

RARE EARTHS AND CRITICAL MATERIALS  
REVITALIZATION ACT OF 2010

---

SEPTEMBER 28, 2010.—Committed to the Committee of the Whole House on the  
State of the Union and ordered to be printed

---

Mr. GORDON of Tennessee, from the Committee on Science and  
Technology, submitted the following

R E P O R T

together with

ADDITIONAL VIEWS

[To accompany H.R. 6160]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was referred the bill (H.R. 6160) to develop a rare earth materials program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

CONTENTS

	Page
I. Bill .....	2
II. Purpose .....	5
III. Background and Need for the Legislation .....	5
IV. Hearing Summary .....	7
V. Committee Actions .....	10
VI. Summary of Major Provisions of the Bill .....	11
VII. Section-by-Section Analysis .....	13
VIII. Committee Views .....	15
IX. Cost Estimate .....	16
X. Congressional Budget Office Cost Estimate .....	16
XI. Compliance With Public Law 104-4 .....	16
XII. Committee Oversight Findings and Recommendations .....	16
XIII. Statement on General Performance Goals and Objectives .....	17
XIV. Constitutional Authority Statement .....	17

XV. Federal Advisory Committee Statement .....	17
XVI. Congressional Accountability Act .....	17
XVII. Earmark Identification .....	17
XVIII. Statement on Preemption of State, Local, or Tribal Law .....	17
XIX. Changes in Existing Law Made by the Bill, As Reported .....	17
XX. Committee Recommendations .....	26
XXI. Additional Views .....	27
XXII. Proceedings of the Full Committee Markup .....	30

## I. BILL

The amendment is as follows:

Strike all after the enacting clause and insert the following:

### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Rare Earths and Critical Materials Revitalization Act of 2010”.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.  
Sec. 2. Definitions.

#### TITLE I—RARE EARTH MATERIALS

Sec. 101. Rare earth materials program.  
Sec. 102. Rare earth materials loan guarantee program.

#### TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT

Sec. 201. Amendments to National Materials and Minerals Policy, Research and Development Act of 1980.  
Sec. 202. Repeal.

### SEC. 2. DEFINITIONS.

In this Act:

(1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term “appropriate Congressional committees” means the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation and the Committee on Energy and Natural Resources of the Senate.

(2) DEPARTMENT.—The term “Department” means the Department of Energy.

(3) RARE EARTH MATERIALS.—The term “rare earth materials” means any of the following chemical elements in any of their physical forms or chemical combinations:

- (A) Scandium.
- (B) Yttrium.
- (C) Lanthanum.
- (D) Cerium.
- (E) Praseodymium.
- (F) Neodymium.
- (G) Promethium.
- (H) Samarium.
- (I) Europium.
- (J) Gadolinium.
- (K) Terbium.
- (L) Dysprosium.
- (M) Holmium.
- (N) Erbium.
- (O) Thulium.
- (P) Ytterbium.
- (Q) Lutetium.

(4) SECRETARY.—The term “Secretary” means the Secretary of Energy.

## TITLE I—RARE EARTH MATERIALS

### SEC. 101. RARE EARTH MATERIALS PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—There is established in the Department a program of research, development, demonstration, and commercial application to assure the long-term, secure, and sustainable supply of rare earth materials sufficient to satisfy the national security, economic well-being, and industrial production needs of the United States.

(2) PROGRAM ACTIVITIES.—The program shall support activities to—

(A) better characterize and quantify virgin stocks of rare earth materials using theoretical geochemical research;

(B) explore, discover, and recover rare earth materials using advanced science and technology;

(C) improve methods for the extraction, processing, use, recovery, and recycling of rare earth materials;

(D) improve the understanding of the performance, processing, and adaptability in engineering designs of rare earth materials;

(E) identify and test alternative materials that can be substituted for rare earth materials in particular applications;

(F) engineer and test applications that—

(i) use recycled rare earth materials;

(ii) use alternative materials; or

(iii) seek to minimize rare earth materials content; and

(G) collect, catalogue, archive, and disseminate information on rare earth materials, including scientific and technical data generated by the research and development activities supported under this section.

(3) IMPROVED PROCESSES AND TECHNOLOGIES.—To the maximum extent practicable, the Secretary shall support new or significantly improved processes and technologies as compared to those currently in use in the rare earth materials industry.

(4) EXPANDING PARTICIPATION.—The Secretary shall encourage—

(A) multidisciplinary collaborations among program participants; and

(B) extensive opportunities for students at institutions of higher education, including institutions listed under section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).

(5) CONSISTENCY.—The program shall be consistent with the policies and programs in the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601 et seq.).

(6) INTERNATIONAL COLLABORATION.—In carrying out the program, the Secretary shall collaborate, to the extent practicable, with the relevant directorates of the European Commission to coordinate activities of mutual interest and avoid duplication of effort.

(b) PLAN.—

(1) IN GENERAL.—Within 180 days after the date of enactment of this Act and biennially thereafter, the Secretary shall prepare and submit to the appropriate Congressional committees a plan to carry out the program established under subsection (a).

(2) SPECIFIC REQUIREMENTS.—The plan shall include a description of—

(A) the research and development activities to be carried out by the program during the subsequent 2 years;

(B) the expected contributions of the program to the creation of innovative methods and technologies for the efficient and sustainable provision of rare earth materials to the domestic economy;

(C) the criteria to be used to evaluate applications for loan guarantees under section 1706 of the Energy Policy Act of 2005;

(D) any projects receiving loan guarantee support under such section and the status of such projects;

(E) how the program is promoting the broadest possible participation by academic, industrial, and other contributors; and

(F) actions taken or proposed that reflect recommendations from the assessment conducted under subsection (c) or the Secretary's rationale for not taking action pursuant to any recommendation from such assessment for plans submitted following the completion of the assessment under such subsection.

(3) CONSULTATION.—In preparing each plan under paragraph (1), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, professional and technical societies, and other entities, as determined by the Secretary.

(c) ASSESSMENT.—

(1) IN GENERAL.—After the program has been in operation for 4 years, the Secretary shall offer to enter into a contract with the National Academy of Sciences under which the National Academy shall conduct an assessment of the program under subsection (a).

(2) INCLUSIONS.—The assessment shall include the recommendation of the National Academy of Sciences that the program should be—

(A) continued, accompanied by a description of any improvements needed in the program; or

(B) terminated, accompanied by a description of the lessons learned from the execution of the program.

(3) AVAILABILITY.—The assessment shall be made available to Congress and the public upon completion.

**SEC. 102. RARE EARTH MATERIALS LOAN GUARANTEE PROGRAM.**

(a) AMENDMENT.—Title XVII of the Energy Policy Act of 2005 (42 U.S.C. 16511 et seq.) is amended by adding at the end the following new section:

**“SEC. 1706. TEMPORARY PROGRAM FOR RARE EARTH MATERIALS REVITALIZATION.**

“(a) IN GENERAL.—As part of the program established in section 101 of the Rare Earths and Critical Materials Revitalization Act of 2010, the Secretary is authorized to make guarantees under this title for the commercial application of new or significantly improved technologies (compared to technologies currently in use in the United States at the time the guarantee is issued) for the following categories of projects:

“(1) The separation and recovery of rare earth materials from ores or other sources.

“(2) The preparation of rare earth materials in oxide, metal, alloy, or other forms needed for national security, economic well-being, or industrial production purposes.

“(3) The application of rare earth materials in the production of improved—

“(A) magnets;

“(B) batteries;

“(C) refrigeration systems;

“(D) optical systems;

“(E) electronics; and

“(F) catalysis.

“(4) The application of rare earth materials in other uses, as determined by the Secretary.

“(b) TIMELINESS.—The Secretary shall seek to minimize delay in approving loan guarantee applications, consistent with appropriate protection of taxpayer interests.

“(c) COOPERATION.—To the maximum extent practicable, the Secretary shall cooperate with appropriate private sector participants to achieve a complete rare earth materials production capability in the United States within 5 years after the date of enactment of the Rare Earths and Critical Materials Revitalization Act of 2010.

“(d) DOMESTIC SUPPLY CHAIN.—In support of the objective in subsection (c) to achieve a rare earth materials production capability in the United States that includes the complete value chain described in paragraphs (1) through (4) of subsection (a), the Secretary may not award a guarantee for a project unless the project’s proponent provides to the Secretary an assurance that the loan or guarantee shall be used to support the separation, recovery, preparation, or manufacturing of rare earth materials in the United States for customers within the United States unless insufficient domestic demand for such materials results in excess capacity.

“(e) SUNSET.—The authority to enter into guarantees under this section shall expire on September 30, 2015.”.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy Act of 2005 is amended by inserting after the item relating to section 1705 the following new item:

“Sec. 1706. Temporary program for rare earth materials revitalization.”.

## **TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT**

**SEC. 201. AMENDMENTS TO NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980.**

(a) PROGRAM PLAN.—Section 5 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604) is amended—

(1) by striking “date of enactment of this Act” each place it appears and inserting “date of enactment of the Rare Earths and Critical Materials Revitalization Act of 2010”;

(2) in subsection (b), by striking “Federal Coordinating Council for Science, Engineering, and Technology” and inserting “National Science and Technology Council,”;

- (3) in subsection (c)—
  - (A) by striking “the Federal Emergency” and all that follows through “Agency, and”;
  - (B) by striking “appropriate shall” and inserting “appropriate, shall”;
  - (C) by striking paragraph (1);
  - (D) in paragraph (2), by striking “in the case” and all that follows through “subsection.”
  - (E) by redesignating paragraph (2) as paragraph (1); and
  - (F) by amending paragraph (3) to read as follows:
    - “(2) assess the adequacy, accessibility, and stability of the supply of materials necessary to maintain national security, economic well-being, and industrial production.”;
    - (4) by striking subsections (d) and (e); and
    - (5) by redesignating subsection (f) as subsection (d).
- (b) POLICY.—Section 3 of such Act (30 U.S.C. 1602) is amended—
  - (1) by striking “The Congress declares that it” and inserting “It”; and
  - (2) by striking “The Congress further declares that implementation” and inserting “Implementation”.
- (c) IMPLEMENTATION.—Section 4 of such Act (30 U.S.C. 1603) is amended—
  - (1) by striking “For the purpose” and all that follows through “declares that the” and inserting “The”; and
  - (2) by striking “departments and agencies,” and inserting “departments and agencies to implement the policies set forth in section 3”.

**SEC. 202. REPEAL.**

Title II of Public Law 98–373 (30 U.S.C. 1801 et seq.; 98 Stat. 1248), also known as the National Critical Materials Act of 1984, is repealed.

## II. PURPOSE

The purpose of H.R. 6160 is to develop a rare earth materials program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes.

## III. BACKGROUND AND NEED FOR THE LEGISLATION

Rare earth materials, or *rare earths*, are critical components of a broad range of technologies with applications in important industrial sectors such as defense, manufacturing, energy, transportation, optics and electronics. Weapons guidance systems, petroleum refining catalysts, advanced vehicle batteries, wind turbine motors, jet engines, miniature disk drives and speakers, televisions and monitors, compact fluorescent light bulbs, and optical cable are just a few examples of technologies that cannot currently be made without rare earths. And, demand for rare earths for these and other technologies is only expected to increase. However, for the past decade, the United States and the rest of the world have been almost entirely dependent on China to supply rare earths.

With control of approximately 97 percent of the global markets for rare earths, China holds a discrete but powerful strategic and economic advantage over the rest of the world. On September 1, 2009, the *New York Times* published an article indicating that the Ministry of Industry and Information Technology of the People’s Republic of China had developed a six-year plan for increasing limitations of exports of rare earth minerals and materials to the rest of the world. News of the plan intensified global concerns that it would become more difficult and expensive to obtain these raw materials that are vital to a number of industries. China later announced it would cut its rare earth exports for the second half of 2010 by 72 percent, and there are indications that exports in near-term will be limited to around half of total non-Chinese demand. At the same time, China has stated clearly that foreign firms who

relocate their manufacturing capacity to China will have no trouble procuring rare earth materials. Recent news that China may have cut off rare earth supplies to Japan in retaliation for the detention of a Chinese fisherman further highlighted the potential instability of a global market for what have quickly come to be recognized as critical raw materials.

The United States was at one time the world's leading supplier of rare earths. But the mine in Mountain Pass, California that was the Nation's lone source ceased production in 2002. Further, facilities allowing the follow-on processing necessary to convert the materials within the ores to the oxide or metal forms required to produce magnets, batteries or other technology system components do not exist within the United States. Meanwhile, China is moving aggressively to consolidate these and other capabilities for cutting-edge value-added separation, refining, and manufacturing of rare earths within China.

Further evidence of the shifting global control of rare earths is the diminishing research and development conducted within the U.S. government and industry on the range of issues related to rare earths. Because of the role lanthanide elements played in the first nuclear reactors, the federal government, particularly the U.S. Department of Energy, developed an extensive knowledge base around rare earth properties and production methods. However, as U.S. industrial capacity in rare earths diminished, this intellectual capital deteriorated. Now, with the need to restore domestic capacity becoming apparent, there is no pool of trained personnel available to expedite the industry's revival.

The purpose of H.R. 6160 is to spur U.S. research, development and education in rare earths; to help facilitate investment in domestic production facilities across the entire rare earths supply chain; to promote international collaboration in the field; and to catalogue and disseminate research results and other information on rare earths. Many experts agree that actions are needed to expand the limited capabilities left behind from the Nation's former world leadership in these technologies, and to train the new scientists and engineers who will restore our ability to compete in the global market.

The U.S.'s mechanism for establishing a materials policy and monitoring the materials industry has also significantly diminished over the last three decades. The Congress passed the National Materials and Minerals Policy, Research and Development Act in 1980 to address concerns with bottlenecks in the production of tungsten and the platinum group metals. That law required both the Executive Office of the President and the Cabinet Departments to identify, track, and act to avert impacts on national security or the economy from a lack of materials. Four years later, dissatisfied with the progress of implementation, Congress passed the National Critical Materials Act, creating a National Critical Materials Council to serve as the President's primary advisers on materials issues and to oversee implementation of the 1980 Act. The mechanisms set up by the 1980 Act had since atrophied—the Committee on Materials formerly constituted within the Office of Science and Technology Policy no longer exist, the Bureau of Mines of the Department of the Interior has been disbanded, and there is no identifiable “early warning” system as called for in the law. The National

Critical Materials Council had little perceptible input on U.S. materials policy, and was ultimately terminated early in the Clinton administration.

This legislation, therefore, amends provisions in the 1980 National Materials and Minerals Policy, Research and Development Act to remove obsolete provisions and require the Executive Office of the President and the Cabinet agencies to be attentive to the state of materials supply to meet the Nation's various needs. Particularly important is the design and maintenance of an "early warning" system to prevent the U.S. from encountering emergency situations in regards to supplies of materials like rare earths. Finally, given the difficulties encountered by the National Critical Materials Council in overcoming bureaucratic resistance within the White House and the agencies, and the fact that its dissolution in 1993 has had very little effect on the Nation's national materials policy, H.R. 6160 repeals the underlying 1984 statute. Doing so returns accountability for materials issues to the Executive Office of the President and the Cabinet agencies.

#### IV. HEARING SUMMARY

At the direction of the Chair of the Committee on Science and Technology, the Subcommittee on Information and Oversight began an examination of the conditions in the rare earth materials industry. The Subcommittee convened a hearing on March 16, 2010, for the purpose of making information regarding the rare earth materials situation available to the Members.

The hearing began with a presentation on the findings and recommendations reached by the Committee on Critical Materials Impacts on the U.S. Economy, established by the National Research Council (NRC) in 2008 at the request of the U.S. Geological Survey and the National Mining Association. Dr. Stephen Freiman, a member of the NRC committee, presented the conclusions of its final report entitled *Minerals, Critical Minerals and the U.S. Economy*. His testimony focused heavily on the committee's development of an analytical method to use in determining those particular minerals posing critical problems for the U.S. economy. To conduct such evaluations requires knowledge of supply risk, which can increase if a major producer cannot meet demand, if political considerations block commerce, or if economic changes undercut the ability of suppliers to remain in business. Dr. Freiman also noted that this consideration can change over time; a particular firm at a particular time may not have a materials crisis, but a government considering the continued need for such minerals over ensuing decades may indeed face problems. The other major consideration in identifying minerals deserving possible action is whether other materials can replace the need for the mineral at issue. The concern may be mitigated if some other material can provide equivalent performance or value.

The NRC committee's report described the outcome of applying this methodology to particular cases that were considered at risk in short to medium time frames. Eleven minerals were chosen and evaluated, and the report cited not only rare earths as "critical" but indicated that the United States might face even greater problems from the platinum group metals or indium.

Dr. Freiman also highlighted the report's focus on enhancing the collection of information on materials to support policymaking. The panel recommended consideration of an organization equivalent to the Energy Information Administration to support the analysis needed to identify critical materials. While the U.S. Geological Survey's collection of data on supply of materials is excellent, there is no parallel effort that gathers the data needed to understand questions of demand. Such information would be vital if the "early warning" function required by the National Materials and Minerals Policy, Research and Development Act of 1980 is to succeed.

The Subcommittee invited Dr. Stephen Duclos, the Manager for Material Sustainability for the General Electric (GE) Global Research Unit, to testify on how his company copes with the kinds of problems posed by materials supply and demand. Materials are fundamental to many GE lines of business. Dr. Duclos indicated that GE adapted the analytical model described by Dr. Freiman to meet the company's needs to identify its materials supply risks. The company must consider price volatility, dynamics in the markets, geopolitics and other possible materials solutions in gauging threats to its operations. Dr. Duclos indicated that research on other materials that can be substituted into GE products and achieve the same performance is of constant interest. Finding new suppliers or revamping the production process to minimize need for materials in tight supplies are other means GE uses to minimize disruption. He warned, however, that given the time needed to qualify suppliers or rework production lines, the company must know of its problem as early as possible.

Accordingly, Dr. Duclos recommended that the Federal Government enhance its ability to monitor and analyze change in materials markets. A lead agency should be designated for these responsibilities. Work to characterize the properties of materials would pay off when supply limitations required the consideration of alternatives. Collaborations between academia, companies and government laboratories should focus on developing alternative manufacturing methods that can reduce the need for or replace a critical material. The government's ability to sustain support for high-risk research and development in recycling and substitution would be a valuable contribution.

Asked to summarize the current state of research on rare earths in the United States, Dr. Karl Gschneidner of the Ames National Laboratory of the Department of Energy indicated that separation and analytical chemistry, process and mechanical metallurgy, and ceramics were no longer being studied in rare earth applications. In contrast, China had created a large research base at the Baotou Research Institute of Rare Earths to support its production facilities nearby.

To contribute to restoring U.S. capacity in the rare earth field, Dr. Gschneider recommended establishment of a National Research Center on Rare Earths and Energy to conduct directed basic research and collaborative projects funded by industry. He also suggested a second center focused on applying rare earths to reducing the energy needs in refrigeration, which would reduce greenhouse gas emissions and eliminate the need for fluorocarbon-based refrigerants.



In his testimony, Dr. Gschneidner noted that the Ames Laboratory had just completed work on an improved production method for the neodymium-iron-boron magnets of particular interest to those currently concerned about rare earths issues. The new technique reduced the cost of production and environmental problems from production leftovers. Asked to comment about transferring such technology to industry, he cited communications through journal articles or at conferences. Students who worked in the laboratory developing the technology were particularly valuable conduits for carrying knowledge into practice.

