Princeton University s Microgrid

Overview

The Siemens Princeton Microgrid project was designed to address the challenges of decarbonization and distributed energy resilience. When Hurricane Sandy hit New Jersey in October 2012, Princeton's Cogeneration Plant microgrid was able to generate power for campus, while also maintaining steam and chilled. In October 2012, Princeton University made headlines worldwide when over 8 million electric customers lost power during Superstorm Sandy and the university's microgrid kept its critical systems running, allowing the New Jersey-based Ivy League campus to serve as an electric refuge for faculty. Princeton's microgrid–which became well known for riding through Superstorm Sandy more than 13 years ago–has been upgraded with heat pumps and a large thermal storage tank that has boosted efficiency and saved millions of dollars in utility costs. An example is the microgrid at Princeton University. The plant produces electricity as well as steam used for heat, hot water and sterilization.

Article Content

Princeton University Microgrid, Which Once Overcame a Tropical

In October 2012, Princeton University made headlines worldwide when over 8 million electric customers lost power during Superstorm Sandy and the university''s microgrid kept its critical

Solar Expansion Project | Facilities

As Princeton builds out its microgrid and expands the use of geo-exchange technology on Campus, the electric heat pumps in the new TIGER facility will be

Princeton University Microgrid

The heart of the Princeton microgrid is the cogeneration plant (center), which was constructed in 1996. The plant produces electricity as well as steam used for heat, hot water and sterilization. The plant

Sustainable energy

Sustainable energy We work aggressively to reduce greenhouse gas emissions to 1990 levels by 2020 by designing, operating and maintaining energy systems

Two Years after Sandy, the Conversation around

Princeton University Energy Plant Manager, Ted Borer, was on hand to explain how the microgrid, fueled by a gas-turbine generator and solar power,

Integrated Central Energy Systems At Princeton University

Highly-integrated microgrid systems exist today. They offer numerous benefits to the host, local community, and larger grid including: financial, reliability, resilience, environmental, diversified risk,

Case study: Microgrid at Princeton University

An example is the microgrid at Princeton University. Recognized among the best-in-class microgrids, Princeton''s gas-fueled CHP plant produced

Princeton University& #8217;s Microgrid: How to Partner, Not Part from ...

Princeton University''s microgrid is now noted worldwide for its resilience and sophistication. The facility more than proved its worth when Superstorm Sandy lashed the eastern

Case study: Microgrid at Princeton University

Recognized among the best-in-class microgrids, Princeton''s gas-fueled CHP plant produced the heating, cooling, and electricity for the campus

Princeton University Microgrid, Which Once Overcame a Tropical

“It was a point of pride to get through this regional crisis and be a place of support, not an additional burden on the community,” said Ted Borer, former director of the Princeton energy plant, a

A Time of Energy Transition at Princeton University

Abstract: Princeton University has committed to driving its Scope 1 and Scope 2 carbon footprints to neutrality by the 300th anniversary of the institution in 2046. Princeton has used combustion-based

Siemens Princeton Microgrid Infographic

The Siemens Princeton Microgrid project was designed to address the challenges of decarbonization and distributed energy resilience. Besides increasing energy eficiency of on-campus buildings, the

The Future of Energy: Princeton University''s Predictions and

Princeton University''s recent predictions about future energy demand and grid capabilities highlight a critical juncture in our approach to power generation, transmission, and distribution.

Princeton Resilient Campus

The Siemens Princeton Microgrid is one of the first to combine renewable energy solutions with both building management and energy management solutions. The result is an innovative, resilient and

Princeton University Microgrid, Which Once Overcame a Tropical

Princeton''s microgrid–which became well known for riding through Superstorm Sandy more than 13 years ago–has been upgraded with heat pumps and a large thermal storage tank that has boosted

Graduate School

By nurturing more than 37,000 bold scholars and leaders since 1900, the Princeton Graduate School has transformed lives, Princeton

SaumyaSingh_Model_15

However, energy management of an isolated microgrid poses challenges of efficiency and reliability. This thesis adopts an approximate dynamic programming approach to mathematically model energy

ExecutiveSummary_SaumyaSinghThesis

The best technological setup for an islanded Princeton University microgrid, given analysis of data from the month of April would be a 0.71MWh battery, two 7MW generators in addition to the existing

Path to Net-Zero: Solar Expansion Project | Facilities

As Princeton builds out its microgrid and expands the use of geo-exchange technology on campus, the electric heat pumps in the new TIGER facility will be

Princeton CHP Plant Overview | PDF | Distributed Generation ...

Princeton University Microgrid Design - Free download as PDF File (.pdf), Text File (.txt) or view presentation slides online. Princeton University''s campus microgrid provides energy to 180

Princeton University Energy Plant Advance Planning for Electric

Princeton University Campus Microgrid April 2013, 562 Dirksen Senate Office Building Edward “Ted” Borer, PE etborer@princeton International District Energy Association Environmental and

Two years after Hurricane Sandy, recognition of Princeton''s microgrid ...

October 23, 2014 In the nearly two years since Hurricane Sandy hit New Jersey, darkening swaths of the nation''s most densely populated state for days, Princeton University has emerged as a national

Princeton University''s Microgrid is Still an Inspiration

When Hurricane Sandy struck the mid-Atlantic area, shutting down the power grid, Princeton became an island of light and warmth, because its

Exploring a University Based Microgrid

Greater Philadelphia Chapter of Association of Energy Engineers Meeting Outline of Presentation 1 finition of a Microgrid 2.Princeton University''s Microgrid Assets 3 nefits of a Microgrid

Contact Us

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