STATEMENT OF SENATOR MARIA CANTWELL
RANKING MEMBER, COMMITTEE ON ENERGY & NATURAL RESOURCES
HEARING ON QUADRENNIAL ENERGY REVIEW
APRIL 28, 2015

"Thank you, Madam Chair, for holding this important hearing on transforming U.S. energy infrastructure.

"And I thank Secretary Moniz for all that he does—shuttling back and forth between Iran sanction discussions and the QER must be a wide breadth of focus—so thank you very much.

"This hearing today is particularly important because infrastructure is the link all of the components of our national energy system, and it is increasingly complex, it's interdependent and it is certainly —as the report shows—in need of an upgrade.

"As we begin the legislative process of crafting what we hope becomes a bipartisan energy bill, it is essential to have a good grasp of both the data and the existing analyses of the infrastructure that supports these energy systems.

"The need for reliable and efficient supplies of energy is becoming closely intertwined with our economic growth and competitiveness. That's why it is even more important that we understand the trends affecting the infrastructure delivering these commodities.

"For instance, there has been a surge in the amount of crude oil transported by rail in the last few years. In a 5-year period starting in 2009, there was an increase of roughly 4,400 percent in the volume of rail shipments.

"This trend has had a number of implications. For example, crude oil now competes with other commodities more traditionally transported by rail, which has caused delays in the delivery of crops and agricultural products to market.

"The report explicitly states that these recent, unexpected shifts in supply and demand for rail services have resulted in disruptions to agricultural shipments that 'exceed even those caused by Hurricane Katrina.' The Department of Agriculture's Agricultural Marketing Service concluded that 'the current rail service problems have exceeded previous events in terms of both magnitude and duration, including

Hurricane Katrina, which caused major disruptions throughout the entire agricultural transportation network.'

"A number of high-profile incidents have also underscored major safety concerns and point to the need for us to revisit existing regulatory structures.

"As the Quadrennial Energy Review notes, 'These accidents have highlighted the need for additional monitoring, enforcement and inspection, as well as setting new safety design requirements for tank cars.'

"Back here, we have all the oil and rail industries pointing fingers at one another. Some are asking serious questions about the competence of certain regulatory agencies like PHMSA within the Department of Transportation. And I want to submit an article for the record submitted that was just written last week about PHMSA.

"But I also want to thank you, Secretary Moniz, for helping to bring data to bear on these policy questions, because it is clear that our work is not done here.

"The Departments of Energy, Transportation, Agriculture and the Federal Energy Regulatory Commission must continue to develop their understanding of how rail congestion may be affecting the delivery of energy and agricultural commodities and the safety implications.

"Obviously outdated and aging infrastructure carries safety risks, and can also be a barrier to entry for new technologies.

"Investing in infrastructure upgrades enables the vast benefits of new technologies to increase efficiency, improve reliability and create jobs. In fact, projections indicate that, by 2030, the energy sector overall will employ an additional 1.5 million workers.

"And changes in the electricity sector, in particular, affect the number and types of energy jobs.

"New technologies require new skills and training in the electricity workforce. And I'm glad to see that was part of the report.

"Older business models are going to change as our economy evolves. The electricity business must keep pace with the innovation and continue to be more efficient, flexible and advanced.

"And this work is important because our grid, I believe, is a platform. It is a platform for products and services and technology—not only in the United States of America but for electricity all around the globe.

"I was struck yesterday by press reports that solar lamps were the only public lighting sources initially available in parts of Nepal, after the tragic earthquake and

avalanche this weekend. So new technologies play a role—at home and abroad—in making energy systems more secure and resilient.

"Here in the U.S., we have been working with our laboratories in developing policies that inform infrastructure investment strategies.

"So in terms of the electricity sector, we know that different states have different geographies, priorities and different mixes of energy. But it's my hope that we can accelerate the modernization of our grid by ensuring that best practices and innovations driven from the ground-up can be implemented.

"As the Quadrennial Energy Review also notes, most of our nation's transmission, storage and distribution infrastructure is owned and operated by the private sector.

"That's why an important aspect of accelerating new infrastructure technologies is a public-private partnership that is called for in the report.

"In 2008, the Edison Electric Institute estimated that, by 2030, the U.S. electric utility industry would need to make a total infrastructure investment of $1.5 trillion to $2.0 trillion.

"Analyses conducted for this review by the administration suggest that natural gas interstate pipeline investment will range between $39 and $52 billion during a similar time period, and depending on the overall level of natural gas demand.

"So, what is the cost of doing nothing?

"Well, between 2003 and 2012, an estimated 679 widespread power outages occurred due to severe weather, which cost the U.S. economy $18 billion to $33 billion each year between 2003 and 2013.

"And, as I mentioned, the POLITICO article from last week, talks about spills, leaks and explosions from oil and gas pipelines that have caused a total of $5.5 billion in damage during the past 12 years.

"So investments that promote innovative solutions to enhance energy infrastructure resilience, reliability and security clearly have huge benefits to the economy, and I think that's what the report is trying to outline.

"So thank you very much for keeping our focus on what we need to do to take advantage of our energy resources, but make them work better for the years ahead."