Mr. Mark Smith, Chairman and CEO of Molycorp Minerals, LLC provided testimony from the perspective of a company specializing in rare earths. Owner of the major U.S. mine providing rare earths until it was closed in 2002, Molycorp began developing a recovery plan when its analysis of the market indicated that there might be an insufficient supply for non-Chinese users between 2012 and 2014. The plan went beyond simply restarting mining operations to include intermediate steps such as separation and refining. The company also determined that extending itself to production of permanent magnets for wind turbines was important to fully participating in the market.

Mr. Smith described some of the steps that had been taken to realize Molycorp's plan. Since environmental concerns were part of the reason for the mine's shutdown, the entire production process was reviewed to minimize the use of acids and water at the separation stage. Unable to find students who had studied or worked with rare earths, the company created a training program to develop its own workforce. In efforts to find funding to cover what was expected to be a \$500 million investment, Molycorp approached financial institutions but could not obtain a loan with conditions the company believed it could repay. To reduce the risk in hopes of finding better terms, Molycorp filed an application for a loan guarantee with the Department of Energy. The Department rejected the request because it did not believe the proposal complied with requirements in the Energy Policy Act of 2005 governing the use of the loan guarantee program.

Based on his experience, Mr. Smith advocated that Congress reconsider the eligibility criteria for the loan guarantee program. Research focused on improving our knowledge of the rare earths and finding new applications for these materials would also be useful. While he was encouraged that interagency efforts in rare earths were being organized, he indicated that speed was of the essence.

Finally, the hearing studied the actions being undertaken by China in its quest to develop its economy for insight into responses by the United States. Mr. Terry Stewart, Managing Partner for Stewart and Stewart, provided testimony based on his expertise in international trade policy.

Mr. Stewart indicated that the imposition of export quotas limiting overseas shipments of rare earths was similar to steps it had taken in other industrial segments. The goal, he said, was to provide Chinese manufacturers with low-cost materials, conferring a price advantage for the final product, or to offer an incentive for a foreign firm to bring its manufacturing to China and thereby spur development in provinces such as Inner Mongolia. The United States and the European Union are collaborating on a case before

the World Trade Organization dealing with other industrial materials; Mr. Stewart indicated that a follow-on case concerning rare earths was being debated.

The Chinese Ministry of Industry and Information Technology had prepared a development plan for the rare earths industry covering the years 2009–2015 indicating that the country would continue to reduce the amount of material allowed to leave China. Mr. Stewart also quoted the plan's intent to build up its technological capacity, expand into end-user products, collect intellectual property and promote its own standards. Like the previous witnesses, Mr. Stewart proposed greater U.S. investments in research, diversifying sources of supply and gaining a better understanding of the market. Unlike the others, he recommended returning to the World Trade Organization with a case arguing export constraints on rare earths breached China's compliance with trade agreements.

#### V. COMMITTEE ACTIONS

On September 20, 2010, the Committee on Science and Technology notice draft text of the "Rare Earths and Critical Materials Revitalization Act of 2010" for markup on September 23, 2010.

On September 22, 2010, the text was introduced as H.R. 6160 by Mrs. Dahlkemper, along with Mr. Lewis of California, Mr. Coffman, Mr. Gordon, and Mr. Carnahan. The bill was referred to the Committee on Science and Technology.

On September 23, 2010, the Committee on Science and Technology met to consider H.R. 6160.

The following amendments were offered:

1. A manager's amendment offered by Mrs. Dahlkemper striking the word "technical" from the description of loan guarantee criteria described in the program plan; clarifying that technologies supported by loan guarantees must represent a significant advancement compared to technologies in use in the "United States at the time the guarantee is issued"; and, ensuring that "accessibility" of rare earth resources be taken into consideration in the supply assessments required under the National Materials and Minerals Policy, Research and Development Act of 1980; The amendment was adopted by voice vote.

2. An amendment offered by Mr. Olson striking provisions requiring the establishment of, and reference to, a Research and Development Information Center; and, inserting language in the general program activities requiring the program to collect, catalogue, archive, and disseminate information on rare earth materials, including data generated by the program; The amendment was adopted by voice vote.

3. An amendment offered by Mrs. Eddie Bernice Johnson to clarify that actions to expand participation in the program include Historically Black Colleges and Universities and other Minority-Serving Institutions, as listed under section 371(a) of the Higher Education Act of 1965; The amendment was adopted by voice vote.

4. An amendment by Mr. Broun striking the section on International Collaboration. The amendment was defeated by a recorded vote of 9–14.

5. An amendment offered by Mr. Garamendi and Mr. Rohrabacher ensuring that the Secretary will procure rare earth mate-

rials in accordance with United States and international law. The amendment was withdrawn.

6. An amendment offered by Mr. Rohrabacher striking the Authorization of Appropriations and related provisions in the bill. The amendment was adopted by voice vote.

7. An amendment offered by Mr. Rohrabacher and Mr. Garamendi to ensure that loan guarantees be awarded to entities only if the entity assures the Secretary that the loan or guarantee will be used to support activities in the United States, and for customers within the United States, unless insufficient domestic demand exists. The amendment was agreed to by voice vote.

8. An amendment offered by Mr. Broun limiting loan guarantees to projects that are not currently being undertaken, or likely to be undertaken, by the private sector. The amendment was defeated by voice vote.

9. An amendment offered by Mrs. Biggert moving the year the loan guarantee authority sunsets from 2018 to 2015. The amendment was adopted by voice vote.

The Committee on Science and Technology favorably reported H.R. 6160, as amended, by voice vote.

## VI. SUMMARY OF MAJOR PROVISIONS OF THE BILL

The proposed bill is designed to establish within the Department of Energy a program to support research, development, demonstration and commercial applications of advanced technologies for the purpose of restoring a globally competitive rare earths industry in the United States. The bill will also amend the overall law governing national materials policy to rebuild a framework allowing identification and management of risk in industries supplying economically valuable materials such as rare earths.

Title I of the proposed Act establishes the program within the Department of Energy. The first major element is to invigorate support for research and development in the field of rare earths. The Secretary is instructed to develop this program to conduct research and development in all aspects of the rare earths industry: obtaining the ores containing the materials, separating the rare earths from the ores, converting the rare earths into industrially useful forms, improving the uses of rare earths in products, and recovering rare earths at the end of their lifecycle for reuse (if possible). Work in the program is expected to result in new processes and methods or significant improvements in existing technologies. To capture the full benefit of the new program, the Secretary is instructed to develop an information-management capability to capture the results from the research and development conducted by the program and other relevant information, for use by stakeholders.

The Department is expected to seek participation from academic and industry participants for projects funded by the research program to broaden knowledge in the United States about the rare earths and their uses and to expand the Nation's capacity to produce these materials. Multidisciplinary collaborations among participants are encouraged. Meritorious applications demonstrating opportunities for students from universities (including Historically Black Colleges and Universities and Minority-Serving

Institutions) to obtain real-world experience should also be supported.

The research program is expected to conform to policies and priorities set forth by the National Materials and Minerals Policy, Research and Development Act. Given that the last national minerals research and development policy was issued in 1996, the rare earths program may have to anticipate the work of the National Science and Technology Council in reconstituting a national materials research and development program.

The Secretary may reach out to counterpart agencies in other countries sharing our concerns about adequate supplies of rare earths to restore a well-functioning global marketplace for rare earth materials.

The program plan governing the activities supported by the research program is to be delivered by the Secretary six months after the program is enacted into law. While preparing the plan, the Secretary is expected to consult widely among interested parties. The plan itself must describe the research and development program during the next two years; how said research and development will translate into sustainable supply; how applications for loan guarantees will be evaluated and a list of the loan guarantees in effect; and how the program is drawing in more participants. This plan is to be updated every two years.

After four years the Secretary is to ask the National Academies to assess the progress and value of the program. The resulting report is to include an explicit recommendation that the program be continued or terminated. The Secretary is to consider any recommendations resulting from the assessment and include discussion of the disposition of such advice in the next update of the program plan.

The second element of the program adds a new section to the Department's existing loan guarantee program. Enacted as Title XVII of the Energy Policy Act of 2005, the Department may offer loan guarantees for projects that "avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases[,] and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued." This proposed bill adds a new section, making particular types of rare earths production projects eligible for such support. Such guarantees are subject to the existing requirements of Title XVII.

Additionally, this new section seeks to expedite action by the Department and the industry by setting a goal to produce a full rare earths production capability within five years and by ending eligibility for guarantees on September 30, 2015. The Secretary is expected to expedite approvals to the extent that this does not conflict with protecting taxpayer interest. Applicants for these guarantees must provide assurance to the Secretary that the capabilities supported by this guarantee are employed in the United States for the benefit of United States firms until the Nation's demand for rare earth materials is satisfied.

Finally, Title II of the proposed bill makes certain amendments to the National Materials and Minerals Policy, Research and Development Act of 1980. The amendments are intended to reflect the changes that have occurred in the intervening three decades; for

example, the Federal Coordinating Council for Science, Engineering and Technology was replaced by the National Science and Technology Council by President Clinton. The amendments also remove some obsolete reporting requirements and allow flexibility to allow the Secretary of Commerce to work with any other Cabinet agency that can contribute to identifying and addressing concerns about materials. A range of federal agencies are likely to play greater roles in making policy in the area of international collaboration and competition, or questions of intellectual property access and protection.

The bill concludes by repealing the National Critical Materials Act of 1984, reflecting the fact that the National Critical Materials Council established by the law never effectively carried out its responsibilities and has been moribund since 1993. Repeal of the law returns accountability for national materials issues to the Executive Office of the President and existing Cabinet agencies.

## VII. SECTION-BY-SECTION ANALYSIS

*The purpose of the Rare Earths and Critical Materials Revitalization Act of 2010 is to develop a rare earth materials program and to amend the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601 et seq.).*

### *Section 1. Short title; Table of contents*

Allows citation of the bill as the “Rare Earths and Critical Materials Revitalization Act of 2010” and provides the legislation’s Table of Contents.

### *Section 2. Definitions*

Defines the terms “Appropriate Congressional Committees,” “Center,” “Department,” “Rare Earth Materials,” and “Secretary” as they are used in the bill.

## TITLE I—RARE EARTH MATERIALS

### **SEC. 101. RARE EARTH MATERIALS PROGRAM.**

#### (a) ESTABLISHMENT OF PROGRAM.—

(1) **IN GENERAL.**—The Department of Energy is authorized to conduct research, development, demonstration, and commercial application activities that will restore a long-term, secure and sustainable supply of rare earth materials to meet the needs of the United States.

(2) **ACTIVITIES.**—The program is to conduct activities spanning the entire production cycle for rare earth materials, to include: theoretical geochemical research; apply advanced methods for locating and recovering rare earths; find better technologies to enable rare earth material production; understand and improve the use of rare earths in product designs; seek substitutes for rare earths; conduct projects to reduce the use of rare earth materials or recycle these from existing products; gather and disseminate relevant information and assist stakeholders in using the information; and facilitate information sharing and collaboration.

(3) **IMPROVED PROCESSES AND TECHNOLOGIES.**—The program is to seek new or significantly improved processes and technologies for the rare earth materials industry.

(4) **EXPANDING PARTICIPATION.**—The Secretary is directed to seek multidisciplinary collaborations among program beneficiaries and promote opportunities for students at colleges and universities, including Historically Black Colleges and Universities and other Minority Serving Institutions listed under section 371(a) of the Higher Education Act of 1965.

(5) **CONSISTENCY.**—The program should be consistent with the overall national materials research and development program required by the National Materials and Minerals Policy, Research and Development Act of 1980.

(6) **INTERNATIONAL COLLABORATION.**—The Secretary may seek to collaborate with other nations on activities of mutual interest.

(b) **PLAN.**—

(1) **IN GENERAL.**—Within six months of the date of enactment, and every two years thereafter, the Secretary shall submit to the House Committee on Science and Technology, the Senate Committee on Commerce, Science and Transportation and the Senate Committee on Energy and Natural Resources the plan governing the rare earth materials program.

(2) **SPECIFIC REQUIREMENTS.**—The Secretary is required to describe the following items in the plan: the research and development activities expected during the next two years; how these activities will lead to improved methods and technologies in the domestic rare earth materials industry; how applications for loan guarantees will be evaluated; any loan guarantees outstanding and their current status; the program's efforts to expand participation; and responses to recommendations from a National Academy of Sciences assessment of the program after its fourth year of operation.

(3) **CONSULTATION.**—The Secretary is directed to consult widely with those knowledgeable about rare earths and associated industry when preparing the program plan.

(c) **ASSESSMENT.**—The Secretary will contract with the National Academy of Sciences to assess progress in the rare earth materials program after four years, and make a recommendation to the Secretary about the continued need for the program.

**SEC. 102. RARE EARTH MATERIALS LOAN GUARANTEE PROGRAM.**

(a) **AMENDMENT.**—Amends Title XVII of the Energy Policy Act of 2005, which authorizes the Department of Energy to issue loan guarantees for projects that “avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases[,] and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued,” to ensure that certain projects involving rare earth materials are eligible for consideration. The following new section is added to the Energy Policy Act of 2005:

**“SEC. 1706. TEMPORARY PROGRAM FOR RARE EARTH MATERIALS REVITALIZATION.**

“(a) **IN GENERAL.**—Authorizes the Department of Energy to issue loan guarantees for the commercial application of technologies that

are new or significantly improved compared to those currently in use in the United States for projects involving the separation and recovery of rare earth materials from ores and other sources; their preparation in oxide, metal, alloy or other forms; or their application in improved magnets, batteries, refrigeration and optical systems, electronics, catalysis and other products and uses.

“(b) **TIMELINESS.**—The Secretary is directed to expedite approval of loan guarantee applications insofar as the interests of taxpayers remain protected.

“(c) **COOPERATION.**—The Secretary is to work with the private sector toward the goal that facilities covering all phases of the production of rare earth minerals, from mining to the manufacture of finished products, be operating within five years of the bill’s signing.

“(d) **DOMESTIC SUPPLY CHAIN.**—The Secretary can only award loan guarantees to entities only if the entity assures the Secretary that the loan or guarantee will be used to support activities in the United States, and for customers within the United States, unless insufficient domestic demand exists.

“(d) **SUNSET.**—Loan guarantees under this program can be issued only through September 30, 2015.”

(b) **TABLE OF CONTENTS AMENDMENT.**—Amends the table of contents for the Energy Policy Act of 2005 by inserting an entry for the new Section 1706.

## TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT

### SECTION 201. AMENDMENTS TO NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980.

(a) **PROGRAM PLAN.**—Amends Section 5 by replacing the original date of enactment with the date of enactment of the current bill; substituting the name of the National Science and Technology Council for that of the defunct Federal Coordinating Council for Science, Engineering and Technology; eliminating mandatory consultation with the Federal Emergency Management Administration, the secretaries of Interior and Defense, and the Director of the Central Intelligence Agency by the Secretary of Commerce in regard to certain requirements placed on the latter secretary to report to Congress; eliminating a requirement that the Secretary of Commerce report to Congress within 3 months of enactment; eliminating certain duties assigned to the secretaries of Interior and Defense; and makes conforming and clarifying changes.

(b) **POLICY.**—Amends Section 3 by making clarifying changes.

(c) **IMPLEMENTATION.**—Amends Section 4 by making clarifying changes.

### SECTION 202. REPEAL.

Repeals the National Critical Materials Act of 1984 (30 U.S.C. 1801; 98 Stat. 1248) because the council authorized under the Act no longer exists.

## VIII. COMMITTEE VIEWS

The intent of the legislation is for the federal government to provide a framework that fosters the growth of a diverse domestic rare

earths industry, and for that industry to become robust enough to compete in the global marketplace while meeting the economic, national security, and industrial needs of the United States. This requires the Department of Energy, in carrying out the activities authorized under this Act through competitive processes, to encourage expansion of both the number and types of entities involved in research, development, demonstration, and commercial application of rare earth materials and technologies in the United States.

The Committee believes that loan guarantees made available under this act should be used to help U.S. companies secure financing for projects from which the ultimate economic and strategic benefit will remain in the U.S. To that end, an amendment was adopted in the Full Committee requiring loan guarantee applicants to provide assurance that the guarantee will be used to support rare earth separation, recovery, preparation, or manufacturing in the U.S., and for sale only to customers in the U.S. The amendment allows for an exception in the case of excess domestic capacity for production of rare earths due to insufficient domestic demand, which should be determined at the secretary's discretion. However, the Committee acknowledges that a loan guarantee applicant might not be able to provide total assurance that a rare earth-bearing material or product will remain in the U.S. if that material or product is sold by the applicant and proceeds through the supply chain to become a finished good.

The Committee's view is that rare earth minerals be procured in a manner consistent with human dignity and the rule of law. An amendment was withdrawn by Mr. Garamendi and Mr. Rohrabacher, by agreement of both Members because of the concerns over the applicability of international law to U.S. citizens.

#### IX. COST ESTIMATE

With respect to requirements of clause 3(d) of House rule XIII, the Committee anticipates that a CBO cost estimate letter on H.R. 6160 will address these issues when the bill proceeds to consideration on the House floor.

#### X. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

With respect to the requirements of clause 3(c)(2) of House rule XIII and section 308(a) of the Congressional Budget Act of 1974 and with respect to requirements of clause 3(c)(3) of House rule XIII and section 402 of the Congressional Budget Act of 1974, the Committee anticipates that a CBO cost estimate letter on H.R. 6160 will address these issues when the bill proceeds to consideration on the House floor.

#### XI. COMPLIANCE WITH PUBLIC LAW 104-4

H.R. 6160 contains no unfunded mandates.

#### XII. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

The oversight findings and recommendations of the Committee on Science and Technology are reflected in the body of this report.



### XIII. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c) of House rule XIII, the goal of H.R. 6160 is to develop a rare earth materials program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes.

### XIV. CONSTITUTIONAL AUTHORITY STATEMENT

Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 6160.

### XV. FEDERAL ADVISORY COMMITTEE STATEMENT

H.R. 6160 does not establish nor authorize the establishment of any advisory committee.

### XVI. CONGRESSIONAL ACCOUNTABILITY ACT

The Committee finds that H.R. 6160 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

### XVII. EARMARK IDENTIFICATION

H.R. 6160 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9 of rule XXI.

### XVIII. STATEMENT ON PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

This bill is not intended to preempt any state, local, or tribal law.

### XIX. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

## ENERGY POLICY ACT OF 2005

### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) \* \* \*

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

\* \* \* \* \*

#### TITLE XVII—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

\* \* \* \* \*

*Sec. 1706. Temporary program for rare earth materials revitalization.*

\* \* \* \* \*

## TITLE XVII—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

\* \* \* \* \*

### SEC. 1706. TEMPORARY PROGRAM FOR RARE EARTH MATERIALS REVITALIZATION.

(a) *IN GENERAL.*—As part of the program established in section 101 of the Rare Earths and Critical Materials Revitalization Act of 2010, the Secretary is authorized to make guarantees under this title for the commercial application of new or significantly improved technologies (compared to technologies currently in use in the United States at the time the guarantee is issued) for the following categories of projects:

(1) The separation and recovery of rare earth materials from ores or other sources.

