

There Will Be Changes Made In Nanticoke and Area

The Nanticoke plant will be the most modern and up-to-date of any development yet in the colossus of power sources. The results of research enables the Commission to build larger units of production than could have been accomplished when the Lakeview plant was built. Each unit there is of 3,000,000 Kilowatts capacity. At Nanticoke each unit will be of 5,000,000 Kilowatts capacity.

Preliminary construction (site preparation) is slated to begin in the early spring of 1968. First concrete pouring is scheduled for the fall of 1968. The powerhouse superstructure will be of steel frame construction with insulated aluminum siding.

Since the site of this development included the site of the Jarvis intake and pumphouse for the Jarvis waterworks system, we were pleased to learn that if this should conflict with Hydro's building arrangements, the Commission will provide a system which is equal to or better than the existing one.

Other things we learned: Requirements for a railway spur line are still under study; The possibility of bringing fuel in from across the lake via a pipeline — still under study; The fly ash from the furnaces will be disposed of on the property in a man-made lake — area not determined; Dust collectors will reclaim 99.5 percent of all air polluting materials; By early 1971 it is expected the work force will reach a peak of about 1500; a staff of 175 to 200 will be required to operate the plant upon completion; local labor will be employed when and where possible.

The location of the electric producing plant at Nanticoke will not, necessarily, be an inducement to industry to locate there. The power will be fed into Hydro's provincial grid transmission circuits (the route not yet determined) and re-directed to the power needs through

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INSPECT HYDRO GENERATING PLANT



Flanked by his council, Walpole Township Reeve Ted Montague (second from left) made a recent inspection tour of Ontario's Lakeview generating station on the western outskirts of Metro Toronto. In the control room—nerve centre of the station, Geoff Gamblin, project engineer, explained the function of the galaxy of lights and switches which make the thermal giant tick. With Reeve Montague are (left to right) Deputy Reeve Hugh Greenfield, Councillor Blake Field and Arnold Huddleston, deputy director of Hydro's property division. In the back row are Art Lampert, chief agent, Hydro property division, Councillor Harold Nie and Councillor Bruce Meehan.

The following is a report of the editor who, last Friday, was given a glimpse of the immensity of Ontario Hydro's responsibility in providing the facility we all, now, take as matter of fact, and the part the new Nanticoke Generating Station will play in contributing to the overall requirements of the system.

THE ANNOUNCEMENT of Ontario Hydro chairman, George E. Gathercole, on August 31, 1966, at the Canadian National Exhibition, when he addressed the Electrical Day luncheon, that plans were in the offing to build a coal-fired thermal-electric station on the shores of Lake Erie, was the start of many rumors, in this area, that Nanticoke might be the site.

On January 12, 1967, Mr. Gathercole confirmed that the site of the Commission's new thermal generating station would be at Nanticoke.

The Plant, which will be built just east of Nanticoke on the Lakeshore, and a total of 770 acres of land is involved in the project. This involves something like seven farms. Negotiations for the purchase of two farms have now been completed. Negotiations continue on the remaining five.

Middle-aged residents may wonder why this plant is being built. Back in 1906, when Ontario Hydro was formed, only water power was considered as a means of producing electricity. The flow of water on the Niagara River and the development of hydraulic plants at Niagara Falls was, in the minds of most people, the only way electricity could be produced. While this means of electrical production still produces most of the electricity used in the Province these resources have been used up and new means must be found to meet the needs of the 2,000,000 customers of Hydro and the anticipated doubling of that need every decade in the future.

It is estimated that thermal electric stations — such as the one to be built at Nanticoke — may supply two-thirds of Ontario Hydro's power requirement as early as 1980.

Ontario Hydro chose coal for its conventional thermal-electric plants because no other fuel could compete in price or availability. Vast quantities are needed. For example, the plant at Nanticoke, fully operational, will require 600 tons of coal an hour, enough to keep a home furnace operating for 100 years. This fuel will be brought into Nanticoke from the Pennsylvania Coal fields by ship. This will require docking facilities extending into the lake for, perhaps, 2,250 feet. These carriers will be self unloading into a stock pile that will require about 30 acres of land space that will accommodate about 2,500,000 tons. From the stockpile it will be fed, by conveyor belt, to the powerhouse where it is pulverized and eventually goes into the furnaces. These furnaces have a capacity of 110 tons of coal an hour.

The Nanticoke Plant will have an initial capacity of 1,000,000 Kilowatts late in 1971. A second unit will increase this capacity to 2,000,000 Kilowatts (greater than the present Hydraulic production of Niagara) by 1972. It is still possible that this production may be doubled at a later date, determined by the circumstances that develop.

When the proposed production of 2,000,000 Kilowatts (in 1972) is accomplished, the station will require 600,000 gallons of lake Erie water every minute for cooling purposes, converting steam into water in the station's condensers.

Last Friday we were given a first hand look at the only similar thermal producing facility in Ontario. It is located at Lakeview, just west of Toronto on the shores of Lake Ontario.

