Public Input before Vero Beach City Council Regarding Full Sale of COVB Electric to FP&L

by
Bob Auwaerter
Vice Chairman
City of Vero Beach Utilities Commission
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Good morning, Madam Mayor and Members of City Council. For the record, I am Bob Auwaerter, Vice Chairman of the City of Vero Beach Utilities Commission.

As you consider whether to approve the sale of the entire Vero Beach Electric utility to Florida Power and Light based on the general parameters of the letter of intent that has been noticed to the public, I think that it is very important to understand what is currently occurring in the electric utility industry in the United States. As an individual who first started doing credit analysis on utilities in 1978 right out of graduate school, I agree with many industry experts who state that the electric utility industry is in the greatest state of flux since Thomas Edison established the first utility. It used to be that if you ran your utility operations well, each state's public utility commission would allow you to operate as a monopoly and earn good, steady profits. Those days are rapidly going away, due to four factors that I will discuss. These disrupters are creating major problems for large investor-owned utilities; they very well could be fatal for a small municipal electric utility like Vero Beach that does not have the size and scale of its competitors.

The first two factors are related—slowing demand and what I will refer to as excess "traditional" power generation capacity. "Traditional" is power generated from coal, natural gas, and nuclear power. Let's talk about demand. Manufacturers around the world, in an effort to reduce costs in a very competitive marketplace, ruthlessly work to reduce the energy needed to make their products. Economists have noted how the amount of energy needed to create a dollar of Gross Domestic Product continues to fall. Appliance manufacturers have made major investments to reduce the power consumption of their products. Look at the big screen TV in your

house and note how little electricity it uses compared to a smaller TV from 10 years ago. The net result is that power demand is barely growing at all. Now combine that decreased demand with an excess of "traditional" power generation capacity. An article from Bloomberg business news service dated 12/30/2016 noted that wholesale electric prices in 2016 hit their lowest levels since 2005, and they see no recovery. The price at year's end was around \$30 per MWh. Why is that figure important to Vero Beach? Our utility buys a significant amount of its power from Stanton I and Stanton II, primarily coal plants. FMPA, in their Strategic Planning Workshop on February 15, 2017—which I attended, projected for its 2017 budget that the power cost from Stanton I would be about \$120 per MWh, and for 2020 about \$160 per MWh. For Stanton II, the figures would be approximately \$90 and \$130, respectively They forecast that these prices will be even substantially higher in the early 2020's. Why so high? Coal plants are most efficient and their prices are the lowest when they run all the time. FMPA expects that these plants will not run very much due to excess generation capacity in Florida which will drive up their costs per MWh. I recently read that a coal plant operator out West was so desperate to run their plant because it was so costly to shut it down and then bring it back up into production that they told the independent system operator controlling the transmission grid that they would pay the operator to take the power off their hands. Effectively, a negative price per MWh for the coal plant. It is hard to make money when you have to pay someone to take your product.

Now, let's move to the third factor, what I refer to as the first great technological disrupter—renewables, particularly solar. Installation prices are plummeting and the Federal government recently renewed an investment tax credit for renewables for several years. FP&L is building two 74.5 MWh solar plants in Indian River County, and one each in St. Lucie County and Brevard County. Once you build the plant, the marginal cost of production is effectively zero. Although there is a debate about what the total cost per MWh for solar power is including capital costs, I have seen presentations from the United States Department of Energy that put the total cost at \$40-\$50 per MWh. Whatever the price is, I feel fairly certain that it will not be going up. As the *Economist* magazine stated in an article dated February 25, 2017, "In a market that prefers energy produced at the lowest short-term cost, wind and solar take business from providers

that are more expensive to run, such as coal plants, depressing power prices, and hence revenues for all."

In addition, the costs of solar installations for single large users, such as a big box store like Walmart or a large manufacturing plant, are going down. Remember, our top 10 customers represent 10.5% of total electric sales. We risk losing our largest, most profitable customers and having to spread our fixed costs on a shrinking customer base. Now the argument is made that the case for large customers to jump off the grid is mitigated by the fact that solar does not work at night or on cloudy days and these customers will continue to buy substantial power from us. This brings me to the fourth factor—the second great technological disrupter—batteries. There is intense research and investment around the planet in so-called "grid-scale" batteries that would allow cost-efficient storage. Some of the technologies include lithium ion batteries, sodium sulfur batteries, and so-called flow batteries. Brilliant minds like Elon Musk are going to solve this problem.

As the saying goes, the trend is not your friend for a small municipal electric utility like Vero Beach. According to the latest published figures from the Florida Municipal Electric Association, in March 2017, out of 33 municipal electric utilities in the State of Florida, 27 had lower rates than Vero Beach for residential electric service. I worry that we will be faced with an increasingly smaller customer base of lower income people who cannot afford to flee the system that will face increasing rates. I urge this Council to do what it takes to get this deal done. TAKE THE MONEY AND RUN, BEFORE IT'S TOO LATE.