Regulation No. 44 Issues
Distributed Generation
August 17, 2004

In follow-up to your meeting yesterday, I wanted to offer the following comments:

1. Consistency with FERC/PJM:

FERC RULE, Docket RM02-1, Standard Interconnection Agreements and Procedures for Large Generators defined interconnection procedures for generators greater than 20 MW interconnecting to a transmission facility.

FERC ANOPR RM02-12, August 16, 2002, Standard Interconnection Agreements and Procedures for Small Generators defines procedures to be followed for generators 20 MW or less when connecting to a transmission facility or when making interstate wholesale transactions. The proposed rule offers:

Accelerated procedures for generators 10-20 MW
Expedited procedures for generators 2-10 MW
Super expedited procedures for generators 0-2 MW

The PJM, Small Generation Interconnection Working Group (SGIWG) is working on creating standards for generators less than 2MW, connecting to the distribution system, lower voltage facilities.

If it is your intent to stick with "Distributed Generation," it seems that a 10 or 20MW limit on applicability would be workable and consistent with FERC definition.

2. Definitions.

I would further suggest that you might want to reconsider some of the definitions that you have used in the regulation.

Distributed Generation (DG) can currently be described as small-scale power generation located close to the end user. DG technologies include diesel and natural gas fueled reciprocating engine-generators, small industrial gas turbines and micro turbines, photovoltaics, and fuel cells. "Small-scale" in the context of DG is not strictly defined, although DG systems are unlikely to be more than 5 or 10 MW even in relatively large commercial applications. – Delaware Energy Task Force Report, page 84.

It would appear that you have attempted to use the current DG definition to identify types of usage (peak shaving, demand response, etc) where the regulations would apply. The problem that this creates is that DG could also be used as an emergency generator. It seems to me that you would be better off leaving the definition of DG as stated in the Governor's Task Force Report and differentiating usage by normal and emergency.

Normal generation would be defined as routine load serving generation or generation participating in peak shaving, interruptible service program operations, behind the meter generation or demand response generation.

Emergency generation would be defined as generation dedicated solely to mitigating: a failure of the electrical grid; an on-site disaster; a local equipment failure; or a public service emergency such as flood, fire or natural disaster.

I don't think you need the distributed generator definition or emergency generator definition, but if required I would suggest limiting it to the following:

Normal Generator means an energy provider that typically generates energy for base load or peak shaving or demand response requirements.

Emergency generator means an energy provider that generates energy solely for meeting emergency generation requirements.

3. Applicability

Based on the input yesterday, I think you have an applicability issue to ponder. No matter how I read the regulation, it seems to apply only to internal combustion engines which is only one facet of distributed generation. I think you need to revise the applicability section to apply to all Distributed Generation less than 20 MW. Then the only issue is how close the unit has to be to the load to qualify as DG (per the definition).

The exceptions that need to be made include:

Those covered by BACT or LAER

Emergency generators used solely for residential use

Emergency generators mandated to meet federal or state emergency requirements.

Baseload or peak shaving generators owned and operated by municipals and installed prior to [date].

I realize that this exempts the fire departments and maybe even the prisons and hospitals, but to be truthful they generate less pollution, even with testing, than the trucks running up and down Delaware's highways. This approach also eliminates the old municipal unit issues and Ozone Alert issues. That leaves Section 4.0 to deal only with emergency generators used by business and industry.

I think you need to strike a limit of either 10 or 20MW on applicability. If there are other generator units that need regulations, then it should be done outside of a DG regulation. California typically looks at a 10 MW cutoff.

This level of exception does not however, deal with the concerns of the cooperative with respect to their peak shaving program. It will obviously become more costly for new participants and may have a significant impact on the program. Ultimately, either through higher program participation payments, or a phasing out of the program, the cooperative consumer will be left with higher energy costs. Given the regulation, the business decision to be made is which course of action results in the least cost increase to the consumers.

4. Dual Use

There is a possibility that a participant may want to use their generator for both normal and emergency usage, in which case the higher level of requirements would be required. It would seem that Section 1.3.2 requires a declaration of either one or the other, but not both.

5. Emissions Levels

There seemed to be genuine concern with the industry's ability to meet the current air quality standards in the regulation. I think the 2010 goals we have in place should be maintained, but it may be that we need a re-opener clause to examine that feasibility in 2008, unless the goal is to crush the diesel engine business in Delaware.

6. Who Pays?

One of the parties mentioned the possibility of the state picking up the tab for engine retrofits to better help the environment and when it comes to correcting past deficiencies, I think they might be correct. However, there is no free ride with respect to regulation, or for that matter new legislation. The cost to install new, cleaner generation will be passed along to customers in rate proceedings. If the state elected to cover some retrofits, it would be picked up by taxpayers. Either way, the cost of energy is going up. The legislature recently considered a renewable portfolio standard mandating a certain percentage of generation from renewable resources. If, and when, it passes, it will also raise the cost of energy which ultimately will find its way back to the ratepayers.

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