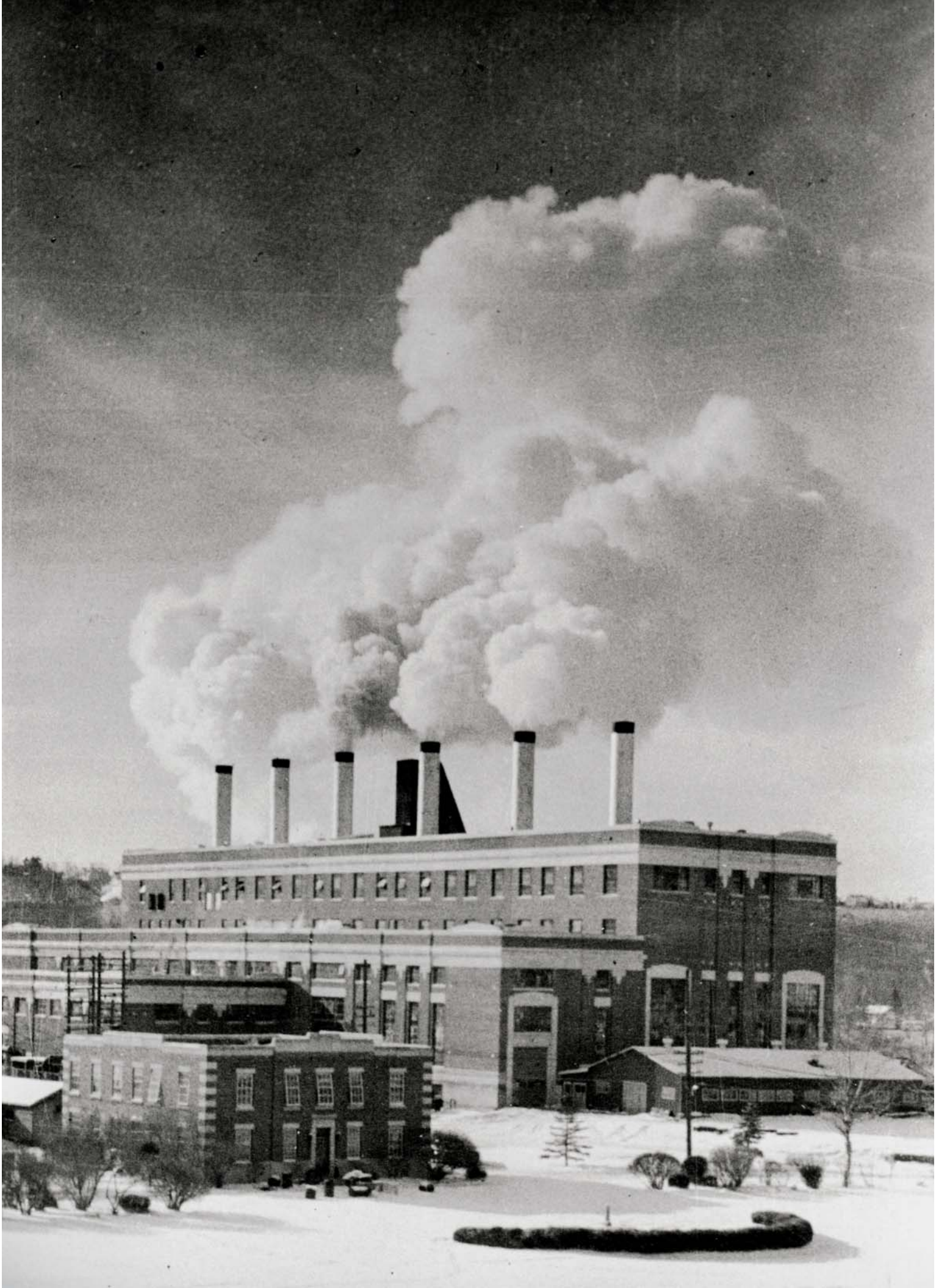


CHAPTER 6

The Rock 'n' Roll Generation

1950 – 1959

Optimism, growth, and faith in technology characterized the 1950s, a decade that greatly contrasted with the bleak war years of the 1940s. People looked to progress as the answer to social ills, and to technology as a means of resolving material challenges. In Edmonton, at least, they were not disappointed: the city basked in oil-fed wealth.

