERAL.—As a condition of
7 entering into a contract to supply the Co-
8 operative with rare-earth ores, supplier
9 members provide rare-earth concentrates
10 to the Cooperative at market price.

11 (ii) CAPITAL CONTRIBUTIONS.—Any
12 supplier member that makes significant
13 capital contributions to the Cooperative, as
14 determined by the Cooperative Board, may
15 become a consumer member for purposes
16 of the distribution of profits of the Cooper-
17 ative under subparagraph (D).

18 (C) CONSUMER MEMBER.—A consumer
19 member—

20 (i) shall make capital contributions to
21 the Cooperative in exchange for entering
22 into negotiated supply agreements; and

23 (ii) in accordance with the agreements
24 entered into under clause (i), may acquire

1 finished rare-earth products from the Co-
2 operative at market price.

3 (D) DISTRIBUTION OF PROFITS.—Any
4 profits of the Cooperative shall be distributed
5 between supplier members and consumer mem-
6 bers in accordance with a formula established
7 by the Cooperative Board.

8 (b) MANAGEMENT.—

9 (1) INITIAL BOARD OF DIRECTORS.—

10 (A) IN GENERAL.—As soon as practicable
11 after the date of the enactment of this Act, the
12 Secretary shall appoint the Initial Board of Di-
13 rectors for the Cooperative, comprised of five
14 members, of whom—

15 (i) one member shall represent the
16 Defense Logistics Agency Strategic Mate-
17 rials program of the Department of De-
18 fense;

19 (ii) one member shall represent the
20 Assistant Secretary of Defense for Re-
21 search and Engineering;

22 (iii) one member shall represent
23 United States advocacy groups for rare-
24 earth producers and original equipment
25 manufacturing interests;

1 (iv) one member shall represent the
2 United States Geological Survey; and

3 (v) one member who shall—

4 (I) not be affiliated with a Fed-
5 eral agency; and

6 (II) be recommended for appoint-
7 ment by a majority vote of the other
8 members of the Initial Board of Di-
9 rectors appointed under clauses (i)
10 through (iv).

11 (B) DUTIES.—The Initial Board of Direc-
12 tors shall—

13 (i) establish the charter, bylaws, and
14 rules of governance for the Cooperative;

15 (ii) make formative business decisions
16 on behalf of the Cooperative; and

17 (iii) assist in the formation of, and
18 the provision of tasks and assignments to,
19 the Corporation.

20 (C) STANDING MEMBER.—The member ap-
21 pointed under subparagraph (A)(v) shall remain
22 on the Cooperative Board and Corporation
23 Board, until such time as—

24 (i) the member voluntarily resigns; or

1 (ii) a majority of the members of the
2 Cooperative Board and a majority of the
3 members of the Corporation Board vote to
4 remove the member from the Cooperative
5 Board and the Corporation Board.

6 (D) TERMINATION.—The Initial Board of
7 Directors shall terminate on the date on which
8 the initial members of the Cooperative Board
9 are appointed under paragraph (2).

10 (2) BOARD OF DIRECTORS.—

11 (A) IN GENERAL.—The Board of Directors
12 of the Cooperative shall comprise nine mem-
13 bers, to be selected in accordance with the by-
14 laws of the Cooperative established under para-
15 graph (1)(B)(i), of whom—

16 (i) five members shall be consumer
17 members;

18 (ii) two members shall be supplier
19 members;

20 (iii) one member shall represent an
21 advocacy group for defense contractors,
22 other rare-earth consumers, and suppliers
23 who are not represented by the Board or
24 through direct ownership in the Coopera-
25 tive; and

1 (iv) one member shall be the member
2 of the Initial Board of Directors appointed
3 under paragraph (1)(A)(v).

