
From: K Decker [<mailto:falconkik@yahoo.com>]

Sent: Friday, November 22, 2013 4:32 PM

To: PUC

Subject: RM-002 Avoided Cost

Dear Commssioners,

We need the South Dakota Public Utilities Commission to determine avoided cost, appropriateness of particular methods for determination of avoided cost, and 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. and how long of term 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. 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.

Sincerely,

Kirsten Decker