Great strides were made in the production of electricity during the 1950s. Edmonton's power departments became leaders in the industry by installing the very latest in turbines, boilers, underground distribution systems, oil-filled cables, aerial towers, and wires that carried previously unheard of amounts of electricity to businesses and residences.

Rossdale Expansion

The Edmonton Journal reported that Edmonton's power plant remained "one of the greatest steam generating plants in Canada" in 1950, producing record amounts of electricity. This record pointed to the need for expansion. In fact, expansion would be required throughout the decade: the population of Edmonton was growing fast, nearly doubling from 1950 (148,861) to 1959 (260,733).

In 1950, the string of upgrades began when a new Parsons 30,000 kW turbo-generator and a gas and oil-fired boiler were ordered. The City of Edmonton approved a $2,000,000 addition to the Rossdale building to make room for the new equipment. Construction was underway in 1951. The older part of the power plant, located on the north end of the complex and dating from the early teens, was demolished. A new section was built in its place. The construction work was completed in 1953, and by September the

OPPOSITE: *The Rossdale site in the early 1950s.*

Milestones

1950
The interprovincial oil pipeline to Ontario is completed.

The Edmonton Mercurys win the World Hockey Championship.

Jasper Place is incorporated as a village

1951
The Edmonton Bulletin discontinues publication.

1954
CFRN-TV, Edmonton's first television station, starts operation. Edmonton's electric utility works to provide power to new television sets.

The Edmonton Eskimos win their first Grey Cup.

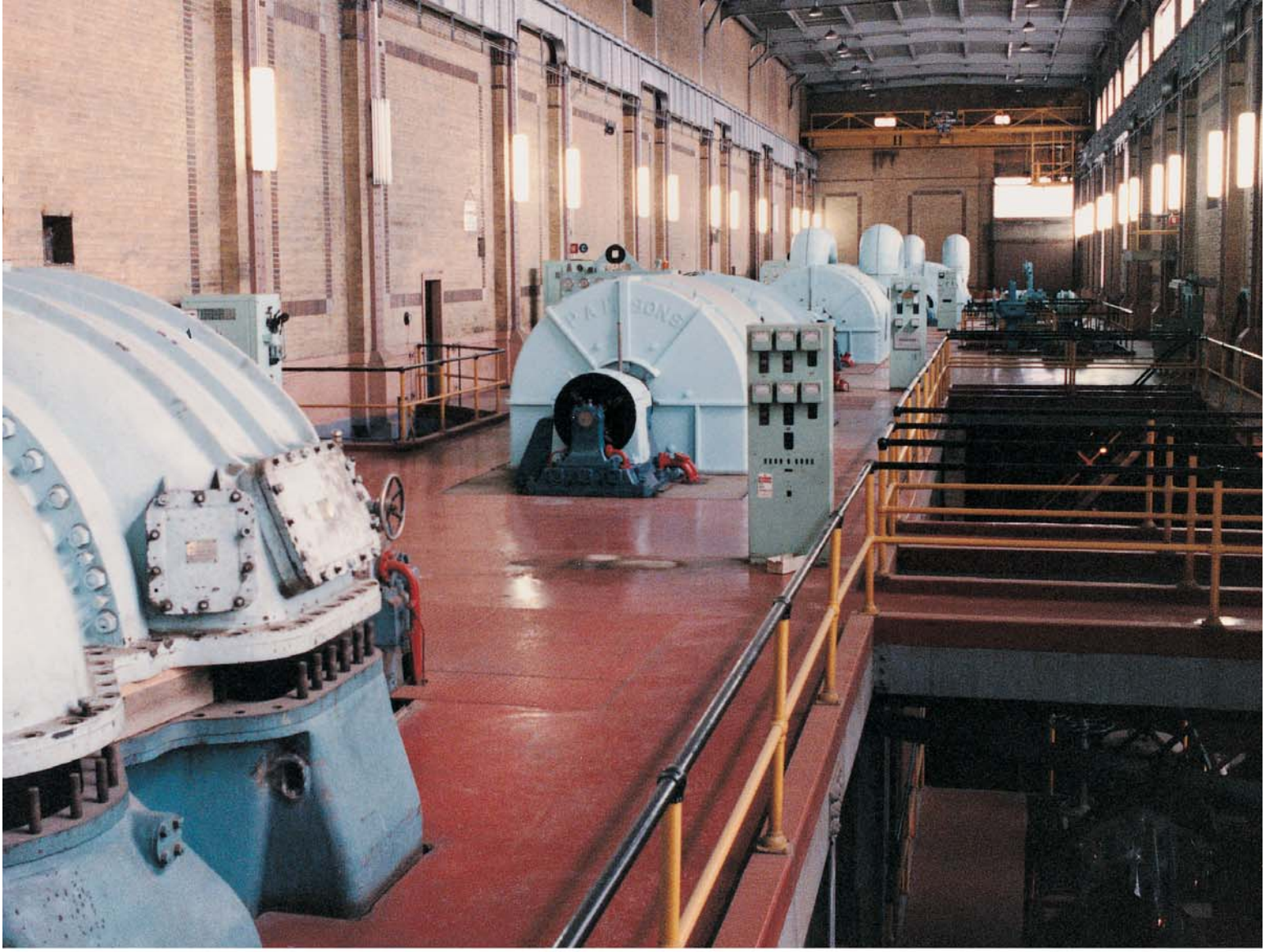
Many Edmontonians replace their kitchen electrical outlets as new, polarized (three-pronged) receptacles become mandatory.