(2) The preparation of rare earth materials in oxide, metal, alloy, or other forms needed for national security, economic well-being, or industrial production purposes.

(3) The application of rare earth materials in the production of improved—

(A) magnets;

(B) batteries;

(C) refrigeration systems;

(D) optical systems;

(E) electronics; and

(F) catalysis.

(4) The application of rare earth materials in other uses, as determined by the Secretary.

(b) *TIMELINESS.*—The Secretary shall seek to minimize delay in approving loan guarantee applications, consistent with appropriate protection of taxpayer interests.

(c) *COOPERATION.*—To the maximum extent practicable, the Secretary shall cooperate with appropriate private sector participants to achieve a complete rare earth materials production capability in the United States within 5 years after the date of enactment of the Rare Earths and Critical Materials Revitalization Act of 2010.

(d) *DOMESTIC SUPPLY CHAIN.*—In support of the objective in subsection (c) to achieve a rare earth materials production capability in the United States that includes the complete value chain described in paragraphs (1) through (4) of subsection (a), the Secretary may not award a guarantee for a project unless the project's proponent provides to the Secretary an assurance that the loan or guarantee shall be used to support the separation, recovery, preparation, or manufacturing of rare earth materials in the United States for customers within the United States unless insufficient domestic demand for such materials results in excess capacity.

(e) *SUNSET.*—The authority to enter into guarantees under this section shall expire on September 30, 2015.

\* \* \* \* \*

**NATIONAL MATERIALS AND MINERALS POLICY,  
RESEARCH AND DEVELOPMENT ACT OF 1980**

\* \* \* \* \*

DECLARATION OF POLICY

SEC. 3. **【The Congress declares that it】** *It* is the continuing policy of the United States to promote an adequate and stable supply of materials necessary to maintain national security, economic well-being and industrial production, with appropriate attention to a long-term balance between resource production, energy use, a healthy environment, natural resources conservation, and social needs. **【The Congress further declares that implementation】** *Implementation* of this policy requires that the President shall, through the Executive Office of the President, coordinate the responsible departments and agencies to, among other measures—

(1) \* \* \*

\* \* \* \* \*

IMPLEMENTATION OF POLICY

SEC. 4. **【For the purpose of implementing the policies set forth in section 3 and the provisions of section 5 of this Act, the Congress declares that the】** *The* President shall, through the Executive Office of the President, coordinate the responsible **【departments and agencies,】** *departments and agencies to implement the policies set forth in section 3 and shall—*

(1) \* \* \*

\* \* \* \* \*

PROGRAM PLAN AND REPORT TO CONGRESS

SEC. 5. (a) Within 1 year after the **【date of enactment of this Act】** *date of enactment of the Rare Earths and Critical Materials Revitalization Act of 2010*, the President shall submit to the Congress—

(1) \* \* \*

\* \* \* \* \*

(b) In accordance with the provisions of the National Science and Technology Policy, Organization, and Priorities Act of 1976 (42 U.S.C. 6601 et seq.), the Director of the Office of Science and Technology Policy shall:

(1) through the **【Federal Coordinating Council for Science, Engineering, and Technology】** *National Science and Technology Council*, coordinate Federal materials research and development and related activities in accordance with the policies and objectives established in this Act;

\* \* \* \* \*

(c) The Secretary of Commerce, in consultation with **【the Federal Emergency Management Administration, the Secretary of the Interior, the Secretary of Defense, the Director of the Central Intelligence Agency, and】** such other members of the Cabinet as may be **【appropriate shall】** *appropriate, shall—*

**【(1) within 3 months after the date of enactment of this Act, identify and submit to the Congress a specific materials needs**

case related to national security, economic well-being and industrial production which will be the subject of the report required by paragraph (2) of this subsection;]

[(2)] (1) within 1 year after the [date of enactment of this Act] *date of enactment of the Rare Earths and Critical Materials Revitalization Act of 2010*, submit to the Congress a report which assesses critical materials needs [in the case identified in paragraph (1) of this subsection,] and which recommends programs that would assist in meeting such needs, including an assessment of economic stockpiles; and

[(3) continually thereafter identify and assess additional cases, as necessary, to ensure an adequate and stable supply of materials to meet national security, economic well-being and industrial production needs.]

(2) *assess the adequacy, accessibility, and stability of the supply of materials necessary to maintain national security, economic well-being, and industrial production.*

[(d) The Secretary of Defense, together with such other members of the Cabinet as are deemed necessary by the President, shall prepare a report assessing critical materials needs related to national security and identifying the steps necessary to meet those needs. The report shall include an assessment of the Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.), and the Strategic and Critical Materials Stock Piling Act (50 U.S.C. App. 98 et seq.). Such report shall be made available to the Congress within 1 year after enactment of this Act and shall be revised periodically as deemed necessary.

[(e) The Secretary of the Interior shall promptly initiate actions to—

[(1) improve the capacity of the Bureau of Mines to assess international minerals supplies;

[(2) increase the level of mining and metallurgical research by the Bureau of Mines in critical and strategic minerals; and

[(3) improve the availability and analysis of mineral data in Federal land use decisionmaking.

A report summarizing actions required by this subsection shall be made available to the Congress within 1 year after the enactment of this Act.]

[(f)] (d) In furtherance of the policies of this Act, the Secretary of the Interior shall collect, evaluate, and analyze information concerning mineral occurrence, production, and use from industry, academia, and Federal and State agencies. Notwithstanding the provisions of section 552 of title 5, United States Code, data and information provided to the Department by persons or firms engaged in any phase of mineral or mineral-material production or large-scale consumption shall not be disclosed outside of the Department of the Interior in a nonaggregated form so as to disclose data and information supplied by a single person or firm, unless there is no objection to the disclosure of such data and information by the donor: *Provided, however,* That the Secretary may disclose non-aggregated data and information to Federal defense agencies, or to the Congress upon official request for appropriate purposes.

\* \* \* \* \*

# **NATIONAL CRITICAL MATERIALS ACT OF 1984**

(Title II of Public Law 98–373)

## **【TITLE II—NATIONAL CRITICAL MATERIALS ACT OF 1984**

### **【SHORT TITLE**

**【SEC. 201.** This title may be cited as the “National Critical Materials Act of 1984”.

### **【FINDINGS AND PURPOSES**

**【SEC. 202.** (a) The Congress finds that—

**【(1)** the availability of adequate supplies of strategic and critical industrial minerals and materials continues to be essential for national security, economic well-being, and industrial production;

**【(2)** the United States is increasingly dependent on foreign sources of materials and vulnerable to supply interruption in the case of many of those minerals and materials essential to the Nation’s defense and economic well-being;

**【(3)** together with increasing import dependence, the Nation’s industrial base, including the capacity to process minerals and materials, is deteriorating—both in terms of facilities and in terms of a trained labor force;

**【(4)** research, development, and technological innovation, especially related to improved materials, processing technologies, are important factors which affect our long-term capability for economic competitiveness, as well as for adjustment to interruptions in supply of critical minerals and materials;

**【(5)** while other nations have developed and implemented specific long-term research and technology programs to develop high-performance materials, no such policy and program evolution has occurred in the United States;

**【(6)** establishing critical materials reserves, by both the public and private sectors and with proper organization and management, represents one means of responding to the genuine risks to our economy and national defense from dependency on foreign sources;

**【(7)** there exists no single Federal entity with the authority and responsibility for establishing critical materials policy and for coordinating and implementing that policy; and

**【(8)** the importance of materials to national goals requires an organizational means for establishing responsibilities for materials programs and for the coordination, within and at a suitably high level of the Executive Office of the President, with other existing policies with the Federal Government.

**【(b)** It is the purpose of this title—

**【(1)** to establish a National Critical Materials Council under and reporting to the Executive Office of the President which shall—

**【(A)** establish responsibilities for and provide for necessary coordination of critical materials policies, including all facets of research and technology, among the various agencies and departments of the Federal Government, and

make recommendations for the implementation of such policies;

[(B) bring the attention of the President, the Congress, and the general public such materials issues and concerns, including research and development, as are deemed critical to the economic and strategic health of the Nation; and

[(C) ensure adequate and continuing consultation with the private sector concerning critical materials, materials research and development, use of materials, Federal materials policies, and related matters;

[(2) to establish a national Federal program for advanced materials research and technology, including basic phenomena through processing and manufacturing technology; and

[(3) to stimulate innovation and technology utilization in basic as well as advanced materials industries.

#### [(ESTABLISHMENT OF THE NATIONAL CRITICAL MATERIALS COUNCIL

[(SEC. 203. There is hereby established a National Critical Materials Council (hereinafter referred to as the "Council") under and reporting to the Executive Office of the President. The Council shall be composed of three members who shall be appointed by the President and who shall serve at the pleasure of the President. Members so appointed who are not already Senate-confirmed officers of the Government shall be appointed by and with the advice and consent of the Senate. The President shall designate one of the members to serve as Chairman. Each member shall be a person who, as a result of training, experience, and achievement, is qualified to carry out the duties and functions of the Council, with particular emphasis placed on fields relating to materials policy or materials science and engineering. In addition, at least one of the members shall have a background in and understanding of environmentally related issues.

#### [(RESPONSIBILITIES AND AUTHORITIES OF THE COUNCIL

[(SEC. 204. (a) It shall be the primary responsibility of the Council—

[(1) to assist and advise the President in establishing coherent national materials policies consistent with other Federal policies, and making recommendations necessary to implement such policies;

[(2) to assist in establishing responsibilities for, and to coordinate, Federal materials-related policies, programs, and research and technology activities, as well as recommending to the Office of Management and Budget budget priorities for materials activities in each of the Federal departments and agencies;

[(3) to review and appraise the various programs and activities of the Federal Government in accordance with the policy and directions given in the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601), and to determine the extent to which such programs and activities are contributing to the achievement of such policy and directions;

[(4) to monitor and evaluate the critical materials needs of basic and advanced technology industries and the Government,

including the critical materials research and development needs of the private and public sectors;

[(5) to advise the President of mineral and material trends, both domestic and foreign, the implications thereof for the United States and world economies and the national security, and the probable effects of such trends on domestic industries;

[(6) to assess through consultation with the materials academic community the adequacy and quality of materials-related educational institutions and the supply of materials scientists and engineers;

[(7) to make or furnish such studies, analyses, reports, and recommendations with respect to matters of materials-related policy and legislation as the President may request;

[(8)(A) to prepare a report providing a domestic inventory of critical materials with projections on the prospective needs of Government and industry for these materials, including a long-range assessment, prepared in conjunction with the Office of Science and Technology Policy in accordance with the National Materials and Minerals Policy, Research and Development Act of 1980, and in conjunction with such other Government departments or agencies as may be considered necessary, of the prospective major critical materials problems which the United States is likely to confront in the immediate years ahead and providing advice as to how these problems may best be addressed, with the first such report being due on April 1, 1985, and (B) review and update such report and assessment as appropriate and report thereon to the Congress at least biennially; and

[(9) to recommend to the Congress such changes in current policies, activities, and regulations of the Federal Government, and such legislation, as may be considered necessary to carry out the intent of this title and the National Materials and Minerals Policy, Research and Development Act of 1980.

[(b) In carrying out its responsibilities under this section the Council shall have the authority—

[(1) to establish such special advisory panels as it considers necessary, with each such panel consisting of representatives of industry, academia, and other members of the private sector, not to exceed ten members, and being limited in scope of subject and duration; and

[(2) to establish and convene such Federal interagency committees as it considers necessary in carrying out the intent of this title.

[(c) In seeking to achieve the goals of this title and related Acts, the Council and other Federal departments and agencies with responsibilities or jurisdiction related to materials or materials policy, including the National Security Council, the Council on Environmental Quality, the Office of Management and Budget, and the Office of Science and Technology Policy, shall work collaboratively and in close cooperation.

#### PROGRAM AND POLICY FOR ADVANCED MATERIALS RESEARCH AND TECHNOLOGY

[SEC. 205. (a) In addition to the responsibilities described in section 204, the Council shall be responsible for coordination with ap-

appropriate agencies and departments of the Federal Government relative to Federal materials research and development policies and programs. Such policies and programs shall be consistent with the policies and goals described in the National Materials and Minerals Policy, Research and Development Act of 1980. In carrying out this responsibility the Council shall—

[(1)(A) establish a national Federal program plan for advanced materials research and development, recommend the designation of the key responsibilities for carrying out such research, and to provide for coordination of this plan with the Office of Science and Technology Policy, the Office of Management and Budget, and such other Federal offices and agencies as may be deemed appropriate, and (B) annually review such plan and report thereon to the Congress;

[(2) review annually the materials research, development, and technology authorization requests and budgets of all Federal agencies and departments; and in this activity the Council shall make recommendations, in cooperation with the Office of Science and Technology Policy, the Office of Management and Budget, and all other Federal offices and agencies deemed appropriate, to ensure close coordination of the goals and directions of such programs with the policies determined by the Council; and

[(3) assist the Office of Science and Technology Policy in the preparation of such long-range materials assessments and reports as may be required by the National Materials and Minerals Policy, Research and Development Act of 1980, and assist other Federal entities in the preparation of analyses and reporting relating to critical and advanced materials.

[(b) The Office of Management and Budget, in reviewing the materials research, development, and technology authorization requests of the various Federal departments and agencies for any fiscal year, and the recommendations of the Council, shall consider all of such requests and recommendations as an integrated, coherent, multiagency request which shall be reviewed by the Office of Management and Budget for its adherence to the national Federal materials program plan in effect for such fiscal year under subsection (a).

#### [(INNOVATION IN BASIC AND ADVANCED MATERIALS INDUSTRIES

[(SEC. 206. (a)(1) In order to promote the use of more cost-effective, advanced technology and other means of providing for innovation and increased productivity within the basic and advanced materials industries, the Council shall evaluate and make recommendations regarding the establishment of Centers for Industrial Technology as provided in Public Law 96-480 (15 U.S.C. 3705).

[(2) The activities of such Centers shall focus on, but not be limited to, the following generic materials areas: corrosion; welding and joining of materials; advanced processing and fabrication technologies; microfabrication; and fracture and fatigue.

[(b) In order to promote better use and innovation of materials in design for improved safety or efficiency, the Council shall establish in cooperation with the appropriate Federal agencies and private industry, an effective mechanism for disseminating materials



property data in an efficient and timely manner. In carrying out this responsibility, the Council shall consider, where appropriate, the establishment of a computerized system taking into account, to the maximum extent practicable, existing available resources.

#### 【COMPENSATION OF MEMBERS AND REIMBURSEMENTS

【SEC. 207. (a) The Chairman of the Council, if not otherwise a paid officer or employee of the Federal Government, shall be paid at the rate not to exceed the rate of basic pay provided for level II of the Executive Schedule. The other members of the Council, if not otherwise paid officers or employees of the Federal Government, shall be paid at a per diem rate comparable to the rate not to exceed the rate of basic pay provided for level III of the Executive Schedule.

【(b) Subject to existing law and regulations governing conflicts of interest, the Council may accept reimbursement from any private nonprofit organization or from any department, agency, or instrumentality of the Federal Government, or from any State or local government, for reasonable travel expenses incurred by any member or employee of the Council in connection with such member's or employee's attendance at any conference, seminar, or similar meeting.

#### 【POSITION AND AUTHORITIES OF EXECUTIVE DIRECTOR

【SEC. 208. (a) There shall be an Executive Director (hereinafter referred to as the "Director"), who shall be chief administrator of the Council. The Director shall be appointed by the Council full time and shall be paid at the rate not to exceed the rate of basic pay provided for level III of the Executive Schedule.

【(b) The Director is authorized—

【(1) to employ such personnel as may be necessary for the Council to carry out its duties and functions under this title, but not to exceed twelve compensated employees;

【(2) to obtain the services of experts and consultants in accordance with the provisions of section 3109 of title 5, United States Code; and

【(3) to develop, subject to approval by the Council, rules and regulations necessary to carry out the purposes of this title.

【(c) In exercising his responsibilities and duties under this title, the Director—

【(1) may consult with representatives of academia, industry, labor, State and local governments, and other groups; and

【(2) shall utilize to the fullest extent possible the services, facilities, and information (including statistical information) of public and private agencies, organizations, and individuals.

【(d) Notwithstanding section 367(b) of the Revised Statutes (31 U.S.C. 665(b)), the Council may utilize voluntary and uncompensated labor and services in carrying out its duties and functions.

#### 【RESPONSIBILITIES AND DUTIES OF THE DIRECTOR

【SEC. 209. In carrying out his functions the Director shall assist and advise the Council on policies and programs of the Federal Government affecting critical and advanced materials by—

[(1) providing the professional and administrative staff and support for the Council;

[(2) assisting the Federal agencies and departments in appraising the effectiveness of existing and proposed facilities, programs, policies, and activities of the Federal Government, including research and development, which affect critical materials availability and needs;

[(3) cataloging, as fully as possible, research and development activities of the Government, private industry, and public and private institutions; and

[(4) initiating Government and private studies and analyses, including those to be conducted by or under the auspices of the Council, designed to advance knowledge of critical or advanced materials issues and develop alternative proposals, including research and development, to resolve national critical materials problems.

#### [AUTHORITY

[SEC. 210. The Council is authorized—

[(1) to establish such internal rules and regulations as may be necessary for its operation;

[(2) to enter into contracts and acquire materials and supplies necessary for its operation to such extent or in such amounts as are provided for in appropriation Acts;

[(3) to publish, consistent with title 44 of the United States Code, or arrange to publish critical materials information that it deems to be useful to the public and private industry to the extent that such publication is consistent with the national defense and economic interest;

[(4) to utilize such services or personnel as may be provided to the Council on a nonreimbursable basis by any agency of the United States, and

[(5) to exercise such authorities as may be necessary and incidental to carrying out its responsibilities and duties under this title.

#### [AUTHORIZATION OF APPROPRIATIONS

[SEC. 211. There are hereby authorized to be appropriated to carry out the provisions of this title a sum not to exceed \$500,000 for the fiscal year ending September 30, 1985, and such sums as may be necessary thereafter: *Provided*, That the authority provided for in this title shall expire on September 30, 1992, unless otherwise authorized by Congress.

#### [DEFINITION

[SEC. 212. As used in this title, the term “materials” has the meaning given it by section 2(b) of the National Materials and Minerals Policy, Research and Development Act of 1980.]

#### XX. COMMITTEE RECOMMENDATIONS

On September 23, 2010, the Committee on Science and Technology favorably reported H.R. 6160 by voice vote and recommended its enactment.

## XXI. ADDITIONAL VIEWS

---

### ADDITIONAL VIEWS OFFERED BY REPRESENTATIVES RALPH HALL, LAMAR SMITH, DANA ROHRBACHER, JUDY BIGGERT, TODD AKIN, BOB INGLIS, MICHAEL McCAUL, ADRIAN SMITH, PAUL BROUN AND PETE OLSON

Rare earth minerals, and the metals and alloys that result from their processing are important components in a broad range of high-tech products, from consumer electronics to wind turbines, hybrid vehicles, and certain military and weapons systems.

