Counterflow

Musk and Me

I signed up for a free quote on line.

By Steve Huntoon

With all the talk of the "existential threat" to traditional utilities from solar and other disruptive technologies (and the blowback against net metering in various states), I thought I'd check out SolarCity first hand. SolarCity is the largest residential solar company in the U.S. by far (with installations said to exceed the next 70 competitors combined). When Elon Musk isn't running Tesla Motors (and colonizing Mars and storing electricity) he's chairing the SolarCity board.

I signed up for a free quote on line, and immediately got a call from a friendly and knowledgeable representative who I will call Robert. Robert took down my utility bill information, including fixed customer charges (totaling $17/month) and variable charges (totaling $0.13/kwh), and approximate usage information over the last year. He ran a credit check while we talked, and used Google Maps (or equivalent) to actually look at the roof of my house.

Robert told me it would take less than hour to get a proposal together. Sure enough he emailed a link to a proposed agreement that was indeed customized for me (and a simulation of what the solar array would look like from the sky – cool stuff).

The gist of the deal is that SolarCity would supply and install the system at no cost, and sell the solar output to me at $0.126/kwh, saving me $0.004/kwh. The installation would provide 8,661 kwh, an estimated 40% of my total usage, so I would save about $3/month. The SolarCity rate would go up 2.9% each year, and I would be committed for 20 years. I must pay SolarCity through automatic payments (or pay $7.50/month more), and I must provide SolarCity a reliable wi-fi connection by which it keeps track of my system.

> That's about $2,500 per customer on sales and marketing.

Here are my observations (strictly as a business proposition without considering the environmental benefits of solar).

First, 2.9% doesn't sound like a lot but (with a shout out to John Bogle) compounded over 20 years it's a big bet on the SolarCity rate versus the utility rate. The U.S. Energy Information Administration predicts long-term residential electric rates to increase 2.5% a year nationally (Annual Energy Outlook 2015, Table A3), so if that prediction turns out, the utility rate would be under the SolarCity rate after 8 years.

Second, there's a risk of the utility rate structure changing in the face of the solar threat. Right now my utility offers net metering which means none of the solar generation goes to waste, but if net metering were to be restricted it appears I would be on the hook for any solar generation not used within a given metering period. And the other big regulatory risk is a restructuring of the utility rate towards more fixed charges, such as in Arizona and Nevada (existing solar customers were exempted in Arizona but not, as of press time, in Nevada).

Third, SolarCity does provide what sounds like a pretty good warranty on the system, but the roof warranty is the greater of one year or the term of an existing roof warranty. I don't have a roof warranty so I'm at risk for any roof problems after year one.

Fourth, if our home is sold and the buyer isn't willing to assume the system and agreement, then I'll need to move it, prepay the estimated charges for the remaining term or buy the system outright. So if I don't have a place

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for it somewhere else I'm in trouble.

Overall as a business proposition it doesn't make sense. I'm not saving much, perhaps losing over time, and I'm facing some pretty big regulatory, roof and moving risks.

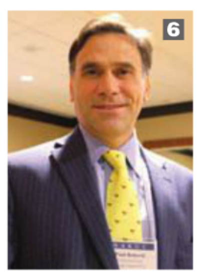
Which begs the question, if our circumstances are marginal at best, despite our utility rate ($0.13/kwh) being higher than the national average ($0.12/kwh), how is SolarCity accomplishing such massive growth? California makes sense with its high utility rates, strong sun, and big incentives. Indeed, most SolarCity installations are there. But why elsewhere?

SolarCity seems to be driving growth by spending tons of money on sales and marketing (and losing tons of it in the process). Operating sales and marketing expenses in 2014 were $238.6 million, gaining SolarCity 94,190 new contracts that year. That's about $2,500 per customer on sales and marketing alone. Net income and operating cash flow for the last 4 quarters to September 30, 2015 were negative $678 million and negative $628 million, respectively.

The longs and shorts on Wall Street are battling it out as to whether SolarCity is already a great business based on atmospheric growth and already contracted future revenues, or is an enormous money pit artificially sustained by new capital lured by the Musk magic (the battle rages at www.seekingalpha.com, symbol SCTY). I must confess I don't understand the business (or at least the financials), and I take some comfort that this can also happen to Warren Buffett.

Anything is possible but it may be premature to dump those old utility stocks. PUF

At NARUC Winter Meeting



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