1955
Construction of Edmonton's Jubilee Auditorium begins.

Groat Bridge is opened.

The Province of Alberta turns 50.

1957
Edmonton's new city hall opens.



ABOVE: *Inside the Low Pressure Plant in 1952.*

new turbo-generator (number 4) and boiler number 6 were installed.

This expansion was more complicated than preceding ones: the addition was built in the middle of the existing plant, and operations at both ends had to continue during construction. The replacement of all existing switchgear and control panels further complicated operation. Despite these challenges, the expansion was much needed and much praised. Superintendent Kirkland opened the new addition to the plant along with Mayor Bill Hawrelak and Premier Ernest Manning. Before lighting the fire that set the new boiler into action, Premier Manning described the event as "another milestone in the progress of a great city."

Though ambitious and expensive, this expansion proved to be insufficient even before it was complete. A third 30,000 kW turbine-generator (number 5) was installed in 1955. This was the final installation in what came to be known as the Low Pressure Plant.

Edmonton's growing population also placed an increasing demand on the City's ability to provide water to its citizens. The pump house, long a part of the power plant site, now also required expansion. Construction of a new pumping station on the west side of the plant at the river's edge was undertaken in the mid-1950s, with three 60-inch intake pipes running almost a third of the way into the river. Toward the east end of the site a new water filtration building was also constructed. According to Superintendent Kirkland, all of these changes and additions increased the efficiency of the operation, more than doubling existing water production with no increase in staff.

The 100 MW Milestone

In the mid-1950s, Rossdale's generating capacity exceeded 100 MW. The first day this capacity was utilized remains a milestone in the careers of many employees. George Faulder, a mechanical engineer at the power plant from

ABOVE: *The fleet of vehicles used by City electrical workers in the 1950s.*

1954 to 1966, remembers that day well. "I remember that first time we reached 100 MW around 1955 or 1956," he says. "Everything was just humming."

