

THE MISSING PIECE OF THE DERMS PUZZLE - CUSTOMER-CENTRIC RESOURCE FORMATION



Utilities' commitments to decarbonization, increased adoption of devices such as residential storage and electric vehicles, and the heightened complexity of grid conditions, are all driving utilities to create an integrated DER management strategy. And, as utilities increase their reliance on DERs to meet these strategic needs, a Distributed Energy Resource Management System (DERMS) is vital to harnessing value.

The market for DERMS platforms, however, is complex - vendors provide varying capabilities to serve a diverse set of use cases. While some vendors primarily provide network management platforms that integrate with utility-owned DERs, others provide pure-play DERMS platforms that are capable of tapping into all types of DERs, including both utility-owned and behind-the-meter resources. In today's vendor landscape, the most critical, and often-overlooked, DERMS capability that only select vendors provide is the ability to form reliable and scalable aggregations of resources that utilities are not able to access quickly – customer-owned, behind-the-meter DERs.

To access these assets, DERMS platforms need to support the DER enrollment lifecycle in addition to establishing contractual and technical integrations with the DER manufacturer. This includes software for acquiring, registering, and verifying customer and asset eligibility with the utility system of record, the customer information system (CIS). Once the DER is integrated, the DERMS platform needs to actively factor in customer preferences and incentives to make intelligent and DER-level control decisions. Without this robust resource formation infrastructure, the DERMS cannot provide granular visibility and control of DERs, limiting the scope and sophistication of grid services that the platform can offer.

THE TENETS OF SCALABLE RESOURCE FORMATION

A DERMS platform with an integrated enrollment capability can provide utilities with a path to coordinated, customer-aware asset control. Key components of customer-centric resource formation include:

CUSTOMER CHOICE

Integrations with all the leading DER vendors allows utilities to enable customer choice, resulting in the ability to build larger aggregations.

CUSTOMER ACQUISITION

The goal of DER programs is to entice large volumes of customers to make their DER available. It is imperative that the DERMS platform supports this through robust enrollment infrastructure and integrations with DER vendors that allow utilities to run targeted acquisition marketing campaigns on channels that customers are most likely to engage with.

REGISTRATION & VERIFICATION

DERMS platforms need to interface with the utility CIS to register the asset and automatically verify the eligibility of the customer or site owner. EnergyHub's proprietary tool, Advanced Enrollment Verification (AEV), interfaces with the utility Customer Information System (CIS) to verify and process customer enrollments for DER programs in real-time. As seen in the figure below, at a west coast utility, AEV supported the rapid enrollment of over 45,000 devices within a few days.

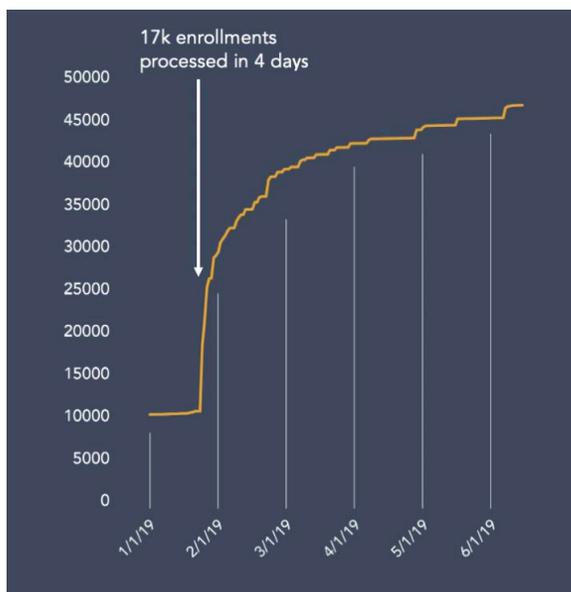
CUSTOMER INCENTIVE MANAGEMENT

The DERMS platform should track enrollments, manage incentive payouts, and support associated business processes.

LOCATIONAL AWARENESS

While the DER is being enrolled and registered in the platform, the DERMS platform ingests data that represents where on the network the DER is located by integrating with the utility GIS (Geographical Information System) and the ADMS (Advanced Distribution Management System) for real-time network topology mapping.

Once these customer-owned resources have been formed, the DERMS intelligently monitors and optimizes the asset for various types of grid services. EnergyHub's Mercury DERMS transforms DERs into bankable resources. As utilities look to integrate a diverse mix of DERs to serve their grid needs, the unique capability of the Mercury DERMS to be customer-centric, agile, DER-aware and scale across asset classes, makes the platform an increasingly critical element of fully integrated utility planning and operations.



Aakriti Gupta, Product Marketing at EnergyHub

Aakriti's role at EnergyHub entails working with the product, sales and business development teams to develop consistent and strategic product positioning, messaging and differentiation for the Mercury DERMS platform. Prior to joining EnergyHub, Aakriti has held positions at Innowatts and GTM research (now Wood Mackenzie) in the capacity of strategy, research and market development, facilitating the go-to-market strategies of various energy software technologies.

Aakriti received an MS and BS in Electrical and Computer Engineering, with an additional major in Engineering and Public Policy from Carnegie Mellon University.

