### BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Consideration of the Amendment of Title 16 U.S.C. 2621(d) and the Addition of Title 42 U.S.C. 6344 by the U.S. Energy Independence and Security Act of 2007	Docket No. 08-999-05
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# **Comments of Utah Clean Energy**

# Introduction.

In its December 17<sup>,</sup> 2010 Order in Docket No. 08-999-05, the Commission directed Rocky Mountain Power to monitor smart grid technologies and provide a report that provides useful information for conducting informed analysis of smart grid investments.<sup>1</sup> Pursuant to that Order, on August 17, 2011, Rocky Mountain Power (the Company) filed a "Report on Smart Grid Technologies" (Report) with the Commission. Utah Clean Energy found the report very informative and appreciates the Company's review of such a complex and expansive issue as the smart grid. Utah Clean Energy recognizes that it is critical to take an intentional and measured approach to smart grid investments and is grateful for the groundwork represented in this report.

#### **Recommendations and comments.**

Utah Clean Energy respectfully submits the following recommendations and comments regarding the Company's monitoring of smart grid technologies:

1. The Company should facilitate a technical conference on the content of this report for the DSM advisory group and other interested parties.

<sup>&</sup>lt;sup>1</sup> "We find merit in the Division and the Company's recommendation regarding monitoring the development of smart grid technologies and to consider their implementation as technologies mature and cost effectiveness analyses demonstrate appropriate benefits to the Company and its customers." 08-999-05 Order, Issued December 17, 2009, page 14

- The Company should utilize its DSM advisory group, as well as its Home Energy Reporting Program, to evaluate obstacles to and strategies for fostering consumer behavior change to complement smart grid technology.
- 3. The Company's discussion of rate structures complementary of smart grid investments needs further explanation and clarification to be more consistent and meaningful.

#### 1. The Company should facilitate a technical conference on the content of this report

for the DSM advisory group and other interested Parties. This report provided a useful overview of highly technical information regarding a wide array of smart grid technologies, including demand-side measures that require consumer responsiveness. Because smart grid investments implicate demand-side participation, the issue of smart grid investments is relevant to demand-side management program planning.

Therefore, Utah Clean Energy recommends that the Company facilitate a technical conference for participants of the DSM advisory group, as well as any other interested stakeholders, to explain the range and possibilities of smart grid technologies, including transmission and distribution technologies. Even though the Company does not plan full-scale investment in smart grid technology at this time, it would be useful for parties to understand the potential for smart grid investments as well as incremental steps the Company is already taking to enable future investments in smart grid technology.

2. The Company should utilize its DSM advisory group, as well as its Home Energy Reporting Program, to evaluate obstacles to and strategies for fostering consumer behavior change to complement smart grid technology. Throughout its report, the Company notes that many benefits of (demand-side) smart grid investments are dependent upon lasting behavioral change of customers in response to smart grid technology. For example, the Company explained that its study of smart grid investments revealed that

these technologies do show promise for future improvements in the operation and management of the transmission and distribution systems. However, the cost to implement a comprehensive smart grid system throughout the RMP territory outweighs the benefits of implementation at this time. Modification of consumer behavior would be central to realizing many benefits. Changes in usage and improved conservation have the potential to dramatically transform the electric industry; however, most of the benefits associated with customer behavior changes are based on optimistic assumptions regarding the number of customers who will change their energy usage. Questions surrounding the sustainability of any consumer behavior change remain uncertain."<sup>2</sup>

Since long-term consumer responsiveness to smart grid technology is a critical component of a smarter grid, the Company should utilize the expertise of its Demand-Side Management Advisory Group, or a working subgroup thereof, to evaluate how smart grid technology, increased information for consumers, and demand-side management programs can interact to foster effective and lasting behavior change.

In its recently released *Grid Modernization Issues with a Focus on Consumers*, the Critical Consumers Issues Forum recommended, "Consumer education and communication regarding grid modernization should be a long-term endeavor, beginning as soon as reasonably practicable."<sup>3</sup> Educating consumers about grid modernization could include efforts to increase customers' energy literacy, mindfulness of energy usage, and awareness of rate structures. To that end, the Company's Home Energy Reporting Program, in addition to workshops with the DSM Advisory Group, should shed light on effectively fostering meaningful and sustainable interaction with a smarter grid.

3. The Company's discussion of rate structures complementary of smart grid investments needs further explanation and clarification to be more consistent and meaningful. Throughout its report, the Company discusses different rate and pricing structures that will be necessary to complement and enable smart grid investments. In one section, the

<sup>&</sup>lt;sup>2</sup> Report, pages 3-4.

<sup>&</sup>lt;sup>3</sup> Critical Consumer Issues Forum, *Grid Modernization Issues with a Focus on Consumers*, 2011, page 5 (Principle number 22).

Company explains that it will be essential to employ rate structures that recover a greater portion of costs through non-volumetric customer charges in order to "fully realize the peak demand management and energy consumption reduction objectives of the smart grid."<sup>4</sup> However, such a structure would decrease the flexibility of volumetric rates to send price signals to customers; nevertheless, in another section, the company explains that Time of Use (TOU) rates and Critical Peak Pricing (CPP), including for residential customers, are necessary to send price signals to catalyze the consumer behavior changes required to bring about the benefits of smart grid. Additionally, the Company explains, a shift to TOU rates or CPP would necessitate a decoupling mechanism.<sup>5</sup> The Company does not explain whether it intends that a high customer charge be accompanied by TOU rates and CPP, as well as decoupling, or whether such a combination would have the intended effects on customer behavior.

Clearly, a discussion of rate structures is a necessary aspect of investing in the smart grid, and it is important that the Company and stakeholders have such discussions. If the Company includes discussion of rate structures in its reports on smart grid technology, it should explain thoroughly how it envisions the interaction of smart grid, rate structures, and consumer behavior.

Respectfully submitted this 14<sup>th</sup> day of October, 2011.

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Utah Clean Energy

<sup>&</sup>lt;sup>4</sup> Report, page 28.

<sup>&</sup>lt;sup>5</sup> Report, page 30.

#### CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was sent by email this 14<sup>th</sup> day of October, 2011, to the following:

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