

May 19, 2017

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VIA ELECTRONIC MAIL

Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

RE: Notice of Inquiry into the Electric Utility Business Model and Request for Stakeholder Comment

In response to the May 1, 2017 Notice of Inquiry into the Electric Utility Business Model and Request for Stakeholder Comment, Ampion hereby submits the following comments.

Ampion appreciates the Division of Public Utilities and Carriers' consideration and the opportunity to contribute to this Inquiry into the Electric Utility Business Model.

Respectfully submitted,



Emily Cosbar
Market Policy Analyst, Ampion

BEFORE THE DIVISION OF PUBLIC UTILITIES AND CARRIERS OF RHODE ISLAND

NOTICE OF INQUIRY INTO THE ELECTRIC UTILITY BUSINESS MODEL AND REQUEST FOR STAKEHOLDER COMMENT

I. Introduction

In response to the Notice of Inquiry into the Electric Utility Business Model and Request for Stakeholder Comment (“Notice”), Ampion respectfully submits comments regarding the transformation of the power sector in Rhode Island.

Ampion is a software as a service (“SaaS”) provider for developers of distributed energy resources (“DER”) across the United States. As part of an ongoing effort to promote equitable policies for participants in DER markets, Ampion actively participates in DER-related proceedings, including the New York Value of Distributed Energy Resources program, the Massachusetts Net Metering program, and the development of the future Solar Massachusetts Renewable Target program. Throughout these proceedings, Ampion has advocated for uniform data exchange requirements to facilitate market transactions in distributed renewable energy programs.

The Division of Public Utilities and Carriers (“DPUC”) stated in the Notice that the Rhode Island power sector has experienced “greater number of electric customers who participate actively in energy production.” This increase in electric “customer-generators” has subsequently increased the need for communication between customers and distribution companies; however, traditional means of communication and interconnection as part of existing electric utility business models have created significant barriers for customer-generators in regulated and deregulated markets alike.

Based on our experience in the DER regulatory space, our technical knowledge of data exchange protocols, and our ongoing support of developers in various markets, Ampion has highlighted a number of key issues for the DPUC’s consideration. Specifically, Ampion will address the following items specified in the Notice:

- *Are there functions described [in the Notice] that should be provided by an unregulated third party, or through a market-based approach?*
- *Many of the functions described [in the Notice] require the utility to manage complex technology systems. What kind of regulatory approach could address the risk of technology obsolescence?*

II. Functions To Be Performed by Unregulated Third Parties vs. Performed by Utilities

The Notice identifies the potential functions of a “twenty-first century electric system,” including reliability services, connectivity services, network integration services, transaction management services, and customer engagement services. Each of these services is tied to the availability of data. Not surprisingly, the Notice identifies the need for data connectivity as one of the primary reasons for inquiry into the existing electric utility business model; however, the question remains as to which market participants should be responsible for providing and/or analyzing this data, the type(s) of data necessary to facilitate an effective and flexible electric grid, and the degree of oversight necessary for ongoing data exchange between entities.

Ampion agrees with the Notice that many of the functions associated with the utility business model are interconnected and therefore “best undertaken by a single enterprise”; however, this is not true of all cases. Specifically, the collection, reporting, and exchange of data associated with DER projects should be outsourced to third party entities that already execute these tasks as part of ongoing project management. Many DER programs rely heavily on the ongoing communication of data related to asset production, utility billing rates, and customer consumption between the customer-generator and the utility. Efficient and transparent methods of data exchange are therefore crucial protocols in the successful implementation of these programs. However, Ampion’s experience servicing DER developers in other markets has demonstrated that utilities often mismanage the transfer of data to other stakeholders (such as, for example, the incorrect transfer of net metering credits to off-taking customer bills pursuant to virtual net metering program rules).

These errors are likely due to the significant amount of input needed from the customer-generator to execute this process, and the inefficient, often manual processes currently in place for customer-generators to communicate such data to the electric utility (and vice versa). However, an additional factor in these recurring errors is the lack of data exchange protocols in existing DER markets. Regardless of which entities assume responsibility for conducting data exchange, it is imperative that such protocols involve RESTful Application Program Interfaces (“APIs”), which uses representational state transfer to communicate data from one database to another. This will allow for secure and efficient transfer of data between all DER market participants.

Ampion acknowledges that the ability of electric utilities to accommodate such data exchange protocols will likely be costly and time-consuming. Yet the need for this service persists regardless of electric utility timelines. Many third-party SaaS providers have entered DER markets to perform the turn-key, data-intensive functions necessary for administering DER projects. Such functions include, but are not limited to, bill credit calculation, asset management, off-taker management, and the transmission of data associated to the electric utility on behalf of the customer-generator. Notably, many of these functions have traditionally been handled by the electric utility; however, the nature of the competitive market encourages SaaS providers to adapt to complex and dynamic

policies much more quickly than electric utilities, and the specialized nature of their services allows them to focus more time and resources on product development than electric utilities as well.

Therefore, based on the prevalence, flexibility, and competitive impetus of SaaS providers in DER markets, Ampion advocates that electric utilities should have the option, if not the obligation, to outsource functions associated with administering DER programs (such as net metering and/or its successors). Adequate oversight of these entities, including the establishment of data exchange protocols that apply to all stakeholders, will ensure security remains a priority while allowing SaaS providers to serve the needs of the market quickly, securely, and effectively.

III. Regulatory Approaches to Address Technology Obsolescence

The Notice identifies the risk of technology obsolescence as another reason for inquiry into electric utility business models. Assuming the electric utilities continue to perform data –intensive functions mentioned in Section II of this filing, and even if some or all of these functions are outsourced to third party SaaS providers, Ampion acknowledges that any data exchange protocols implemented at the regulatory level risk technology obsolescence. Ampion asserts that this should not deter the DPUC or other regulatory bodies from instituting these protocols, and notes that any future policy should require routine reassessment of market-standard technologies to promote secure, reliable, and resilient data practices.

There is little question, however, that regulatory and policy decisions cannot exist outside financial considerations. One of the most prevalent factors in technological development is the ability of the electric utilities to make routine investments in new, efficient, and more secure technology. In November of 2016, The National Association of Regulatory Utility Commissioners (“NARUC”) published a resolution¹ explicitly recommending that utilities be permitted to rate base the purchase of cloud software and/or SaaS in the same manner as they would legacy hardware, stating that “utilities should be free to make software investments based on which option best meets both the needs of the utility and its customers, rather than how the investment will be treated for accounting purposes.” This regulatory approach would ultimately facilitate regular investment in new and more secure cloud-based technologies by removing financial barriers to do so. Ampion therefore encourages the DPUC to consider NARUC’s guidelines in the context of developing regulatory framework to address technology obsolescence.

IV. Conclusion

¹ *Resolution Encouraging State Utility Commissions to Consider Improving the Regulatory Treatment of Cloud Computing Arrangements*, NARUC (published November 2016)

Ampion appreciates the opportunity to contribute to the ongoing discussion regarding Rhode Island's power sector. Please contact Emily Cosbar (617-202-3143) with any questions regarding this filing.

Respectfully submitted,

A handwritten signature in cursive script that reads "Emily Cosbar".

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