

Helicopters, implosives to be used in utility work along Hwy. 2 west

By Britta Arendt Grand Rapids Herald-Review | Posted: Saturday, January 14, 2012 12:00 pm

Expect some unusual activity overhead along U.S. Highway 2 west from Grand Rapids starting this week.

Otter Tail Power Company is informing travelers and residents along the highway to Deer River to be aware of new activities on the Bemidji-Grand Rapids 230kv transmission line being constructed by a collaboration of utilities including Minnkota Power Cooperative, Minnesota Power, Xcel Energy, Great River Energy, and project lead Otter Tail Power Company. Depending on the weather, a helicopter and implosive devices will be used to install wire and splice conductor joints.

The new transmission line is part of a statewide effort known as CapX2020 involving several utilities throughout Minnesota that identified need for more transmission capacity to serve population growth.

According to Otter Tail Communication Specialist Cindy Kuismi, high voltage transmission lines hadn't been built in many areas throughout the state for nearly 30 years before CapX2020. The new Bemidji-Grand Rapids line will also serve wind energy that is being developed to the west.

Last August, construction crews started setting structure poles along the route that extends from a substation in Wilton, west of Bemidji through Cass Lake and Bena to the substation at Boswell in Cohasset. The Minnesota Public Utilities Commission approved the route in October of 2010 after a considerable permitting process.

Kuismi explained that there are 215 transmission poles between Cass Lake and Cohasset out of a total of 535 along the entire route. The line crosses 20 miles of federal land within the Chippewa National Forest. It also traverses the Leech Lake Reservation.

Because there are a number of eagle nests within 660 feet of the line, Kuismi said construction will cease in those areas between February and April when eagles are typically nesting. The utilities have also been working with the Minnesota Department of Natural Resources to install bird diverters where the line passes known flight paths.

"Our main concern is to have as little environmental impact as possible," added Kuismi.

Most of the transmission poles are H-frame with a few single poles near Deer River. A portion of the line runs parallel with the recently installed pipeline. Required right-of-way for this project is 125 feet.

The helicopter and implosive work is employed to install the actual wire or conductor between poles.

The helicopter is used to string rope that is followed by conductor through stringing wheels attached to the arm of each pole. During this process, the helicopter hovers close to the poles with a lineman hanging below.

Kuismi said the helicopter will fly somewhat awkwardly sideways.

"It may seem like the helicopter is in trouble but they're very experienced and this is perfectly normal construction activity," Kuismi explained.

People may also be concerned when they hear the implosive detonations, which sound similar to a shotgun depending on proximity. There are 54 places along the route where implosive connectors will be used to seamlessly join conductor ends. The split-second detonation of implosive connectors creates both a flash and a loud boom.

The utilities are working with the DNR and local law enforcement to put signs up along the route notifying travelers of the work.

Project Safety Manager Eric Hamm urges travelers to keep their eyes on the road and don't stop or gawk.

"Please don't allow this work to become a distraction that leads to inattentive driving and an accident," said Hamm. "Keep other travelers in mind and stay focused on driving safely while these construction activities are taking place. Stopping along the road or work area increases the likelihood of vehicle accidents and may distract the workers, making their jobs more dangerous as well."

No road closures are anticipated at this time, according to Project Manager Al Koeckeritz, "If it becomes necessary to temporarily close a road, we will work with the appropriate law enforcement and with the news media to get the word out. Motorists may see signs for reduced speeds in certain areas to allow for construction activities and the movement of some of our larger equipment."

This phase of the construction is expected to be finished this April or May.