

The Honorable Ed Whitfield Chairman Energy and Power Subcommittee House Energy & Commerce Committee United States Congress Washington, DC 20515 The Honorable Bobby Rush Ranking Member Energy and Power Subcommittee House Energy & Commerce Committee United States Congress Washington, DC 20515

May 18, 2015

Dear Chairman Whitfield and Ranking Member Rush:

I would like to thank the Energy and Commerce subcommittee on Energy and Power for holding a hearing focused on energy reliability and security. The Pew Charitable Trusts is especially pleased to see the recognition of the grid resiliency benefits in Section 1207 of the Committee's discussion draft. We appreciate that it encourages measures which promote greater use of onsite power generation more broadly, such as a requirement for facilities of a certain size to consider a cost-benefit analysis of onsite power generation from systems such as combined heat and power (CHP) technologies. Onsite power generation can provide the important benefits of added energy resiliency while lowering overall energy costs.

Distributed energy generation offers the ability to protect institutions and manufacturers from unexpected electricity power outages caused by natural disasters and other disruptions. With CHP systems, facilities self-generate power and use the grid to fulfill any additional power needs. In times of grid instability, these systems have the ability to "island," or operate without connection to the local electricity infrastructure. Facilities with CHP, therefore, have no need to operate stand-alone emergency generators, which often become stranded assets due to the minimal frequency with which they are used. Being able to use these highly efficient systems at all times including when the grid is down provides certainty – a CHP system owner never wonders if a seldom used generator will start when most needed.

Critical infrastructure benefits from reliable, efficient power

Many lifesaving medical devices require electricity. A reliable source of power, no matter what the weather brings, is of the utmost importance to hospitals, assisted living facilities and other such critical infrastructure. Medical centers with CHP can prevent evacuations due to power outages, saving lives. According to a report from the American Journal of Alzheimer's Disease & Other Dementia, death rates for seniors 30 days after an evacuation rose 218 percent, and after 90 days increased to 158 percent. Moving patients from one location to another can disrupt medical care and routines, leading to higher risk of hospitalization.¹

CHP systems also save money. According to a report by *Health Care Without Harm* and the Boston Green Ribbon Commission, adding a one megawatt combined heat and power system to a hospital can save \$700,000 annually. The immediate economic benefits of reducing fuel consumption and increasing

¹ Senior Housing News, <u>http://seniorhousingnews.com/2012/11/28/nursing-home-resident-mortality-rates-skyrocket-218-following-evacuation/</u>.

reliability do not take into account the additional advantage of eliminating lost revenue when the power goes out and systems go down.²

During Hurricane Katrina in August 2005, Mississippi Baptist Medical Center in Jackson, MS maintained power and continued caring for patients while the main grid lost power for 57 hours, thanks to its onsite CHP system. The 646-bed hospital served as a shelter for displaced people and patients from other hospitals, handing out food and clothing during the storm. First responders were even able to use the Medical Center facility as an operations center while their facilities were without power. In fact, it was the only Jackson-area hospital to maintain all operations during the storm. In addition to resiliency benefits, the Medical Center saves \$738,000 on energy costs annually, which are directly invested in core mission operations. ³

Already, more than 120 nursing facilities and 180 hospitals nationwide employ combined heat and power to generate electricity with more projects coming online.

Industrial and institutional facilities also benefit from uninterrupted power

More recently, while many buildings including hospitals lost power during Hurricane Sandy in October 2012, CHP systems helped several large energy users — New York University, Long Island's South Oaks Hospital, and Co-op City in the Bronx and New Jersey's Bergen County Utilities Authority — stay warm and lit. These islands of power acted as places of refuge for emergency workers, displaced people, and evacuated patients from medical facilities.⁴

Several manufacturing facilities that installed CHP also kept their lights on and their operations going during the superstorm. Sikorsky Helicopters in Connecticut has been able to offer refuge to emergency responders and employees and their families – all because of the investment they made in 2011 in a CHP system. Still, the resiliency benefits that businesses and hospitals garner from their CHP systems are not being valued in a way which can be monetized to help reduce the upfront capital costs of installing these systems.

By encouraging electric utilities to "develop a plan to increase the utilization of resiliency related technologies" and supporting cost recovery for such systems, the Committee's discussion draft takes an important step to help keep the lights on during extreme weather events, improve grid reliability, capture wasted energy, make our nation more competitive and even reduce pollution.

The Pew Charitable Trusts appreciates the opportunity to comment on the Committee's discussion draft.

Thank you,

Phyllis Cuttino Director, Clean Energy Initiative

² PR Web, <u>http://www.prweb.com/releases/2013/9/prweb11106862.htm</u>.

 ³ Gulf Cost CHP Program, <u>http://www.txsecurepower.org/Portals/23/A%20Tale%20of%20Two%20Hospitals.pps</u>
⁴ Department of Housing and Urban Development,

http://portal.hud.gov/hudportal/HUD?src=/press/press releases media advisories/2013/HUDNo.13-125.