

High Voltage



Spinning a New Web

"Structure 394 is down," pilot Jerry Nelson yelled into the handset of his radio shortly after beginning an aerial patrol of the Red Rock-Eau Claire 345 kilovolt transmission line at dawn on July 10.

"How many others are out?" a ground dispatcher asked.

"They're down for as far as I can see," Nelson answered.

Not until several minutes later was Nelson, under contract from Burnett County Flying Service of Siren, able to complete his report to stunned NSP officials. Every one of the 60 massive structures in a 10-mile stretch between Menomonie

and Eau Claire was completely destroyed. Four others were severely damaged and ground crews later discovered two more that needed to be replaced.

"We couldn't believe it," said Pat Grant, superintendent of electric distribution and transmission. "We had reports during the night that as many as three structures were down, but 60 seemed impossible."

As the disbelief turned to sober acceptance, Grant and other NSP officials began planning for the emergency reconstruction of the major transmission line into the Eau Claire area.

The first step was obtaining a Certificate of Need from the Public Service Commission which agreed to waive the formal procedures normally required. Minnesota-company officials with experience in constructing high voltage lines were called in to coordinate the effort. A private contractor, Midland Constructors of Dodge Center, MN, was retained to do the actual work.

By the afternoon of the 16th, Midland crews were already in the Menomonie area to begin clearing road crossings and dismantling the wrecked structures. The original 14-man complement was beefed up to 40 workers in seven crews, each tackling a separate phase of the rebuilding.

As the structures were being dismantled, right-of-way contacts were made with all the property owners. By July 21, pole hauling started and two days later new structures were being framed. Project directors are optimistic that with crews working twelve-hour shifts, seven days a week, the line will be back in service by the self-imposed deadline of Sept. 5.

"There must have been terrific wind pressure but we still aren't sure what happened to it," Grant said of the line which has been dependably providing transmission for more than 14 years. "We have hired a consulting firm to evaluate that question so we can avoid future disruptions."

