

**Comments by Comverge, Inc. on the NARUC Manual on Distributed Energy
Resources Compensation
September 02, 2016**

Comverge, Inc. applauds the National Association of Regulatory Utility Commissioners (“NARUC”) for creating a sub-committee to directly address rate issues surrounding the continued adoption of distributed energy resources (“DER”) and in recognizing their role in the evolving grid. Furthermore, we appreciate the opportunity to provide input on the NARUC Manual on Distributed Energy Resources Compensation (“the manual”) and respectfully submit the following comments for consideration.

I. Introduction to Comverge

Comverge is the nation’s leading provider in mass market demand response (“DR”) across the residential and small commercial customer segments. Through both software and direct installations of hardware, we provide demand-side management solutions that integrate demand response, energy efficiency (“EE”) and customer engagement tools, enabling electric utilities to ensure grid reliability, meet peak demand, satisfy regulatory compliance and improve their customers’ energy experience. By combining software, hardware and services, Comverge offers a full turn-key solution to help utilities maximize the benefits of demand management programs, including customer recruitment, device installation, call center support, control events and measurement and verification. Comverge has successfully administered demand management programs with hundreds of electric utilities nationwide to deploy 6 million energy management devices, enroll over two million residential customers into demand management programs, and we currently control approximately 6,000 MW of curtailable peak load. Comverge offers a suite of DR program models tailored to individual utilities’ planning needs. In addition to helping utilities to meet system wide peak, Comverge is capable of targeted demand management solutions (“TDM”) to address locational peaks and defer or avoid traditional utility investments in generation, transmission and distribution. In

addition, it is the only DR provider to offer a mass-market “pay-for-performance” model in which we assume the risk in building out the DR program and only receive payment for capacity that we successfully deliver. Comverge’s DR programs continue to earn high customer satisfaction scores and are relied upon by electric utilities to achieve MW capacity targets and requirements as part of their planning processes.

Based on our years of experience and direct involvement in the expansion and management of DER, Comverge aims to provide input on the draft manual from a practitioner’s perspective on some of the key regulatory and rate issues that we are seeing in jurisdictions around the country, and how those might inform future iterations of the manual.

II. Recommendations

- a. *Directly address energy management technologies, such as demand response, in the definition of DER and discussion.*

Comverge commends NARUC for following the lead of California, New York, and Massachusetts,¹ in expressly including demand response in the definition of DER. Cost effective DR and energy management solutions have a long track record of providing stability to both retail and wholesale rates, and continue to have a stabilizing effect on states with increased penetration of distributed generation. We would recommend that the manual go further to include the ability for DER solutions to be dispatchable, particularly for energy management solutions such as demand response, and include a discussion on the locational aspects of DER, which is often an important regulatory consideration. Dispatchability can directly determine the prudence of a DER investment and the ability for regulated utilities to use them as an operational or system resource, while the locational impact of DER can either present system challenges or, as in the case of our targeted demand management program in New York, provide a cost-effective option to

¹ As cited on p.16.

address demand and defer traditional investment. Comverge also recommends that the definition distinguish between two broad categories of DER: those that generate electricity or thermal energy (e.g., rooftop solar), and energy management technologies (e.g., demand response and targeted energy efficiency). In our direct experience, these are often complementary in the field but involve different regulatory considerations and compensatory structures, depending on how they are deployed.

While DR is directly discussed in the definitional sections of the manual, Comverge recommends that further chapters be expanded to include energy management. The current draft largely treats DER as monolithic, particularly in the rate design and compensation chapters, and almost exclusively addresses issues related to distributed generation. For example, the manual states that “the choice for a customer to invest in DER is made once” but this is not the case for all DER. For energy management technologies, a residential customer may change investments over time, which could be based on program components that are dependent on the rate structure. Alternatively, it could be a matter of having better and more engaging technology – simply consider the evolution of residential thermostats over the past 15 years. Or in the case of mobile battery storage, a customer may choose a short-term lease to accommodate a temporary increase in process load. In the discussion of advanced metering,² the manual states that with AMI “customers can better understand the potential impacts of installing DER at their location or signing up for community DER programs.” Again, this is specific to rooftop solar. A more inclusive and accurate statement would be that AMI allows customers to “better understand the potential impacts of *implementing DER or participating in DER programs* at their location”.

Comverge appreciates the complexity that these technologies present and those passages are warranted, but what is also lacking is a discussion of how some DER technologies play a complementary role that, when implemented correctly, can ameliorate some of the regulatory challenges that one technology alone may present. If the purpose of this

² pp. 63-66

manual is to guide NARUC members and present current best practice, Comverge recommends that the authors provide a discussion on how these resources can be integrated to be used as a locational or system resource and the appropriate regulatory treatment, but the current draft at times makes the opposite point. For example, on page 31 the manual discusses that increased DER investment could lead to increased need in generation to compensate for intermittency and increased need in distribution equipment. Here again the “DER investment” is not specific but seems to be referring to distributed solar. Rather than highlight that intermittent DER resources will require additional generation, the manual could include demand response as either an alternative or a complement to address the problem of intermittency.

The distinction between different DER technologies is particularly important to address in the discussion of compensation methodologies and Comverge recommends that the manual more explicitly address them, but the good news is that the traditional cost-of-service model does not necessarily have to be significantly altered to address some of these solutions. Commissions can allow for utilities to rate-base certain energy management solutions, and as is the case with companies like Comverge, utilities can manage programs on a pay-for-performance basis to reduce the risk to both the utility and the ratepayer.³ Furthermore, automated demand response solutions like switches and thermostats can lessen the polemic on demand charges by helping customers manage usage under these rate structures. In fact, the extent of the savings and the approach to mitigation are influenced by both the specifics of the rate design and the technology available to the customer, but the complementary role of different DERs is not fully addressed in the current draft.

³ There are several recent examples of this. Kentucky allowed LG&E & Kentucky Utilities to rate base smart thermostats in case 2011-00134, San Diego Gas & Electric capitalized programmable communicating thermostats as eligible expenses as part of their combined AMI program in docket 13-05-010; and Madison Gas and Electric capitalized smart inverters recently. The Illinois Commerce Commission has been investigating whether cloud-based computing solutions – which are often utilized for energy management – should be capitalized in rate base.

- b. *Advocate for NARUC members to work with regulated entities in defining objectives.*

The manual does an excellent job in capturing the importance and relevance of DER, but Comverge would recommend that the next draft include specific guidance on defining the objectives of regulators in addressing DER compensation. Whether a commission and its regulated companies aim to enable DER investment, reduce emissions, or deal with locational congestion will require different regulatory treatment. In our direct experience, those jurisdictions that have clearly defined the objective of their DER policy are the most favorable for customers, utilities and third parties.

- c. *Institute a defined process for changes to the manual.*

As NARUC has recognized, the regulated landscape is rapidly changing due to technological advancement and adoption, market economics, and customer education, and any best practices document risks being quickly outdated. Comverge recommends that NARUC leadership and the Staff Subcommittee on Rate Design create a clear process by which changes can be made to this manual as necessary. In our view, this manual should be a living document, which can be openly discussed by all relevant stakeholders in a way that allows for adequate transparency and flexibility to address changing market, environmental, and infrastructure issues.

Comverge sincerely appreciates the opportunity to provide input and participate in this process. We hope our suggestions contribute to the ongoing discussion and, ultimately, can help inform regulatory policies will lead to a more reliable, affordable and sustainable grid. We look forward to contributing to future iterations of the manual and to helping enable further investment in cost-effective DER.

Respectfully Submitted,

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Matthew McCaffree
Senior Director, Regulatory Strategy
Comverge, Inc.