It is said that it cost $3 million to air a 30 second advertisement during last weekend's Superbowl. If that is the case, then General Electric chose to spend that much (plus change for production cost) to run a cute little musical piece based on the Scarecrow's song from the Wizard of Oz — "If I Only Had a Brain".

It was 70 years ago that everyone's favorite Judy Garland film hit the theaters, but GE wasn't just offering us a nostalgic interlude between play-action passes. The Scarecrow was comprised of wires and insulators, and the apparently brainless entity of song was the U.S. electric transmission grid. GE's ad was promoting the Smart Grid.

As a concept, the Smart Grid is a triumph of "framing" — naming something in a manner that makes everyone like it before they know what it is. In an informal poll, I found that 10 out of 10 people preferred a smart grid to a dumb one.

GE's dancing spool of wire did absolutely nothing to put any meat on the bones, and that seems to be just the way the company wanted it. Shaping public opinion so that people insist on having a smart grid seems to be all that businesses are after, at this point. That way, there can be a sense of inevitability attached to any new transmission widget that seems more smart than not.

So, what is a smart grid, and why is it we are learning to want one so badly? The U.S. Department of Energy can't really put its finger on it. Its writing on the subject is broad and aspirational — slim on details

One thing appears to be a given: Smart Griddists want to change out all of those mechanical meters we have measuring electric use at our homes and businesses and replace them with software-based two-way communications systems. This would allow for back-and-forth information exchange about supply, cost and demand. More about that another time.

Further upstream, there may be an opportunity to add more sensors and switches to the grid, speeding response to potential problems and perhaps reducing the likelihood of wide-spread blackouts. Since the grid is really one big machine, with everyone along the path dependent on keeping things in balance, it might make sense to adopt some new technologies as they develop. One constant question goes to how much reliability we really need. Another one goes to how much we are willing to spend to get it. Regardless, those promoting the smart grid don't offer a detailed shopping list, at this point.

Beyond these ideas, people seem to pin on the Smart Grid donkey any other aspect of electric service that they are interested in. For some people, new transmission lines would make the grid smarter. For others, it would be new generating stations in strategic locations, or real-time pricing, or energy efficiency.

All of these things may be good all of the time, or some of the time. For now, caution may be in order. When people start talking about the Smart Grid, make them tell you what they have in mind.