4 (B) POWERS.—The Cooperative Board
5 may—

6 (i) prescribe the manner in which
7 business shall be conducted by the Cooper-
8 ative;

9 (ii) determine pay-out ratio formulas
10 for consumer members and supplier mem-
11 bers, based on—

12 (I) the capital stock ratios of
13 consumer members; and

14 (II) the value of supply member
15 contracts, as determined based on the
16 volume, term, and distributions of
17 rare-earth concentrates relative to
18 processing costs; and

19 (iii) evaluate technologies and proc-
20 esses for the efficient extraction and refin-
21 ing of rare-earth materials from various
22 thorium-bearing ores.

23 (C) REFINERY AND OFFICE LOCATIONS.—

24 The Cooperative Board shall establish the refin-
25 ery and offices for the Cooperative at any loca-

1 tions determined to be appropriate by the Coop-
2 erative Board.

3 (c) POWERS; DUTIES.—

4 (1) INVESTMENT PARTNERSHIPS.—The Cooper-
5 ative shall seek to enter into domestic and inter-
6 national investment partnerships for the develop-
7 ment of the refinery.

8 (2) AGREEMENTS; DIRECT SALES.—The Coop-
9 erative may—

10 (A) enter into equity, financial, and sup-
11 ply-based agreements or arrangements with
12 value-added intermediaries, equipment manu-
13 facturers, or consumers of rare-earth products,
14 and Federal, State, or local agencies to provide
15 economic incentives, leases, or public financing;
16 and

17 (B) engage in direct market sales of rare-
18 earth products.

19 (3) SUPPLY CONTRACTS AND TOLLING SERV-
20 ICES.—

21 (A) IN GENERAL.—The Cooperative may—

22 (i) directly purchase rare-earth mate-
23 rials obtained from any byproduct pro-
24 ducers of rare-earths;

1 (ii) transport those materials as un-
2 processed and unrefined ores, in accord-
3 ance with part 40 of title 10, Code of Fed-
4 eral Regulations (parts 12–13b, or any
5 corresponding similar regulation or ruling);

6 (iii) offer non-member supplier short-
7 term or direct purchase contracts; and

8 (iv) allow primary rare-earth pro-
9 ducers to be tolling customers of the Coop-
10 erative.

11 (B) REQUIREMENTS.—A tolling customer
12 under subparagraph (A)(iii) shall—

13 (i) retain control of the rare-earth
14 products during the processing, refining, or
15 value adding of the rare-earth products by
16 the Cooperative; and

17 (ii) take possession of the rare-earth
18 products after—

19 (I) tolling services are rendered
20 by the Cooperative; and

21 (II) the Cooperative has received
22 payment in full for the tolling services
23 rendered.

1 (C) FEE.—The Cooperative may charge
2 tolling customers under subparagraph (A)(iii) a
3 tolling fee not to exceed the sum of—

4 (i) the amount equal to 110 percent of
5 the total cost for tolling services rendered
6 by the Cooperative on behalf of the tolling
7 customer; and

8 (ii) the amount equal to five percent
9 of the market value of the finished product
10 provided to the tolling customer by the Co-
11 operative.

12 (D) APPLICABLE LAW.—Any contract
13 among consumer members, supplier members,
14 tolling customers, and direct purchase suppliers
15 entered into under subparagraph (A)(iii) shall
16 be protected as provided in subsection
17 552(b)(4) of title 5, United States Code.

18 (E) LIMITATIONS.—A direct purchase non-
19 member supplier under subparagraph (A)(ii) or
20 a tolling customer under subparagraph
21 (A)(iii)—

22 (i) shall not be considered to be a sup-
23 plier member or otherwise be considered a
24 member of the Cooperative for purposes of
25 this Act; and

1 (ii) shall not participate in Coopera-
2 tive profits or have voting rights with re-
3 spect to the Cooperative.

4 (d) AUDITS.—

5 (1) IN GENERAL.—The Cooperative shall retain
6 an independent auditor to evaluate the extent to
7 which Federal funds, if any, made available to the
8 Cooperative for research and development activities
9 have been expended in a manner that is consistent
10 with the purposes of this Act and the charter, by-
11 laws, and rules of governance of the Cooperative.

