Farm Power Northwest LLC
1934 South Wall St
Mount Vernon, WA 98273

Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, Washington 98504-7250
records@utc.wa.gov

RE: Study of the Potential for Distributed Energy in Washington State, June 24, 2011
Docket UE-110667

Dear Mr. Danner:

Please find below comments from Farm Power Northwest LLC in response to the distributed generation questions the Commission has identified.

A. General – Cross-Cutting Issues:
4. Are there changes in state statutes or rules that would encourage technology-neutral development of distributed energy generally, such as changes to financial incentives?

In order to encourage technology-neutral development of distributed energy, state statutes should require investor-owned utilities to offer long-term fixed-price standard contracts at just below projected retail electricity rates to distributed generation projects. Long term means at least fifteen years, rather than the five years currently required. Fixed-price means a forward strip of at least fifteen years, and the price of just below retail is a reinterpretation of "avoided cost" that is far more meaningful than the cost of running a distant utility-scale power plant. A realistic calculation of the avoided cost of electricity delivered to a local feeder by a distributed generation project should be based on the value of that electricity delivered to the next customer on the feeder, minus nominal administrative and balancing costs.

6. Do distributed energy technologies impact investor-owned utility rates currently? If so, please describe how and whether rate impacts affect certain customer classes more than others. How might future rates be impacted?

No; most utilities offer well below retail rates for electricity from distributed generation projects, and the projects absorb their own interconnection costs.

Future rates would not be impacted if utilities raised their payments to distributed generation much closer to—but not above--retail rates.

7. Do distributed energy technologies meet winter peaking needs for investor-owned utilities? Can distributed energy technologies serve baseload capacity? Which distributed energy technologies serve primarily as an hour-ahead or day-ahead energy supply? How can each of the distributed energy technologies and fuel sources contribute to meeting utility peak load needs?

Biogas technologies provide baseload capacity, and they can also meet peaking needs if offered electricity prices designed to encourage such a production profile.

9. Certain statutes and Commission rules require the UTC to review resource acquisition pursuant to least-cost planning. Would pursuing distributed energy conflict with those rules due to the nascent state of technology development and current cost to implement? How far, if at all, should the state depart from least-cost planning principles and rules?

Distributed generation can be purchased without departing from least-cost planning principles if utilities honestly and objectively assess the value of electricity delivered on local feeders. Acquiring this electricity avoids the need to invest in additional power plants, transmission lines, substation upgrades, and other significant expenses.

12. For both capacity and energy, how does the current cost of building distributed energy technology compare with other available resources?

The cost of producing electricity from many distributed energy technologies is already below the retail price of electricity. Unfortunately, these technologies lack the market stability provided to incumbent resources such as natural gas-fired power plants owned by utilities; thus, for lack of stable contracts and the stable financing these contracts can bring, distributed generation is rarely built even in cases where it compares favorably with other resources.

B. Technology-Specific Issues:
Biogas
12. How are fuel mixtures accounted for, and are there fuel mixes with fuel components that do not qualify under the state renewable portfolio standard (RCW 19.285)?

The state's renewable portfolio standard has flawed definitions that make it pointless for most biogas projects to track fuel mixes with the goal of receiving credit for producing renewable electricity that qualifies under RCW 19.285. The

most important flawed definition is that of "Nonpower attributes", which includes all “avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases.” Production of biogas often also yields environmental benefits unrelated to the production of electricity; these benefits include avoided methane emissions from manure storage or landfill disposal of organic waste, improved water quality, and reduction of nutrient discharges. Most biogas projects are unable to claim credit for these benefits while also selling renewable energy that qualifies under RCW 19.285.

13. What is the range of project capacity sizes for biogas generation resources and how does that compare to the capacity sizes for projects that qualify for published PURPA rates?

Projects with the best economic potential may be larger than one megawatt, but very few will exceed five megawatts in size. Published PURPA rates should be offered to distributed generation resources with nameplate capacities of at least two megawatts and possibly up to five megawatts.

C. Financial Incentives:

1. If the cost of building a distributed energy resource is not yet competitive, and a subsidy is recommended, what form of subsidy is best?

The best subsidy for a still-uncompetitive distributed energy resource is a capped cash grant worth no more than 10% of the installation cost of the project. This will mimic the success of the federal “Treasury grant” in stimulating construction without as large of a cost to taxpayers and without the complication of monitoring production in future years.

2. What effect would the subsidy have on encouraging the building of the resource versus research and development?

At this point, Washington State needs operating projects to continue research and development—the technology must get out of the laboratory and into production.

Thank you for this opportunity to comment.

Sincerely,

Kevin Maas
President
Farm Power Northwest LLC

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