STATEMENT OF STUART WIDOM

CALPINE CORPORATION

BEFORE THE

DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

CLEAN POWER PLAN LISTENING SESSION

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DOVER, DE

Good evening [Secretary Small], [Deputy Secretary Coats] , Director Mirzakhalili, Director Cherry, and other representatives from the Delaware Department of Natural Resources & Environmental Control's (DNREC's) Division of Air Quality and Division of Energy and Climate that are with us this evening.

Thank you for allowing me this opportunity to express Calpine Corporation's preliminary thoughts on the US Environmental Protection Agency's Clean Power Plan and how it might be implemented in Delaware. The Clean Power Plan was published in the Federal Register in its final form on October 23, 2015.

My name is Stu Widom and I am Director of Governmental & Regulatory Affairs for Calpine Corporation's East Region. Calpine Corporation is America's largest generator of electricity from natural gas and geothermal resources. Our fleet of 83 power plants in operation or under construction represents nearly 27,000 megawatts of generation capacity. Through wholesale power operations and our retail business, Champion Energy, we serve customers in 19 states and Canada. Calpine's East Region Office is based in Wilmington.

Calpine specializes in developing, constructing, owning and operating natural gas-fired and renewable geothermal power plants that use advanced technologies to generate power in a low-carbon and environmentally responsible manner. Our clean, efficient modern and flexible fleet is uniquely positioned to benefit from recent trends affecting our industry,

including the abundant and affordable supplies of clean natural gas, stricter environmental regulations, aging power generation infrastructure and the increasing need for dispatchable power plants to successfully integrate intermittent renewables such as wind and solar into the electric grid.

We are one of the nation's largest publically traded Independent Power Producers. Calpine sells power into the competitive wholesale electricity markets - including the PJM market - which, as you know, serves Delaware. On a national basis, about 95% of the electricity generated by Calpine's fleet is from natural gas-fired power plants. Overall, Calpine burns more than 10% of all the natural gas consumed by the power industry, making Calpine one of the largest consumers of natural gas in the U.S., and the largest among all power generators. Despite our size, Calpine's fleet is the cleanest among the major players in America's independent power generation sector.

From a local perspective, Calpine is also Delaware's largest generator of electric power, with approximately 2,275 MWs of electric generating capacity currently in operation within our state. We generate about two-thirds of the power that is consumed by Delaware's residential, commercial and industrial facilities during the peak demand period of the summer.

As you know, Calpine has developed, constructed and recently brought on line the more than $300 million Garrison Energy Center, a state of the art, energy efficient and

environmentally responsible combined cycle power plant in Dover. This infrastructure investment will continue to ensure that Delawareans will be given the opportunity to obtain a reliable and efficient supply of power for our future, and will also assist Delaware in providing the necessary federal compliance demonstration associated with the State's Clean Power Plan obligations.

Calpine understands that Delaware will be developing a State Implementation Plan, or "SIP", in the upcoming months based upon various stakeholder listening sessions as well as anticipated model rules that a number of states will be considering. As such, our comments tonight won't be overly specific. More suggestions will come later in the process once Delaware formulates a more specific draft plan.

That being said, Calpine believes that the Delaware economy and the state's electric consumers would be best served by DNREC remaining within the long established Regional Greenhouse Gas Initiative (RGGI) Program in order to achieve its Clean Power Plan compliance obligations.

We believe that Delaware – a relatively small state that has well-controlled CO_2 emission characteristics– needs to ensure that it is part of a broader regional group that can accommodate extensive CO_2 allowance trading in order to promote the most efficient, flexible, and cost effective compliance approach for existing as well as for new sources. As

a member of RGGI, Delaware should be close to achieving this goal. It is expected that RGGI will provide the vehicle needed by its member states to comply with the Clean Power Plan. However, just continuing RGGI is not sufficient. To continue to lead in this area, the RGGI states must engage in a common compliance market with other states in this program, just as they already participate in common energy markets in parts of RGGI. The leadership of the RGGI states would be undermined if RGGI were to adopt a policy of limiting or prohibiting trading with non-RGGI states within the context of the Clean Power Plan.

And while RGGI appears to be the best approach for Delaware to comply with the Clean Power Plan, we also encourage the state to be flexible in this process. For example, if other PJM Mid-Atlantic states develop their own trading mechanism, Delaware should seriously consider joining that program to minimize or eliminate any market inefficiencies of having two carbon price signals in the Mid-Atlantic.

It is also imperative that Delaware not lose or degrade the many benefits it enjoys by being a member of PJM. We believe the most efficient way for Delaware to meet the goals of ensuring access to a vibrant allowance trading market and retaining the benefits of PJM membership will be for the PJM states to work together to ensure that trading is not limited or restricted in any matter that would negate the market-based compliance

approach or that would diminish the benefits of being in an organized power market such as PJM.

In order to comply with the Clean Power Plan, Calpine believes that DNREC should adopt a mass-based, "trading ready" approach in its SIP that is applicable to both new **and** existing resources. Delawareans would be best served by this approach because a mass-based model provides a non-subsidized, level playing field that has proven the test of time in other emission markets. A mass based approach worked well in the Clean Air Act's Acid Rain and Ozone compliance programs for pollutants such as SO_2 and NOx. It is a well understood construct and provides clear price signals to sources to implement viable compliance plans in a cost effective and efficient manner.

It is also important to note that according to modeling and analysis performed by both the US EPA and PJM, a mass-based approach is expected to result in the overall least cost of compliance and, at the same time, preserve the efficient electricity market structure run by PJM.

Furthermore, Calpine also believes that a multi-state, trading ready approach, ideally one that overlays the PJM footprint, would be the most effective structure and will yield the best overall results for the consumer. Just like in regional electricity markets such as PJM,

there is tremendous efficiency in scale and resource diversity, which leads to the least cost security constrained economic dispatch of the PJM power market.

Thank you again for allowing me the opportunity to offer Calpine's initial thoughts.