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2302 Great Northern Drive
P O Box 2747
Fargo, ND 58108-2747
(701) 241-8632
dave.sederquist@xcelenergy.com

PUBLIC SERVICE COMMISSION

August 1, 2008

Gloria A. Geiger, Interim Director
North Dakota Public Service Commission
State Capitol Building, Dept. 408
600 East Boulevard
Bismarck, ND 58505-0480

Re: North Dakota Public Service Commission inquiry on automated meter reading device malfunctions affecting Company's natural gas customers

Dear Ms. Geiger:

Attached please find the Company's responses to questions raised by the Commission in a letter dated July 2, 2008.

Xcel Energy appreciates this opportunity to provide the North Dakota Public Service Commission additional information regarding the failure of automated meter reading modules for a large number of natural gas customers in the Fargo and Grand Forks areas. Our reply provides additional detail regarding the situation, our responsive actions to date and planned further actions, as well as our responses to the specific questions posed by the Commission.

Please do not hesitate to call me if you have any questions. Thank you.

Sincerely,

David H. Sederquist
Sr. Consultant, Regulation & Finance
Xcel Energy

Cc: Tom Rafferty
Public Outreach Specialist

**Xcel Energy's Response to
North Dakota Public Service Commission Inquiry
Regarding the Automated Meter Reading Module Failure
August 1, 2008**

Xcel Energy appreciates this opportunity to provide the North Dakota Public Service Commission additional information regarding the failure of automated meter reading modules for a large number of natural gas customers in the Fargo and Grand Forks areas. Below we provide additional detail regarding the situation, our responsive actions to date and planned further actions, and our responses to the specific questions posed by the Commission in its July 2, 2008 letter. We also look forward to scheduling a meeting with the Commission where we can bring the appropriate Xcel Energy staff to provide further information and respond to any additional questions you may have.

A. Situation Overview

We determined in early February that an abnormally high number of automated meter reading (AMR) modules used for our natural gas customers had potentially failed. Our field investigations subsequently confirmed that we experienced approximately 4,000 actual module failures out of this initially identified pool.

The failed modules were updated equipment installed in late 2007 as either replacements to prior AMR units, or as new units in an expansion of our AMR system. They are located primarily in the Fargo and Grand Forks area (affecting customers in both North Dakota and Minnesota), as well as the St. Cloud, Minnesota area. The failure rate for these new modules is higher than our historical experience with gas AMR modules.

The failure appears to stem from a mechanical failure of the module that also affected the meter index. Specifically, the shearing of pins located on a drive shaft within the AMR module that caused both the module and the meter index to stop recording natural gas usage. While the module continued to send readings to the AMR collection system after the failure, the readings indicated zero consumption because the module's drive shaft no longer turned. The meter index also stopped recording usage as it depended on the same shaft.

As a result, affected customers' meter readings reflected no usage during for the period between module failure and replacement. Given the timing of our

billing cycles, our meter reading did not initially pick up readings of no consumption since the pre-failure consumption for that billing period was recorded on the meter and transmitted through the Cellnet signal. Once we identified the failure and its cause, we undertook both replacement of the module to ensure accurate, prospective meter readings and rebilling of the previously unbilled natural gas consumption in a manner consistent with our tariff and Commission rules. We completed the replacement of the initial failures in the Fargo and Grand Forks areas mid-March, and completed the associated rebilling in mid-July.

Cellnet, our third-party vendor, provides us the AMR modules and services via service contracts. While the modules that failed were updates that had been designed and expected to be an improvement over the prior module, the equipment failed to meet our performance expectations. Since our initial identification of the failed modules, we have continued to experience failures, although at a lower rate.

We are currently negotiating with Cellnet to remedy the situation and develop a plan for addressing the other modules of this type remaining on our system. We have also incorporated third-party testing of module performance as provided by the service contract to satisfy ourselves that it will perform to acceptable standards.

