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December 2, 2013

Ms. Patricia Van Gerpen, Executive Director
South Dakota Public Utilities Commission
State Capitol Building
500 East Capitol Avenue
Pierre, South Dakota 57501-5070

Re: EL13-017 - In the Matter of the Petition of Northern States Power Company dba Xcel Energy for Approval of Its 2012 Demand Side Management Report and 2014 Proposed Demand Side Management Plan

Dear Ms. Van Gerpen:

At the recent commission meeting in this matter we agreed to provide information about several questions. Following are what we took away as the questions followed by our response to each:

Question 1) Provide a description of how Xcel Energy accounts for its "Business Saver Switch" inventory and the savings the Company claims for those categories.

For new Business Saver's Switch installations, the Company claims credit for Saver's Switches installed at customer premises where there previously was none.

For replacement of Business Saver's Switch installations necessary for maintenance purposes, the Company has switches installed dating back to 1992. We project that switches have an average life span of 15 years. Because communication to the switch only goes one way, we don't have an immediate way of identifying when a switch has reached the end of its life and is not responding anymore. To aid in the identification of broken switches we have devised a process called Virtual Visit. This is an approach where we activate switches on a hot day (not a control day) and measure consumption at the premise level. Because the central AC is so dominant in the overall consumption profile of a residential household, you can in some cases detect that the AC is running and identify cases where, when we activate the switch, nothing happens. When we replace a switch identified via Virtual Visits to not be working, we claim savings for those and count them toward the goal. We do so under the theory that a participant with a non-functioning switch contributes zero load relief on a control day. By replacing the switch, we achieve the same incremental load relief as we would have with a new installation.

It is impractical to use this "Virtual Visit" technique for commercial premises. So we make a field visit to inspect whether the switch is responding to signals. In cases where a field visit turns up switches that are not working, we also count those replacements as achievements.

Note- in the past couple of years we have been replacing some (older) switches that have been shown to malfunction and interfere with Verizon Wireless 4G signals. As part of our agreement with Verizon we are replacing switches within close proximity to cellular communications towers. In those cases we do **not** claim savings (as the switches are technically working and producing load relief).

For re-activation of Business Saver's Switch installations, in theory, we could also take credit for a **re-activated** switch (i.e., a customer is enrolled in Saver's Switch and decides to leave the program). Our practice is to not remove the switch but rather remotely deactivate it and leave it in place. Therefore, if the customer moves out and a new customer moves in that wants a Saver's Switch, we can remotely reactivate the existing switch. At present, this is theoretical since historically we have NOT counted these towards our achievements. It is also a very small number because attrition from Saver's Switch is so low. For example, we finished 2012 with just under 17,000 active residential switches in SD and 414 deactivated units in the field. For reference: three switches were re-activated in 2012.

Question 2) Provide a list of participating vendors or locations for our "Home Lighting" program.

There are a total of 11 retail outlets that participate in the SD Home Lighting program:

True Value (Lewis Drug), 7 stores
Home Depot, 1 store
Menards, 2 stores
Batteries Plus, 1 store

These retailers, which we plan to continue to use in 2014, were chosen to provide a good mix of products and reach a maximum number of customers.

Question 3) Provide a more detailed explanation of data request response 2-2 about rate impact being 'zero'.

The DSM portfolio results in two types of costs that are borne by customers: 1) the cost to offer the programs to the customers that participate (administration, marketing, rebates, etc.) and 2) the lost revenue in the form of lower volumetric sales due to participant actions to save energy. Fortunately, the DSM portfolio is also responsible for creating financial benefit for both the Company and its customers. Those benefits include reduced fuel costs for the next 15 years (the average lifetime of the energy efficiency improvements now on the system) and less demand which allows the Company to avoid or defer construction of more power plants. In the end, DSM both costs customers money but also saves them money.

In 2012, the Xcel Energy South Dakota DSM portfolio resulted in long-term fuel cost and capacity requirement decreases that have a current net present value of \$4,534,767. The administrative costs and lifetime revenue reduction associated with this savings has a current value of \$3,764,594, resulting in a net benefit of \$770,172 for all ratepayers over the lifetime of the DSM measures. The effect of this portfolio will be a positive mitigation of future non-participant costs, i.e. the Company's revenue requirements, and therefore rate increases, will be

slightly lower relative to a scenario with no DSM. Using estimated energy sales over the average DSM measure lifetime of 15 years, the approximate positive impact is \$0.000025/kWh.

Applying the same calculations to the proposed 2014 DSM portfolio, there is a small net cost to customers of \$12,239. However, this value is mathematically insignificant to six decimal places when divided by the Company's projected sales over the average lifetime of DSM measures. Therefore, the proposed 2014 DSM portfolio will have neither a positive or negative impact on future non-participant costs relative to a scenario without DSM.

If anyone has any questions, please call me at 339-8350

Sincerely,

A handwritten signature in cursive script that reads "Jim Wilcox". The signature is written in black ink and is positioned below the word "Sincerely,".

Jim Wilcox