Growing demand for rare earth materials, combined with recently announced export restrictions by China—the dominant global source of rare earth mining and production activities—has led to concerns the U.S. could face a potential supply shortage in rare earth minerals as early as 2011.

H.R. 6160 is intended to address these concerns through the establishment of a rare earth materials research and development (R&D) program and authorization of loan guarantees to support rare earth minerals mining, processing, and production activities.

Notwithstanding the clear and significant potential for a rare earth supply shortage, we question whether the activities called for in H.R. 6160 provide the appropriate policy response to this issue.

To the extent that a rare earth supply gap may present national security concerns, we believe such concerns should be addressed without delay, but through appropriate responsible entities, notably the Department of Defense (DOD) and House and Senate Armed Services committees. Accordingly, we note that DOD plans to complete a national security evaluation of this issue in the coming weeks.

With respect to commercial supply needs, we believe that taxpayer subsidies in the form of loan guarantees should be restricted to those areas not undertaken by the private sector. Inappropriate entry into the competitive marketplace risks the government favoring certain companies over others, “picking winners and losers” and potentially crowding out further private sector investment. This principle is particularly important in the case of rare earths due to the aggressive private pursuit of rare earth mining opportunities in response to recent price increases. To this end, we offered an amendment to ensure that loan guarantees were not given for projects that already had obtained private sector funding; we regret the Majority’s rejection of this amendment.

We also regret the Majority’s rejection of amendment language to address concerns regarding the legislation’s international collaboration requirement. Specifically, H.R. 6160 directs the Secretary of Energy to “coordinate activities” regarding rare earths with the European Commission to “avoid duplication of effort.” We question the

appropriateness of avoiding duplication of effort as a foreign policy objective related to a domestic supply issue, and we object to language directing collaboration only with the European Commission, to the exclusion of other key allies.

However, we are pleased that several other Republican amendments to improve H.R. 6160 were approved with bipartisan support, specifically amendments to: (1) eliminate funding authorizations for R&D activities; (2) eliminate a rare earth “R&D Information Center”; (3) limit loan guarantee support for exportation of unprocessed rare earth materials necessary to meet domestic demand; and (4) reduce the length of authorization for rare earth loan guarantees from eight years to five years.

Finally, we express our concern that this legislation was not developed and advanced through regular order. The Energy and Environment Subcommittee, which maintains jurisdiction over the activities authorized in this bill, did not hold a legislative hearing or markup, dramatically limiting Members’ opportunities to review this issue and consider improvements to the legislation.

Despite these concerns, we recognize the importance of ensuring a stable supply of rare earth materials and the potential for a near-term supply shortage, and we remain committed to working on this issue and this bill as it moves through the legislative process.

PAUL BROWN.  
PETE OLSON.  
MICHAEL McCAUL.  
LAMAR SMITH.  
RALPH HALL.  
ADRIAN SMITH.  
BOB INGLIS.  
JUDY BIGGERT.  
DANA ROHRABACHER.  
TODD AKIN.

ADDITIONAL VIEWS OFFERED BY REPRESENTATIVE PAUL  
BROUN

In light of China's actions to further increase an international supply shortage of rare earth minerals, I recognize the need for ensuring a stable domestic supply of such resources. The bill's goals of advancing U.S. research and development of rare earth minerals to increase domestic production facilities are worthy. However, I regret that another committee on which I serve, the House Committee on Natural Resources, did not have the opportunity to hold any hearings or mark up this bill to address rare earth matters that may have been of jurisdictional interest.

Specifically, I hoped that the Natural Resources Committee would have been able to debate assisting the streamlining of mining permits, the identification of public lands which are ripe for rare earth mineral development, and the necessity of federal loan guarantees for private mining operations. Also, the marked up bill appears duplicative to the research and development efforts currently being developed by the U.S. Geological Survey underscoring the need for feedback and input from the Natural Resources Committee in discussions impacting U.S. mining operations.

By failing to work with other Committees, this legislation squanders an opportunity to positively restart an important industry in America and does a disservice to the American taxpayer by failing to address important gaps, while creating unnecessary duplication.

PAUL BROUN.

## **XXII: PROCEEDINGS OF THE FULL COMMITTEE MARKUP ON H.R. 6160, THE RARE EARTHS AND CRITICAL MATERIALS REVITALIZATION ACT OF 2010**

THURSDAY, SEPTEMBER 23, 2010

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND TECHNOLOGY,  
*Washington, DC.*

The Committee met, pursuant to call, at 10:07 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Bart Gordon [Chairman of the Committee] presiding.

Chairman GORDON. Good morning. The Committee will come to order. Pursuit to notice the Committee on Science and Technology meets to consider the following measures. H.R. 5866, *The Nuclear Energy Research and Development Act of 2010*, and H.R. 6160, *The Rare Earth and Critical Materials Revitalization Act of 2010*.

Also I want to welcome our interns today. I think we have a lot of interns here. They have come to see how sausage is made. I think you will be pleased that we are doing it in a good way.

We will now proceed with the markup. Today we will consider two important pieces of legislation that will help America recapture a technological lead in a wide range of industries critical to our economy, our national defense, and a clean and secure energy future.

First, we will consider H.R. 5866, cosponsored by myself, Subcommittee Chairman Baird, Ranking Member Hall, and Subcommittee Ranking Member Inglis. This bill amends the *Energy Policy Act of 2005*, to modernize and improve our Federal nuclear energy R&D programs. Our Nation's 104 commercial reactors today produce 20 percent of our electricity and 70 percent of our emission-free energy. If we are to increase our energy independence and mitigate the effects of climate change, nuclear must continue to be a part of our Nation's energy mix.

However, capital costs continue to rise for construction of new plants and the question of how to manage the waste byproducts of nuclear fission remains.

H.R. 5866 provides the programmatic architecture needed at DOE to answer and solve these outstanding issues. This bill is the result of a truly bipartisan effort over the past six months, and I would like to thank Mr. Hall, Mr. Inglis, Dr. Baird, as well as the Committee staff of both the majority and the minority for their continued good work as we move this legislation through the Committee and to the Floor.

The second bill on the roster is H.R. 6160, introduced by the gentlewoman from Pennsylvania, Mrs. Dahlkemper, and cosponsored by Mr. Carnahan, Mr. Jerry Lewis, Mr. Coffman, and myself.

As the I&O Subcommittee hearing in March highlighted and Mrs. Dahlkemper understands well, rare earths are an essential component of the technologies in a wide range of emerging and established industries, for everything from oil refining to hybrid cars, wind turbines to weapon systems. And the demand for rare earths is only expected to grow.

However, despite the fact that the U.S. at one time was the global leader in this field, we are now 95 percent dependent on China for rare earths. Making matters more urgent, China has begun limiting production in the export of rare earths and requiring that products using rare earth be manufactured in China and largely for Chinese consumption. And for the ones of you that have not had a chance to see the paper this morning, I wanted you to see the front page of the *New York Times* business section. The headline is, "In Dispute, China Blocks Rare Earths Exports to Japan."

Now, let me just suggest that I suspect in the next few days that Congress is going to take action on some concerns about the Chinese currency, and with that action we could well see next week that the headline could be, "In Dispute, China Blocks Rare Earth Mineral Exports to the United States." That would be devastating to our economy as well as to our national security.

This is clearly an untenable position for the U.S. I believe it would be foolish to stake our national defense and economic security on China's goodwill or hope that it will choose to compete in a fair and open global marketplace for rare earths. The stakes are simply too high. This is not the first time the Committee has been concerned with competitive implications of materials such as rare earths. In 1980, 30 years ago, this committee established a National Minerals and Materials Policy. One core element in the legislation was the call for support for a vigorous and comprehensive and coordinated program for materials research and development.

Unfortunately, over successive Administrations the effort to sustain the program fell apart. Now it is time to revise a coordinated effort to level the global playing field in rare earths.

Mrs. Dahlkemper's bill calls for increased research and development to help address the Nation's rare earths shortage and reinvigorates the national policy for critical materials.

With that I thank you for your attendance and participation this morning and look forward to a productive markup.

[The prepared statement of Chairman Gordon follows:]

#### PREPARED STATEMENT OF CHAIRMAN BART GORDON

Today we will consider two important pieces of legislation that will help America recapture a technological lead in a wide range of industries critical to our economy, our national defense, and a clean and secure energy future.

First, we will consider H.R. 5866 sponsored by myself and co-sponsored by Subcommittee Chairman Baird, Ranking Member Hall and Subcommittee Ranking Member Inglis.

This bill amends the *Energy Policy Act of 2005* to modernize and improve our Federal nuclear energy R&D programs. Our nation's 104 commercial reactors today produce 20 percent of our electricity and 70 percent of our emissions free energy.

If we are to increase our energy independence and mitigate the effects of climate change, nuclear must continue to be a large part of our nation's energy mix.

However, despite a strong record of safety and operating efficiency, capital costs continue to rise for construction of new plants, and the question of how to manage the waste byproducts of nuclear fission remains.

H.R. 5866 provides the programmatic architecture needed at DOE to answer and solve these outstanding issues.

This bill is the result of a truly bipartisan effort over the past six months and I would like to thank Mr. Hall, Mr. Inglis, and Mr. Baird, as well as the Committee Staff of both the Majority and Minority, for their continued good work as we move this legislation through the Committee and to the floor.

The second bill on the roster is H.R. 6160 introduced by the gentlewoman from Pennsylvania, Mrs. Dahlkemper, and cosponsored by Mr. Carnahan, Mr. Jerry Lewis, Mr. Coffman, and myself.

As the I&O Subcommittee hearing in March highlighted, and as Mrs. Dahlkemper understands well, rare earths are an essential component of technologies in a wide array of emerging and established industries. For everything from oil refining to hybrid cars, wind turbines to weapons systems, the demand for rare earths is only expected to grow.

However, despite the U.S. at one time being the global leader in this field, we are now 95% dependent on China for rare earths. Making matters more urgent, China has begun limiting production and export of rare earths and requiring that products using rare earths be manufactured in China, and largely for Chinese consumption.

This is clearly an untenable position for the U.S. I believe it would be foolish to stake our national defense and economic security on China's goodwill or a hope that it will choose to compete in a fair and open global marketplace for rare earths.

This is not the first time the Committee has been concerned with the competitive implications of materials such as rare earths. In 1980—30 years ago—this Committee established a national minerals and materials policy. One core element in that legislation was the call to support for “a vigorous, comprehensive and coordinated program of materials research and development.”

Unfortunately, over successive administrations, the effort to sustain that program fell apart. Now, it is time to revive a coordinated effort to level the global playing field in rare earths.

Mrs. Dahlkemper's bill calls for increased research and development to help address the Nation's rare earth shortage, and reinvigorates the national policy for critical materials.

With that, I thank you all for your attendance and participation this morning, and I look forward to a productive markup.

Chairman GORDON. And I now recognize Mr. Hall to present his opening statement.

Mr. HALL. Thank you for holding the markup of H.R. 5866, the Nuclear Research Bill, and H.R. 6160, the *Rare Earth and Critical Materials Revitalization Act*, and as this is expected to be maybe our last markup of the 111th Congress, and at my age I don't ever like to say this is our last vote or this is our last day up here, this is our—my last day in Congress or anything, but I want to take the opportunity really to thank you personally for your service to the committee and your very fair and bipartisan approach to working with us and the Members of the Committee over the years. We all feel that way, and we certainly wish you well.

The first bill we will consider authorizes the Nuclear Energy R&D Program to the Department of Energy, and we are all aware of the importance of nuclear energy to America's future. It provides a safe, reliable, and cost-competitive source of energy to meet future increases in electricity demand. And it is not battled by a lot of the goofy people that are opposed to a lot of the other types of energy that we have.

It is safe, and we should have been—other than having about 20 percent, we ought to have somewhere closer to 50 percent nuclear output. It didn't happen, and there is a lot of other things that we could look back for and repeat the words from that famous poem, Maud Muller. The last sentence of it said, “Of all sad words of



tongue or pen the saddest of these it might have been.” And if we would have worked harder on nuclear and supported it more and looked more toward the proper energy thrust of the future, I think we would be better off.

In the short term we need to license and build more reactors or use an existing light water technology, but over the longer term we need to advance the development and licensing of new reactor designs, extend the life of the existing reactor fleet, and address the serious issue of managing waste and spent nuclear fuel. That is a big order.

Continued research and development is necessary to overcome all of these challenges, and this bill will help us to get through a comprehensive approach that authorizes existing R&D activities at DOE with an emphasis on accelerating the advancement and eventual licensing of small modular reactors.

It is a good bill. I thank the majority for working with us throughout the summer to craft it, and I am pleased to join Chairman Gordon, Energy Subcommittee Chairman Baird, and Ranking Member Inglis as a cosponsor.

We—I know that the second bill we consider creates a “Rare Earth Mineral,” R&D Program at DOE and authorizes DOE to make loan guarantees for mining, processing, and industrial production of rare earth minerals. This is an important issue that warrants our attention.

Rare earths are used in many different high-tech applications, including certain military and weapons systems, and China controls the bulk of world supply and recently announced its intention to reduce exports, triggering concerns that the U.S. could face a supply gap.

The obvious question we face is how best to address this concern with respect to potential and national security ramifications. I understand that the Department of Defense will soon complete a study regarding its need for a domestic rare earth supply capability, a question that appropriately will be addressed by DOD and the Armed Services Committee.

With respect to commercial supply needs, it appears that increased demand and actions by China have resulted in sharp price increases for rare earth materials. Now, this in turn has stimulated an immediate market response as companies around the world are aggressively pursuing new rare earth mining and progressing—processing opportunities. A suggestion that a taxpayer subsidy for such activity may not be necessary.

Important questions remain unanswered because we have—because we bypass regular order with this legislation, and members have had only a brief opportunity consider this issue and legislation. I am uncomfortable supporting passage of this bill. I am not positive as to how I feel about the bill, but I am very understanding that we have a problem that we probably need to settle for ourselves without selecting one single entity to support, that we get some competitive approach to it, and with that I yield back the balance of my time.

Pardon. If I might retract that, I want to—if I have any time left I want to yield it to Mr. Bilbray.

Mr. BILBRAY. Mr. Chairman—thank you. I appreciate the Ranking Member yielding. Look, I just want to—regardless of the details of how we work this out, I want to thank the Chair and the Ranking Member for raising these two issues, because I think too often here in Washington and around this country we talk about lofty ideas, things like clean air, clean, affordable energy. We talk about electrification of automobiles and more efficient use of what energy we have.

These two items you have brought up are those essential things that are put on backburners and are not bothered with because they may be politically hot, but they are the foundations that are essential to lay if you are ever going to see things like clean, affordable energy, if you are going to see electrification of our fleets, and especially these two. It is the fact that the nuclear power issue is one that has been a third—political third rail, but you are brave enough to address it, and I congratulate and thank you for the American people on that.

And the issue of rare earths is one of those detailed things that are essential. If you think about this, it is the permanent magnet, high-efficiency electric motors that are driving Priuses and our troop carriers are essential for this. So if you believe in a clean, electrified fleet, then you have got to be brave enough to stand up on rare earth. If you believe in a clean air and want to address climate change, then you got to be brave enough to stand up for next generation nuclear.

And I appreciate the fact that, Mr. Chairman, that you have been brave enough to be able to do that, and I hope that the committee over at E and C and in Interior are brave enough to stand up and talk frankly about this because we are not going to see those great opportunities for the future if the committees and this Congress aren't brave enough to do what you are doing today.

And I want to yield back.

Mr. HALL. Mr. Chairman, I, too, appreciate your interest and involving the committee in this very, very important issue. I will continue to work with you on issues as we move forward. I yield back. Thank you.

Chairman GORDON. We now will consider H.R. 6160, the *Rare Earth and Critical Materials Revitalization Act of 2010*. I recognize the gentlelady from Pennsylvania, Mrs. Dahlkemper, for five minutes to describe the bill.

Mrs. DAHLKEMPER. Thank you, Mr. Chairman. I am speaking today in support of my bipartisan bill, the *Rare Earth and Critical Materials Revitalization Act*, and—if many of you are like me—you probably didn't know a lot about rare earth materials until recently. During a subcommittee hearing in this room, when I did learn about them, I realized that we must do something to address a growing gap between the United States and China in the use and development of these materials.

Rare earth materials are used in defense, industrial uses, energy, optics, and electronics. These materials go into our iPods, speakers, disc drives, batteries for electric cars, products that are all being currently manufactured in China because we can't make them here. China currently accounts for between 90 and 97 percent of the world's supply of rare earth materials. General Electric, in my

district, can use these materials to make wind turbines, helping to give us greater energy independence.

The National Association of Manufacturers has endorsed this bill because of the importance of these materials to American manufacturing. These materials don't, though, just go into electronics and clean energy products, but they are also used in all sorts of critical military-based technologies like precision-guided weapons and night-vision goggles.

So we are not just talking about our energy security here today, but we are also talking about our national security. Just this summer China announced that it would cut its exports for the second half of 2010, by 72 percent. At the same time China has stated clearly that foreign firms who move their manufacturing capacity onto Chinese soil will have no trouble procuring rare earth materials.

Today we have an opportunity to begin the long process of catching up with the Chinese and beginning to make these goods in America again. We simply cannot depend on China or any other country for such crucial material to our national security. If China decides to stop selling those goods to us, we need to have our own supply available.

I am thankful to the Chairman for the opportunity to bring this bill up, and I urge all of my colleagues to support the bill. Thank you.

Mr. BAIRD. [Presiding] Thank you, Mrs. Dahlkemper. I now recognize Mr. Hall to present any remarks on the bill.

Mr. HALL. Thank you, Mr. Chairman, and I will be brief and just reemphasize from my earlier statement. Ensuring a stable, a very stable supply of rare earth minerals is very important to our high tech economy and as it has just been said and our national security. And this issue certainly warrants our close review.

However, it is not clear whether the bill before us would completely address the problem effectively, and they really haven't had a chance to do that. There are a lot of unresolved questions, and the fact that we didn't have time to undertake a Full Committee or subcommittee hearing is not blamed on anybody on this legislation. The lack of a subcommittee markup through which to consider these questions is regrettable. I think we really need it, but I look forward to the debate and the discussion.

And I yield back.

Mr. BAIRD. Is there anyone else who wishes to be recognized on the bill?

[The prepared statement of Mr. Miller follows:]

PREPARED STATEMENT OF REPRESENTATIVE BRAD MILLER

Mr. Chairman, I am pleased to see the Committee taking up the *Rare Earth and Critical Materials Revitalization Act*. I know how much time you've devoted to finding a solution that assures a long-term sustainable supply of these valuable elements to meet our national security and economic needs. I know this because I'm pleased that the Investigations and Oversight Subcommittee, which I chair, has been contributing to the preparation of this legislation and this markup.

In March, my Subcommittee held a hearing to examine the scope of the rare earths problem for the United States. We learned of our heavy dependence on China, which supplies almost the entire global demand. We had testimony on the tightening limits on exports from China. Research in the United States on rare earths has fallen off. And the head of the company that wants to give us the ability

to compete again told us that he couldn't get a bank loan to carry out his plan. You spent a good deal of time with us that day, Mr. Chairman.

