

Meera Kohler **President & CEO**

Board of Directors Chairman Charlie Curtis, Kiana

Vice Chairman Walter G. Sampson, Noorvik

Phyllis Clough, Old Harbor

Treasurer Helena R. Jones, Ambler

Robert L. Beans Sr., Mountain Village Fred Sagoonick, Shaktoolik Julia Walker, Anvik

Communities Served

Alakanuk Ambler Andreafsky Anvik Brevig Mission Chevak Elim Emmonak Gambell Goodnews Bay Grayling Holy Cross Hooper Bay Huslia Kaltag Kasiqluk Kivalina Koyuk Lower Kalskag Marshall Mekoryuk Minto Mt. Village

Nightmute Nulato Nunapitchuk Old Harbor Pilot Station Pitkas Point Quinhagak Russian Mission St. Mary's St. Michael Savoonga Scammon Bay Selawik Shageluk Shaktoolik Shishmaref Shungnak Stebbins Teller Togiak Toksook Bay Upper Kalskag Wales



Alaska Village Electric Cooperative, Inc. 4831 Eagle Street Anchorage, AK 99503 (907) 561-1818 (800) 478-1818

AK-105

Difficult New Year for Savoonga

At 10:10 p.m. on Sunday, December 26, our dispatch service forwarded a call from the power plant operator in Savoonga. It was below zero, blowing at 45 miles per hour and several homes in the new section of town were out of power. He thought he had a blown fuse in the line, but couldn't replace the fuse because it was blowing too hard.

We immediately made arrangements for one of our linemen to divert to Savoonga from Wales. He arrived in Savoonga around 5 p.m. Monday and started trying to restore power to the community, two-thirds of which was out of power. With continuing terrible weather, it was impossible to determine exactly what was causing outages across town, but we assumed we had sustained damage to the system because of icing and high winds.

As the bad weather continued, two more linemen were dispatched to Savoonga, and efforts continued to isolate the cause of the outages and to restore power. In the meantime, about 30 homes and businesses were out of power for almost a week, resulting in up to 150 people seeking shelter in the school building. Weather conditions prevented air traffic to and from Savoonga, with the problem made worse due to the airport being without power.

As the days passed, we realized we had a unique situation on our hands. Savoonga had seen a spell of warm weather (above freezing) the week before Christmas, which resulted in the sea ice around the north shore of the island either melting or drifting away. A sudden drop in temperature of almost 50 degrees, accompanied by strong winds from the north, resulted in saltwater being picked up and deposited on our lines and, especially, hardware such as insulators and transformers.

The extreme cold resulted in the salt spray freezing into a semi-solid slush—a highly conductive coating. As a result, we had numerous faults occurring throughout the system, causing outages. While it was a relief, finally, to know we had not experienced any equipment failures, as we had surmised for a week or more, it was dismaying to realize how extensive the salt-slush coating was and how many outages it had caused.

Power was restored to everyone in Savoonga by January 3, but a number of homes and businesses suffered damage due to frozen pipes. The state of Alaska sent out a damage assessment team in early January. As a result of the findings, Gov. Sean Parnell declared a state disaster for Savoonga on January 15.

AVEC will retrofit the distribution system in Savoonga with equipment that can withstand the arcing caused by frozen salt-spray in the next few weeks. We also will look at possibly retrofitting systems in other AVEC villages that may be susceptible to similar conditions.

In the meantime, we urge all of our members to be prepared to deal with several days without electricity. We have experienced extreme storms accompanied by ice-free water in recent years, and the results can be extended outages. If we are prepared to deal with such outages, we can emerge with minimal damage, but we must all work together, because united we are stronger!

Until next time,

Mwa Kolili Meera Kohler President and CEO