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Subject: : Conservation

Topic: : We won't see profits from Shale Gas.

Re: We won't see profits from Shale Gas.

Author: : pcray1231

Date: : 2013/11/1 9:26:33

URL:

Elon Musk might be right. For cars. The power grid, where most of the demand is from business, is a different story. You always hear # of homes comparisons. But the bulk of non-transportation power is from business. One, say, car factory, uses more power than entire cities. The amount of power a car uses is a lot, but so is the amount of power needed to make that car. From melting the steel to all the machining and assembly and welding and so forth. Most Americans use far more power at work than they do at home.

I do think electric cars will take off. I'm not sure they'll become "standard", but they'll become "common". There's still a good contingent that, even when batteries are better, they just are not a good option. That said, if they can take 30-40% of the car market, well, that's nothing to sneeze at. And I think in 20 years that will be the reality. Not sure whether it'll be pure electric or various hybrids, though.

First Solar, and all the others can blow the doors off of expectations, and I hope they do. They can grow 25% per year, for 50 years. And I hope they do. That still will not make 10% of the grid.

Are you honestly trying to impress an engineer with % increases in an industry that measures it's share in fractions of a percent? When you double a really low number, you still have a really low number. You can keep doubling it, and still have a small number.

Consider (making up numbers to show point):

Current demand: 1000

Current solar share: 5

Non-solar = 995.

Now, fast forward a year. Make demand go up, say, 3%. And hell, lets say a 100% increase in solar.

New demand = 1030

New solar share = 10

Non-solar = 1020 = higher than last year!

See, you can grow in your share, but note, the non-solar portion grew as well. You're not chasing a static number in regards to demand. It's growing too. And even if it's by a lesser %, year on year, since its so much larger a number, you're gains in solar are still not coming close to keeping up with increased demand, much less cutting into the current usage. i.e. you still need MORE coal/oil/gas next year. You're going after a growing market, and it's likely that ALL sources grow simultaneously. If one shrinks, say, coal, then even if solar/wind is growing by leaps and bounds, it's not replacing coal. Something with a current larger share, like gas, is the bulk of the replacement. The answer to the power problem, for the foreseeable future, is all of the above. That

~~INCLUDES solar, wind, etc., but is not limited to them.~~

I am a proponent of solar, wind, etc. I really am. I'm just realistic about it, and how long it takes. A century down the road, with grid upgrades and so forth, maybe. Hard to know. But the panels and wind turbines which are starting manufacture today won't even be online in 3 years. If you design a new one, it'll take 5 years to settle the design and patents, and another 2 or 3 to develop, and another few years to manufacture, etc. It'll be a decade before it goes into use. And you're talking 4, 5, maybe 10 iterations of that down the road, while depending on similar upgrades in support infrastructure such as power lines, substations, batteries, etc.