U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY
Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Subcommittee on Energy Hearing:
Research and Innovation to Address the Critical Materials Challenge

Tuesday, December 10, 2019

Good morning and thank you to all our witnesses for joining us here today to discuss a topic that is of great importance to many of our nation's industries: the supply of critical materials. There are growing concerns regarding the potential disruption of supply chains that use critical minerals for various end uses, including clean energy generation and storage technologies dependent on these raw materials. Today's hearing will help us to identify strategies for addressing these risks and provide information that will hopefully be helpful for stakeholders working in these areas.

Rare minerals are now fundamental to the functioning of our nation. They are found in alloys, magnets, batteries, and catalysts, which in turn are integrated into countless products such as aircraft, electric vehicles, lasers, naval vessels, and various types of consumer electronics. However, some of the minerals found in these applications are in limited supply and the methods for their extraction incur high environmental and financial costs. Given their necessity in so many applications, there is growing concern over whether supply can meet our societal demand in both the near- and far term.

Each mineral has its own unique story of supply and price vulnerability. For example, in my home state of Texas, the city of Amarillo justifiably calls itself the "Helium Capital of the World." Since the 1920s, the town has been home to the Federal Helium Reserve, a massive underground geological formation that acts as the U.S. strategic helium supply repository. The U.S. has long been the world's largest helium producer, but experts for years have warned of a forthcoming shortage.

You may think of helium only in terms of party balloons and perhaps the Macy's Thanksgiving Day parade, but helium has a wide array of practical uses, from crucial roles that it plays in

industrial processes, to military and civilian aerospace applications, to medical technologies and basic research, many of these uses spanning the Science Committee's jurisdiction.

As Dr. Hayes will testify today, her research with superconductors heavily depends on reliable supplies of affordable helium. We will also hear from our panel of witnesses about how there are no readily available substitutes existing for many materials, and that without action the U.S. could potentially face an annual shortfall of up to $3.2 billion worth of critical materials.

As our nation's demand for these materials rapidly increases, in step with our advancements in various technologies, I look forward to learning more from today's witnesses about how we can better support our National Labs, universities, and private companies in addressing this national challenge.

Thank you and I yield back.