Chairman Whitfield, Ranking Member Rush and members of the Committee, thank you for the invitation to be with you today. Your hearing on reliability of the nation’s electric grid is a timely one.

While the Commission has been given responsibility by Congress to ensure the reliability of the bulk power system, the threats to that reliability are many and the Commission’s tools are somewhat limited. In this testimony, I will offer initial thoughts about several areas that have the potential to impact electric reliability, and close with comments on the sweeping changes that may be imminent with proposed new Environmental Protection Agency rules.

First, I will comment about areas in which I believe the nation has made vast improvements, and that is in relation to addressing the causes of previous large failures in the bulk power system. The good news is we are actually in a much better position than we had previously been, largely because of significant utility investments and mandatory, enforceable reliability standards. It is not to say that large scale blackouts cannot and will not happen in the
future – they may indeed occur at some point. But it is to say that our Nation has significantly reduced the likelihood that those events will reoccur for the same reasons as in the past – such as poor vegetation management, human error, poor planning and lack of visibility into the workings of the real-time grid.

Yet in some ways, our reliability risks are just as daunting as before due to emerging threats such as increasing cyber attacks and physical attacks.

**Cybersecurity**

If you were to ask me which of the risks to electric reliability causes me the greatest concern – I would probably identify cyber risk as first on the list. Through its critical infrastructure protection standards, the Commission has been active in attempting to mitigate the risk of a successful cyber attack. However, as has been stated by FERC staff and members of the Commission in the past, the tools FERC currently has available to it are inadequate in the face of a fast moving or imminent attack, and to the degree FERC does have authority it is limited to the bulk power system and not the myriad of other systems that interact with it. The FERC-NERC standard setting process does have the ability, over time, to create a security ecosystem that makes it much harder for cyber attacks to be successful. But that process is too slow and too open to deal with threats in real time. In addition, federal law may not do enough to promote information sharing between and among government and industry. I continue to be supportive of efforts in Congress to close these gaps.
Physical Security

The issue of physical security has been a prominent one in recent months due to high profile attention given to physical attacks on the grid. Acts of physical destruction to portions of the electric grid have been something utilities have dealt with for years, but the Commission has recently seen the need for more formalized standards for the protection of the grid. The result has been a recently released Notice of Proposed Rulemaking that may ultimately lead to mandatory enforceable standards designed to mitigate the risk of a physical attack bringing down portions of the bulk power system. As I said earlier this month when voting to approve the NOPR, I believe these efforts are a step in the right direction, but would encourage all stakeholders to view this as just a first step in a longer term iterative process we undertake with the industry.

Geomagnetic Disturbances

Naturally occurring GMD is yet another threat to the grid. The Commission’s newly adopted rules begin the process requiring utilities to assess the GMD risks to their systems and requiring them to then take appropriate actions to mitigate those risks.

All of these rules are a carefully crafted attempt to strike an appropriate balance: to reduce risk, but to be mindful that if the goal is to reduce every risk to zero, then we would end up with a grid that Americans could not afford. We would also violate the axiom that if everything is a priority, then nothing is a priority.
Environmental Compliance Regulations

In addition to the traditional and emerging reliability threats that the Commission addresses through standards development, reliability faces an additional challenge in the form of several new and proposed environmental regulations.

The Committee supplied a list of questions and my answers are attached to this testimony. I will let that stand as a starting point for any further questions you might have, but I would like to highlight just a few additional thoughts I have with regard to EPA’s new proposed Clean Power Plan.

More than any regulation I have seen during the time that I have been involved in the energy sector, this EPA proposed rule has the potential to comprehensively reorder the jurisdictional relationship between the federal government and states as it relates to the regulation of public utilities and energy development.

Up until this point, utilities have been regulated through the influence of a number of governmental entities. State legislatures, governors, public utility commissions, state energy offices, state departments of environmental quality, EPA and FERC, to name some of the major players, all had a role to play. Any one entity could exert an influence on the process, but they each had their own niche.