Despite problems with this new module, we believe that AMR has and will continue to benefit our customers. We have a total of over 2.2 million meters on our system and rely on over 1.6 million AMR readings each month (total Company, gas and electric). We believe that AMR offers costs savings and typically improves billing accuracy, as well as providing a platform for additional services, such as time-of-use and innovative rate designs. While this situation involved the failure of a specific module to perform as expected, we believe that the overall performance and potential of our AMR system will continue to offer value for our customers.

B. Rebilling Process

Our rebilling process corrected for the unrecorded natural gas usage during the months that no usage was recorded on the affected customers' meters. This situation is thus a "dead register," in that the meter index failed to record consumption and there is no way to retrieve actual usage data for the period.

We thus employed the process provided by our tariff and Commission rules to estimate usage based on customer history.

Specifically, to estimate each customer's usage during this period, we examined customer-specific information from the prior two years. Using data contained in the Cellnet data collection system, we were able to identify the dates of both module failure and replacement, giving us a clearly defined period for rebilling. We obtained actual customer usage information for the same period in the prior two years, and used the lower of the two as an estimate of the unrecorded usage for rebilling. We then applied the actual rates in effect during this period to obtain a total amount for use in our cancel/rebiling process. This process is identical to the process we use whenever we experience a meter failure at a customer premise.

We undertook the rebilling process as the modules were replaced, launching a comprehensive effort to complete the rebilling of affected North Dakota customers in late March – July. The process for performing this rebilling is manual and requires billing specialists to investigate each customer's specific history, including the dates of module failure and replacement, past usage, and customer contact records to determine the appropriate amount for rebilling. The rebilling took several months to complete due to the large number of modules that failed in this time period and the amount of time involved to investigate and implement the cancel/rebiling process.

We believe the new billings are accurate and consistent with our tariffs and Commission rules governing meters that are found to not register usage. We are also attempting to mitigate the impact on customers in the following ways:

- Given that this past winter was colder than previous years, we believe that customers will pay no more than their actual usage would have cost during this period.
- We offer customers the opportunity for payment arrangements for the rebilled amounts.
- We do not assess late charges for the rebilled amounts.
- We are willing to work with customers in situations where the estimated usage is demonstrated to exceed the customer's expected actual usage.

We recognize the inconvenience this situation causes affected customers, but believe the process used protects customers and ensures that they do not pay

more than they otherwise would have had the meter properly recorded their usage. While we agreed to the Commission's recent request to stop issuing new rebillings associated with failed modules, we respectfully request the ability to reinstate this process, as we believe our approach is appropriate and consistent with requirements. We believe it was important to issue the rebillings such that customers can pay the previously unbilled amounts prior to next year's heating season, where natural gas prices are expected to be unusually high.

As noted in our responses to the Commission's questions below, we recognize that the cancel/rebilling process can be confusing. We are open to hearing additional suggestions for improving customer understanding.

C. Responses to NDPSC Questions

Below we provide our responses to the 15 questions posed in the Commission's July 2 letter.

Q1: How often do you read the meters?

A1: We read meters for billing purposes approximately once a month (using a typical 28-day billing cycle).

Q2: If you read the meters at least once a month, why has it taken 3 months to fix some of these meters that malfunctioned?

A2: It has taken us time to repair the failed modules primarily due to the volume of failures that occurred in a short period of time and the time required to identify both the failure cause and affected customers.

We first became aware of the failed modules in early February. After investigating customer inquiries, we required Cellnet to provide us a report of unusual usage patterns to identify customers potentially affected by a module failure. Based on that information, we found that we were experiencing a high failure rate in a short period of time. The majority of these failures occurred in December 2007 - January 2008.

By early February 2008, we identified the specific mechanical failure that occurred, determining that it was due to a break within the module that halted the recording of gas through the meter – thus, gas could be consumed without the meter recording that consumption. We directed Cellnet to repair the failing modules; we subsequently confirmed that

Cellnet should cease installing the problem module in any installation on our system. Cellnet undertook this comprehensive replacement effort, and all of the originally identified failed Fargo and Grand Forks area modules investigated and replaced as necessary by March 15.

Due to the large volume of failures occurring in a brief timeframe, the replacement effort was slower than would be expected under more normal conditions. The average replacement time was faster for the customers experiencing failures in February, as we understood the problem by then and were underway with the replacement effort.

