OPENING STATEMENT

Ranking Member Eddie Bernice Johnson (D-TX)

House Committee on Science, Space, and Technology
Subcommittee on Space
"*Powering Exploration: An Update on Radioisotope Production and Lessons Learned from Cassini*"
October 4, 2017

Good morning and welcome to our witnesses. I look forward to your testimony. Mr. Chairman, thank you for holding this hearing to assess the state of the supply of the radioisotope power that NASA relies on to carry out science missions in the outer regions of the solar system and on the surface of Mars.

Today is the 60th anniversary of the Sputnik launch that ignited the space race with the former Soviet Union. In the intervening decades, federal investment in NASA's planetary science program has enabled NASA to send spacecraft to the farthest reaches of our solar system and beyond. Thanks to Curiosity, which landed on Mars in 2012, we know that ancient Mars could have had the chemistry necessary to support life. Curiosity also has detected methane in the Martian atmosphere, a possible sign of microbial activity, and evidence for ancient water flows.

The recently completed Cassini mission spent more than a decade observing storms in Saturn's cloud tops, probing the planet's hidden interior, observing Saturn's rings with unprecedented detail, and flying through the geysers of Saturn's moon, Enceladus. The New Horizons mission became the first mission to perform a flyby of Pluto and subsequently discovered that Pluto is still geologically active, has an extensive blue atmosphere, and is home to the largest known glacier in the solar system.

What do all of these missions have in common? All of these missions, and the groundbreaking science they enable, are driven by radioisotope power. NASA is developing future missions that require radioisotope power as well, including the Mars 2020 rover that is currently in development. In 2009 and 2011, National Academies reports sounded alarms about the supply of material needed for radioisotope power and underscored the need for immediate action to restart domestic production of Pu238, the non-weapons grade isotope that makes radioisotope power systems work.

Mr. Chairman, it is vital that NASA is equipped with the power resources it needs to continue to lead in the scientific exploration of the solar system. NASA's partnership with the Department of Energy has been and will continue to be essential in enabling the use of radioisotope power systems. I look forward to a fruitful discussion on what NASA and DOE are doing to cost-effectively ensure a sufficient supply of material needed for radioisotope power systems to meet NASA's needs into the future.

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