July 10, 2019

To whom it may concern,

Company: Tamagawa Holdings, Co., Ltd.
Representative: President, Toru Masuzawa
(JASDAQ Code: 6838)
Contact: Management Planning Division, Junya Tokumoto
Tel: 03-6435-6933

Notice on Commencement of Development and Verification Test of Green Energy Surplus Power Managing & Coordinated Operation System "GEMCOS"

As informed in the "Notice on Commencement of Joint Research with Tohoku University (Sendai City, Miyagi Pref.)" dated February 14, 2019, we have sought optimization equipment control and monitoring in the natural energy (solar, wind, biomass, hot spring heat, etc.) field expanding domestically and internationally and structuring of the new business using surplus power thereof.

Please be informed that we have recently commenced development and verification test of green energy surplus power managing & coordinated operation system "GEMCOS" (hereafter "Product") with assumption of power securement of cost-lowering of servers for driving computers on IoT sensor network and emergency disaster prevention and reduction system, etc. by storing surplus power from the wind power generation equipment jointly with our partner, AURA-Green Energy Co., Ltd. (hereafter "AURA") and Systen-i, Co., Ltd. (hereafter "System-i") in Sendai City, Miyagi Pref. which provides electric control equipment and software design.

■Overview

We have commenced the verification test by implementing the Product developed jointly with AURA and System-i on the power generation control room of the small size wind power generation equipment in Fukaura-machi, Aomori Pref. owned by our group. The Product has been under cooperative supervision of Mr. Yasubumi Furuya, the specially-appointed professor of Micro System Integration Center of Tohoku University, and designed by System-i according to power generation ability of the wind power generation equipment.

In the small size wind power generation, electricity formally became surplus when it exceeded certain voltage. The Product will be able to store such electricity in the battery power storage machine by rectifying the fluctuating voltage output for flexible use at any time when necessary. The Product used in this verification test is the system which can be used for driving of computer servers and communication equipment up to middle size consumption power and which can also remotely monitor through Wi-Fi communication.

Application fields of the Product are various including securement of power in small size communities, remote islands, etc. and securement of lifeline power at the time of emergency. In addition, the Product is embedded with 1) decentralized network power storage battery management system, 2) operation of servers for low-power electronic equipment and 3) safe and high-efficiency monitoring function by remotely-monitorable IoT decentralized sensor network, which expand low-cost applicable fields using surplus power.

Especially in North Japan regions, also thanks to advantage of cold and cool climate in a full year, consumption power cost for regularly operated servers for computers is estimated to be lowered to less than a half. Additionally, by enlarging the middle size of the Product, profit may be secured in the green energy field.

Our group will continue to enhance collaboration with the domestic and international affiliate agencies for structuring of business system which can correspond to reformation of the society.

※GECOS : Green Energy Management for Collaborative Operation System