

Agile Energy X, Inc. Launches Demonstration of Flexible Power Demand Creation with Containerized Distributed Data Center

> December 6, 2023 Agile Energy X, Inc.

Agile Energy X, Inc., a 100% subsidiary of TEPCO Power Grid, Inc., is a "Solutions Integrator" that solves energy-related social issues by creating digital values and environmental values from electric power through the integration of advanced technologies centered around distributed computing.

Agile Energy X has built a container-type distributed data center in Nasushiobara City, Tochigi Prefecture in Japan, and started operation in August 2023.

Through this project, Agile Energy X aims to establish a solution that contributes to reducing the need to upgrade power grid facilities by alleviating grid congestion caused by the increase in renewable energy connections to the grid.

Agile Energy X is committed to developing innovative solutions that would help make renewable energy one of the main sources of power generation in Japan.

Realization of a distributed energy resource capable of flexibly creating power demand to help alleviate grid congestion.

Agile Energy X focused on "Bitcoin Mining," a type of distributed computing, as one of the most effective distributed energy resources (DER) capable of flexibly creating power demand, that can contribute to reducing the need to upgrade grid capacity due to the increase in renewable energy interconnection.

This is a solution based on reverse thinking—taking advantage of the characteristics of bitcoin mining that consumes a lot of power executing cryptographic calculations in order to create digital value—enabling bitcoin mining to play the role of demand response (increasing the demand of power when necessary.)

Agile Energy X built a containerized data center connected to the power distribution system in Nasushiobara City, Tochigi Prefecture, to contribute to alleviating grid congestion by remotely operating bitcoin mining devices in a flexible manner, ramping up and down power demand as necessary.

The development and installation of this data center facility was made possible with the technical cooperation of TRIPLE-1, Inc., a Japanese startup that specializes in the development of advanced semiconductors and distributed data centers.



Containerized data center (exterior)



Bitcoin mining devices (inside container)

Development towards "distributed computing" to support the digital society. Containerized Data Centers will become the technology base for the future digital society that enables the combination of renewable energy with distributed computing technologies, such as bitcoin mining, Al/deep learning, and computer graphics rendering processes, to be used as flexible demand response resources. Agile Energy X will continue its innovative efforts as a Solutions Integrator with the mission to solve social issues related to energy and contribute to the realization of an ideal energy infrastructure for the future.