I can see the influence of that hearing in the bill here today. The bill sets up a research program that will look for new processes and technologies to find, produce and use rare earths in ways that will benefit industries as diverse as magnets, lighting, batteries, communications and refining oil. Add neodymium to iron and boron and you can get a magnet that guides smart bombs to their targets or puts hard drives into computers that store more than we ever believed at a cost that seemed too good to be true. If we are going to keep our leads in high-technology industries, we will need these materials for years to come.

I wanted to indicate my support for the bill and express the satisfaction I have in the contributions my Subcommittee made in helping you and Mrs. Dahlkemper bring it before us today. Mrs. Dahlkemper has been a very diligent member of the Investigations and Oversight Subcommittee, and I am pleased to see her offering this bill today.

Mr. BAIRD. If not, I ask unanimous consent that the bill is considered as read and open to amendment at any point and that the members proceed with the amendments in the order of the roster.

Without objection, so ordered.

Mr. BAIRD. The first amendment on the roster is a manager's amendment offered by the gentlelady from Pennsylvania, Mrs. Dahlkemper. Are you ready to proceed with your amendment, Mrs. Dahlkemper?

Mrs. DAHLKEMPER. Yes, Mr. Chairman. I have an amendment at the desk.

Mr. BAIRD. The clerk will report the amendment.

The CLERK. Amendment number 051, amendment to H.R. 6160 offered by Mrs. Dahlkemper of Pennsylvania.

Mr. BAIRD. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentlelady for five minutes to explain the amendment.

Mrs. DAHLKEMPER. Thank you, Mr. Chairman. There are three parts to the manager's amendment. The first item removes the word "technical" from Section 101(c)(2)(C), which requires the Secretary of Energy to include in the program plan a description of the factors to be used when evaluating applications for loan guarantees.

Use of the phrase "technical criteria" could be read to say that the DOE would predetermine very specific design requirements in project applications, something the government is not necessarily well qualified to do. Removing technical leaves the intent of the subparagraph intact and the discretion to the Secretary as to how detailed the criteria may be.

In the second part we are making our language on the types of projects eligible for loan guarantees consistent with the other loan guarantee authorizations in Title 17 of the Energy Policy Act of 2005. With the amendment the Secretary must evaluate loan guarantee applications against technologies in place at the time the application is being considered, so that the funds go only to projects making significant advances in technology.

This change was recommended by my colleagues across the aisle, and I am happy to include it here.

And the last section, I would like at this point yield to my friend from Ohio, Mr. Wilson, to explain that portion.

Mr. BAIRD. The gentleman is recognized.

Mr. WILSON. Thank you. Thank you, Chairman Gordon and Congresswoman Dahlkemper. Thank you for addressing a concern of mine in this manager's amendment.

By including the word "accessibility" in Section 201—an article in today's *New York Times* highlights the fragile supply chain of rare earth materials. In response to Japan's detainment of a fishing captain, China has halted all exports of rare earth elements to Japan.

American firms rely heavily on both Japan and China to supply the magnets and other materials needed for hybrid cars and systems vital to our national defense. If Japan no longer has access to rare earth materials—minerals, pardon me—from China, America would be entirely reliant on China for materials necessary to our country's security. I am pretty sure that this is a situation we don't want to get into.

Even before this latest incident, export quotas, embargoes, and policies limiting supplies only to firms willing to establish their manufacturing operations nearby leave open the possibility that there might be a large source of rare earth materials unavailable to firms in the United States.

Mr. Chairman and Congresswoman Dahlkemper, thank you for ensuring that this accessibility issue remains as an important component in the future assessments of rare earth materials.

Thank you.

[The prepared statement of Mr. Wilson follows:]

PREPARED STATEMENT OF REPRESENTATIVE CHARLES A. WILSON

I would like to thank Chairman Gordon and Congresswoman Dahlkemper for addressing a concern of mine in this manager's amendment by including the word "accessibility" in Section 201.

An article in today's *New York Times* highlights the fragile supply chain for rare earth materials. In response to Japan's detainment of a fishing captain, there are reports that China has halted all exports of rare earth elements to Japan. Furthermore, Arnold Magnetic Technologies, a company that employs 93 of my constituents in Marietta, Ohio has already brought to my attention serious access issues with regard to rare earth elements.

American firms rely heavily on both Japan and China to supply the magnets and other materials needed for hybrid cars and systems vital to our national defense. If Japan no longer has access to rare earth minerals from China, America would be entirely reliant on China for materials necessary to our country's security. I am pretty sure that is a situation we do not want to get into.

Even before this latest incident, export quotas, embargoes and policies limiting supplies only to firms willing to establish their manufacturing operations nearby leave open the possibility that there might be a large source of rare earth minerals unavailable to firms in the United States.

Chairman and Congresswoman Dahlkemper, thank you for ensuring that the accessibility issue remains an important component in future assessments of rare earth materials.

Mrs. DAHLKEMPER. I want to thank the gentleman for his contribution to his amendment, very much needed, and I yield back.

Mr. BAIRD. The gentlelady yields back.

Is there further discussion on the amendment?

If no, the vote occurs on the amendment. All in favor, say aye. Those opposed, no. The ayes have it. The amendment is agreed to.

The second amendment on the roster is an amendment offered by the gentleman from Texas, Mr. Olson. Mr. Olson, are you ready to proceed?

Mr. OLSON. I am, Mr. Chairman.

Mr. BAIRD. The clerk will report the amendment.

The CLERK. Amendment number 321, amendment to H.R. 6160 offered by Mr. Olson of Texas.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I guess we will go ahead and recognize the gentleman for five minutes to explain the amendment.

Mr. OLSON. Thank you, Mr. Chairman. The goal of my amendment is to provide us with the flexibility going forward to the benefit of the American taxpayers. The bill before us authorizes \$70 million over five years for R&D-related activities, including the establishment of a new Department of Energy Research and Development Information Center.

The importance of such a center, to the bill's overarching goal to stabilize the supplies of rare earth materials, is debatable. As a general rule, we should try to avoid statutory creation of such centers unless the need is clear and compelling. Centers are expensive, typically costing \$5 million or more per year to implement, and once established they have a tendency to exist in perpetuity. It is easier to kill a vampire than a new Federal Government program.

In response for requests for stakeholders comments and legislation, the U.S. Magnet Materials Association expressed concern about the creation of such a center, specifically stating, and I quote, "The U.S. MMA questions whether the center is an appropriate information clearinghouse." We have also heard concerns that this responsibility already exists at the USGS. The bill also includes specific language requiring the center to host annual conferences costing up to \$375,000 to, "promote information sharing and encourage new collaborative activities."

With our growing debt the justification for Congress to spend tax dollars on an information sharing conference is highly questionable. The American people want us to stop the unnecessary growth of government, and these concerns have prompted me to offer this amendment, and I ask for its support.

Reserve the balance of my time.

[The prepared statement of Mr. Olson follows:]

#### PREPARED STATEMENT OF REPRESENTATIVE PETE OLSON

- Mr. Chairman, I have an amendment at the desk and ask for its immediate consideration.
- Thanks Mr. Chairman. The goal of my amendment is to provide us with flexibility going forward to the benefit of the American taxpayer.
- The bill before us authorizes \$70 million over five years for R&D-related activities, including establishment of a new Department of Energy "Research and Development Information Center."
- The need importance of such a center to the bill's overarching goal to stabilize domestic supplies of rare earth materials is debatable.
- As a general rule, we should try to avoid statutory creation of such centers unless the need is clear and compelling.
- Centers are expensive—typically costing \$5 million or more per year to implement. And once established they have a tendency to exist in perpetuity. It's easier to kill a vampire than a government program.
- In response to a request for stakeholder comments on the legislation, the U.S. Magnet Materials Association expressed concern about the creation of such a

Center, specifically stating “the USMMA questions whether the Center is an appropriate information clearinghouse.”

- We’ve also heard concerns that this responsibility already exists at the USGS.
- The bill also includes specific language requiring the Center to host annual conferences costing up to \$375,000 to “promote information sharing and encourage new collaborative activities.”
- With our growing debt, the justification for Congress to spend tax dollars on an “information sharing” conference is highly questionable.
- The American people want us to stop unnecessary spending.
- These concerns have prompted me to offer this amendment and I ask for its support.

Chairman GORDON. Thank you, Mr. Olson. We will support the bill, but I would ask that you would work with us as we go to the Floor if there is any fine tuning on it to make sure that it doesn’t go beyond your intention.

Mr. OLSON. Happy to do that, Mr. Chairman. Thank you.

Chairman GORDON. Thank you, Mr. Olson.

Is there further discussion on the amendment?

Mrs. Dahlkemper is recognized.

Mrs. DAHLKEMPER. In the interest of moving forward I agree with accepting the amendment, but I did want to just make a few points that I think this amendment preserves a few of the proposed R&D Information Center functions and leaves behind really greatly-reduced information gathering functions.

And the R&D Information Center was intended to gather domestic and international scientific materials pertaining to rare earth materials in the same location and assist the stakeholders in actually using this information. This is also to be a location where researchers could gather to exchange information, ideas, whether at conferences or in the normal course of their work and collaborate on projects. And I think centralizing the information and providing a locus for live information exchange on rare earth was intended to help resuscitate the U.S. research activity in the field of rare earth.

But as I said, I am glad to hear that the gentleman is going to work on language, and I hope we can find some way to assure that this happens as we go forward.

I yield back.

Chairman GORDON. Mr. Hall is recognized.

Mr. HALL. Mr. Chairman, I thank you. I support Mr. Olson’s amendment to strike the rare earth R&D Information Center created in the bill for these reasons.

The need for a center to conduct this activity is not as clear as it could be, especially since the U.S. Geological Service has responsibility for collecting similar data on research supply generally.

Further, centers tend to be very expensive as was pointed out by Mr. Olson and are difficult to terminate once they are created. Mr. Olson’s amendment addresses this by eliminating this center and allowing DOE the discretion to support information-sharing activities as necessary. As necessary by—determined, I guess, by the Geological Service.

I urge its passage, and I yield back my time.

Chairman GORDON. Thank you, Mr. Hall. Is there further discussion on the amendment?

If there is no further—Governor Garamendi is recognized.

Mr. GARAMENDI. Probably in this case it would be Deputy Secretary Garamendi at the Department of Interior where we oversaw the U.S. Geological Survey.

The point of this bill is to focus America's attention and resources on the rare earth issue, which is of profound importance, as has been pointed out by the author. There is nothing in this bill that provides direction, support, money, or opportunity for the U.S. Geological Survey to further engage in this process and to play its role as correctly stated a moment ago. The U.S. Geological Survey is the place in the Federal Government where the focus on these materials where the geology and the materials could be found.

If we are going to strike this section for the reasons given, we really ought to provide some direction in the legislation to direct the USGS to get on with the task and to focus their attention to these rare earth issues. It is not in the bill presently. I would ask the author to consider that as she moves the bill along for the purposes of providing directions to the U.S. Geological Survey to engage with the Department and to carry out its ruling specifically on this function.

Thank you, Mr. Chairman.

Chairman GORDON. Thank you. I would quickly point out that we don't have jurisdiction in that area. That would be Resources. However, Mr. Olson has agreed, and we always can count on him to fulfill that, too. We will try to work through this to be sure that we get the best bill possible.

Is there further discussion?

If there is no further discussion, then all in favor of the amendment, say aye. Opposed, say no. The ayes have it. The amendment is agreed to.

And now I ask unanimous consent to try to—the Chairman asks unanimous consent to clear up one of his many mistakes and that is that I did not recognize the gentlelady from Illinois, although I was told that you had wanted to be recognized. I have a short memory span, and it was right outside of that, and so I ask unanimous consent that the gentlelady be able to submit a statement for the record on the last bill.

Without objection, so ordered.

The third amendment on the roster is the amendment offered by the gentlelady from Texas, Ms. Johnson. Are you ready to proceed with your amendment?

Ms. JOHNSON. Yes, Mr. Chairman. I have an amendment at the desk.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 131, amendment to H.R. 6160 offered by Ms. Eddie Bernice Johnson of Texas.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentlelady for five minutes to explain the amendment.

Ms. JOHNSON. Thank you, Mr. Chairman and Ranking Member Hall, for considering my amendment. It amends Section 4 on page five in order to highlight the importance of collaborating and outreaching.



Historically black colleges and universities have helped the minority-serving institutions, and this—I am not submitting as an affront. I am doing this because we have such a lack of diversity in our national science enterprise and although the majority of African-Americans in college do not attend HBCUs, HBCUs graduate the majority of African-Americans with doctorates in science, technology, engineering, and math.

And these institutions have gotten it right for some reason. I would like to see outreach to these universities. We should utilize every mind in this great Nation and do what we can as legislators to encourage all Americans to enter these fields. In order for our country to maintain its leadership and innovation we must identify and break down the barriers that are holding our country back from maintaining our diverse workforce.

In 2010, we could no longer afford to ignore the glaring statistics showing women and minorities are being left behind in STEM disciplines. I will continue to address what I know as a serious problem. Working together I believe we can achieve our common goal for diversity and equity in sciences.

Mr. Chairman and Mr. Hall, I appreciate your considering this straightforward, common-sense amendment, and I encourage my colleagues to support this amendment, and I yield back the balance of my time.

Chairman GORDON. Mr. Hall is recognized.

Mr. HALL. Thank you, Mr. Chairman. Ms. Johnson, I thank you for this. This amendment simply clarifies that minority-serving institutions should be among those to be included in the DOE efforts to expand participation opportunities at universities under the bill.

I support it, and I thank Ms. Johnson for offering it and her continued leadership on this particular issue.

Thank you. I yield back.

Chairman GORDON. Thank you, Mr. Hall, and I concur that this is an excellent amendment.

If there is no further discussion on the amendment, then the vote occurs on the amendment. All in favor, say aye. Opposed, no. The ayes have it. The amendment is agreed to.

The fourth amendment on the roster is the amendment offered by the gentleman from Georgia, Dr. Broun. Are you ready to proceed with your amendment?

Mr. BROUN. Yes, Mr. Chairman. Thank you very much, and I have an amendment at the desk.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 316, amendment to H.R. 6160 offered by Mr. Broun of Georgia.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentleman for five minutes to explain the amendment.

Mr. BROUN. Thank you, Mr. Chairman. Before I address my amendment, I just want to mention that while there may be appropriate pieces of this legislation that could help develop domestic research as we desperately need, if this bill were to move forward, it also should be considered at the Natural Resources Committee,

which has jurisdiction over the mining operations that would be eligible for loans under this bill that the Chairman just mentioned a minute ago.

Secondly, I hope that the Committee is in communication with Natural Resources and discussing legislation to assist the streamlining of mine permits and identification of public lands, which are ripe for mineral developments.

Further, this bill we are considering today also appears to be duplicative of the efforts currently being developed by the U.S. Geological Survey, underscoring the importance of including the Natural Resources Committee in any discussions impacting U.S. mining operations.

Now, back to my amendment. This amendment strikes Section 101(a)(6) which requires the Secretary of DOE to, "coordinate activities of mutual interest and avoid duplication of effort," with the European Commission.

While it makes sense to consult with allies on areas of mutual strategic interest, the underlying bill language is focused only on Europe and appears to go beyond traditional interactions. The term activities is undefined, and therefore, could include anything from trade policy to tax and regulatory issues.

Further, why should we only coordinate with Europe? Most non-Chinese rare earth mining efforts are concentrated in Australia and Canada, two of our best allies. They certainly shouldn't be excluded from any international consultations.

Striking this section will not permit the Secretary from seeking advice with any country or Federal agency that the Secretary believes would be helpful in regarding rare earth mining, processing, production, or development issues.

Lastly, avoiding duplication of efforts should never be a foreign policy objective. The U.S. is, of course, a sovereign Nation with our own interests. We should never avoid pursuing an activity out of concern for, "duplication of effort," with another country.

I urge the Committee to support this amendment, to allow the Secretary the flexibility to discuss rare earth mining issues with any entity that the Secretary believes ought to be consulted.

Thank you, Mr. Chairman. I encourage adoption of this amendment. I yield back.

[The prepared statement of Mr. Broun follows:]

PREPARED STATEMENT OF REPRESENTATIVE PAUL C. BROUN

- Thank you, Mr. Chairman. I have an amendment at the desk.
- Before I address my Amendment, I just want to mention that while there may be appropriate pieces of this legislation that could help develop domestic research, if this bill were to move forward, it should also be considered in the Natural Resources Committee which has jurisdiction over the mining operations that would be eligible for loans under this bill. Secondly, I hope that the Committee is in communication with Natural Resources and discussing legislation to assist the streamlining of mining permits and identification of public lands which are ripe for mineral developments.
- Further, this bill we are considering today also appears to be duplicative of the efforts currently being developed by the U.S. Geological Survey underscoring the importance of including the Natural Resources Committee in any discussions impacting U.S. mining operations.
- Back to my amendment: This amendment strikes Section 101(a)(6) which requires the Secretary of DOE to "coordinate activities of mutual interest and

avoid duplication of effort” with the European Commission. While it makes sense to consult with allies on areas of mutual strategic interest, the underlying bill language is focused only on Europe and appears to go beyond traditional interactions.

- The term “Activities” is undefined, and therefore, could include anything from trade policy to tax and regulatory issues. Further, why should we only coordinate with Europe? Most non-Chinese rare earth mining efforts are concentrated in Australia and Canada—two of our best allies. They certainly shouldn’t be excluded from any international consultations.
- Striking this Section will not prohibit the Secretary from seeking advice with any country or Federal agency the Secretary believes would be helpful regarding rare earth mining processing, production, or development issues.
- Lastly, “avoiding duplication of effort” should never be a foreign policy objective. The U.S. is, of course, a sovereign nation with its own interests. We should never avoid pursuing an activity out of concern for “duplication of effort” with another country.
- I urge the Committee to support this amendment to allow the Secretary the flexibility to discuss rare earth mining issues with any entity the Secretary believes ought to be consulted. Thank you, Mr. Chairman.

Chairman GORDON. Thank you, Dr. Broun, and let me concur in the sense that I agree with you. This amendment is too narrow. We should have further collaboration. I think it is to the benefit of all countries that aren’t the monopoly here to get as much information on the table so that we can move forward.

However, I will oppose this particular amendment because it would take out this particular collaboration but would be happy to work with you as we go to the Floor to expand it to additional countries and also to take out the mandatory aspect of it.

Is there further discussion?

Mr. Hall.

Mr. HALL. I want to offer my support for Dr. Broun’s amendment. I think he raises some very important concerns with the bill’s international collaboration requirement, particularly given that the ultimate goal of this bill is to address rare earth supply issues in the United States.

Further, it is not clear why a collaboration with the European Commission ought to be singled out over any other country or why avoiding “duplication of effort” internationally is an appropriate goal. I thank Dr. Broun for offering the amendment. I urge you to pass it.

I yield back, sir.

Chairman GORDON. Is there further discussion on the amendment?

If there is no further discussion, then the vote is on the amendment. All in favor, say aye. Opposed, no.

Mr. BROUN. Mr. Chairman.

Chairman GORDON. The—Dr. Broun—first of all, Dr. Broun, the Chairman is uncertain as to the—I assume you are asking for a recorded vote, and the Chairman hasn’t ruled yet, and I am uncertain as to that vote. It was a light yes and a light no, so for that reason you are recognized to—we will call for a recorded vote, if that is what you would like.

