

## Comments For:

### Medicare and Medicaid Programs; Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers

Docket Number: CMS-3178-P

The signed organizations appreciate the opportunity to submit comments on the proposed rule on Emergency Preparedness Requirements for Medicare and Medicaid providers. We support the proposed rule requiring onsite backup power sources for providers. 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 those that utilize combined heat and power (CHP) technologies. Onsite power generation can provide added energy resiliency while lowering energy costs for facilities and patients, and improve patient outcomes while also reducing pollution.

Generating power at the site where it is used is also known as distributed energy generation. These technologies have the ability to protect institutions from unexpected electricity power outages caused by natural disasters and other disruptions. With CHP systems, facilities self-generate power and use the grid as a backup. If the grid were to go down, 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 this highly efficient system all of the time including as a backup when the grid is down is more cost effective and, of course, more reliable. A CHP system owner never wonders if a seldom used generator will start when it’s most needed.

Emergency preparations including preventing evacuations due to power outages can save 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, as many lifesaving medical devices require electricity. Moving patients from one location to another can disrupt medical care and routines, leading to higher risk of hospitalization.<sup>1</sup>

CHP and waste heat to power systems not only increase resiliency and save lives, but they 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 due to increased efficiency. With these technologies, efficiencies can reach up to 85 percent, saving the hospital money and energy while also reducing pollution--- all the while ensuring better patient outcomes. These immediate benefits do not even take into account lost revenue when the power goes out and systems go down.<sup>2</sup>

For example, 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 on-site 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 hospital as an operations center while their facilities were without power, as it was the only Jackson-area hospital to maintain all operations during the storm. In addition to these energy resiliency

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

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

benefits, the Medical Center saves an annual \$738,000 on energy costs, which can be more directly invested in core mission operations.<sup>3</sup>

In contrast, Memorial Hermann Baptist Hospital in Beaumont, TX was forced to shut down for an entire week in 2005 following Hurricane Rita and sustained over \$30 million in damages. The facility did not have an on-site CHP system.<sup>4</sup>

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 bright. These islands of power acted as places of refuge for emergency workers, displaced people, and evacuated patients from medical facilities without power.<sup>5</sup>

In the wake of Hurricane Sandy, President Obama ordered the creation of the Hurricane Sandy Rebuilding Taskforce led by the Department of Housing and Urban Development (HUD) in conjunction with the Environmental Protection Agency and the Department of Energy (Taskforce). The purpose of the Taskforce is to help communities rebuild physically and economically, and to ensure that they are better prepared to withstand extreme weather in the future. In August 2013, the Taskforce released its “Rebuilding Strategy” outlining formal recommendations for moving forward.<sup>6</sup>

Because of major damage to the energy infrastructure and massive power outages, the Taskforce made energy resiliency a high priority. With so many real life examples of CHP systems proving their value during Hurricane Sandy, two of the formal recommendations directly relate to these technologies: “Ensure that Sandy recovery energy investments are resilient” and “Encourage Federal and State cooperation to improve electric grid policies and standards.”<sup>7</sup>

To achieve these goals, the Taskforce worked with federal agencies and the states of New York and New Jersey to allocate \$30 million in financing to rebuild and bolster energy infrastructure in affected areas with technologies such as CHP, micro grids and energy storage. In New Jersey, the Taskforce worked to identify critical buildings and energy infrastructure to develop a statewide resiliency plan. In New York, through the Green Bank Resilience Retrofit program, HUD and DOE are providing funding and technical assistance for resilient energy technologies such as CHP and microgrids. Connecticut is searching for CHP and microgrid opportunities through a program that began after Hurricane Irene.<sup>8</sup>

In September 2013, the Hurricane Sandy Rebuilding Taskforce released a guide on using combined heat and power to significantly increase building and community resiliency. The Taskforce found CHP to be such a critical part of its effort to make communities resilient to future disasters, that they released the guide to raise awareness and educate developers, critical facilities, and the public. In addition to outlining the benefits and policy importance of CHP, the guide also provides potential users on the

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<sup>3</sup> Gulf Cost CHP Program, <http://www.txsecurepower.org/Portals/23/A%20Tale%20of%20Two%20Hospitals.pps>

<sup>4</sup> *Id.*

<sup>5</sup> Department of Housing and Urban Development, [http://portal.hud.gov/hudportal/HUD?src=/press/press\\_releases\\_media\\_advisories/2013/HUDNo.13-125](http://portal.hud.gov/hudportal/HUD?src=/press/press_releases_media_advisories/2013/HUDNo.13-125).

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

process to install a CHP system and includes factors to determine if CHP is right for a building or complex, project finance options, and further resources on the process.<sup>9</sup>

With CHP's ability to help save lives, reduce costs and pollution, withstand extreme weather, and grid blackouts, the technology should be encouraged in all medical facilities, as well as other buildings that provide critical services to communities. CHP technologies can also help enable institutions to become places of refuge in crisis. However, it should be noted that for institutions to take full advantage of these benefits, they must not only invest in the CHP technology but also make investments in the employees or consultants who are trained in managing and optimizing such systems. While the expense of a CHP system is recouped from lowered energy costs over time, the upfront installation costs can be significant. To address this issue, key constituents are encouraging Congress to expand existing tax incentives to further reduce the cost of deployment.

Already, more than 120 nursing facilities and 180 hospitals around the country employ combined heat and power to generate electricity with more projects coming online. President Obama issued an Executive Order in August 2012<sup>10</sup> creating a national goal of adding an additional 40 GW of CHP over the next decade. In order to reach this goal, hospitals, assisted living facilities and other critical infrastructure will need incentives proposed by rules such as this one. While some facilities within the medical sector are moving ahead to protect patients, reduce operating costs and provide resilience, the proposed rule will encourage others to act.

Thank you again for the opportunity to comment on this proposed rule.

Signed,

1. Energy Resources Center
2. Environmental Defense Fund
3. Midwest Cogeneration Association
4. Sheet Metal and Air Conditioning Contractors' National Association
5. The Alliance for Industrial Efficiency
6. The Pew Charitable Trusts
7. Texas Combined Heat and Power Initiative
8. UGI HVAC Enterprises, Inc.

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<sup>9</sup> [Office of Energy Efficiency & Renewable Energy,   
http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp\\_for\\_reliability\\_guidance.pdf](http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp_for_reliability_guidance.pdf)

<sup>10</sup> <http://www.whitehouse.gov/the-press-office/2012/08/30/executive-order-accelerating-investment-industrial-energy-efficiency>