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DER as a service- ecoLong and VOLTTRON (Abstract)

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Abstract

The project goal is to commercialize the VOLTTRON-hosted “DER as a Service” (DaaS) application and make it an “out-of-the-box” solution for ecoLong to use as a secure residential energy management system that allows 1.) distributed energy resources (DERs) to participate in wholesale markets and provide services to the grid and 2.) intelligently control the energy in the residential buildings to the desired level while maintaining occupancy comfort. The product will be field deployed onto multiple Solar Liberty sites in New York state to demonstrate wide-scale participation of DERs in wholesale markets to provide services to the grid and validate the effectiveness of the solution. The integrated management of DERs and buildings increases the penetration of solar resources by managing its variability, providing grid services, and solving the evening ramping challenges. Ultimately, the DaaS platform will make buildings and DERs smarter by unlocking grid-interactive efficient buildings.

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