12 (2) REPORTS.—The auditor retained under
13 paragraph (1) shall submit to the Secretary of De-
14 fense, the Cooperative, and the Comptroller General
15 of the United States an annual report containing the
16 findings and determinations of the auditor.

17 (3) REVIEW BY COMPTROLLER GENERAL.—The
18 Comptroller General of the United States shall—

19 (A) review each annual report submitted to
20 the Comptroller General by the auditor under
21 paragraph (2); and

22 (B) submit to the Committee on Armed
23 Services of the Senate and the Committee on
24 Armed Services of the House of Representatives
25 a report containing the comments of the Comp-

1 troller General on the accuracy and complete-
2 ness of the report and any other matters relat-
3 ing to the report that the Comptroller General
4 considers appropriate.

5 (e) REIMBURSEMENT OF FEDERAL GOVERNMENT.—

6 Not later than seven years following the date of the enact-
7 ment of this Act, the Cooperative shall reimburse the Fed-
8 eral Government for administrative costs associated with
9 the establishment of its charter.

10 **SEC. 5. THORIUM STORAGE, ENERGY, AND INDUSTRIAL**
11 **PRODUCTS CORPORATION.**

12 (a) ESTABLISHMENT.—

13 (1) IN GENERAL.—As soon as practicable after
14 the date of the enactment of this Act, the Coopera-
15 tive Board, in consultation with the Secretary of De-
16 fense, shall establish the Thorium Storage, Energy,
17 and Industrial Products Corporation to develop uses
18 and markets for thorium, including energy.

19 (2) FEDERAL CHARTER.—The Corporation
20 shall operate under a Federal charter.

21 (b) MANAGEMENT.—

22 (1) BOARD OF DIRECTORS.—

23 (A) IN GENERAL.—The Board of Directors
24 of the Corporation shall comprise five members.

1 (B) INITIAL MEMBERS.—The initial mem-
2 bers of the Corporation Board shall consist of
3 the following members, to be appointed by the
4 Secretary of Defense:

5 (i) one member, who shall represent
6 the Assistant Secretary of Defense for Re-
7 search and Engineering;

8 (ii) a J-7 who will represent the Di-
9 rector of the Joint Chiefs of Staff;

10 (iii) one member, who shall represent
11 United States advocacy groups for com-
12 mercial development of thorium in nuclear
13 energy systems;

14 (iv) one member, who shall represent
15 a national laboratory; and

16 (v) one member, who is the member of
17 the Initial Board of Directors appointed
18 under section 4(b)(1)(A)(v).

19 (C) SUBSEQUENT MEMBERS.—Subject to
20 subparagraphs (A) and (D), subsequent mem-
21 bers of the Corporation Board and Executive
22 Committee shall be appointed in accordance
23 with bylaws of the Corporation established
24 under paragraph (2)(B)(i).

1 (D) STANDING MEMBERS.—The initial
2 members appointed under clauses (iv) and (v)
3 of subparagraph (B) shall remain on the Cor-
4 poration Board and the Executive Committee,
5 until such time as—

6 (i) the members voluntarily resign;

7 (ii) in the case of a member appointed
8 under subparagraph (B)(iv), a majority of
9 the members of the Corporation Board
10 votes to remove the member from the Cor-
11 poration Board; or

12 (iii) in the case of a member ap-
13 pointed under subparagraph (B)(v), a ma-
14 jority of the members of the Corporation
15 Board votes to remove the member from
16 the Corporation Board and the Cooperative
17 Board.

18 (2) EXECUTIVE COMMITTEE.—

19 (A) IN GENERAL.—The Executive Com-
20 mittee for the Corporation shall comprise the
21 initial members of the Corporation Board ap-
22 pointed under clauses (iv) and (v) of paragraph
23 (1)(B).

24 (B) DUTIES.—The Executive Committee
25 shall—

1 (i) establish the charter, bylaws, rules
2 of governance, and corporate structure for
3 the Corporation; and

4 (ii) make formative business decisions
5 with respect to the Corporation.