Mr. BROUN. Well, if we pass the amendment, I am not going to ask for a recorded vote. So I would like the Chairman to rule because I heard more ayes than nos. So—

Chairman GORDON. Well, I guess when in doubt, then the amendment fails. So—

Mr. BROUN. Yes, Mr. Chairman. I request a recorded vote.  
Chairman GORDON. A recorded vote is called for. The clerk will call the roll.  
The CLERK. Chairman Gordon?  
Chairman GORDON. No.  
The CLERK. Chairman Gordon votes no.  
Mr. Costello?  
[No response.]  
The CLERK. Ms. Johnson?  
Ms. JOHNSON. Aye.  
The CLERK. Ms. Johnson votes aye.  
Ms. Woolsey?  
[No response.]  
The CLERK. Mr. Wu?  
[No response.]  
The CLERK. Mr. Baird?  
Mr. BAIRD. No.  
The CLERK. Mr. Baird votes no.  
Mr. Miller?  
[No response.]  
The CLERK. Mr. Lipinski?  
Mr. LIPINSKI. No.  
The CLERK. Mr. Lipinski votes no.  
Ms. Giffords?  
[No response.]  
The CLERK. Ms. Edwards?  
[No response.]  
The CLERK. Ms. Fudge?  
[No response.]  
The CLERK. Mr. Luján?  
[No response.]  
The CLERK. Mr. Tonko?  
Mr. TONKO. No.  
The CLERK. Mr. Tonko votes no.  
Mr. Rothman?  
Mr. ROTHMAN. No.  
The CLERK. Mr. Rothman votes no.  
Mr. Matheson?  
Mr. MATHESON. No.  
The CLERK. Mr. Matheson votes no.  
Mr. Davis?  
[No response.]  
The CLERK. Mr. Chandler?  
[No response.]  
The CLERK. Mr. Carnahan?  
[No response.]  
The CLERK. Mr. Hill?  
[No response.]  
The CLERK. Mr. Mitchell?  
[No response.]  
The CLERK. Mr. Wilson?  
Mr. WILSON. No.  
The CLERK. Mr. Wilson votes no.  
Mrs. Dahlkemper?

Mrs. DAHLKEMPER. No.  
 The CLERK. Mrs. Dahlkemper votes no.  
 Mr. Grayson?  
 [No response.]  
 The CLERK. Mrs. Kosmas?  
 [No response.]  
 The CLERK. Mr. Peters?  
 [No response.]  
 The CLERK. Mr. Garamendi?  
 Mr. GARAMENDI. No.  
 The CLERK. Mr. Garamendi votes no.  
 Mr. Hall?  
 Mr. HALL. Aye.  
 The CLERK. Mr. Hall votes aye.  
 Mr. Sensenbrenner?  
 [No response.]  
 The CLERK. Mr. Lamar Smith?  
 [No response.]  
 The CLERK. Mr. Rohrabacher?  
 Mr. ROHRABACHER. Yes.  
 The CLERK. Mr. Rohrabacher votes aye.  
 Mr. Bartlett?  
 [No response.]  
 The CLERK. Mr. Ehlers?  
 Mr. EHLERS. Aye.  
 The CLERK. Mr. Ehlers votes aye.  
 Mr. Lucas?  
 [No response.]  
 The CLERK. Mrs. Biggert?  
 Mrs. BIGGERT. Aye.  
 The CLERK. Mrs. Biggert votes aye.  
 Mr. Akin?  
 [No response.]  
 The CLERK. Mr. Neugebauer?  
 [No response.]  
 Mr. Inglis?  
 Mr. INGLIS. Aye.  
 The CLERK. Mr. Inglis votes aye.  
 Mr. McCaul?  
 Mr. MCCAUL. Aye.  
 The CLERK. Mr. McCaul votes aye.  
 Mr. Diaz-Balart?  
 [No response.]  
 The CLERK. Mr. Adrian Smith?  
 Mr. SMITH OF NEBRASKA. Aye.  
 The CLERK. Mr. Adrian Smith votes aye.  
 Mr. Broun?  
 Mr. BROUN. Aye.  
 The CLERK. Mr. Broun votes aye.  
 Mr. Olson?  
 Mr. OLSON. Aye.  
 The CLERK. Mr. Olson votes aye.  
 Chairman GORDON. How is Mr. Bilbray recorded?  
 The CLERK. Mr. Bilbray is not recorded.

Chairman GORDON. Does anyone wish to change—Mr. Luján is——

The CLERK. Mr. Luján is not recorded.

Mr. LUJÁN. I vote no.

The CLERK. Mr. Luján votes no.

Chairman GORDON. Does anyone wish to change a vote?

Ms. Johnson is recognized.

Ms. JOHNSON. Change my vote.

The CLERK. Ms. Johnson wants to change her vote from aye to no.

Chairman GORDON. Mr. Wu is recognized.

The CLERK. Mr. Wu is not recorded.

Mr. WU. No.

The CLERK. Mr. Wu votes no.

Chairman GORDON. How is Ms. Woolsey recorded?

The CLERK. Ms. Woolsey is not recorded.

Ms. WOOLSEY. No.

The CLERK. Ms. Woolsey votes no.

Chairman GORDON. Does anyone else wish to change a vote?

Anyone else that has not voted?

If not then—oh, excuse me.

How is Ms. Fudge recorded?

The CLERK. Ms. Fudge is not recorded.

Ms. FUDGE. No.

The CLERK. Ms. Fudge votes no.

Chairman GORDON. And how is Mr.—has Mr. Tonko been recorded?

The CLERK. Yes. Mr. Tonko voted no.

Chairman GORDON. Okay. Is there anyone else then that wishes to be recorded?

Seeing no one else, then the clerk will report the vote.

The CLERK. Mr. Chairman, nine Members vote aye, and 14 Members vote no.

## COMMITTEE ON SCIENCE AND TECHNOLOGY - 111th

DATE: September 23, 2010 AMENDMENT NO. 4 ROLL CALL NO. \_\_\_\_  
 Bill: H. R. 6160  
 SPONSOR of AMEND -Broun-316

PASSED VOICE VOTE  
 DEFEATED ✓ WITHDRAWN

Quorum – 15 to vote – 22 to report

MEMBER	AYE	NO	PRESENT	NOT VOTING
1 Mr. GORDON, Chair		✓		
2 Mr. COSTELLO - IL				
3 Ms. JOHNSON - TX		✓		
4 Ms. WOOLSEY - CA		✓		
5 Mr. WU - OR		✓		
6 Mr. BAIRD - WA		✓		
7 Mr. MILLER - NC				
8 Mr. LIPINSKI - IL		✓		
9 Ms. GIFFORDS - AZ				
10 Ms. EDWARDS - MD				
11 Ms. FUDGE - OH		✓		
12 Mr. LUJAN - NM		✓		
13 Mr. TONKO - NY		✓		
14 Mr. ROTHMAN - NJ		✓		
15 Mr. MATHESON - UT		✓		
16 Mr. DAVIS - TN				
17 Mr. CHANDLER - KY				
18 Mr. CARNAHAN - MO				
19 Mr. HILL - IN				
20 Mr. MITCHELL - AZ				
21 Mr. WILSON - OH		✓		
22 Mrs. DAHLKEMPER- PA		✓		
23 Mr. GRAYSON - FL				
24 Ms. KOSMAS - FL				
25 Mr. PETERS- MI				
26 Mr. GARAMENDI, CA		✓		
27 Vacancy				
1 Mr. HALL- TX	✓			
2 Mr. SENSENBRENNER-WI				
3 Mr. LAMAR SMITH- TX				
4 Mr. ROHRABACHER- CA	✓			
5 Mr. BARTLETT- MD				
6 Mr. EHLERS- MI	✓			
7 Mr. LUCAS- OK				
8 Mrs. BIGGERT- IL	✓			
9 Mr. AKIN- MO				
10 Mr. NEUGEBAUER- TX				
11 Mr. INGLIS- SC	✓			
12 Mr. McCAUL- TX	✓			
13 Mr. DIAZ-BALART- FL				
14 Mr. BILBRAY- CA				
15 Mr. ADRIAN SMITH- NE	✓			
16 Mr. BROUN - GA	✓			
17 Mr. OLSON- TX	✓			
TOTALS	9	14		

Chairman GORDON. The amendment is opposed, and the amendment fails.

The fifth amendment on the roster is an amendment offered by the gentleman from California, Governor Garamendi. Are you ready to proceed with your amendment?

Mr. GARAMENDI. Maybe we just ought to say Mr. Garamendi and forget the rest of it. But, thank you, Mr. Chairman.

Given the discussion that we had in the previous amendment—

Chairman GORDON. Excuse me. The clerk will report the amendment.

The CLERK. Amendment number 033, amendment to H.R. 6160 offered by Mr. Garamendi of California and Mr. Rohrabacher of California.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentleman for five minutes to explain the amendment.

Mr. GARAMENDI. The discussion on the previous amendment highlights the necessity for, or the reality actually, of international cooperation and agreements and discussions with regard to rare earths. Part of that discussion will undoubtedly take us to the conflict zones of the world, specifically Africa.

I think the Members of the Committee are well aware of what are known as “blood diamonds.” The next blood diamond issue is already in existence, which is the rare earth issues. Often rare earth mining and extraction in Africa is, in fact, similar to the blood diamond issue where it is used to fund conflicts and horrendous activities by warring parties.

This amendment was intended to get to that issue. Because of the concerns that many Members of the Committee have about the underlying issue of conflict zones and in this case rare earth fueling those conflicts, we put forth this amendment.

However, there are Members of this Committee and others that are concerned about the relationship of the United States to international law and other international treaties and organizations.

So Mr. Rohrabacher and I, while we remain very concerned about the issue underlying—that is, of rare earth fueling conflicts, we don’t want to get into a debate about the role of the United States with regard to international law and the like.

I, therefore, yield to Mr. Rohrabacher on this issue, and I am sure he will express his concern on the underlying issue as well as concern on the international relations issues.

Mr. ROHRABACHER. Thank you very much, and let me just thank my colleague for the cooperation that we have had on this. We both share some very deep concerns about some of the, we might say, collateral damage of America’s efforts to procure those resources that we need to maintain our standard of living in this country.

And the gentleman is right on target and correct when he mentions and draws our attention to those incredible violations of human rights that are going on in Africa and in the procurement of a number of minerals. It is something that Americans should not



in any way be furthering by our actions both as consumers and as legislators here in the United States.

Let me point out that we also have a problem as the Chairman mentioned in his opening remarks where we have this *New York Times* article in dispute trying to block rare earth exports to Japan, where you have the world's worst human rights abuser, China, threatening that one—the one shining light of democracy in Asia, Japan, threatening to do them great harm because they are now dependent, Japan has this type of dependency as we do on China. We should not be dependent, especially dependent on countries that are utilizing their power in their country to suppress their own population. This amendment makes sure that at the very least whether it is the Communist Chinese or whether it is in Africa that we do not procure rare earth minerals in a way that it undermines human rights standards throughout the world and our own human rights commitment here in the United States.

The gentleman and I will be working on specific language. I am concerned about making sure that we do not subject American citizens to what I consider to be somewhat questionable authority, you know, accumulations that we have in the name of international law, and just to be clear about that to my friend, to my colleague, the reason why I am very concerned about say international law is some of these very same countries that are human rights violators, if we set up a system of human—of international law, the tribunals within decades could well be controlled by countries that are human rights abusers.

And we don't need that. What we need to do is make sure that our own country maintains its standards, and I am—I will be working with the gentleman to come up with a specific language that will meet the objective of making sure that we are not procuring these rare earth minerals in a way that it undermines the respect for human rights and the standards that we hold dear.

And so I would thank my colleague and join him, and we will be working out that language.

Mr. GARAMENDI. Mr. Chairman, I thank you for the opportunity to raise this issue, and I thank my colleague from California in joining me. I suspect there are other Members of the Committee who share the concerns that we have expressed.

However, the amendment as written raises tangential issues that make it difficult for this specific language to proceed. I will, therefore, withdraw the amendment and work with the author and the Committee and others to make it clear that in the acquisition of these rare earths that we do not violate or do not in any way create more havoc in very dangerous and unfortunate parts of the world. There are ways that it can be done. We are working on some language, simply don't have it together yet.

I would also just—I am sure the Committee Members are aware that there are international programs underway, many of them voluntary in the United States, and many of the American companies are participants in those programs acquire these materials from those places where it does not create further conflict, and they acquire materials in a way that does not create further conflict.

We will work on it. It is an important issue to all of us, and therefore, I withdraw the amendment.

Chairman GORDON. Thank you, Governor. With unanimous consent the amendment is withdrawn.

And the sixth amendment on the roster is an amendment offered by the gentleman from California, Comrade Rohrabacher. Are you ready to proceed with your amendment?

Mr. ROHRABACHER. Yes. Thank you.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 053, amendment to H.R. 6160 offered by Mr. Rohrabacher of California.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentleman for five minutes to explain his amendment.

Mr. ROHRABACHER. This amendment is, I guess, described as the fiscal responsibility amendment. We have to note that the Department of Energy has received billions of dollars more over the years from its baseline of 2007, and we did spend—our Congress now we realize that the budget deficits are now running at a rate that is becoming, how do you say, dangerous for our society. I don't see how we can—and I don't know anybody that thinks that we can sustain the level of deficit spending that—at the rates that we are doing in the Federal Government.

So with that—when you face that challenge of bringing down this massive level of deficit spending in the Federal Government at the same time recognizing that we have increased the budget by billions of dollars over the baseline of 2007, from the Department of Energy.

Also, we realized that every research project, especially in the Department of Energy, should not be considered something that is ongoing no matter what. I mean, at some point research projects should actually be—the doors should be closed and new—a new project should be looked at. So this is, I mean, after hopefully successful research, but even if it is unsuccessful, at some point the line has got to be drawn saying we spent enough money on this, we have got to in order to balance the budget or in order to spend money on other things, we have got to prioritize the spending and shut down certain areas and build up other areas.

That is what this amendment does. It insists that we start prioritizing and that the people at the Department of Energy prioritize and that this then—make sure that this legislation does not add to the overall debt that our country is facing and make sure that this is within the current budget levels.

Thank you very much.

Chairman GORDON. Thank you, Mr. Rohrabacher.

I will recommend that this amendment be accepted, not because this is not very important research that should be done, but I concur with you that I think there are existing resources within the Department to carry this out.

If there is no further discussion on the amendment, all in favor, say aye. Opposed, no. The ayes have it. The amendment is agreed to.

I will point out that we are going to have about five amendments around quarter after, and so but now we move onto the ninth

amendment on the roster. Or—excuse me. Mr. Rohrabacher, do you have any additional amendments?

Mr. ROHRABACHER. I will be withdrawing the next two amendments that I was planning to based on the fact that they are no longer necessary due to the passage of the first amendment.

Chairman GORDON. So we then will move to the ninth amendment on the roster, which is an amendment offered by the gentleman from California, Mr. Rohrabacher. Are you ready to proceed with your amendment?

Mr. ROHRABACHER. Yes, I am.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 314, amendment to H.R. 6160 offered by Mr. Rohrabacher of California and Mr. Garamendi of California.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentleman for five minutes to explain the amendment.

Mr. ROHRABACHER. All right. Thank you very much, Mr. Chairman.

This amendment requires that loan guarantee recipients, when we are talking about these rare earth materials, that people receiving loan guarantees based on trying to find an answer to this challenge, that we make sure that that money is going to be used for the development of domestic processing capabilities in the United States rather than to financing methods that will actually be used by foreign corporations and—or by entities that are now processing materials that are coming from overseas.

I mean, what are we trying to do here? Why are we concerned about these rare materials in the first place is because it makes us vulnerable. Well, why should we be providing loan guarantees that do not meet that problem, which is our vulnerability to other countries if, indeed, we are not—if we are dependent upon them for these rare earth materials.

So my amendment simply, and Mr. Garamendi has joined me in this, and we just insist that we use this to develop our own domestic capabilities within the United States rather than spending our money and focusing it on things that will be used overseas.

And I yield to my friend, Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Rohrabacher. The continued collaboration between Mr. Rohrabacher and myself is going to lead to the destruction of both of our reputations.

However, even in politics the—astronomy prevails and occasionally the sun, the moon, and the earth line up, and you have an eclipse, or an ellipse as the case might be. In this case policies are lining up. We are very concerned on our side about the American domestic production, manufacturing, and where it is headed.

In this case this amendment is very much in line with what we have been talking about and that is make it in America, and therefore, I find this amendment to be appropriate and delighted to work with Mr. Rohrabacher on making it in America.

Thank you.

Mr. HALL. Mr. Chairman.

Chairman GORDON. Mr. Hall is recognized.

Mr. HALL. This amendment would address a concern that has been raised by some of the competitors to Molycorp. That is a mining company that is pursuing a loan guarantee with the Department of Energy. Specifically the concern is that raw materials could be mined and then sent over to China for processing, which would undermine the goal of the program to address U.S. supply concerns and in the process amount to a taxpayer subsidy of exports to China.

This amendment would require DOE to ensure that recipients of loan guarantees under the program did not do this.

It is a good amendment. I support it, urge its passage.

Yield back.

Chairman GORDON. Dr. Baird is recognized.

Mr. BAIRD. Mr. Chairman, thank you. I support the intent, but I want to make sure I understand the implications of it. So the intent I get. I think the premise is if we have got domestic supply needs, we want to make sure that the material is coming to our domestic consumers rather than getting exported.

Mr. ROHRABACHER. Correct.

Mr. BAIRD. I get that. As I read it, though, help me understand something. It sounds like we may be saying in this amendment that it is not just about exporting the needed material per se but exporting the technologies that are used to separate the material.

In other words, let us suppose a U.S.—and I may be reading it wrong, but let us suppose a U.S. manufacturer or engineer develops a technology for separating material, and they want to sell that technology to other countries. Are we saying they can't sell the technology? Is that an unintended—I may be reading it wrong.

Mr. ROHRABACHER. That is not in the bill.

Mr. BAIRD. Okay.

Chairman GORDON. I would suggest, Dr. Baird, that this may be one more area that we will—might need further collaboration as we move forward toward the Floor.

Mr. BAIRD. Okay. I really want to look at that. I mean, I am not going to oppose it at this point, but I want us to be very careful about that, because I don't want to inadvertently penalize a U.S. manufacturer because it says unless the project's proponent guarantees or provides to the Secretary an assurance that the loan or guarantee shall be used to support the separation, recovery, preparation, or manufacturing of rare earth materials in the United States for customers within the United States, if we export the technology to manufacture something, that is actually a net job gain to us.

So, anyway, I would just urge you to work on that. I won't call for opposing it now, but I think we want to be very careful that we don't hamstring U.S. manufacturers or engineers for exporting the technology for separation, but if you are really trying to protect the material per se and adequacy here, and I am not sure. At least we want to clarify that in some report language.

So I will yield back but—

Mr. ROHRABACHER. I—I don't know, maybe just to suggest that the intent of this legislation is to make sure that what money is coming out of the U.S. taxpayers to provide loan guarantees, et

cetera, are used for the benefit of the American people. That doesn't necessarily preclude that a company that receives this loan will also not be able to do other things.

