Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101
RE: Reply Comments
Renewable Development Fund Cycle 4 Selection Report
Docket No. E002/M-12-1278

Dear Dr. Haar:

I submit these reply comments, in response to various comments and filings submitted since my comments filed on our about September 27, 2013. I apologize for the roughness of the document but I am responding to comments filed by Xcel Energy only a few minutes ago and there is a 4:30 deadline.

I did not participate in the initial phases of this docket. Had I done so, I would have urged a different approach. As it is, the proposal from Xcel Energy provides little or no evaluation of the extent to which various proposals are in the public interest either environmentally or economically.

It is not at all clear why certain categories of proposal have been ranked as they have. How, for example, does one compare the likely benefits of a rooftop solar project, vs an experimental "biomass" burner, vs creating a research slush fund for an academic institution?

No Consideration seems to have been given to the implications of projects for public health and quality of life. Table of Xcel's most recent comments:

Table 1 - Core Criteria and Point System

Core Criteria RD Projects EP Projects

Project Method, Scope & Deliverables 20 20
Technical Requirements 70 70
Management Team, Schedule and Cost 30 30
Potential Benefits to Minnesota and Ratepayers 80 20
Total Resource Cost per kWh (EP Only) 0 60
Core Criteria Score 200 200
Maximum Bonus Points Allowed 2 30 30
Overall Total 230 230

While there is a "potential benefits" category--not well defined, there is no comparable "potential harm" category.

The basis of "bonus point" criteria, in many cases, are unclear. For example "7. For anaerobic digester systems, projects that propose to use non-agricultural residue for a feedstock." Why should bonus points be awarded for this? Perhaps there is a reason, but it is unexplained.

Similarly, bonus points are to be awarded for "2. Projects located within the Energy Innovation Corridor." The "Energy Innovation Corridor" is in an area of degraded air quality. So any project located there should be one with no potential to further degrade air quality. RD4-1 Regents of the University of Minnesota, Title: Developing Gasification Technology from Solid Waste, and RD4-11

University of Minnesota Title: Demonstrating the Potential for Distributed Power Generation Using Converted Biomass, violate this principle and should be disqualified.

Total Resource Cost is explained this way at pages 3-4 of Xcel's Dec. 12 comments:

Total resource cost, as a measure of the levelized cost of energy on a \$/kWh basis over the project development, construction and operation, was calculated for each EP proposal. The contributors to the TRC are: development, construction, and equipment costs; PPA costs (measured as the difference between PPA price and market energy price); emissions costs (for biomass proposals); and operations and

maintenance costs.

This approach does not adequately capture the "externalities," nor are "emissions costs" clearly defined. There is at present a "value of solar" proceeding before the Commission, and another proceeding about the valuation of external costs of various fuels. Insights from these proceedings should be included in the evaluation of proposals (called "bids" by Xcel) and I hereby incorporate by reference the filings and public comments in these two proceedings.

At page 4 is stated:

"A discount rate of [redacted] and a marginal energy price of per [redacted] MWh were used as directed by Xcel Energy."

I see no legitimate basis for the withholding of this information. It is not clear whether this information was made available to the "advisory group" or whether the advisory group participated in selecting the values. It is not easy to understand how proposals can be evaluated without this information.

The "advisory group" appears to be established by legislation. Therefore, it is a public body subject to Minnesota law governing "open meetings" and data practices. Meetings should have been given public notice, agendas and minutes should be available. Pursuant to the Minnesota Data Practices Act, I request this information for all meetings held by the "advisory group."

Overall, I think it is essential the Commission proceed very carefully, and at the very least hold evidentiary hearings.

Respectfully submitted,

Alan Muller

Alan Muller Energy & Environmental Consulting 1110 West Avenue Red Wing, MN, 55066 302.299.6783 alan@greendel.org