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Dear Karen E. Cremer, Staff Attorney:

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I understand the Commission Staff is interested in receiving comments on rules for considering, on a statewide basis, the proper standards that should govern avoided cost determination. I would like to provide comments regarding avoided cost determination as it relates to energy efficiency and demand response programs.

I have worked for three electric and gas utilities for 39 years. I have also been providing utilities with demand-side management planning and design services for the past 5 years. I have over 20 years of experience in planning and design of energy efficiency and demand response programs and much of that work involved a clear understanding energy and capacity avoided costs.

The following are comments on the issues to be addressed in the rulemaking docket regarding standards for avoided cost determination.

Avoided cost determination should follow the California Standard Practice Manual. This manual has been in effect since the late 1980s and is the generally accepted standard for all energy efficiency and demand response programs across the country.

- 2) The methodology for determining avoided cost
 - Avoided energy cost is the net-present-value of the incremental cost to produce or purchase
 energy (kWh) in each hour of the year. In the design of energy efficiency programs, different
 amounts of energy are saved during each hour of the year depending on the energy saving
 measure. The energy that gets saved in each hour of the year by the energy efficiency program
 times the incremental cost of that energy for each hour determines the avoided energy cost for
 one year. This analysis is repeated for each year the program (or measures within the program)
 saves energy. Transmission and distribution line losses should also be considered as part of the
 avoided cost calculation.
 - The capacity avoided cost is the net-present-value of new capacity which is avoided or delayed
 due to the installation of energy efficiency measures or load reduction due to demand response
 programs. Avoided capacity for generation should include generation reserve margins that are
 also avoided. Avoided capacity costs should also include avoided costs in transmission and

distribution facilities. Transmission and distribution line losses should also be considered as part of the avoided cost calculation.

- 3) Appropriateness of particular methods for determination of avoided cost
 - While each location in South Dakota could represent different energy and capacity avoided cost, a weighted average of all avoided cost calculations could be used to determine the state average.

4) Appropriate term

- The use of statewide avoided costs would help standardize energy efficiency and demand response programs across the state, making them more uniform for customers and trade allies. Uniform programs provide significant benefits to customers as well as all market channels.
- As supply costs change, avoided costs will change. Avoided costs should be re-calculated every 3 or 4 years with interim modifications only when changes are significant. Avoided costs should be used only in a forward looking manner and should be stable for the duration of the program or life of the measure.

I am very interested in providing comments for establishing standards to govern avoided cost determinations. Please include me on your mailing list so I can provide timely comments and assistance.

Sincerely,

George Phillips, P.E.

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