Mr. BAIRD. If I may, I think the gentleman may want to, in some way, classify that the issue is making sure that there is adequate supply of the material, not necessarily to limit the export of the technologies that extract or purify the material. And maybe the gentlemen will want to do that, but I am not sure. That is going to—

Mr. ROHRABACHER. Well, we would certainly be willing and I can talk for myself, but I am sure my colleague can speak for himself in this, but that would be acceptable in a report language to clarify that.

Mr. GARAMENDI. I agree.

Chairman GORDON. Thank you. Since we are all in agreement then I assume there is no further discussion.

All in favor of the amendment, say aye. Opposed, no. The ayes have it, the amendment is agreed to.

The next amendment, the tenth amendment on the roster is an amendment offered by the gentleman from Georgia, Dr. Broun. Are you ready to proceed with your amendment?

Mr. BROUN. Yes, Mr. Chairman. We will try again.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 315, amendment to H.R. 6160 offered by Mr. Broun of Georgia.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentleman for five minutes to explain the amendment.

Mr. BROUN. Thank you, Mr. Chairman. This amendment ensures that the DOE loan guarantees to the rare earth industry do not interfere with or crowd out private sector activity.

Specifically, it limits funding for rare earth projects to those categories that the private sector is not currently undertaking or likely to undertake due to excessive technical or financial uncertainty.

Given recent reports describing the expected future increase in demand for rare earth mining and processing, China's export restrictions triggering rare earths price increases and aggressive movement of private capital in the rare earth operations. Why are we looking to subsidize activities already being pursued in the private marketplace?

For example, a recent rare earths investor newsletter describing the, "largest rare earths mine in the world discovered in Nebraska," stated that, "a source close to the venture capital community said that capital would not be a problem."

Similarly, Australian mine developer Lynus recently raised \$450 million to recover rare earth materials, and earlier stage exploration ventures are underway throughout Canada and the United States. On August 3, 2010, Molycorp based in Greenwood, Colorado, raised \$380 million through an initial public offering to support the reopening of its Mountain Pass, California, rare earths mining operation. Its stock price has nearly doubled since the IPO and its current market capitalization is now over \$1.8 billion.

The private domestic and international capital marketplace appears willing to invest in rare earth operations. Unless the Department of Defense asserts that it has a strategic need to ensure a stable supply of rare earth materials, taxpayers should not subsidize these private market activities.

I urge the Committee to support this amendment to prevent interference of taxpayer-funded subsidies with a private capital marketplace for rare earth operations.

Thank you, Mr. Chairman, and I yield back.

[The prepared statement of Mr. Broun follows:]

PREPARED STATEMENT OF REPRESENTATIVE PAUL C. BROUN

- Thank you, Mr. Chairman. I have an amendment at the desk.
- This amendment ensures that the DOE loan guarantees to the rare earths' industry do not interfere with or crowd out private sector activity. Specifically, it limits funding for rare earth projects to those categories that the private sector is not currently undertaking or likely to undertake due to excessive technical or financial uncertainty.
- Given recent reports describing the expected future increase in demand for rare earth mining and processing, China's export restrictions triggering rare earth price increases, and an aggressive movement of private capital into rare earth operations, why are we looking to subsidize activities already being pursued in the private marketplace?
- For example, a recent rare earth investor newsletter describing the "Largest Rare Earth Mine in the World Discovered in Nebraska" stated that "a source close to the venture capital community said **capital wouldn't be a problem.**" Similarly, Australian mine developer Lynas recently raised \$450 million to recover rare earth materials, and earlier-stage exploration ventures are underway throughout Canada and the United States. On August 3rd, 2010, Molycorp, based in Greenwood, Colorado, raised \$380 million through an initial public offering (IPO) to support the reopening of its Mountain Pass, California rare earth mining operation. Its stock price has nearly doubled since the IPO, and its market capitalization is now over \$1.8 billion. The private domestic and international capital marketplace appears willing to invest in rare earth operations.
- Unless the Department of Defense asserts it has a strategic need to ensure a stable supply of rare earth materials, taxpayers should not subsidize these private market activities.
- I urge the Committee to support this amendment to prevent interference of taxpayer-funded subsidies with the private capital marketplace for rare earth operations. Thank you, Mr. Chairman.

Chairman GORDON. Thank you, Dr. Broun, and thank you for your consistency.

Sincerely, I really think this is a different situation here. This is a national security issue. We are dealing with a monopoly. We saw what has already happened here. In terms of the projects that are coming in, you know, that is hypothetical. Since you are dealing with a monopoly, they have the ability to, at a later date, flood the market with additional rare earths, bankrupt this private sector, and then jack them up again.

This really is, I think, a national security issue. This is not a free market situation. We are dealing with, again, a virtual monopoly, and I think that we, for national security purposes, need to move forward and make available—potentially there could be a more artfully drawn way to this, and we will be happy to work with you, but the intent is there, and it is important.

And I yield to—

Mr. BROUN. Would you yield?

Chairman GORDON. —the gentleman from Georgia.

Mr. BROUN. Well, I appreciate that. The purpose of this amendment is not to discourage our letting these contracts out and not to discourage the research and development. The thing about it is that if the private sector is going to pursue this, why should we be spending Federal taxpayer funds when the private sector is doing it? And I certainly don't support the monopoly, and it is not—there has been a monopoly, and certainly I appreciate the importance of us making sure that China is not the only source of rare earth.

But we have a big resource in Nebraska, Mr. Smith's state, and the thing is why should we be just pouring money into the—and giving grants to the private sector when the marketplace right now will allow those private resources to come to play in the market, and we shouldn't be spending taxpayers' funds. So that is the reason for the amendment, and to the extent that a potential supply gap does raise national security concerns, that is a question for the Department of Defense and Armed Services Committee to consider, and in fact, the Department of Defense is studying this issue, and Armed Services Committee, the House and Senate expect to hold hearings on this issue in the next couple of weeks.

And so I encourage that this amendment is passed just to protect taxpayers' funds and not to spend it on companies that are going to spend the funds themselves through the private sector.

I yield back. Thank you.

Chairman GORDON. Thank you. Once again, I will point out these are only guarantees, and again, only guarantees if necessary to bring the private sector in.

If there is no further discussion, then the vote is on the amendment. All in favor of the amendment, say aye. Opposed, no. No. The no's appear to have it. The amendment is not successful, and—

Mr. BROUN. Mr. Chairman.

Chairman GORDON. —the eleventh amendment—Dr. Broun, I respect you, and we will do whatever you want, but we are going to have five votes.

Mr. BROUN. I was just going to say I count very well, so I was not going to ask for a recorded vote.

Chairman GORDON. You would have gotten it if you wanted it.

Mr. BROUN. But thank you. I appreciate that, and I am sure that is—thank you, Mr. Chairman.

Chairman GORDON. Thank you. So you think my hearing is improving?

Mr. BROUN. Mr. Chairman, enjoy doing count, too.

Chairman GORDON. The eleventh and final amendment on the roster is the amendment offered by the gentlelady from Illinois, Mrs. Biggert.

Mrs. BIGGERT. Yes.

Chairman GORDON. Are you ready to proceed with your amendment?

Mrs. BIGGERT. Mr. Chairman, I have an amendment at the desk.

Chairman GORDON. The clerk will report the amendment.

The CLERK. Amendment number 322, amendment to H.R. 6160 offered by Mrs. Biggert of Illinois.

Chairman GORDON. I ask unanimous consent to dispense with the reading.

Without objection, so ordered.

I recognize the gentlelady for five minutes to explain the amendment.

Mrs. BIGGERT. Thank you, Mr. Chairman. My amendment moves the loan guarantee timeline up three years to be what was to be consistent with the five-year authorization. As I understand with the adoption of that amendment there is no years on the authorization.

But I think that for oversight it is only sensible to sunset the loan guarantee program earlier than eight years it would have been to match the authorization. But with so many industries depending on these sensitive materials, we can't begin to understand what the domestic landscape for rare earth elements will look like in 2013, much less 2018.

So with—my amendment will have the oversight ability to make adjustments in a timely fashion and with better understanding of the industry needs since we are not able to discover those needs through the normal committee process.

So I would urge approval of that, and I yield back.

Chairman GORDON. Thank you, Mrs. Biggert. As usual you add a sensible note to this discussion, and I would recommend that we accept your amendment.

Is there further discussion on the amendment?

If there is no further discussion, the vote occurs on the amendment. All in favor, say aye. Opposed, no. The ayes have it. The amendment is agreed to.

Are there other amendments?

If no, then the vote—

Mr. BAIRD. Mr. Chairman, I just—

Chairman GORDON. Oh. Dr. Baird is recognized.

Mr. BAIRD [continuing]. Can't resist saying that I just want to celebrate the passage of this law. For those of you who remember the group Rare Earth, that would make a lot of sense but obviously no one else remembers.

Chairman GORDON. But for those of you with a good sense of humor, it might not.

Mr. ROHRBACHER. I think I was sitting behind Mr. Baird at that concert.

Chairman GORDON. All right. Once again, are there further amendments?

If no, then the vote occurs on the bill, H.R. 6160, as amended. All those in favor, say aye. All opposed, no. The ayes have it. In the opinion of the Chair the ayes have it. The bill passes, and I recognize myself—or I recognize Mrs. Dahlkemper to offer a motion.

Mrs. DAHLKEMPER. Thank you, Mr. Chairman. Thank you for this opportunity today, to you and the Ranking Member. I think, you know, the current problem with rare earths is that we have had little attention for the last 20 years, and I am glad that we are able to move ahead today.

And I move that the Committee favorably reports H.R. 6160 as amended to the House with a recommendation that the bill do pass.



Furthermore, I move that staff be instructed to prepare the legislative report and make necessary technical and conforming changes and that the Chairman take all necessary steps to bring the bill before the House for consideration.

Chairman GORDON. The question is on the motion to report the bill favorably. Those in favor of the motion will signify by saying aye. The ayes have it. The bill is favorably reported.

Without objection, the motion to consider is laid upon the table. Members will have two subsequent calendar days in which to submit supplemental minority or additional views for the measure, and I want to thank you today for—I think we have passed two very good national security, economic security bills.

Let me also point out that I think a new indoor record was set in that we now, over the last four years, have passed 147 bills and resolutions from this committee in a bipartisan manner. So I thank you all for your cooperation.

And I want to thank Members for their attendance, and this concludes this markup.

[Whereupon, at 12:15 p.m., the Committee was adjourned.]



## Appendix:

---

H.R. 6160, SECTION-BY-SECTION ANALYSIS, AMENDMENT ROSTER

F:\EJS\EJS\_261.XML

.....  
 (Original Signature of Member)

111TH CONGRESS  
 2D SESSION

**H. R.** 6160

To develop a rare earth materials program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes.

---

IN THE HOUSE OF REPRESENTATIVES

Mrs. DAHLKEMPER (for herself and [see ATTACHED LIST of cosponsors]) introduced the following bill; which was referred to the Committee on

---



---

**A BILL**

To develop a rare earth materials program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
 5 “Rare Earths and Critical Materials Revitalization Act of  
 6 2010”.

1 (b) TABLE OF CONTENTS.—The table of contents for  
 2 this Act is as follows:

Sec. 1. Short title; table of contents.  
 Sec. 2. Definitions.

#### TITLE I—RARE EARTH MATERIALS

Sec. 101. Rare earth materials program.  
 Sec. 102. Rare earth materials loan guarantee program.

#### TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT

Sec. 201. Amendments to National Materials and Minerals Policy, Research  
 and Development Act of 1980.  
 Sec. 202. Repeal.

### 3 SEC. 2. DEFINITIONS.

4 In this Act:

5 (1) APPROPRIATE CONGRESSIONAL COMMIT-  
 6 TEES.—The term “appropriate Congressional com-  
 7 mittees” means the Committee on Science and Tech-  
 8 nology of the House of Representatives and the  
 9 Committee on Commerce, Science, and Transpor-  
 10 tation and the Committee on Energy and Natural  
 11 Resources of the Senate.

12 (2) CENTER.—The term “Center” means the  
 13 Research and Development Information Center es-  
 14 tablished in section 101(b).

15 (3) DEPARTMENT.—The term “Department”  
 16 means the Department of Energy.

17 (4) RARE EARTH MATERIALS.—The term “rare  
 18 earth materials” means any of the following chem-

1 ical elements in any of their physical forms or chem-  
 2 ical combinations:

- 3 (A) Scandium.
- 4 (B) Yttrium.
- 5 (C) Lanthanum.
- 6 (D) Cerium.
- 7 (E) Praseodymium.
- 8 (F) Neodymium.
- 9 (G) Promethium.
- 10 (H) Samarium.
- 11 (I) Europium.
- 12 (J) Gadolinium.
- 13 (K) Terbium.
- 14 (L) Dysprosium.
- 15 (M) Holmium.
- 16 (N) Erbium.
- 17 (O) Thulium.
- 18 (P) Ytterbium.
- 19 (Q) Lutetium.

20 (5) SECRETARY.—The term “Secretary” means  
 21 the Secretary of Energy.

## 22 **TITLE I—RARE EARTH** 23 **MATERIALS**

### 24 **SEC. 101. RARE EARTH MATERIALS PROGRAM.**

25 (a) ESTABLISHMENT OF PROGRAM.—

1 (1) IN GENERAL.—There is established in the  
2 Department a program of research, development,  
3 demonstration, and commercial application to assure  
4 the long-term, secure, and sustainable supply of rare  
5 earth materials sufficient to satisfy the national se-  
6 curity, economic well-being, and industrial produc-  
7 tion needs of the United States.

8 (2) PROGRAM ACTIVITIES.—The program shall  
9 support activities to—

10 (A) better characterize and quantify virgin  
11 stocks of rare earth materials using theoretical  
12 geochemical research;

13 (B) explore, discover, and recover rare  
14 earth materials using advanced science and  
15 technology;

16 (C) improve methods for the extraction,  
17 processing, use, recovery, and recycling of rare  
18 earth materials;

19 (D) improve the understanding of the per-  
20 formance, processing, and adaptability in engi-  
21 neering designs of rare earth materials;

22 (E) identify and test alternative materials  
23 that can be substituted for rare earth materials  
24 in particular applications; and

25 (F) engineer and test applications that—

- 1 (i) use recycled rare earth materials;
- 2 (ii) use alternative materials; or
- 3 (iii) seek to minimize rare earth mate-
- 4 rials content.

5 (3) IMPROVED PROCESSES AND TECH-  
6 NOLOGIES.—To the maximum extent practicable, the  
7 Secretary shall support new or significantly im-  
8 proved processes and technologies as compared to  
9 those currently in use in the rare earth materials in-  
10 dustry.

11 (4) EXPANDING PARTICIPATION.—The Sec-  
12 retary shall encourage multidisciplinary collabora-  
13 tions of participants, extensive opportunities for stu-  
14 dents at institutions of higher education, or both.

15 (5) CONSISTENCY.—The program shall be con-  
16 sistent with the policies and programs in the Na-  
17 tional Materials and Minerals Policy, Research and  
18 Development Act of 1980 (30 U.S.C. 1601 et seq.).

19 (6) INTERNATIONAL COLLABORATION.—In car-  
20 rying out the program, the Secretary shall collabo-  
21 rate, to the extent practicable, with the relevant di-  
22 rectorates of the European Commission to coordi-  
23 nate activities of mutual interest and avoid duplica-  
24 tion of effort.



1 (b) RESEARCH AND DEVELOPMENT INFORMATION  
2 CENTER.—

3 (1) IN GENERAL.—To collect, catalogue, dis-  
4 seminate, and archive information on rare earth ma-  
5 terials, the Secretary shall establish, through a com-  
6 petitive process, a Research and Development Infor-  
7 mation Center.

8 (2) CENTER ACTIVITIES.—

9 (A) IN GENERAL.—The Center shall—

10 (i) serve as the repository for sci-  
11 entific and technical data generated by the  
12 research and development activities funded  
13 under this section;

14 (ii) assist scientists and engineers in  
15 making the fullest possible use of the Cen-  
16 ter's data holdings;

17 (iii) seek and incorporate other infor-  
18 mation on rare earth materials to enhance  
19 the Center's utility for program partici-  
20 pants and other users;

21 (iv) provide advice to the Secretary  
22 concerning the research and development  
23 program under subsection (a); and

24 (v) host conferences, at least annually,  
25 for participants in the rare earth materials

1 program and other interested parties to  
2 promote information sharing and encour-  
3 age new collaborative activities.

4 (B) RESTRICTION.—Not more than 2.5  
5 percent of the amounts made available pursuant  
6 to this section may be used for hosting con-  
7 ferences under subparagraph (A)(v).

8 (c) PLAN.—

9 (1) IN GENERAL.—Within 180 days after the  
10 date of enactment of this Act and biennially there-  
11 after, the Secretary shall prepare and submit to the  
12 appropriate Congressional committees a plan to  
13 carry out the program established under subsection  
14 (a) and the Center established under subsection (b).

15 (2) SPECIFIC REQUIREMENTS.—The plan shall  
16 include a description of—

17 (A) the research and development activities  
18 to be carried out by the program during the  
19 subsequent 2 years;

20 (B) the expected contributions of the pro-  
21 gram and the Center to the creation of innova-  
22 tive methods and technologies for the efficient  
23 and sustainable provision of rare earth mate-  
24 rials to the domestic economy;

1 (C) the technical criteria to be used to  
2 evaluate applications for loan guarantees under  
3 section 1706 of the Energy Policy Act of 2005;

4 (D) any projects receiving loan guarantee  
5 support under such section and the status of  
6 such projects;

7 (E) how the program is promoting the  
8 broadest possible participation by academic, in-  
9 dustrial, and other contributors; and

10 (F) actions taken or proposed that reflect  
11 recommendations from the assessment con-  
12 ducted under subsection (d) or the Secretary's  
13 rationale for not taking action pursuant to any  
14 recommendation from such assessment for  
15 plans submitted following the completion of the  
16 assessment under such subsection.

17 (3) CONSULTATION.—In preparing each plan  
18 under paragraph (1), the Secretary shall consult  
19 with appropriate representatives of industry, institu-  
20 tions of higher education, Department of Energy na-  
21 tional laboratories, professional and technical soci-  
22 eties, and other entities, as determined by the Sec-  
23 retary.

24 (d) ASSESSMENT.—

1 (1) IN GENERAL.—After the program has been  
2 in operation for 4 years, the Secretary shall offer to  
3 enter into a contract with the National Academy of  
4 Sciences under which the National Academy shall  
5 conduct an assessment of the program under sub-  
6 section (a), including the operations and activities of  
7 the Center under subsection (b).

8 (2) INCLUSIONS.—The assessment shall include  
9 the recommendation of the National Academy of  
10 Sciences that the program should be—

11 (A) continued, accompanied by a descrip-  
12 tion of any improvements needed in the pro-  
13 gram; or

14 (B) terminated, accompanied by a descrip-  
15 tion of the lessons learned from the execution of  
16 the program.

17 (3) AVAILABILITY.—The assessment shall be  
18 made available to Congress and the public upon  
19 completion.

20 (e) AUTHORIZATION OF APPROPRIATIONS.—

21 (1) IN GENERAL.—There are authorized to be  
22 appropriated to the Secretary to carry out this sec-  
23 tion the following sums:

24 (A) For fiscal year 2011, \$10,000,000.

25 (B) For fiscal year 2012, \$15,000,000.