6 (c) POWERS.—

7 (1) ESTABLISHMENT OF SUBSEQUENT ENTI-
8 TIES.—

9 (A) IN GENERAL.—The Corporation may
10 establish one or more entities, to be known as
11 an “Industrial Products Corporation” for the
12 certification, licensing, insuring, and commer-
13 cial development of all non-energy uses for tho-
14 rium (including thorium isotopes and thorium
15 daughter elements), including—

- 16 (i) alloys;
17 (ii) catalysts;
18 (iii) medical isotopes; and
19 (iv) other products.

20 (B) AUTHORITY OF ENTITIES.—The enti-
21 ties described in subparagraph (A) may—

- 22 (i) develop standards, procedures, and
23 protocols for the approval of commercial
24 and industrial applications for thorium;

1 (ii) carry out directly the production
2 and sale of thorium-related non-energy
3 products; and

4 (iii) sell or license any production or
5 sales rights to third parties.

6 (C) SALE OR DISTRIBUTION OF INDUS-
7 TRIAL PRODUCTS CORPORATION; CREATION OF
8 BUSINESSES AND PARTNERSHIPS.—To develop
9 and commercialize non-energy uses for thorium,
10 the corporation Board may—

11 (i) create, sell, or distribute the equity
12 of an entity described in subparagraph (A);
13 and

14 (ii) establish partnerships with Fed-
15 eral agencies, foreign governments, and
16 private entities relating to businesses and
17 activities of the entity.

18 (2) SALE OR DISTRIBUTION OF CORPORATION
19 EQUITY; CREATION OF PARTNERSHIPS.—To develop
20 and commercialize thorium energy, the Corporation
21 may sell or distribute equity and establish partner-
22 ships with the United States, foreign governments,
23 and private entities—

24 (A) to create capital;

25 (B) to develop intellectual property;

1 (C) to acquire technology;

2 (D) to establish business partnerships and
3 raw material supply chains;

4 (E) to develop commercial thorium energy
5 systems;

6 (F) to develop commercial systems for the
7 reduction of spent fuel;

8 (G) to develop hardened energy systems
9 for the United States military; and

10 (H) to develop process heat technologies
11 systems for coal-to-liquid fuel separation, desa-
12 lination, chemical synthesis, and other appli-
13 cations.

14 (d) DUTIES.—

15 (1) OWNERSHIP OF THORIUM AND RELATED
16 ACTINIDES.—The Corporation shall—

17 (A) on a preprocessing basis, assume liabil-
18 ity for and ownership of all thorium and
19 mineralogically associated or related actinides
20 and decay products contained within the mona-
21 zite and other rare-earth mineralizations in the
22 possession of the cooperative;

23 (B) separate the thorium from the rare-
24 earth concentrates, take physical possession and
25 safely store all thorium-containing actinide by-

1 products, with the costs of the storage to be
2 paid by the Corporation from fees charged or
3 revenue from sales of other valuable actinides
4 and decay products, and thus after—

5 (i) develop new markets and uses for
6 thorium;

7 (ii) develop energy systems that utilize
8 thorium; and

9 (iii) develop, manage, and control na-
10 tional and international energy leasing and
11 distribution platforms related to thorium
12 energy systems.

13 (2) SAFE, LONG-TERM STORAGE; DEVELOP-
14 MENT OF USES AND MARKETS.—The Corporation
15 shall—

16 (A) in consultation with the Administrator
17 of the Environmental Protection Agency and
18 the Secretary of Energy, be responsible for the
19 safe, long-term storage of all thorium and tho-
20 rium decay products generated through the Co-
21 operative, consistent with part 192 of title 40,
22 Code of Federal Regulations (as in effect on the
23 date of the enactment of this Act), while taking
24 into account the low relative risks relating to
25 thorium; and

1 (B) develop uses and markets for thorium,
2 including energy, by coordinating and struc-
3 turing domestic and international investment
4 partnerships for the development of commercial
5 and industrial uses for thorium.