The failure rate experienced with these modules is higher than expected and does not meet our performance expectations. We are in negotiations with our vendor on remedies and a plan for correcting this situation with remaining problem modules. We will provide information regarding the outcome of those negotiations once completed.

Despite these problems, we believe that having the automated meter reading system offers benefits to our customers. It also allowed us to more rapidly identify the affected customers than a traditional metering system would provide in the event of a comparable equipment failure. By analyzing the daily data gathered by the AMR system, we could more readily identify the affected customers and begin to take corrective action. Without such information, it would have taken several months to identify the problem, as it could take several cycles to obtain readings of zero consumption, depending on the timing of the failure relative to the monthly, manual meter-reading cycle.

Q3: Does Xcel Energy have a system that alerts someone when hundreds or thousands of meters show a substantial drop in usage?

A3: Yes, we employ several systems to monitor our system performance and alert us to problems. In this case, our process of investigating customer inquiries raised our concern that modules were failing at an abnormally high level. We then requested Cellnet to develop a report to identify unusual usage patterns; that report, received in early February, allowed us to recognize the scope of the problem. Based on that information we undertook further investigation and corrective action. We also now require regular reports from Cellnet that identify potential meter reading issues promptly so they can be field verified and corrected, as appropriate.

In addition, we have a standard reports that flag potential metering or billing issues on a customer-specific basis. These reports help us to identify and correct more common billing issues. One of these reports addresses accounts with three consecutive readings of zero consumption. We set this parameter in light of the seasonal usage on our system that makes readings of zero consumption not uncommon or inaccurate. While this report would have eventually flagged the problem, it was not designed to quickly identify large system failures such as the one experienced this year.

Q4: Why has it taken until June to backbill people for meter problems that occurred in the winter?

A4: Our efforts first focused on identifying the problem and taking corrective action through replacement modules. This approach minimized the period that meter did not record usage and would facilitate accurate billing as quickly as possible.

Once the module was replaced, we could undertake rebilling. With the specific time period identified (the period between module failure and replacement), we could begin the manual process of gathering historic usage to obtain an estimate of the unmetered usage for rebilling purposes, calculate the estimated under-billed amount, and perform the cancel/rebill process. Company billing specialists were able to process, on average, three to four accounts per hour, not including the time spent analyzing unique customer circumstances that called for a customized response. We completed the rebilling process for the initial North Dakota customers affected by the module failure issue on July 11, 2008. Replacement of any new failed modules is ongoing, but – as we recently committed – we have stopped rebilling any additional North Dakota customers. We are monitoring the situation closely, and taking responsive action once any new failures occur.

Q5: Why are some people getting two bills on the same day that show different amounts due?

A5: The first bill shows the cancellation of all prior billings and calculation of the estimated charges for the previously unbilled period; the second bill shows the recalculation of the billings subsequent to the module being

replaced. This two-step approach is necessary for ensuring we retain the estimated usage information in our system.

We recognize that this process can be confusing for customers. To assist understanding of the process, we provided all customers with a letter in advance of rebilling explaining the situation; we have since developed and are currently using a modified letter that we believe communicates this information more effectively. We provide a sample of this letter as Attachment A. We also provide instructions to our call center agents regarding cancel/rebills so that we can effectively respond to customer inquiries.

Q6: Why are there mathematical errors on some of the bills? One bill shows this for a meter reading:

Company reading on 03/03	5650
Company reading on 03/03	5810
Total usage in 0 days ccf	9840

A6: These readings stem from our manual insertion of the estimated unbilled usage into the billing system. In this case, we estimated that usage during the unbilled period was 160 ccfs. We thus first add this amount to the last accurate reading before the module failure (5650) to obtain a new, estimated reading (5810, or 5650 plus 160) for the date of the replacement.

When performing the overall rebilling, we calculated back to the date of the meter failure. When doing so, the billing system sees a beginning reading that is higher than the ending reading and assumes that the ending reading “rolled over” to the next 10,000 units of usage. Thus, in this case the system assumed that the ending reading was 15650 as opposed to 5650, and calculated a false usage of 9840 (15650 – 5810).

