Written Statement
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Good Morning. My name is Paul Newton. I serve as the North Carolina President for Duke Energy. Duke Energy owns more than 57,000 MW of electric generating capacity. We produce and deliver electricity to 7.2 million homes and businesses located in six states. About 21 million people depend on us to provide reliable and affordable electric service 24 hours a day, 7 days a week. Operating in both regulated and deregulated markets in the U.S. and internationally, Duke Energy's utility business consists of a balanced generation capacity mix currently consisting of 35% coal, 36% natural gas, 14% nuclear, 13% solar, wind and hydro, and 2% oil.

For more than a decade, Duke Energy has been aggressively moving forward with a strategy to modernize our generation and delivery systems. By taking a thoughtful, deliberate approach, we have been able to reduce emissions from our fleet, including carbon dioxide emissions, all while keeping customer rates below the national average in all of our regulated jurisdictions and across all customer classes. Duke Energy has been growing its renewable portfolio, making more than $4 billion in investments in our commercial renewable energy business. We have also added a significant amount of natural gas generation to our fleet with the construction of five new natural gas combined cycle plants since 2011. In fact, Duke Energy has invested more than $9 billion in new generation across our systems, allowing for the retirement

of about one-quarter of our coal-fired and large oil-fired fleet or 6,800 MW of capacity by 2018. This represents 18 power plants and 52 coal units. We are also actively investing in grid technologies to become more efficient and to build on our ability to offer reliable service.

Duke Energy supports climate change policies that will result in reductions in greenhouse gas emissions at achievable rates over time while balancing impacts to our customers' rates, the economies of our service territories and the reliability that our customers count on.

After a thorough review, Duke Energy has identified numerous concerns with EPA's proposed Clean Power Plan (CPP) as we detailed in comments submitted to the EPA. An area of particular concern, and one that I will address here today, deals with the reliability challenges likely to result from the interim compliance period targets and the requirement that many states must meet very stringent CO_2 emission reduction targets beginning in 2020. Florida and North Carolina, in which Duke Energy operates, are two examples of this challenge. Requiring too much too soon, without time to effectively plan and build replacement generation or to address the infrastructure needed to support replacement generation places our electric system reliability at risk. The most effective way to avoid reliability problems associated with the CPP is to ensure that electric system reliability is properly factored into any final rule and that the rule sets emission reduction requirements on a schedule that is possible to achieve without significantly jeopardizing reliability. Duke Energy therefore urges the FERC to work closely with EPA to ensure that reliability is properly factored into any final rule requirements.

As I will discuss in greater detail, Duke Energy believes that one of the most effective steps that can be taken to avoid reliability concerns associated with the CPP is to eliminate the proposed interim compliance period targets and allow states to develop their own emission reduction glide paths toward achieving the 2030 targets. While the potential might exist for

regional planning to help alleviate potential reliability issues, there are too many unknowns to consider the potential for regional cooperation as a substitute for deferring to the states on the appropriate glide path to 2030.

The EPA has the opportunity to review and approve, or disapprove, a state's plan. The EPA's ability to reject the plan incentivizes states to create reasonable glide paths that are able to take into account state-specific resource needs. A second concern Duke Energy has with the proposed CPP is that it creates a significant risk for stranded investments. Our customers have made more than $7 billion in improvements to our coal-fired power plants in recent years – many of which were made to comply with other EPA regulations. These customer investments could become stranded because of the interim compliance period targets and the potential need to retire some of these assets before they have reached the end of their useful lives. Customers should not have to pay twice. Once for state of the art environmental controls, and a second time because of a CPP that could require premature retirement of some of those same plants to achieve the EPA's policy objectives.

As stated earlier, Duke Energy has been transforming its generation fleet for a number of years, and we know what is required to make such a transformation in a cost-effective and orderly manner. Through the systematic retirement of older coal-fired units, the addition of new natural gas combined cycle units, new renewable generation facilities, nuclear unit up-rates and offering end-use energy efficiency programs to our customers, Duke Energy has already lowered its CO_2 emissions by almost 19% from 2005 to 2014. One thing we have learned through these efforts is that the transition to a lower carbon future must be made in an orderly, deliberate and thoughtful fashion, and must allow sufficient time for the significant steps required to bring about such a change. Rushing the transition can create unintended consequences, including the

potential for undesirable reliability problems such as increased parallel power flows and capacity deficiency emergencies, and economic problems for the customers we serve.

Under the CPP, the EPA has proposed that North Carolina and Florida achieve more than three quarters of their 2030 emission rate reduction requirements by 2020. Further, the proposed interim compliance period requires state plans to achieve the average of their 2020-2029 targets by 2029. Thus, the CPP front-end loads the required reduction, which means that states will not have the latitude to develop an implementation plan that starts slowly and works up to the final 2030 target at a pace that takes into account their unique needs and circumstances. With the CPP 2020-2029 averaging provision, a state that fails in the early years of the interim compliance period to achieve CPP interim period targets has no choice but to go beyond its final 2030 target in the later part of the interim compliance period in order to meet its 2020-2029 average interim compliance period target. Even then, the state may not be in compliance with its 10-year average interim compliance target. Therefore, the interim compliance period provides no relief for states with very stringent 2020 targets from having to meet those targets in 2020, which gives rise to our significant reliability concerns.

