

Statement of Kristina M. Johnson
Under Secretary for Energy Designee
Senate Committee on Energy and Natural Resources
April 23, 2009

Chairman Bingaman, Ranking Member Murkowski, and distinguished Members of the Committee, it is an honor and a privilege to appear before you today as President Obama's nominee for Under Secretary of Energy.

I wish to thank President Obama for asking me to join his administration as Under Secretary for Energy in the Department of Energy (DOE), and Secretary Chu for his confidence in my appointment. If confirmed, I look forward to working with the Department of Energy team Secretary Chu is assembling to advance the President's plans to restore our economy, secure our energy future and reduce our greenhouse gas (GHG) emissions. I am confident that the team you see here today will work together, tirelessly, to achieve these goals.

The Under Secretary for Energy has wide responsibilities in energy technology including the DOE Offices of Fossil Energy, Nuclear Energy, Energy Efficiency and Renewable Energy, Electricity Delivery and Energy Reliability, Environment Management, Civilian Radioactive Waste Management and Legacy Management, and the DOE Laboratories associated with energy technologies. While the duties are varied, one consistent challenge is better integration of the work of the science and technology offices and DOE laboratories. By bridging the gap between basic research, development and commercial deployment, DOE can deliver technologies that will help to improve our everyday lives and enable us to achieve our long-term energy and climate change goals.

I believe my background and experience have helped equip me with the skills and perseverance to tackle the challenges faced by the Under Secretary for Energy.

I am a third generation engineer. My grandfather, Charles W. Johnson, was a mechanical engineer and worked directly for George Westinghouse as his engineering assistant, during the early days of Westinghouse Corporation.

My father, Robert G. Johnson, was an electro-mechanical engineer, and also worked for Westinghouse. After serving in the U.S. Army during WWII, he rejoined the company, developing the bid packages for the Boulder, Grand Coulee and Glen Canyon hydroelectric power generation plants, to mention a few. I am inspired by my Grandfather's and Father's desire to improve their communities through technology. Their example, along with my Mother and Family's extraordinary support, has helped shaped my own course and desire to similarly serve society through the application of science and technology innovation.

After receiving my PhD in electrical engineering from Stanford University, I served on the faculty of the University of Colorado at Boulder for fourteen years, ultimately directing the cross-disciplinary National Science Foundation Engineering Research

Center (ERC) in Optoelectronic Computing Systems. The NSF/ERC program emphasizes a systems-focus and market pull for academic research. Our mission was to create a new workforce and new industries for the 21st Century.

We succeeded in starting fourteen new companies, creating high paying jobs and new technologies in the optics and photonics industry sector. As an academic, I am most proud of the accomplishments of my 25 PhD students and postdoctoral fellows, and 48 bachelor and master independent study students who contributed mightily to the success of our research program and ERC.

After Colorado, I served as Dean of the Pratt Engineering School at Duke University for eight years, where I started programs to transition academic research and development into the commercial marketplace. I established the Fitzpatrick Center for Interdisciplinary Engineering, Medicine and Applied Sciences, an expanded professional master's of engineering management program and a technology accelerator called SouthEast Techinventures. Working with industry, academia and the state and federal governments, we spun out over twenty-two companies, creating jobs and an educated workforce in the biotech and photonic industry sectors in North Carolina.

For the last two years I have been the Provost and Senior Vice-President for Academic Affairs at Johns Hopkins University. Johns Hopkins University is the largest research university in the country. It is comprised of nine Schools, the Applied Physics Laboratory, and numerous centers and institutes. In managing the academic affairs of a university with 20,000 full and part-time students and approximately 2,500 faculty, I was responsible for building a strong management team and launching university-wide strategic research and faculty hiring initiatives.

My entire career has focused on improving each institution I have served by making the whole "greater than the sum of the parts." I relish the opportunity to do this by working with the outstanding DOE leadership and staff to develop an energy technology roadmap to inspire, guide and measure our progress toward achieving President Obama's clean energy, job creation, and climate change goals.

If confirmed as Under Secretary of Energy, I look forward to working with members of this committee, and I pledge to you that I will apply my knowledge, expertise and experience to solving our nation's energy challenges. Thank you.