U.S. Senate Committee on Energy and Natural Resources
Questions for the Record Submitted to Dr. Rita Baranwal
116th Congress

Questions from Ranking Member Joe Manchin III

Question 1: Your career has provided you with important insights into the U.S. nuclear industry from both the commercial side and the research and development side. In the past, you have discussed the importance of keeping the U.S. nuclear industry viable and that, in order to achieve economic success, the U.S. will need to be able export U.S. nuclear technologies abroad. How can the U.S. balance its security interests while also ensuring U.S. companies can access markets such as China and India?

Answer 1: For decades, the U.S. has been the world leader in nuclear technology; to continue that leadership, we must continue to innovate as well as look for strategic opportunities to work with other countries to use U.S. technologies. This approach requires a careful balance between economic security and national security interests. I believe the U.S. should engage with foreign states that have committed to open, transparent, and collaborative nuclear technology research and development practices.

Question 2: How can the Department of Energy better facilitate partnerships with advanced nuclear companies and private investors, and will you seek to do so?

Answer 2: My experience as Director of Gateway for Accelerated Innovation in Nuclear (GAIN) at the Idaho National Laboratory has focused on forming and fostering numerous private-public partnerships across the supply chain to support advanced nuclear technologies and the future of energy production. If confirmed, I will continue to facilitate and build upon those partnerships.

Question 3: The current nuclear fleet faces a number of challenges to remain operational. The Department of Energy and National Laboratories play an important role in developing advanced materials, some of which will be critical to the continued operation of the light-water reactor fleet. With your significant experience in this field, how do you plan to further direct research to make current and future reactors safer and also economically competitive?

Answer 3: If confirmed, I will continue to focus on materials science research that is cost-competitive and scalable – augmented by the work by the National Laboratories – so that transformative nuclear energy technologies can support and enhance the current and next generation of reactors.

Question 4: What are concrete steps the Office of Nuclear Energy can start to take today in order to successfully build non-light water advanced demonstration reactors and what role should the Department play in commercializing advanced reactor concepts?

Answer 4: If confirmed, I pledge to learn more about the current programs, activities, and funding for the Office of Nuclear Energy. I believe DOE can play a significant role in research and development as well as identifying barriers to broader market adoption and commercialization. One such area could include the Versatile Test Reactor program that will test advanced reactor concepts.

Question 5: As with most domestic energy sources, we are facing critical workforce shortages in the U.S. nuclear industry, with projections of retirement and non-retirement job loss as high as 41 percent over the next five years. Programs like the Department of Energy's Nuclear Energy University Program

(NEUP) and Integrated University Program (IUP) are key to bridging these challenges, but we must ensure that they continue to be fully supported by DOE. As Assistant Secretary will you pledge to support the mission and funding of these programs? How do you believe the Department can play a role to prevent attrition from the nuclear energy field?

Answer 5: I agree that it is critical to address workforce challenges for the nuclear industry, and we should continue to invest in training programs with a focus on STEM – Science Technology Engineering and Mathematics – education. In my capacity as Director of GAIN, we have experienced success in encouraging universities to collaborate with industry and the National Laboratories to help industry commercialize their technologies with a high-skilled workforce.

Questions from Senator Martin Heinrich

Question 1: If you are confirmed, will you help existing private uranium-enrichment facilities in the United States to survive against government-supported competition in the commercial nuclear fuel-cycle?

Answer 1: I commit to gain a greater appreciation for the challenges facing our commercial enrichment facilities and to do what I can to help existing private uranium-enrichment facilities in the United States be competitive with government-supported competition in the commercial nuclear fuel-cycle.

Question 2: Will you also make it a priority to visit LES in Eunice New Mexico, the nation's only fully operating commercial uranium enrichment facility, in the first 60 days of your tenure at DOE to gain a first-hand understanding of how NE's specific challenges and needs for enriched uranium can be readily met by private industry without tax-payer subsidies?

Answer 2: If confirmed, I plan to visit our several nuclear facilities and labs and I commit to visiting LES as soon as practicable following confirmation and will make every effort to do so within 60 days of my DOE tenure.