Until we see how each state determines the utility compliance requirements, Duke Energy cannot know the amount of coal-fired generation it might need to retire by 2020 to comply with the proposed state targets. However, we can say with confidence that the proposed 2020 targets for North Carolina and Florida have the potential to drive coal unit retirements by 2020 in each state, as the EPA's own modeling analysis of its proposed rule suggests will be the case. The EPA modeling of its proposed "preferred option" shows a number of Duke Energy coal units shutting down by 2020. Duke Energy currently has no plan to retire the units the EPA modeling shows retiring. All of the units have recently been equipped with SO_2 scrubbers and

many of the units were recently equipped with selective catalytic reduction technology to control NOx emissions.

A 2020 compliance date, especially for states like North Carolina and Florida which have very stringent 2020 targets, is not compatible with the regulatory timeline the EPA has laid out in its proposal, which could have states finalizing and submitting their implementation plans to EPA in mid to late 2017 or 2018, and the EPA ruling on the acceptability of those plans in mid to late 2018 or 2019. Simply put, the proposed implementation schedule does not provide the amount of time that will be needed to develop and implement by 2020 what will most certainly be very complex compliance plans.

Very stringent 2020 targets place reliable, well controlled and economically viable coal-fired generating units at risk of premature retirement in order to meet the initial 2020 targets simply because there would not be sufficient time to do anything else that would have a sufficient impact on CO_2 emissions. We cannot retire generation without adding replacement generation at the same time.

Potential reliability issues that arise in a premature retirement situation include the possibility of capacity shortages along with related electric transmission and natural gas infrastructure reliability concerns. Put very simply, retiring significant amounts of existing coal generation requires not only replacement natural gas generation, but also the attendant modifications required to the electric transmission infrastructure and associated natural gas pipeline infrastructure necessary to accommodate the new generation. Each of these major infrastructure components, new generation facilities, transmission system modifications and additional natural gas pipeline capacity takes several years to study, plan, design, permit, and construct. With CPP state implementation plans expected to be approved sometime in 2018 or

2019 and stringent CPP targets in 2020 utilities will find themselves in the untenable situation of choosing between CPP compliance and the continued provision of highly reliable and affordable electric generation. This represents a lose-lose situation for all stakeholders; customers, utilities and regulators. Elimination of the interim goals would allow each state to independently evaluate the most effective, economic and reliable path to 2030 compliance given the individual complexities within each state jurisdiction. State regulators are in the best position to assess, develop and enforce state specific milestones required to meet EPA's ultimate 2030 targets outlined in the CPP.

Again, Duke Energy envisions a least cost CPP strategy that potentially includes a coordinated set of actions that might include additional renewable generation, new nuclear generation along with accompanying transmission and gas pipeline projects to support retirements and new builds. Implementing such a strategy, however, including the requisite steps of planning, permitting, obtaining required utility commission approval, and design and construction would take many years, and the bulk of the work could not be performed until after the final regulatory requirements are set, which again, will not occur for several years. The bottom line is that unless the final rule reflects the modifications necessary, it will not be possible to carry out a reasoned strategy for achieving the 2020 targets that will ensure compliance while simultaneously maintaining system reliability and affordable rates for our customers.

The obvious solution to concerns about reliability is to allow each state to develop its own glide path for achieving its final 2030 target that reflects state-specific needs and circumstances. Only in this way will it be possible to accommodate the significant transformation that will be necessary to achieve the levels of reduction contemplated in the CPP

without placing the reliability of the electric system at risk. Elimination of the interim target in favor of state-specified glide paths, however, would not mean that reliability concerns can be assumed to be fully resolved. Quite the contrary. The transformative nature of the CPP means that we must remain vigilant regarding potential reliability issues throughout the various development processes for each of the state's implementation plans to address potential reliability issues unique to each jurisdiction. Duke Energy therefore recommends that the North American Electric Reliability Corporation (NERC), or its delegates, evaluate state implementation plans to help identify possible reliability problems prior to submission to the EPA. This evaluation would consider the interaction of multiple state implementation plans, recognizing the interconnected nature of the grid, and would assess their combined impact on reliability. The FERC may need to intervene with EPA to ensure that states receive additional time to submit their implementation plans, if necessary, so that identified reliability problems are addressed in advance. Moreover, once state implementation plans are approved by the EPA, the FERC and NERC will need to play an ongoing, active role in ensuring that compliance with state implementation plans does not jeopardize reliability. This will likely require coordination between the FERC, NERC and the EPA to ensure that if reliability issues are identified that require changes to state implementation plans or timelines, that those subject to the rule will not be deemed out of compliance. This could be thought of as a type of reliability safety valve. And while Duke Energy is fully supportive of having an effective safety valve in place on day one, we don't view the existence of a safety valve as eliminating the need for direct action to avoid obvious reliability problems before they arise. A reliability safely valve can take several forms, and we encourage the FERC and the EPA to work with industry and states as they consider various approaches. Duke Energy offers to be part that dialogue to help craft a workable policy.

Earlier in my remarks I mentioned that Duke Energy is concerned about the substantial stranded investment caused by the premature retirement of coal-fired power plants under the CPP. In Duke Energy's case, the premature retirement of coal-fired EGUs by 2020 could render worthless billions of dollars of investments our customers have made to install expensive pollution control equipment to comply with other EPA or state regulations. Such an outcome is both unacceptable and unnecessary, and can be substantially mitigated by eliminating the interim compliance period and allowing states to set their own emission reduction glide paths.

Thank you for holding today's technical conference and for the opportunity to participate in the discussion on this critically important issue. Duke Energy looks forward to working with the Commission and EPA to ensure that the CPP does not create electric system reliability problems, and does not result in an unnecessary financial burden on our customers.