Press Release



December 1, 2023 Shizen Connect Inc.

Shizen Connect selected for Tohoku Electric Power peak shaving and VPP demonstration project using EVs

Shizen Connect Inc., a VPP(*1) platform provider, has been selected by Tohoku Electric Power Co., Inc. (Tohoku Electric Power) to participate in its demonstration project on the technical feasibility of the balancing market (Replacement Reserve for FIT), which will help reduce electricity consumption costs and stabilize the power grid through the use of electric vehicles. The demonstration project will use Shizen Connect's proprietary aggregate energy management system (EMS) "Shizen Connect" and will start in December 2023.





The demonstration project will use "Shizen Connect," an aggregation energy management system developed by Shizen Connect using IoT technology and artificial intelligence (AI), at the Nagamachi Housing Exhibition Hall in Sendai City, Miyagi Prefecture, where Tohoku Electric Power is a special sponsor. This demonstration project will verify the effectiveness of peak shaving and the technical feasibility of building a virtual power plant (VPP) by remotely charging and discharging electric vehicles through V2H (*2).

peak shaving peak shaving charge/discharge (V2H) regulating power SHIZEN CONNECT

Demonstration image of peak-shaving and VPP operation using EVs

Demonstration overview

Objective	1 Verification of technical feasibility of balancing market
	(Replacement Reserve for FIT) using EVs
	2 Verification of peak shaving effect using EVs
Duration	December 2023 - January 2024
Role of Shizen Connect	Aggregation planning and remote control implementation
	 Evaluation of demonstration results
	•Overall coordination of the demonstration project, etc.

Shizen Connect will continue to contribute to the realization of a decarbonized society together with leading companies in various fields.

*1 **Virtual Power Plant (VPP)** : A system that uses ICT to integrate and control multiple distributed energy resources as if they were a single power plant

*2 **Vehicle to Home (V2H):** Not only charging the EV, but also sending power from the EV to the home. In the event of a disaster, household appliances can be used as usual by supplying power from the EV.

EMS "Shizen Connect" https://www.se-digital.net/ (japanese website)

"Shizen Connect" is an aggregation energy management system (EMS). It can provide individual control for storage batteries and EV chargers, control for microgrids connecting multiple buildings with their own private transmission lines, as well as control of VPPs for large scale energy resources. Individual control and VPP control tended to be separate, but EMS "Shizen Connect" provides a one stop service allowing energy resources to be used with multi-purpose, which also improves economic efficiency. The system can be adapted with any equipment supplier, allowing energy resources to be chosen freely without relying on a certain manufacturer.

Tohoku Electric Power Co., Inc.

Head Office: 1-7-1 Honcho, Aoba-ku, Sendai, Miyagi 980-8550, Japan Founded: May 1, 1951 President and Representative Director: Kojiro Higuchi URL: <u>https://www.tohoku-epco.co.jp/english/index.html</u>

Shizen Connect Inc.

Head Office: 3F, 5-33-10 Hongo, Bunkyo-ku, Tokyo Founded: October 2, 2023 Shareholder: Shizen Energy Inc. 100% Representative Director: Munekazu Matsumura Business: VPP platform, energy management service, IoT equipment sales, etc. URL: <u>https://se-digital.net</u> (Japanese only)

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