BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures, and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769	Rulemaking 14-08-013 (Filed August 14, 2014)

COMMENTS OF ALARM.COM AND ENERGYHUB ON ORDER INSTITUTING RULEMAKING

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September 5, 2014

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Consistent with the *Order Instituting Rulemaking* issued on August 14, 2014, Alarm.com and EnergyHub (EnergyHub) respectfully submit the following comments. We look forward to participating in the important discussions on issues raised in this proceeding.

I. INTRODUCTION

Alarm.com (www.alarm.com) provides a suite of connected home services, including substantial solutions for interactive energy management. In 2013, they completed the acquisition of EnergyHub (www.energyhub.com), a longtime leader in enabling rapid deployment of demand response and energy efficiency programs.

Today, these combined companies have nearly 2 million subscribers nationwide, with a substantial portion that have internet-connected thermostats. In fact, the remote thermostat control element of interactive services packages is one of the features most

sought after by consumers. These connected thermostats complement other energy management devices such as pool pumps, window air conditioners, dehumidifiers and water heaters.

EnergyHub believes that residential and small commercial customer classes are adopting technology solutions that provide distributed energy resource value, most notably energy efficiency, energy management and demand response. Consumer technology and home energy management solutions represent a valuable distributed energy resource and are critical to the distribution resource planning efforts that are the subject of this proceeding.

While we look forward to a full exploration of the issues under consideration in this proceeding, we have not responded to each of the questions included in the *Order Instituting Rulemaking*. Rather, we have focused our remarks on a focused set of overarching principles that we believe should be incorporated into the deliberations in this proceeding and that we hope may improve the final guidance offered.

II. IDENTIFYING THE VALUE OF DISTRIBUTED ENERGY RESOURCES REQUIRES SUFFICIENTLY DETAILED SYSTEM INFORMATION

To the extent that this proceeding will, as stated in the *Order Instituting Rulemaking*, "evaluate the IOUs' existing and future electric distribution infrastructure and planning procedures with respect to incorporating Distributed Energy Resources into the planning and operation of their electric distribution systems" it is imperative that the current status of the distribution system is shared in an open, transparent manner in order for independent service providers to identify technology and business solutions that can provide appropriate distributed energy resources.

As noted in the *Order Instituting Rulemaking*, "In their DRPs, the IOUs are

required to define the criteria for determining what constitutes an optimal location for the deployment of DERs, and then identifying specific locational values for DERs. To this end, the IOUs must include in their DRPs methodologies to define locational benefits and optimal locations for DERs, augmented or new tariffs and programs to support efficient DER deployment, and the removal of specific barriers to deployment of DERs."

To that end, EnergyHub submits that the guidance developed in this proceeding must include a mechanism by which all stakeholders are afforded access to appropriately detailed information about the operating characteristics, costs and anticipated infrastructure investments of the distribution system.

III. INFORMATION ABOUT THE DISTRIBUTION SYSTEM SHOULD BE PROVIDED IN A CONSISTENT, OPEN MANNER

In order to support consistent planning across service territories and to support the development of DERs with the required capabilities in the locations needed, information about the distribution system should be provided in a manner that supports the use of an open-source planning and analysis tool. Specifically, we propose that information be shared in format that supports the use of the GridLAB-D software.

GridLAB-D is a distribution system simulation and analysis tool that is designed to support the design and operation of distribution systems. It was developed by the U.S. Department of Energy (DOE) at Pacific Northwest National Laboratory (PNNL). It was specifically designed to allow users to create detailed models of how new end-use technologies, distributed energy resources (DER), distribution automation, and retail markets interact and evolve over time, including creation and validation of rate structures, consumer reaction and the interaction and dependence of programs with

other technologies and wholesale markets. It is our understanding that this tool is familiar to investor-owned utilities in California. More information is available at *http://www.gridlabd.org*.

IV. TRANSPARENT ACCESS TO SYSTEM DATA WILL SUPPORT CONSUMER ENGAGEMENT AND MITIGATE MARKET POWER

There are ongoing regulatory activities in other jurisdictions that are examining similar issues related to distribution system planning in the context of increasing deployment of distributed energy resources. Most notably, in April 2014, the New York Public Service Commission opened a *Reforming the Energy Vision* proceeding (14-M-0101) with a stated purpose "to reform New York State's energy industry and regulatory practices."

Specifically, they seek to "promote more efficient use of energy, deeper penetration of renewable energy resources such as wind and solar, wider deployment of 'distributed' energy resources, such as micro grids, on-site power supplies, and storage."

In August 2014, they issued a "Straw Proposal"[1] in which they concluded that, "Utilities manage distribution system operations and determine capital upgrades based on regularly updated distribution system data. As with interconnection, utilities have the potential to exercise market power through their provision (or lack thereof) of distribution system data."

They further conclude that, "Within the context of an animated DER market, DER market participants will require enhanced, standard format, time-stamped system

[1] DPS Staff Straw Proposal on Track One Issues, available from http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BCA26764A-09C8-46BF-9CF6-F5215F63EF62%7D

distribution system data in real time to develop a detailed business case. Transparent system data access will also enable transparent bid load reductions into an interoperable DSP system. At present, a lack of enhanced, standard-format system data creates information asymmetry, a classic barrier to new market development and entry of new market participants. Transparent distribution system data access will uncover where and when DER can provide the most economic benefit to the grid. Enhanced data acquisition and sharing will fulfill system needs and allow DER developers to pursue projects that would add the most value to the grid."

Finally, the Straw Proposal concludes that, "The Commission should require utilities to develop and expand universal and transparent access to system data through the information exchange described in the customer engagement section."

It is clear that the need for a transparent, consistent and open mechanism to share system information has been determined by other regulators to be a key requirement for mitigating utility market power and enhancing the participation of DER providers in market activities. We believe the guidance developed in this proceeding should establish a similar requirement.

V. CONCLUSION

Undoubtedly, there are many complicated issues that will arise during the course of this proceeding. We have focused our remarks on a limited set of issues pertaining to the development of an open, competitive market for distributed energy resources. We look forward to engaging in the discussions that will follow and seek to assist in the effort to develop a robust record to support Commission guidance.

September 5, 2014 in Brooklyn, New York.

Respectfully Submitted,

/s/ Seth Frader-Thompson

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A division of Alarm.com