

Guaranteed power with CHP

A state-of-the-art critical data center will reduce energy costs, improve power reliability, and reduce carbon emissions by over 650 tons per year, thanks to a 425 kW cogeneration unit.



Shaping the future

This data solutions company has shaped the future of the internet by creating unprecedented value and opportunity for its customers, employees, investors, and ecosystem partners.

To continue as a leader in networking, the company required additional resilience against the national supply grid and wanted to both reduce and stabilize overall energy costs over time. As a global business, a reduction in carbon emissions was also important.

Trigeneration system

Centrica Business Solutions provided a highly efficient trigeneration system powered by a 425 kW natural gas engine, which creates electricity and chilled water to meet the cooling loads of the server equipment. This system is displacing an electric screw compressor chiller which currently uses grid electricity to provide chilled water. It carries a no break provision, to guarantee no interruption of power in the event of a utility failure.

The project was financed by capital purchase with a specialized operation and maintenance contract. The system is monitored by the CHP unit's on-board computer systems, which provide two-way communication to the company's 24/7 remote monitoring center. As a result, the service team will be available to arrive on-site within four hours to ensure there is optimum service available 365 days a year.

The results

The CHP system has reduced the data center's carbon emissions by over 650 tons per year. The company expects average energy savings of more than \$135,000 annually.



Reduced annual carbon emissions



Average energy savings per year



Monitoring and support

“

Centrica Business Solutions provided a highly efficient trigeneration system, which guarantees there will be no interruption of power in the event of a utility failure.”

Spokesperson, Data Center

Why Centrica Business Solutions?

- A full range of services provided by expert technicians, including feasibility studies, system testing, and ongoing maintenance
- Producing “turnkey” modular systems allows Centrica Business Solutions to reduce costs, improve quality, and deliver solutions that can scale with any facility
- Reliable 24/7 access to knowledgeable support staff