EPA’s proposed 111(d) regulations would dramatically alter these traditional lines of authority by creating a new paradigm of oversight of net carbon emission from a state. The
process that has been envisioned by EPA through its proposed rule leaves the states with many promises of flexibility but an exceptionally difficult choice.

On one hand, a state could tell EPA that it is not playing ball. That would allow a state to wash its hands of a process that it may see as unworkable or ill-advised for any number of reasons. Yet doing so carries significant risk. Presumably, EPA would then step in and craft an implementation plan of its own; but its tools may be crude, and as of yet are undefined. In short, a state has no idea what the downside risk is should they not participate in creating a state compliance plan.

On the other hand, a state could decide to go down the path of taking the EPA up on its offer of flexibility and craft its own plan or attempt to partner with other states on a regional plan. Yet this is a path that is at least as perilous; for if states agree to play by the EPA’s rules, they are ceding ultimate authority of the regulation of their state’s public utilities and energy development to the EPA.

What was once a relationship of interacting and cooperating entities will be one in which there is a clear senior partner. In the past, EPA authority extended to specific generating plants or groups of plants, but by a state voluntarily agreeing to seek EPA approval of its overall integrated regulation of the electric industry, it will have entered a comprehensive “mother-may-I?” relationship with the EPA that has never before existed.

After an implementation plan is approved by the EPA, a state will have lost its ability to chart its own course as to how it regulates public utilities and its energy sector as a whole. To use just one example, if a future legislature, decides that its renewable portfolio standard is not
working for the citizens of its state, that legislature may effectively be prevented from changing course, because its “EPA-approved” RPS will still be in full effect; and likely enforceable by either the EPA or subject to a private party lawsuit. The same would apply to any future state utility commission action to the degree it implicates an EPA approved plan. And because basically everything in the electricity sector affects carbon output in some manner, if a state “plays ball” with the EPA, the proposed rule could effectively lock a state into a comprehensive carbon integrated resource plan that can only be changed with the acquiescence of the EPA.

Moreover, given the predominant regional nature of today’s electric grid operations, implementation of the proposed rule faces practical difficulties at both ends of the spectrum. If states choose to comply with the proposed rule by taking an independent, go-at-it-alone approach, then regional grid operators will be faced with an increasingly complex task of implementing multiple compliance mechanisms into what was once an efficiently dispatched regional electric grid. The various compliance regimes will also add complexity to bilateral contracts that cross state borders.

To take just one recent example, a few days ago, the Governor of Minnesota called for the elimination of coal as a source of electricity production. Presumably, this is the sort of thing that could be incorporated into a state compliance plan. But electricity delivered to Minnesotans is part of a regionally dispatched grid. In the context of today’s highly integrated interstate electricity grids and markets, it is hard to comprehend how any similarly situated state could attempt to make itself an island. A state can refuse to permit coal plants within its borders, but to the degree it was attempting to regulate energy produced elsewhere, it is not
permissible. Indeed, the State of Minnesota recently had a federal court nullify a state statute for violating federal law on those very grounds.

At the same time, even if all states in a region band together under the regional grid operator, any changes to the wholesale markets must necessarily be vetted and approved by FERC. The Commission would be charged with the awkward task of evaluating fundamental wholesale market design changes driven by environmental priorities approved by the EPA. Yet FERC is an economic and reliability regulator. Any decisions made by FERC must be rooted not in the Clean Air Act, but in our “just and reasonable” and “not unduly discriminatory or preferential” rate standard in the Federal Power Act. FERC’s ability to alter or reject an RTO-proposed compliance mechanism would present a conflict with EPA’s evaluation of the compliance plans. Absent Congress stepping in and clearly defining FERC authority and EPA authority, it is not hard to envision a future jurisdictional train wreck.

I offer these thoughts to illustrate the difficult decisions that lie ahead and to highlight for Congress just how seismic this change is. Putting aside questions this Committee has raised with regard to reliability and cost impacts of the proposed rule, I submit it could fundamentally change the very fabric of how the utility industry is regulated in the country.

Thank you for the opportunity to appear before you today, I would be happy to answer any questions you may have.