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CPS Energy

CPS Energy a Leader in Renewables and Low and Zero-Emission Resources

CPS Energy is the nation's largest municipally-owned electric and gas utility, providing reliable and affordable service to 786,000 electric and 339,000 gas customers in the Greater San Antonio area. With our AA+ credit rating, one of the best in the industry, we offer best in class reliability and recognize our role as a community partner in leading the transformation of the utility business to cleaner energy resources and new technologies that provide enhanced services to our customers.

CPS Energy has built and acquired the third largest generation portfolio in ERCOT. Our generation portfolio is one of the most diversified in the state and includes natural gas, nuclear, coal, solar, wind, landfill gas, and energy efficiency/demand response. CPS Energy is a leader in wind with more than 1000 MW of geographically diverse wind capacity, the number one solar utility in Texas with roughly 250 MW operational and on path to have 500 MW of solar by the end of 2016. CPS Energy has a very strong energy efficiency and demand response program with the goal of saving 771 MW by 2020, with over 400 MW achieved to date.

Without any mandates, CPS Energy implemented a strategy, called Vision 2020, to have 65% of its energy from low- or non-emitting resources by 2020. Core to this strategy is the early retirement of the 2 Deely coal units by end of 2018, 15 years ahead of schedule, thereby redirecting significant capital investment from coal to natural gas resources and renewables. Emission reductions from this strategy will be equivalent to removing over 1.3 million cars off of the road. All of this has been accomplished while keeping our residential rates among the lowest of the top 20 cities in the country.

Texas Well Positioned to be a Leader in Clean Energy Resources

We are fortunate to be in a state with an abundance of energy resource options. The Texas electricity market through ERCOT is ideal for innovation with strong focus on enabling the market to transact power in the most efficient and economical manner. Texas leads the nation in wind-powered generation capacity with over 16,000 MW in place. Utility-scale solar is expected to significantly ramp up to over 2000 MW by 2017 with over 1750 MW in the queue with interconnection agreements. Texas also has an abundance of natural gas with the Eagle Ford Shale and the Permian Basin that can provide affordable, low-emission resources for the power grid. Natural gas, renewables, and energy efficiency/demand response are well poised to support the power needs of Texas in an affordable and environmentally responsible manner.

CPS Energy Great Example for Transforming a Utility

CPS Energy, being a vertically integrated utility serving a major metropolitan area, can serve as a great case study for how to embrace renewables and new technologies in a way that strengthens our value proposition to the customer. We are integrating our renewables and demand response resources with our traditional generation sources. For example, we are running

coal plants at minimum load for many hours of the year when solar and wind perform and have them available to ramp up if the renewables fall off either forecasted or unexpectedly. In this way we save on fuel costs and reduce our overall emissions as those facilities run fewer hours. The concept of a baseload power plant is a thing of the past; all of our plants need to be much more dynamic and responsive to market conditions. We are also investing significant capital into the delivery side of the business that will enable better, more efficient customer service and reliability and also enable new products and services that are distributed in nature such as rooftop solar and battery solutions. Our delivery system will serve as a platform for growth and new services for our customers. Benefits of this initiative will include a more efficient and automated delivery system, will accelerate growth of new products and services, and create a platform for plug & play distributed generation.

As part of the forward thinking approach, CPS Energy is focused on Grid of the Future planning and research. Looking forward, we seek to evaluate and deploy new technologies that provide value to the customer while making the transition to future services and capabilities as seamless as possible. We are currently piloting and standing up various new technologies so that when customers begin to adopt these new products they will be able to easily integrate into the grid.

Challenges are Real and Need to be Addressed

Although CPS Energy is positioning itself to continue to be an innovator and thought leader within the industry, we are not underestimating the magnitude of the challenges that face the utility industry. The changing dynamics of legacy asset utilization and their integration with intermittent resources are critical to the future of grid stability and reliability. Legacy units are being asked to operate in non-traditional ways and the changing economics of these assets pose new challenges for continued investment and maintenance. The current suite of Ancillary Services is challenged in ERCOT to reliably and efficiently integrate the more diverse set of resources into the grid. Batteries and other fast responding technologies may find a roll in filling the gap.

Solutions and new strategies will need to be created in order to answer questions like, how do we create a common platform in order to dispatch resources, distributed as well as grid connected, into the market that will bring the most value to our community? The continued integration of distributed resources and the management of these products to the grid remains a high priority but also raises additional questions such as, how do we develop an economic model to sustain backup generation and energy delivery capability as distributed generation and variable resource penetration increases? Customer and data analytics will play a key role not only for developing new utility business models, but also for the grid operator to plan for and incorporate load side resources. Physical and cyber security will also remain a key challenge as utilities continue to secure an increasing amount of distribution-level data to ensure the reliability of the grid.

CPS Energy remains committed to work on a steady path to diversify and reduce our carbon output of our generation fleet. Texas remains well positioned because of the favorable market conditions and abundance of energy resources.