



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR AND RADIATION
WASHINGTON, D.C. 20460

Climate Protection Partnership Division
U.S. EPA 6202J
Washington, DC 20460

February 7, 2014

Michael Bednar
The Data Centers, LLC
1554 Paoli Pike, Suite 325
West Chester, PA 19380

Dear Mr. Bednar,

The United States Environmental Protection Agency (“EPA”) Combined Heat and Power (CHP) Partnership (the “Partnership”) is a voluntary program with the goal of reducing the environmental impact of power generation in the United States by promoting the use of CHP, which is a highly-efficient and reliable approach to generating power and thermal energy from a single fuel source. The Partnership works closely with energy users, the CHP industry, state and local governments, and other clean energy stakeholders to facilitate the development of new CHP systems and to promote their environmental and economic benefits. With this letter, we write to express our support for the use of CHP by The Data Centers, LLC (TDC) as part of the construction of a data center on the University of Delaware’s STAR Campus in Newark, Delaware.

TDC’s decision to utilize CHP technology demonstrates exceptional leadership in energy use, energy management and environmental stewardship. The CHP system will not only support the reliable operation of TDC’s data center, but also provide useful heat to the University of Delaware. We estimate that the CHP system will avoid significant emissions of nitrogen oxide (NO_x), sulfur dioxide (SO₂) and carbon dioxide equivalent (CO₂e). In addition, the CHP system is expected to enhance Delaware’s energy infrastructure and enable TDC to provide essential energy and data services in the event of severe weather occurrences or other significant grid disruptions.

TDC provided the Partnership with information regarding the planned approximately 278 MW CHP system. The Partnership reviewed the information and conducted an evaluation of the system using the Partnership’s CHP Emission Calculator; a tool that compares the NO_x, SO₂ and CO₂e emissions from the CHP system to that of conventional energy sources. This letter provides the results of our evaluation.

The following factors were considered in the examination of the energy efficiency and emissions reduction potential of the proposed CHP system:

- Expected actual operation of the natural gas-fired CHP system,
- Emissions data for fossil-fired generating sources in the RFC East subregion from EPA’s eGRID2012,

- Regional transmission and distribution losses from displaced power generation, and
- Estimated emissions from displaced natural gas-fired boilers.

Based on this analysis, the Partnership has determined that TDC's proposed CHP system is expected to avoid NO_x emissions by approximately 1,400 tons per year, SO₂ emissions by approximately 9,200 tons per year, and CO_{2e} emissions by approximately 1,030,000 tons per year compared to conventional energy sources. The avoided carbon emissions are equal to those from the generation of electricity used annually by more than 128,000 homes in the U.S.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary McNeil".

Gary McNeil
U.S. EPA Combined Heat and Power Partnership Program
Climate Protection Partnership Division
1200 Pennsylvania Ave., NW, MC-6202J
Washington, DC 20460

cc: Bob Sidner, ERG