Statement of Frank Pallone, Jr.
Ranking Democratic Member
Committee on Energy and Commerce
Subcommittee on Energy and Power
Hearing on
The 21st Century Electricity Challenge: Ensuring a Secure, Reliable and Modern Electricity
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Thank you Chairman Whitfield and Ranking Member Rush for holding this hearing on the future of the grid.

The National Academy of Sciences (NAS) has referred to the US electricity grid as the greatest engineering achievement of the 20th century because it delivers critical energy services to consumers in an instantaneous, affordable, and dependable manner. In fact, as a society, we have come to expect that every time we flip the switch in a dark room light will appear.

But our grid is changing as we speak. There are ever-growing demands on the grid, to power our new technologies and to accept new forms of generation, while at the same time, conventional attacks, cyber-attacks, climate change and other new threats require the grid to

become more resilient. The grid is now the subject of almost constant innovation and entrepreneurship, as many of our witnesses will attest. How we unleash that innovative spirit, and at the same time ensure overall system reliability, is the challenge for the grid of the future.

Fortunately, advanced technologies exist to address these challenges, with substantial benefits for both the electricity sector and, in most cases, consumers. These new technologies are working smarter, and promise electricity generation and delivery that is more efficient, economic, and environmentally responsive. While this transition will not be quick or easy, our witnesses today make clear that the move towards smart grid technology is already here.

Today, you can already find this technology deployed around the nation. You can see it in the deployment of smart meters and other technologies that facilitate greater energy efficiency and cost savings, as well as in the deployment of solar and other distributed generation. These technologies will also help move us forward in the fight against climate change, providing new ways to reduce greenhouse gas

emissions while at the same time enhancing overall system resiliency and reliability.

In my home state, you can also see the deployment of smart grid technologies in the work DOE has done to set up a micro-grid to prevent transit service outages in northern New Jersey, like the one we experienced during Superstorm Sandy.

While the movement to these new technologies is important in many cases, its near term adoption is not inevitable. Nor is it necessarily a panacea for all the problems we face. And we will need to work with our state and local counterparts, including state regulators, to develop workable solutions.

For instance, while a micro-grid may help preserve power for a portion of a community during an extreme weather event, policy makers will be the ones tasked with deciding who gets the benefits of that power, and who pays for establishing the infrastructure.

Similarly, the rate of adoption for many of these new technologies often depends on the incentives put in place by policymakers. For example, real-time, smart metering can provide consumers with critical information about their energy use during hours of peak demand. Yet, without the proper rate structures in place to encourage residential or commercial customers to use energy during off-peak hours, there is little motivation for someone to charge their electric vehicle at night instead of in the morning, or to alter their business plans to ensure others can consume electricity during the day.

Policy questions still exist, but there is little doubt that adopting these new technologies to move us toward a smarter grid could spur benefits for consumers, our economy, and the environment. The witnesses before us today can help us navigate these obstacles to quickly realize the benefits of these technologies in a cost-effective manner. I look forward to hearing their views.