1 (C) For fiscal year 2013, \$15,000,000.

2 (D) For fiscal year 2014, \$15,000,000.

3 (E) For fiscal year 2015, \$15,000,000.

4 (2) ASSESSMENT.—From the amounts author-  
 5 ized under paragraph (1), there are authorized to be  
 6 appropriated to the Secretary \$700,000 to enter into  
 7 a contract under subsection (d)(1).

8 (3) AVAILABILITY.—Such sums shall remain  
 9 available until expended.

10 **SEC. 102. RARE EARTH MATERIALS LOAN GUARANTEE PRO-**  
 11 **GRAM.**

12 (a) AMENDMENT.—Title XVII of the Energy Policy  
 13 Act of 2005 (42 U.S.C. 16511 et seq.) is amended by add-  
 14 ing at the end the following new section:

15 **“SEC. 1706. TEMPORARY PROGRAM FOR RARE EARTH MA-**  
 16 **TERIALS REVITALIZATION.**

17 “(a) IN GENERAL.—As part of the program estab-  
 18 lished in section 101 of the Rare Earths and Critical Ma-  
 19 terials Revitalization Act of 2010, the Secretary is author-  
 20 ized to make guarantees under this title for the commer-  
 21 cial application of new or significantly improved tech-  
 22 nologies (compared to technologies currently in use in the  
 23 United States) for the following categories of projects:

24 “(1) The separation and recovery of rare earth  
 25 materials from ores or other sources.

1           “(2) The preparation of rare earth materials in  
2           oxide, metal, alloy, or other forms needed for na-  
3           tional security, economic well-being, or industrial  
4           production purposes.

5           “(3) The application of rare earth materials in  
6           the production of improved—

7                   “(A) magnets;

8                   “(B) batteries;

9                   “(C) refrigeration systems;

10                  “(D) optical systems;

11                  “(E) electronics; and

12                  “(F) catalysis.

13           “(4) The application of rare earth materials in  
14           other uses, as determined by the Secretary.

15           “(b) TIMELINESS.— The Secretary shall seek to min-  
16           imize delay in approving loan guarantee applications, con-  
17           sistent with appropriate protection of taxpayer interests.

18           “(c) COOPERATION.—To the maximum extent prac-  
19           ticable, the Secretary shall cooperate with appropriate pri-  
20           vate sector participants to achieve a complete rare earth  
21           materials production capability in the United States with-  
22           in 5 years after the date of enactment of the Rare Earths  
23           and Critical Materials Revitalization Act of 2010.

1 “(d) SUNSET.—The authority to enter into guaran-  
 2 tees under this section shall expire on September 30,  
 3 2018.”.

4 (b) TABLE OF CONTENTS AMENDMENT.—The table  
 5 of contents for the Energy Policy Act of 2005 is amended  
 6 by inserting after the item relating to section 1705 the  
 7 following new item:

“Sec. 1706. Temporary program for rare earth materials revitalization.”.

8 **TITLE II—NATIONAL MATERIALS**  
 9 **AND MINERALS POLICY, RE-**  
 10 **SEARCH, AND DEVELOPMENT**

11 **SEC. 201. AMENDMENTS TO NATIONAL MATERIALS AND**  
 12 **MINERALS POLICY, RESEARCH AND DEVEL-**  
 13 **OPMENT ACT OF 1980.**

14 (a) PROGRAM PLAN.—Section 5 of the National Ma-  
 15 terials and Minerals Policy, Research and Development  
 16 Act of 1980 (30 U.S.C. 1604) is amended—

17 (1) by striking “date of enactment of this Act”  
 18 each place it appears and inserting “date of enact-  
 19 ment of the Rare Earths and Critical Materials Re-  
 20 vitalization Act of 2010”;

21 (2) in subsection (b), by striking “Federal Co-  
 22 ordinating Council for Science, Engineering, and  
 23 Technology” and inserting “National Science and  
 24 Technology Council,”;

25 (3) in subsection (c)—

1 (A) by striking “the Federal Emergency”  
2 and all that follows through “Agency, and”;

3 (B) by striking “appropriate shall” and in-  
4 serting “appropriate, shall”;

5 (C) by striking paragraph (1);

6 (D) in paragraph (2), by striking “in the  
7 case” and all that follows through “subsection,”

8 (E) by redesignating paragraph (2) as  
9 paragraph (1); and

10 (F) by redesignating and amending para-  
11 graph (3) to read as follows:

12 “(2) assess the adequacy and stability of the  
13 supply of materials necessary to maintain national  
14 security, economic well-being, and industrial produc-  
15 tion.”;

16 (4) by striking subsections (d) and (e); and

17 (5) by redesignating subsection (f) as sub-  
18 section (d).

19 (b) POLICY.—Section 3 of such Act (30 U.S.C. 1602)  
20 is amended—

21 (1) by striking “The Congress declares that it”  
22 and inserting “It”;

23 (2) by striking “The Congress further declares  
24 that implementation” and inserting “Implementa-  
25 tion”.



F:\EJS\EJS\_261.XML

14

1 (c) IMPLEMENTATION.—Section 4 of such Act (30  
2 U.S.C. 1603) is amended—

3 (1) by striking “For the purpose” and all that  
4 follows through “declares that the” and inserting  
5 “The”; and

6 (2) by striking “departments and agencies,”  
7 and inserting “departments and agencies to imple-  
8 ment the policies set forth in section 3”.

9 **SEC. 202. REPEAL.**

10 Title II of Public Law 98-373 (30 U.S.C. 1801; 98  
11 Stat. 1248), also known as the National Critical Materials  
12 Act of 1984, is repealed.

SECTION-BY-SECTION ANALYSIS OF  
H.R. 6160, THE RARE EARTHS AND CRITICAL  
MATERIALS REVITALIZATION ACT OF 2010

The purpose of the *Rare Earths and Critical Materials Revitalization Act of 2010* is to develop a rare earth materials program and to amend the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601 et seq.).

**Section 1. Short Title; Table of Contents**

Allows citation of the bill as the “Rare Earths and Critical Materials Revitalization Act of 2010” and provides the legislation’s Table of Contents.

**Sec. 2. Definitions**

Defines the terms “Appropriate Congressional Committees,” “Center,” “Department,” “Rare Earth Materials,” and “Secretary” as they are used in the bill.

**TITLE I—RARE EARTH MATERIALS**

**Sec. 101. Rare Earth Materials Program**

(a) ESTABLISHMENT OF PROGRAM.—

- (1) IN GENERAL.—The Department of Energy is authorized to conduct research, development, demonstration, and commercial application activities that will restore a long-term, secure and sustainable supply of rare earth materials to meet the needs of the United States.
- (2) ACTIVITIES.—The program is to conduct activities spanning the entire production cycle for rare earth materials, to include: carrying out theoretical geochemical research; applying advanced methods for locating and recovering rare earths; finding better technologies to enable rare earth material production; understanding and improving the use of rare earths in product designs; seeking substitutes for rare earths; and conducting projects to reduce the use of rare earth materials or recycle these from existing products.
- (3) IMPROVED PROCESSES AND TECHNOLOGIES.—The program is to seek new or significantly improved processes and technologies for the rare earth materials industry.
- (4) EXPANDING PARTICIPATION.—The Secretary is directed to seek multidisciplinary collaborations among program beneficiaries and to promote opportunities for students at colleges and universities to contribute to these collaborations.
- (5) CONSISTENCY.—The program should be consistent with the overall national materials research and development program required by the National Materials and Minerals Policy, Research and Development Act of 1980.
- (6) INTERNATIONAL COLLABORATION.—The Secretary should seek to collaborate with appropriate Directorates of the European Commission to maximize benefits and avoid duplication of projects.

(b) RESEARCH AND DEVELOPMENT INFORMATION CENTER.—

- (1) IN GENERAL.—The Secretary will conduct a competition to select a Center that will collect the results from the projects conducted by the rare earths materials program.
- (2) ACTIVITIES.—The Center is to serve as the repository for the information generated by the research and development projects supported by the program; the staff is to assist scientists and engineers in using the Center’s data while seeking other information to enhance the value of the Center’s collection and to provide advice to the Secretary regarding the program’s research and development activities; and the Center is to host conferences to promote collaboration and information sharing on rare earths. No more than 2.5 percent of funds appropriated for the rare earths materials program may be used to fund such conferences.

(c) PLAN.—

- (1) IN GENERAL.—Within six months of the date of enactment, and every two years thereafter, the Secretary shall submit to the House Committee on Science and Technology, the Senate Committee on Commerce, Science and

Transportation and the Senate Committee on Energy and Natural Resources the plan governing the rare earth materials program.

- (2) **SPECIFIC REQUIREMENTS.**—The Secretary is required to describe the following items in the plan: the research and development activities expected during the next two years; how these activities will lead to improved methods and technologies in the domestic rare earth materials industry; how applications for loan guarantees will be evaluated; any loan guarantees outstanding and their current status; the program’s efforts to expand participation; and responses to recommendations from a National Academy of Sciences assessment of the program after its fourth year of operation.
- (3) **CONSULTATION.**—The Secretary is directed to consult widely with those knowledgeable about rare earths and associated industry when preparing the program plan.

(d) **ASSESSMENT.**—The Secretary will contract with the National Academy of Sciences to assess progress in the rare earth materials program after four years and to make a recommendation to the Secretary about the continued need for the program.

(e) **AUTHORIZATION OF APPROPRIATIONS.**—The program is authorized \$70 million over a five-year period (\$10 million in year one and \$15 million in the following four years). These funds remain available until expended. To cover the cost of conducting the assessment by the National Academy of Sciences, \$700,000 is authorized from these funds.

#### **Sec. 102. Rare Earth Materials Loan Guarantee Program**

(a) **AMENDMENT.**—Amends Title XVII of the Energy Policy Act of 2005, which authorizes the Department of Energy to issue loan guarantees for projects that “avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases[,] and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued,” to ensure that certain projects involving rare earth materials are eligible for consideration. The following new section is added to the Energy Policy Act of 2005:

#### **“SEC. 1706. TEMPORARY PROGRAM FOR RARE EARTH MATERIALS REVITALIZATION**

“(a) **IN GENERAL.**—Authorizes the Department of Energy to issue loan guarantees for the commercial application of technologies that are new or significantly improved compared to those currently in use in the United States for projects involving the separation and recovery of rare earth materials from ores and other sources; their preparation in oxide, metal, alloy or other forms; or their application in improved magnets, batteries, refrigeration and optical systems, electronics, catalysis and other products and uses.

“(b) **TIMELINESS.**—The Secretary is directed to expedite approval of loan guarantee applications insofar as the interests of taxpayers remain protected.

“(c) **COOPERATION.**—The Secretary is to work with the private sector toward the goal that facilities covering all phases of the production of rare earth minerals, from mining to the manufacture of finished products, be operating within five years the bill’s signing.

“(d) **SUNSET.**—Loan guarantees under this program can be issued only through September 30, 2018.”

(b) **TABLE OF CONTENTS AMENDMENT.**—Amends the table of contents for the Energy Policy Act of 2005 by inserting an entry for the new Section 1706.

#### **TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT**

#### **Sec. 201. Amendments to National Materials and Minerals Policy, Research and Development Act of 1980**

(a) **PROGRAM PLAN.**—Amends Section 5 by replacing the original date of enactment with the date of enactment of the current bill; substituting the name of the National Science and Technology Council for that of the defunct Federal Coordinating Council for Science, Engineering and Technology; eliminating mandatory consultation with the Federal Emergency Management Administration, the secretaries

of Interior and Defense, and the Director of the Central Intelligence Agency by the Secretary of Commerce in regard to certain requirements placed on the latter secretary to report to Congress; eliminating a requirement that the Secretary of Commerce report to Congress within 3 months of enactment; eliminating certain duties assigned to the secretaries of Interior and Defense; and makes conforming and clarifying changes.

(b) **POLICY.**—Amends Section 3 by making clarifying changes.

(c) **IMPLEMENTATION.**—Amends Section 4 by making clarifying changes.

#### **Sec. 202. Repeal**

Repeals the National Critical Materials Act of 1984 (30 U.S.C. 1801; 98 Stat. 1248) because the council authorized under the Act no longer exists.

### COMMITTEE ON SCIENCE AND TECHNOLOGY FULL COMMITTEE MARKUP SEPTEMBER 23, 2010

#### AMENDMENT ROSTER

#### H.R. 6160, the *Rare Earths and Critical Materials Revitalization Act of 2010*

1.	Ms. Dahlkemper (051)	<p>Makes several technical and clarifying changes to the bill.</p> <p>Removes “technical” from Sec. 101(c)(2)(C).</p> <p>Replaces reference in Sec. 1706 (a) to “United States” with “United States at the time guarantee is issued.”</p> <p>Revises “adequacy and stability” in Sec. 201(a)(2)(F) to read “adequacy, accessibility, and stability.”</p>	Agreed to by voice vote.
2.	Mr. Olson (321)	<p>Amends Sec. 101 (the “Rare Earth Materials Program”) by adding a subparagraph (G) to Sec. 101(a)(2) stating that the program shall support activities to “collect, catalogue, archive, and disseminate information on rare earth materials, including scientific and technical data generated by the research and development activities supported under this section.”</p> <p>Strikes Sec. 101(b) (“Research and Development Information Center”), and removes all references to “the Center” in subsequent subsections.</p>	Agreed to by voice vote.
3.	Ms. Johnson (131)	Amends Sec. 101(a)(2)(4) (“Expanding Participation”), requiring the Secretary of Energy to encourage “multidisciplinary collaborations among program participants, and extensive opportunities for students at institutions of higher education, including institutions listed under section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).”	Agreed to by voice vote.

4.	Mr. Broun (316)	Strikes Sec. 101(a)(6) ("International Collaboration").	Defeated by roll call vote - 9 yeas and 14 nays.
5.	Mr. Garamendi/ Mr. Rohrabacher (033)	Adds a subsection (7) of Sec. 101(a), stating that, "The Secretary shall ensure that departmental procurement of rare earth materials for the purposes of this Act does not violate United States or international law."	Offered and withdrawn.
6.	Mr. Rohrabacher (053)	Strikes Sec. 101(e) ("Authorization of Appropriations").	Agreed to by voice vote.
7.	Mr. Rohrabacher /Mr. Garamendi (314)	Amends Sec. 1706 ("Temporary Program for Rare Earth Materials Revitalization") by adding a new subsection ("Domestic Supply Chain"), providing that, "the Secretary may not award a guarantee for a project unless the project's proponent provides to the Secretary an assurance that the loan or guarantee shall be used to support the separation, recovery, preparation, or manufacturing of rare earth materials in the United States for customers within the United States unless insufficient domestic demand for such materials results in excess capacity."	Agreed to by voice vote.
8.	Mr. Broun (315)	Amends Sec. 1706 ("Temporary Program for Rare Earth Materials Revitalization") by adding a new subsection ("Limitation") providing that, "The Secretary is authorized to make a guarantee for a project under this section only if the project, due to technical or financial uncertainty, is not (1) currently being undertaken by the private sector; or (2) likely to be undertaken by the private sector."	Defeated by voice vote.
9.	Ms. Biggert (322)	Amends Sec. 1706(d), to change the year that the authority under that section expires from 2018 to 2015.	Agreed to by voice vote.

F:\M11\DAHLKE\DAHLKE\_051.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MRS. DAHLKEMPER OF**  
**PENNSYLVANIA**

Page 8, line 1, strike “technical”.

Page 10, line 23, strike “United States” and insert  
“United States at the time the guarantee is issued”.

Page 13, line 12, strike “adequacy” and insert “ade-  
quacy, accessibility,”.



F:\EJS\EJS\_321.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MR. Disson**

Page 4, line 24, strike “and”.

Page 5, line 4, strike the period at the end and insert “; and”.

Page 5, after line 4, insert the following:

- 1 (G) collect, catalogue, archive, and dissemi-
- 2 nate information on rare earth materials, in-
- 3 cluding scientific and technical data generated
- 4 by the research and development activities sup-
- 5 ported under this section.

Page 6, strike line 1 and all that follows through line 7 on page 7 (and redesignate subsequent subsections accordingly and correct internal cross-references).

Page 7, line 14, strike “and the Center established under subsection (b)”.

Page 7, line 21, strike “and the Center”.

F:\EJS\EJS\_321.XML

2

Page 9, beginning on line 6, strike “, including the operations and activities of the Center under subsection (b)”.





F:\M11\JOHNTE\JOHNTE\_131.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MS. EDDIE BERNICE JOHNSON OF**  
**TEXAS**

Page 5, strike lines 11 through 14 and insert the following:

- 1           (4) EXPANDING PARTICIPATION.—The Sec-  
2       retary shall encourage—  
3           (A) multidisciplinary collaborations among  
4       program participants; and  
5           (B) extensive opportunities for students at  
6       institutions of higher education, including insti-  
7       tutions listed under section 371(a) of the High-  
8       er Education Act of 1965 (20 U.S.C.1067q(a)).



F:\EJS\EJS\_316.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY Mr. Brown**

Strike section 101(a)(6).



F:\M11\GARAME\GARAME\_033.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MR. GARAMENDI OF CALIFORNIA**  
**AND MR. ROHRABACHER OF CALIFORNIA**

Page 5, after line 24, insert the following:

- 1           (7) **LAWFUL ACTIVITIES.**—The Secretary shall
- 2           ensure that departmental procurement of rare earth
- 3           materials for the purposes of this Act does not vio-
- 4           late United States or international law.



F:\M11\ROHRAB\ROHRAB\_053.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MR. ROHRABACHER OF CALIFORNIA**

Strike section 101(e) of the bill.



F:\EJS\EJS\_314.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY MR. ROHRABACHER OF CALIFORNIA**  
**AND MR. GARAMENDI OF CALIFORNIA**

Page 11, after line 23, insert the following (and re-designate the subsequent subsection accordingly):

1       “(d) DOMESTIC SUPPLY CHAIN.—In support of the  
2 objective in subsection (c) to achieve a rare earth materials  
3 production capability in the United States that includes  
4 the complete value chain described in paragraphs (1)  
5 through (4) of subsection (a), the Secretary may not  
6 award a guarantee for a project unless the project’s pro-  
7 ponent provides to the Secretary an assurance that the  
8 loan or guarantee shall be used to support the separation,  
9 recovery, preparation, or manufacturing of rare earth ma-  
10 terials in the United States for customers within the  
11 United States unless insufficient domestic demand for  
12 such materials results in excess capacity.”



FAEJS\EJS\_315.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY Mr. Broun**

Page 11, after line 23, insert the following (and re-designate the subsequent subsection accordingly):

1       “(d) LIMITATION.—The Secretary is authorized to  
 2       make a guarantee for a project under this section only  
 3       if the project, due to technical or financial uncertainty,  
 4       is not—  
 5               “(1) currently being undertaken by the private  
 6       sector; or  
 7               “(2) likely to be undertaken by the private sec-  
 8       tor.”.



F:\EJS\EJS\_322.XML

**AMENDMENT TO H.R. 6160**  
**(RARE EARTHS AND CRITICAL MATERIALS**  
**REVITALIZATION ACT OF 2010)**  
**OFFERED BY Ms. Biggert of Illinois**

Page 12, line 3, strike “2018” and insert “2015”.