This experience was provided through the courtesy of the Public Relations Department of Ontario Hydro. Mr. Leo Vamplew, in charge of public relations in the Niagara area, brought us into contact with the senior officials of Ontario Hydro, at the Lakeview plant and also at the Richview Control center, the only one in the entire system, when any question we could conceive of was responsibly answered. This Thermal-Electric development at Nanticoke will be, almost, beyond human comprehension.

200 MILLION SEEN AS COST OF HYDRO PLANT AT NANTICOKE

Leo Vamplew, public relations officer with Ontario Hydro in the Niagara Peninsula, told the Jarvis Lions Club on Monday night that the proposed Thermal Hydro Plant in the Nanticoke area would cost \$200,000,000.

This could include the cost of the site, 200 acres, rights of way for a Railway Line to the site, and rights of way for a possible four transmission lines to feeder stations in the Hamilton area.

Mr. Vamplew was cautious by saying that those on a higher level of authority than himself had not yet finalized on the Nanticoke site for the huge Plant. He left no doubt, however, that in his opinion this is where the Plant would be built.

Mr. Vamplew reviewed the changing demands for power in Ontario by stating that in 1906 when Sir Adam Beck brought about the first natural generated power for use, 4000 Kilowatts were generated. We are presently using, in Ontario, 8 million Kilowatts and the projected requirements for 1980 are 20 million Kilowatts.

Ontario is planning to provide this evenly from three sources. One-third will come from natural water power, one-third from thermal power (coal) stations and one-third from nuclear power.

Other thermal plants have been built at Toronto, Windsor, Fort Arthur, Lakeview (Toronto area) and Lambeth. Nanticoke may be the sixth with four units of 500 K.W. each or a total of two million K.W's.

In order to operate such a plant it will be necessary to stockpile two and one-half million tons of coal. (The average daily usage will be 2400 tons. This will require docking facilities extending 1200 feet into Lake Erie.

From the best information he could offer, subject to the approval of higher authority, the site for the project should be cleared by late 1967, and construction should start early in 1968. The first unit (of four) should be producing power in 1971 and the whole project should be completed in 1977. During the years of construction 1500-1700 men would be employed and the normal operational staff, upon completion, would be between 175-200.

He intimated that to meet the demands of the project at least 100 new homes will be required in the area. He said he felt the people who would occupy those homes would be a credit to the community. He also indicated that no imposition on this particular report we found that Ontario Hydro does not anticipate that the influx of 2,000 workers in the construction stages will not impact on the educational or housing facilities of the area. There are still many phases of the development study and these will have to be dealt with as the project progresses.

The Nanticoke thermal generating station is an important development in the history of our area. It is BIG, and what changes this will make to our life remains to be seen.

LAKE ERIE PLANT SITE ONTARIO HYDRO CONFIRMS

Ontario Hydro Chairman Geo. E. Gathercole this week confirmed that the site of the Commission's new thermal generating station will be at Nanticoke near Jarvis on the shore of Lake Erie.

Plans to proceed with the new station were revealed last August by Mr. Gathercole, but engineering surveys had not been completed and its precise location could not be determined at that time.

The plant, which will be built close to the community of Nanticoke, will bear the historic name. Initially, the plant will have a capacity of one million kilowatts from two generating units, but eventually it will be expanded to double this capacity. An indication of its importance is that ultimately the output will approximate that of Ontario Hydro's share of the electric power produced at Niagara Falls.

Before a decision on the site was made, exhaustive surveys were carried out by Hydro's technical forces to determine whether foundation conditions would permit the building of a large thermal-electric plant. It is expected work will begin late in 1967 on site preparation. Access roads, workshops, and permanent construction are slated for the early summer of 1968.

By early 1971, it is expected the cooling will be returned to the lake slightly warmer but in a purer condition than when it was extracted.

Thus while the water returned to the lake will slightly raise the temperature in the immediate vicinity of the plant, it will have no measurable effect on the temperature of the lake itself.

Hydro's policy is to ensure that the air surrounding its coal-fired plants will be as clean as possible.

In line with this, the most modern mechanical and electrical precipitators available will be installed at Nanticoke.

These precipitators will remove 99.5 per cent of the particles, and two giant chimneys will disperse flue gases high into the upper atmosphere.

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NANTICOKE MAY BE SITE OF NEW POWER STATION

CONSTRUCTION of a large coal-burning power station in Haldimand County by Ontario Hydro would have a significant effect on the economy of the district, Hon. James Allan, Ontario Treasurer, said this week.

Mr. Allan, MPP-Haldimand-Norfolk, said he had been informed by Hydro Chairman George E. Gathercole that the peak work force for the project could reach 1,500 by early 1971.

Plans for the new power development were announced this week. A site on Lake Erie near Nanticoke is now being tested and if foundation conditions are suitable the plant will be built there. The station would have a generating capacity of 1,000,000 kilowatts from two units by 1973, but its ultimate size would probably be 2,000,000 kilowatts.

Mr. Allan said the plant's operating staff would total about 110, increasing to nearly 200 when the \$200 million project reaches completion.

"According to the best estimates Hydro has at the moment", Mr. Allan said, "site preparation and the building of access roads and shops should start late in 1967. Construction of the plant itself is expected to get underway by early summer of 1968".