

## **Governor, PRMC unveil new heat, power system**

Aug 18th, 2017 · by Salisbury Independent · Comments: 0



Gov. Larry Hogan on Friday unveiled the new Combined Heat and Power system for Peninsula Regional Medical Center, and announced the launch of a \$5.5 million CHP grant program, the state's largest to date, which will be administered by the Maryland Energy Administration.

Hogan was joined by MEA Director Mary Beth Tung, as well as PRMC President and CEO Dr. Peggy Naleppa.

PRMC recently installed a new CHP system that will make its operations more efficient and environmentally friendly. This project was funded in part by a \$494,320 CHP grant from the Maryland Energy Administration, with additional support from Unison Energy, Delmarva Power, and its parent company, Pepco Holdings.

PRMC is the Eastern Shore's largest, most advanced tertiary care facility, with 3,300 physicians, staff, and volunteers that provide care to nearly 500,000 patients.

“Peninsula Regional Medical Center is the largest and most experienced health care provider in this region, and now, PRMC has made a significant investment in the future with this combined heat and power system,” said Hogan. “Today, we are ‘flipping the switch’ on a program that reduces operating costs, and guarantees electricity is ready and available when needed, something that is critical for PRMC’s 3,300 physicians, staff, and volunteers, and for the nearly 500,000 patients who are served here.” “CHP systems make sense, both from a fiscal and an environmental perspective, given that this approach captures wasted energy and redirects the heat for maximized efficiency,” said Director Tung.

“Stewardship is one of Peninsula Regional’s core values. By installing the CHP, we achieve both environmental and economic stewardship that is a benefit to our community,” said Naleppa. “It also makes PRMC more resilient; in the event of a power grid failure or natural disaster, we have a built-in backup that will allow us to continue to care for our community.”

CHP systems generate electricity and useful thermal energy in a single, integrated system. CHP options combine technologies to maximize energy efficiency and reduce waste. In traditional fossil fuel power plants, two-thirds of the energy used to generate electricity is wasted in the form of heat discharged to the atmosphere as well as through electricity transmission, achieving a combined efficiency of only 33 percent.

By combining electricity generation and waste heat capture, CHP systems can operate at levels as high as 80 percent efficiency. PRMC’s new system is composed of natural gas fired reciprocating internal combustion engines, and recovered waste heat will be used to provide space heating and domestic hot water.

This new CHP system is expected to have an annual generation of over 26 million kilowatt hours, providing a projected annual electric cost savings of \$415,086. Additionally, the projected annual natural gas costs savings will total \$324,705. This energy efficiency project will see a payback in just over seven years.

PRMC’s CHP system will offset 81 percent of the annual energy consumption and cut its carbon footprint drastically, with an annual CO<sub>2</sub> reduction of more than 50 percent, using natural gas supplied by Chesapeake Utilities.

The plant’s construction cost about \$6 million, including grants from Pepco and MEA. Unison Energy, as owner/developer of the CHP system, oversaw and bore the cost of

the installation, contracting with Whiting-Turner for the construction, as well as Rommel Electric, Joseph M. Zimmer Inc. and Becker Morgan.

CHP systems expand grid resiliency. Under this system, PRMC will be “off the grid” to some extent, which benefits the medical center and the community. The reduced power load required by PRMC means Delmarva Power will have more resources for residents on high-demand days of extreme heat or cold. Peninsula Regional still uses Delmarva Power’s services, but to a lesser extent. Should the CHP system require maintenance, Delmarva Power is still prepared to supply all of PRMC’s power needs, resulting in no interruptions to service.

The fiscal year 2018 CHP program has a total of \$5.5 million with a targeted \$3 million for CHP energy efficiency projects in commercial, industrial, and institutional facilities; \$1.5 million for energy efficient CHP projects that also increase resiliency in critical infrastructure facilities; and \$1 million initially for projects that leverage biomass or biogas resources as a fuel source. \$3.5 million of the program budget is reserved for projects being implemented in Pepco and Delmarva Power Territories.