While we recognize the confusion this process can for customers, we believe our process calculated the rebillings in an accurate manner.

Q7: Staff has seen at least one bill due in June that said the next meter reading will be in March. Why is this happening?

A7: The first of the two bills issued in the rebilling process will show an erroneous next scheduled meter reading date since our billing system assigns this date based on the “Gas Charges Usage Period” shown on the invoice. Because the first bill was needed to incorporate the estimated usage up to the date of module replacement, it provides a next scheduled read date for March or April, depending on the date of replacement.

The second of the two bills issued in the rebilling process reflects an accurate date for the next meter reading.

Q8: Some of the meters showed some usage, while others showed no usage. Can the meters be tested to see how slow they were? (Our rules for slow meters are slightly different than the rules for meters that are totally dead). How do you know what exact day the meter stopped? Did some meters stop and then start working again?

A8: We have confirmed that the predominant module failure resulted in no usage being recorded; in some cases it may have resulted in the recording of usage on an intermittent basis, but in no case have we found it to cause slow usage or that it began operating normally after the failure. The AMR failure caused the meter index to stop functioning, thus no usage was recorded during the period between module failure and replacement.

When investigating a potential failed module and determining whether rebilling is necessary, we are able to query the exact dates of the failure and replacement through the AMR data repository. While we typically only pull meter reading information monthly for billing purposes, the modules send information to the collection system daily. Through investigation of that information, we can clearly identify the day of the failure, and we know from both Cellnet field records and this information system the date the module was replaced. Thus, we have a clearly defined period during which the customer was not billed for the natural gas consumed, providing us an accurate foundation for the rebilling process.

We expect that some bills could suggest low usage, instead of the actual period of no usage, depending on the customer’s billing cycle.

Customers would not receive a bill indicating zero gas consumption until the first full billing cycle after the module failure – prior to that time, the bill would reflect usage up to the time of the module failure. To

illustrate, if the module failed in the middle of a customer's billing cycle, the first bill after the failure would reflect one-half month of usage, as opposed to zero consumption. We note that this timing issue contributed to the delay in identifying the large-scale nature of the problem in January through our regular reporting and monitoring systems.

As we improved on the speed of our response to indications of potential failed modules, however, customers may have received two consecutive bills with partial consumption and not received any bills with zero consumption. That situation occurred whenever module failure, identification, and replacement all occurred within two consecutive billing cycles.

We do have processes for identifying and testing whether meters are running either too fast or too slow. As indicated above, however, we have confirmed that the module failures did not cause meters to simply read too slowly.

Q9: Are there other issues in addition to the modules malfunctioning? Has Xcel's billing system malfunctioned?

A9: No. We do not believe there are any other issues. We are working to negotiate remedies with our vendor as well as an effective resolution to address this problem going-forward. We are committed to ensuring accurate bills and taking appropriate corrective action with problem modules remaining in the field. We will provide additional information on these plans as they are developed.

We also note that our billing system has not malfunctioned; rather, it produced bills accurately using the information provided (either readings of zero consumption through the automated meter reading system or the manual insertion of estimated usage during the cancel/rebilling process). We recognize that the information provided customers in the rebilling process can be confusing, and will continue to work to improve our communication with customers who receive such bills.

Q10: In addition to basic subtraction errors on the bills, are there other errors on bills?

A10: No, not to our knowledge. Please see our response to Q9 above.

Q11: When will Xcel be done backbilling for these errors?

Q11: We completed the investigation, initial module replacement and associated rebilling process on July 11, 2008 for the North Dakota customer accounts originally identified with potential module failure. We are in negotiation with our vendor regarding appropriate corrective action for the remaining modules installed on our system that may be susceptible to failure. We believe we have the processes in place to promptly identify, replace, and rebill when appropriate new failures that occur until a more comprehensive remedy is implemented.

Q12: Xcel initially stated there were about 4,400 bad modules in North Dakota and that the company was still investigating the root cause. Has that number increased? Is there more information about the cause?

