May 20, 2016

Gladys M. Brown, Chairman
Pennsylvania Public Utility Commission
400 North St.
Keystone Building
Harrisburg, PA 17120


Dear Chairman Brown and Commissioner Powelson:

The Keystone Energy Efficiency Alliance (KEEA) supports the Pennsylvania Public Utility Commission’s (PUC’s) effort to increase the deployment of combined heat and power (CHP) systems in the Commonwealth. By encouraging EDC’s and NGDC’s to make CHP an integral party of their energy efficiency and resiliency plans, the Commonwealth can take advantage of the Department of Energy’s Resiliency Accelerator Program while improving energy efficiency, decreasing greenhouse gas emissions and harmful air pollutants, and laying the groundwork for the utility of the future.

KEEA is an energy efficiency trade association with over 60 state and national business members who provide advanced energy resources and expertise to utilities, businesses, and ratepayers. By representing the interests of the clean energy industry in Pennsylvania, KEEA is growing the market for energy efficiency and helping the Keystone State secure a sustainable energy future.

CHP systems are one of the most reliable and efficient means of generation available to the Commonwealth. CHP, or cogeneration systems, typically have a system efficiency of 85% for the heat and electricity that they produce, which is far more efficient than the 45% efficiency of conventional systems. Further, because energy generation by CHP systems are consumed on-site or nearby, there is little to no line-loss. Large manufacturing and industrial users have leveraged CHP systems for years to produce cost effective heat and electricity. However, CHP systems are most effective when they are combined with robust district heating and cooling measures, also known as district energy.
District energy systems use a CHP system to produce electricity and also produce steam, hot water, or chilled water to distribute thermal energy to multiple buildings through a network of buried, insulated pipes. One example of district energy is Philadelphia’s “Green Steam” program. In that program, Philadelphia’s existing 163 MW Grays’s Ferry Cogeneration Facility was supplemented by two rapid start boilers that now provide energy to over 500 buildings in Center City including the Comcast Center, as well as the University of Pennsylvania. That program alone achieved 10% of Philadelphia’s Green Works emission goals while decreasing NOx and SO2 emissions in the City.

Despite the numerous advantages of these systems, they do face serious barriers to widespread deployment in the Commonwealth. These include utility rate structures that discourage investment in CHP, lack of common and fair interconnection and net metering standards, discriminatory utility standby rates, and emissions regulations that do not recognize the improved efficiency and pollution benefits of CHP systems. Many of these barriers currently exist in Pennsylvania. In its Policy Statement, the Commission noted that Pennsylvania can improve in the areas of interconnection standards, the presence of a program designed to acquire CHP energy resources, and state approved production goals for acquiring a defined amount of savings from CHP.

The Commission’s proposed policy statement that requires utilities to submit biennial reports on their efforts to support the development of CHP is an important step towards Pennsylvania realizing its full CHP potential. Such reports will provide important information on CHP deployment in the Commonwealth, and provide the data necessary to adopt more robust CHP programs in the future, in partnership with other state and federal agencies. KEEA believes that this a step towards better energy generation and grid modernization that will ultimately result in greater energy efficiency, more efficient system operations, increased reliability and resiliency, decreased emissions, lower energy prices, and avoided T&D upgrades.

While KEEA supports the Commission’s tentative order, KEEA urges the Commission to consider both existing and potential CHP facilities that make up the backbone of district energy systems as it move forward. District energy systems have particular needs, such as the ability to isolate its grid during times of catastrophic weather events. Further, to the extent practicable, the Commission should encourage the deployment of CHP for those district heating systems that do not currently utilize CHP, such as the Energy Center district in Pittsburgh.
KEEA commends the Commission for its pro-active effort to promote advanced energy resources, such as CHP, which will ultimately drive the Commonwealth to a 21st century energy system.

Sincerely,

Matt Elliott
Executive Director