6 (e) AUDITS.—

7 (1) IN GENERAL.—The Corporation shall retain
8 an independent auditor to evaluate the extent to
9 which Federal funds, if any, made available to the
10 Corporation for research and development activities
11 have been expended in a manner that is consistent
12 with the purposes of this Act and the charter, by-
13 laws, and rules of governance of the Corporation.

14 (2) REPORTS.—The auditor retained under
15 paragraph (1) shall submit to the Secretary of De-
16 fense, the Corporation, and the Comptroller General
17 of the United States an annual report containing the
18 findings and determinations of the auditor.

19 (3) REVIEW BY COMPTROLLER GENERAL.—The
20 Comptroller General of the United States shall—

21 (A) review each annual report submitted to
22 the Comptroller General by the auditor under
23 paragraph (2); and

24 (B) submit to the Committee on Armed
25 Services of the Senate and the Committee on

1 Armed Services of the House of Representatives
2 a report containing the comments of the Comp-
3 troller General on the accuracy and complete-
4 ness of the report and any other matters relat-
5 ing to the report that the Comptroller General
6 considers appropriate.

7 (f) REIMBURSEMENT OF FEDERAL GOVERNMENT.—
8 Not later than seven years after the date of the enactment
9 of this Act, the Corporation shall reimburse the Federal
10 Government for the administrative costs associated with
11 the establishment of its charter.

12 **SEC. 6. DUTIES OF SECRETARY OF DEFENSE.**

13 (a) ADVANCEMENT OF RARE-EARTH INITIATIVES.—
14 The Secretary shall coordinate with other Federal agencies
15 to advance and protect—

16 (1) domestic rare-earth mining;
17 (2) the refining of rare-earth elements;
18 (3) basic rare-earth metals production; and
19 (4) the development and commercialization of
20 thorium, including—

21 (A) energy technologies and products; and
22 (B) products containing thorium.

23 (b) ANNUAL REPORTS.—Not later than one year
24 after the date of the enactment of this Act, and annually

1 thereafter, the Secretary shall submit to Congress a report
2 that, for the period covered by the report—

3 (1) contains a description of the progress in the
4 development of—

5 (A) a domestic rare-earth refining capac-
6 ity; and

7 (B) commercial uses and energy-related
8 uses for thorium; and

9 (2) takes into account each report submitted to
10 the Secretary by the Cooperative and the Corpora-
11 tion.

12 (c) FEDERAL AGENCIES; NATIONAL LABORA-
13 TORIES.—Each Federal agency (including the Nuclear
14 Regulatory Commission and the Defense Advanced Re-
15 search Projects Agency), each national laboratory, and
16 each facility funded by the Federal Government shall pro-
17 vide assistance to the Cooperative and the Corporation
18 under this Act.

19 (d) INSTITUTIONS OF HIGHER EDUCATION.—Each
20 institution of higher education is encouraged—

21 (1) to develop training and national expertise in
22 the field of thorium development; and

23 (2) to promote—

24 (A) the marketing of thorium;

1 (B) the advancement of the strategic uses
2 of thorium; and

3 (C) salt chemistry science and radio chem-
4 ists.

5 **SEC. 7. AMENDMENT TO 10 U.S.C. 2533b, REQUIRING ONLY**
6 **U.S. OR NATO MEMBER NATION RARE EARTH**
7 **MATERIALS IN U.S. WEAPON SYSTEMS.**

8 (a) 10 U.S.C. 2533b(a) REQUIREMENT.—Shall be
9 amended to add the following provision: “(3) Beginning
10 January 1, 2020, all purchased or procured weapon sys-
11 tems must contain only U.S. or NATO member nation
12 produced and sourced rare earth materials, metals,
13 magnets, parts, and/or components. The inclusion of any
14 rare earth materials that originate or pass through a non-
15 NATO member nation is prohibited. No waivers shall be
16 granted unless the lead contractor seeking a waiver can
17 demonstrate that it has pursued all possible corrective ac-
18 tions, including direct investment into the supply chain.”.

○