Succeeding in the Distributed Generation business

LOOK AT IT AS PROJECTS NOT PRODUCTS

A number of people have asked me to identify the successful Distributed Generation (DG) businesses and business models. I guess more than a few are interested in whether this concept is ever going to produce the kind of sales volumes forecast by members of the early micro-generation community. This is not an easy question to answer, particularly for a "dyed in the wool" turbo-guy, and my first response was . . . "There aren't any!"

Let me also state that the definition of DG is subject to various interpretations based on factors such as power range, application, and location with-respect-to-grid. But I am referring to the customer side of the meter activities.

The truth is that there are some successes, but they're doing Combined Heat and Power (CHP) projects with reciprocating engines, and an occasional small gas turbine if the heat/power ratio is appropriate. They will do diesels too, if they can get by the permitting restrictions. But to keep it simple and for purposes of this discussion let's stay with natural gas engines.

For the most part, the engine distributors and OEMs are packaging and installing natural gas reciprocating engines, sometimes owning and operating and sometimes not, but always doing the work on a project basis. I used to say that, "if you call it a project, you've already spent too much money!"

But projects like these have been done for years. It is the reason that "projects" had to be sufficiently large to support the project engineering requirements for a "one-off" installation, and why the number of installations still remains relatively small.

These businesses are successful because they are participating in three or four steps of the value chain and have accepted lower margins on what most consider an add-on business opportunity. More importantly, however they have structured their activities on a project basis and can leverage experiences locally.

On the other hand, virtually all of the DG equipment developers have built their businesses and business models around grand distribution and re-distribution schemes that only look good on paper. This may appeal to some investors, but these schemes add considerable cost and have an underlying, but generally unrecognized assumption of a product-based business. Of course, the real driver in the product business is the hoped for economies of scale associated with serial production vs. project size.

Today, all of the DG equipment developers have added a CHP option, most as a standard, as a consequence of less-than-expected electrical efficiency and higher-than-targeted cost. The only problem is that in so doing, they have failed to link the nature of this CHP product configuration with the project nature of its application.

CHP applications are always "projects." Power-only applications have the potential to be "products," but only if they are competitive on efficiency and cost.

One of the most interesting and effective DG efforts is regional CHP offices sponsored by the U.S. Department of Energy. These are real people, doing real projects for real customers and applications. These are constituents and, unlike the various national initiatives before, they have a voice at the state level.

The challenge before the various technology developers is to structure their businesses to do the project work required to sustain an interest in these technologies, but to do so without creating multi-tiered distribution organizations and subsequent expectations of production-like volumes.

The move to CHP products is a commitment to a project-oriented business model, whether these companies realize or are willing to admit to it.

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