AMENDMENT TO RULES COMMITTEE PRINT 117-31

OFFERED BY MR. VICENTE GONZALEZ OF TEXAS

Page 364, strike line 7 and all that follows through page 366, line 6, and insert the following:

(u) CRITICAL MINERALS MINING RESEARCH AND DEVELOPMENT AT THE FOUNDATION.—

(1) AWARDS FOR BASIC RESEARCH.—

(A) IN GENERAL.—In order to support supply chain resiliency, the Director shall issue awards, on a competitive basis, to institutions of higher education or nonprofit organizations (or consortia of such institutions or organizations) to support basic research that will accelerate innovation to advance critical minerals mining strategies and technologies for the purpose of making better use of domestic resources and eliminating national reliance on minerals and mineral materials that are subject to supply disruptions.

(B) USE OF FUNDS.—Activities funded by an award under this paragraph may include—

(i) advancing mining research and development activities to develop new mapping and mining technologies and techniques, including advanced critical mineral extraction and production, to improve existing or to develop new supply chains of critical minerals, and to yield more efficient, economical, and environmentally benign mining practices;

(ii) advancing critical mineral processing research activities to improve separation, alloying, manufacturing, or recycling techniques and technologies that can decrease the energy intensity, waste, potential environmental impact, and costs of those activities;

(iii) conducting long-term earth observation of reclaimed mine sites, including the study of the evolution of microbial diversity at such sites;

(iv) examining the application of artificial intelligence for geological exploration of critical minerals, including what size and diversity of data sets would be required;

(v) examining the application of machine learning for detection and sorting of critical minerals, including what size and diversity of data sets would be required;

(vi) conducting detailed isotope studies of critical minerals and the development of more refined geologic models; or

(vii) providing training and research opportunities to undergraduate and graduate students to prepare the next generation of mining engineers and researchers.

(2) CRITICAL MINERALS INTERAGENCY SUBCOMMITTEE.—

(A) IN GENERAL.—In order to support supply chain resiliency, the Critical Minerals Subcommittee of the National Science and Technology Council (referred to in this subsection as the Subcommittee) shall coordinate Federal science and technology efforts to ensure secure and reliable supplies of critical minerals to the United States.

(B) PURPOSES.—The purposes of the Subcommittee shall be—

(i) to advise and assist the Committee on Homeland and National Security and

the National Science and Technology Council on United States policies, procedures, and plans as it relates to critical minerals, including—

(I) Federal research, development, and deployment efforts to optimize methods for extractions, concentration, separation, and purification of conventional, secondary, and unconventional sources of critical minerals;

(II) efficient use and reuse of critical minerals;

(III) the critical minerals workforce of the United States; and

(IV) United States private industry investments in innovation and technology transfer from federally funded science and technology;

(ii) to identify emerging opportunities, stimulate international cooperation, and foster the development of secure and reliable supply chains of critical minerals;

(iii) to ensure the transparency of information and data related to critical minerals; and

(iv) to provide recommendations on coordination and collaboration among the research, development, and deployment programs and activities of Federal agencies to promote a secure and reliable supply of critical minerals necessary to maintain national security, economic well-being, and industrial production.

(C) RESPONSIBILITIES.—In carrying out subparagraphs (A) and (B), the Subcommittee may, taking into account the findings and recommendations of relevant advisory committees—

(i) provide recommendations on how Federal agencies may improve the topographic, geologic, and geophysical mapping of the United States and improve the discoverability, accessibility, and usability of the resulting and existing data, to the extent permitted by law and subject to appropriate limitation for purposes of privacy and security;

(ii) assess the progress toward developing critical minerals recycling and reprocessing technologies, and technological alternatives to critical minerals;

(iii) examine options for accessing and developing critical minerals through investment and trade with allies and partners of the United States and provide recommendations;

(iv) evaluate and provide recommendations to incentivize the development and use of advances in science and technology in the private industry;

(v) assess the need for and make recommendations to address the challenges the United States critical minerals supply chain workforce faces, including—

(I) aging and retiring personnel and faculty;

(II) public perceptions about the nature of mining and mineral processing; and

(III) foreign competition for United States talent;

(vi) develop, and update as necessary, a strategic plan to guide Federal programs and activities to enhance—

(I) scientific and technical capabilities across critical mineral supply chains, including a roadmap that identifies key research and development needs and coordinates ongoing activities for source diversification, more efficient use, recycling, and substitution for critical minerals; and

(II) cross-cutting mining science, data science techniques, materials science, manufacturing science and engineering, computational modeling, and environmental health and safety research and development; and

(vii) report to the appropriate committees of Congress on activities and findings under this subsection.

(D) MANDATORY RESPONSIBILITIES.—In carrying out subparagraphs (A) and (B), the Subcommittee shall, taking into account the findings and recommendations of the relevant advisory committees, identify and evaluate Fed-

eral policies and regulations that restrict the mining of critical minerals.

(3) GRANT PROGRAM FOR DEVELOPMENT OF CRITICAL MINERALS AND METALS.—

(A) ESTABLISHMENT.—The Secretary of Commerce, in consultation with the Director and the Secretary of the Interior, shall establish a grant program to finance pilot projects for the development of critical minerals and metals in the United States.

(B) LIMITATION ON GRANT AWARDS.—A grant awarded under subparagraph (A) may not exceed $10,000,000.

(C) ECONOMIC VIABILITY.—In awarding grants under subparagraph (A), the Secretary of Commerce shall give priority to projects that the Secretary of Commerce determines are likely to be economically viable over the long term.

(D) SECONDARY RECOVERY.—In awarding grants under subparagraph (A), the Secretary of Commerce shall seek to award not less than 30 percent of the total amount of grants awarded during the fiscal year for projects relating to secondary recovery of critical minerals and metals.

(E) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of Commerce $100,000,000 for each of fiscal years 2021 through 2024 to carry out the grant program established under subparagraph (A).

(4) DEFINITIONS.—In this subsection:

(A) CRITICAL MINERAL; CRITICAL MINERAL OR METAL.—The terms ''critical mineral'' and ''critical mineral or metal'' include any host mineral of a critical mineral (within the meaning of those terms in section 7002 of title VII of division Z of the Consolidated Appropriations Act, 2021 (Public Law 116-260)).

(B) SECONDARY RECOVERY.—The term ''secondary recovery'' means the recovery of critical minerals and metals from discarded end-use products or from waste products produced during the metal refining and manufacturing process, including from mine waste piles, acid mine drainage sludge, or byproducts produced through legacy mining and metallurgy activities.

☒