

Half million volts coming onstream

Hydro's bringing 'power to the people'



The conductor ends drop from the arms of the tower to the ground where they are secured in grips. Once the next section of line is in place, the ends will be spliced together with splicers,

which resemble metal tubes. The fences around the work area are to protect the men working there and any visitors to the site.

Day by day, week by week, the two ends of the wire which will carry 500,000 volts of electricity from the Bruce generating station on Lake Huron to the Milton transformer station come closer and closer together, in effect symbolizing the end of a seven-year battle to stop the corridor.

The final connection will be made in Halton Hills, and the efforts of homeowners up and down the length of the corridor to have the need for the corridor and the reasons for the choice of the route demonstrated will have come to naught. Ontario Hydro has changed its policies dealing with such corridors since the fight began, but that is of little satisfaction to most of the residents who gaze each day on the towers and wires looming over their homes, farms and businesses.

Ontario Hydro began stringing the line through the last remaining section in the second week of May, and the final connection may be made by the end of June towards the Milton transformer station.

Last Wednesday morning, media photographers were taken on a tour of the sites where the stringing is proceeding. Chris Taylor of Ontario Hydro's community relations department and Don Nelson, general foreman of stations and line construction, explained the procedure and the equipment being used.

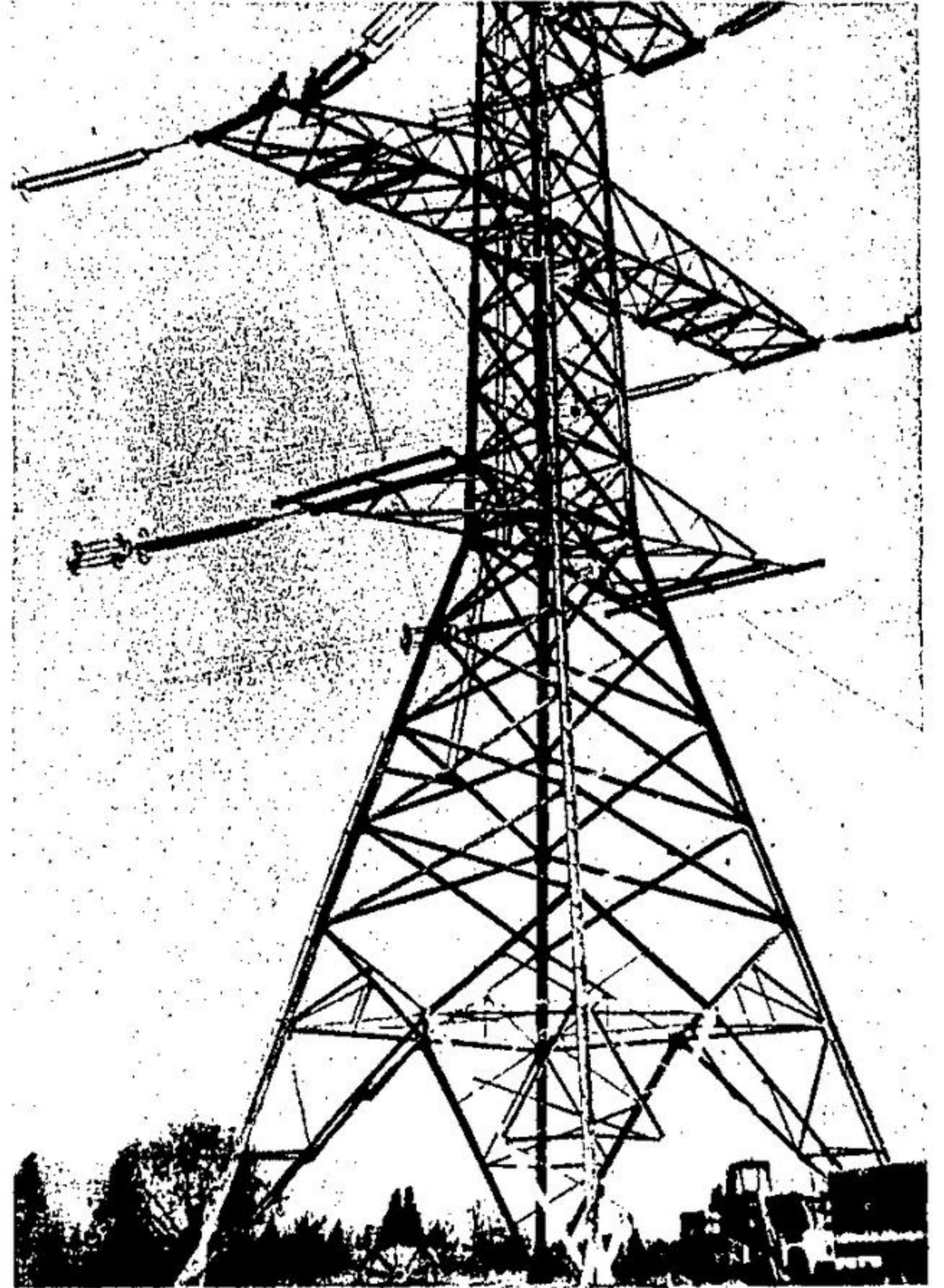
The section under construction was from Highway 24 south to Highway 7. At the Milton end, the tower has been strung from the transformer station to a point just north of Steeles Avenue.

The line is strung in five-mile sections for the most part. Mr. Nelson said. The first stage is for a helicopter to fly around the towers with a rope which is hooked on to the arms of the tower. This rope is then attached to a larger rope, known as a bull line, and the bull line is pulled along by the first rope until it stretches the full length of the section being strung. The first rope is then pulled out.

This process is repeated with a three-quarter inch steel cable and finally with the four conductors. Each time a new cable is pulled through, the other is removed, until the conductors are in place. This must be done for each of the six arms.

Once the wire is in place, a machine called a tensioner is attached to one end of the wire, and the tension of the line is set. The sag of the line is calculated on a number of factors, such as wind and land elevation.

Once the final connection is made, Ontario Hydro will conduct inspections of "every bolt in the tower" and every facet of the construction to ensure it is safe before the power is turned on, Mr. Taylor said.



Those men high on the arms of the tower are volunteers who also receive danger pay for their work on the towers. They are connecting the insulators to the tower arms. Mr. Nelson said no men are asked to work on the towers. All that work is done on a volunteer basis. This is an anchor tower which takes the conductors around a bend in the route. The design of these towers is especially stable.

Herald story and photos by Lori Taylor



These gauges are the controls of the tensioner. Don Nelson, general foreman of stations and lines construction for Ontario Hydro, explained that each of the conductors has to be pulled to the right tension, to maintain the proper height from the ground and to avoid trees and other obstacles.



Don Nelson, Ontario Hydro general foreman of stations and lines construction, shows the splicer which is used to join the two ends of the conductor. This splicer is an innovation of Ontario Hydro's and in tests to ensure the strength of the splice, the conductor split before the splice did.



Lines construction workers connect the insulators to the conductors. The insulator is then attached to the tower, after being hauled up by a pulley and moved into position by a bulldozer.



This machine is a tensioner. It adjusts the tension of the lines, setting the tension to stand up against the elements. The tensioner is set at the end of the newly-installed section of line and literally pulls the miles of conductor to the

right tension. The section being pulled Wednesday was 37,000 feet long, one of the longest sections to be pulled in one go on the whole line, if not on any corridor in Ontario.

Not all the work on the site is directly related to the stringing of the lines. The machines must be maintained in good working order, and two of the men are shown here working on one of the tensioners, which sets the tension of the lines.