Q12: Our initial assessment indicated that about 5,100 Fargo and Grand Forks area customer accounts had the potential for being affected by a failed AMR module; we subsequently field-verified that approximately 4,000 of these were actual failures. Since then, modules have continued to fail, but at a lower rate, and we are continuing to investigate and respond to these in a timely manner.

At this time, Cellnet has been unable to offer any conclusive findings regarding the root cause of the module failures.

Q13: How much did Xcel spend on the new customer information system and what is North Dakota's share?

A13: Our Customer Resource System (CRS) processes bills for customer accounts across the four Xcel Energy utility operating companies (Northern States Power Company (Minnesota), Northern States Power Company (Wisconsin), Public Service Company, and Southwest Public Service). Our total investment in this system was approximately \$153.5 million.

Our North Dakota jurisdiction is allocated a proportionate share of these costs, which amounted to approximately \$2.8 million for the electric utility and \$1.5 million for the gas utility.

Q14: Where and how are the bills developed and mailed to North Dakota customers?

A14: We contract with a third-party vendor (DST Output) to prepare and print our bills. We send the appropriate meter reading and other data electronically to this vendor, who then processes, prints, and mails our bills to our customers. Bills are sent from Kansas City, Kansas.

Q15: What is Xcel's policy when a customer asks for a reduced estimate because of factors such as being away on vacation, changes in use patterns or home improvements designed to save energy?

A15: We will consider the circumstance and evidence the customer can provide in support of the claim that our estimate is too high. Situations that would cause us to consider adjusting the estimate include:

- The customer can produce acceptable proof that they have modified their natural gas usage relative to the two-year history used in the estimate. An example of such proof would be the submitting of receipts for the recent installation of a new, high-efficiency furnace.
- The customer has both natural gas and electric service and there is also a demonstrable drop in recent electric usage compared to the recent past.
- The customer indicates they are using electricity instead of natural gas to heat their home or business, and their electric consumption has increased correspondingly.

We believe the process used for developing estimated usage is fair and reasonable for the customer, as it relies on the lowest of two year's prior usage for the same period. Because this winter was colder than prior years, we believe customers will not overpay due to the rebilling. However, we will consider appropriate evidence that the estimate is overstated, should the customer provide it.

August 1, 2008

PRIVATE DATA

1/0/1900

1/0/1900

Account : PRIVATE DATA

Premise: PRIVATE DATA

Dear :

We have identified that your gas meter has not been registering your energy usage accurately. We have installed new metering equipment and confirmed that it is now functioning correctly. We apologize for any inconvenience this has caused you.

Since little or no usage was registered on your meter after the reading on 1/19/2008 a correction has been made, estimating gas usage for the period from 12/29/2007 through 2/21/2008. The estimated usage was calculated based on previous consumption at the property and has been used to calculate a corrected bill.

Below is a summary that outlines the information used to estimate usage during the affected period.

Meter Service Address	
New Meter Equipment Installation Date	2/21/2008
New Meter Equipment Type	gas
Number of Days Used for Billing Correction	54
Usage Per Day Last Year	4.73
Usage Per Day Two Years Ago	4.11
Estimated Usage Per Day Utilized for Corrected Billing	4.11
Total Estimated (CCF/KWH) Usage for Corrected Billing	222
Corrected Bill Amount for 12/29/2007 - 2/21/2008	\$ 266.59

You should receive an itemized statement within the next week. Because your bill might reflect charges for multiple months, you have the option to set up a payment arrangement. If you choose to set up a payment arrangement, you will not be charged interest or late fees. **

Please accept our apologies for any inconvenience this has caused you. Feel free to contact our customer service representatives at **1-800-895-4999** if you have any questions or to set up a payment arrangement. Please select "Billing" from the main menu and then follow the prompts.

Sincerely,

Xcel Energy Billing Services

**This time frame is in accordance with rules on file with the appropriate state entity.*

***Per Xcel Energy credit guidelines, interest and late fees are waived so long as payments are received during the prescribed timeframe of the payment program. If payments are not received by the due date, interest and late fees may be charged.*