

## Report on Xcel Energy Automated Meter Reading Module Failures

In 1997, Xcel Energy automated its meter reading process so that usage data from the meters could be relayed through a wireless network to the company's billing system.

As the batteries within the modules mounted on natural gas meters reached their lifetime limit, the company determined it would be more cost effective to fully replace the modules (capable of using longer life batteries) than to exchange the existing batteries. In September 2007, Xcel Energy, through its automated meter reading ("AMR") vendor Cellnet, began the exchange of 43,000 AMR modules on existing natural gas meters in North Dakota. The majority of this work was completed by Jan. 11, 2008.

In late January, the company's billing staff noticed a higher than normal volume of customers' accounts registering no or very low natural gas consumption. Based on these findings, it was determined that, to date, about 4,400 modules in North Dakota would require replacement. The necessary installation field workers were rapidly deployed to investigate and replace the suspect modules. This work was accomplished during the month of February and continued into March. As of today, nearly all of the 4,400 modules have been replaced with an upgraded version of the module.

The cause of the module failures continues to be investigated by the Company, but as of yet, no determination has been made regarding the root cause.

Company representatives are reviewing the affected accounts and will provide estimated billings where applicable. To estimate bills, Xcel Energy uses the customer's lowest average daily use for the corresponding billing cycle for each of the past two years.

Xcel Energy continues to carefully monitor the system for additional meters where this condition may occur. If any further problems are detected, a replacement order is created and dispatched to the field for module replacement. In addition to carefully monitoring the performance of the installed modules, Xcel Energy is conducting tests on the modules to determine what further action may be needed.

These performance issues have not affected automated electric meters.