Electrical engineer Frank Battistella was also part of this event. "That day in late December of '55," he recalls,

> *we were conducting a full test on turbine-generator number 5 and its boiler, number 7, to determine if the equipment met the contract designs for output and efficiency. This was a large undertaking, involving not only plant personnel but also university students, as many readings had to be taken simultaneously. The turbine had an overload capacity, allowing us to raise the output to 35 MW. We had the machine set for a test reading of 33 MW when Mr. Kirkland walked in from the control room and said to us, 'Boys, don't take the unit down until we advise you to because, at this moment, the city load is in excess of 100 MW.'*

Tracking Power Use

In the 1950s, Edmonton used technology to streamline another process that had become difficult to manage due to population growth: billing. This was a giant step for a system that had been evolving very slowly since the utility's birth.

Forty-one employees produced about 39,000 bills each month in the early 1950s. This was a manageable number. But Edmonton was growing; 1,573,151 bills would have to be issued in 1965.

Three Prongs for Safety

"The two-prong receptacle for electric plugs, standard equipment in houses for years, is on its way out as far as kitchens are concerned," reported the *Edmonton Journal* in 1954. The Canadian Electrical Code called for the use of polarized (three pronged) receptacles, which became mandatory in May 1954. These receptacles prevented many types of electrical accidents. Manufacturers began to turn out appliances such as toasters and irons with the three-pronged plug as standard equipment. This meant that people purchasing new appliances needed to update their household wiring.

William I. McFarland

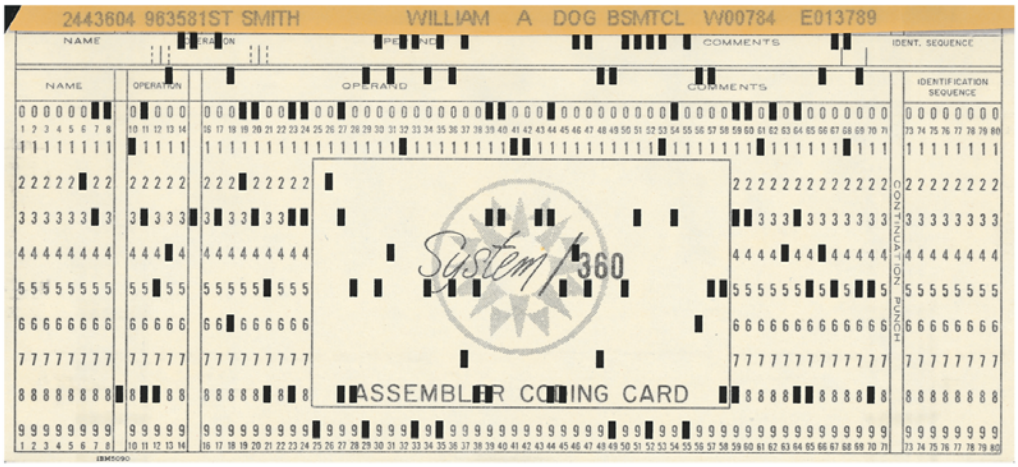
William I. McFarland was superintendent of Rossdale for seven years, from 1945 to 1952.

According to an *Edmonton Journal* account, Mr. McFarland was born in New Brunswick, where he was educated as a teacher. After coming to Alberta, he enrolled at the University of Alberta and graduated in 1929 with an education that qualified him to work in the electrical industry. After working in Ontario for a few years, McFarland returned to Edmonton as an electrical engineer with the Light and Power Department. He worked for the street railway as electrical engineer and assistant superintendent until he was appointed power superintendent in October 1945. He resigned to take a job with a consulting firm in Calgary. William Kirkland succeeded him.

Adapted from The Edmonton Journal, *1952*

The Price of Power

How much did electrical service cost Edmonton families? In 1952, the suburban domestic rate was $0.05 per kWh for the first 40 kWh. From 1936 until some time in 1957, a five-percent discount was given to encourage prompt payment of bills. This discount was eliminated in 1957, which brought in over $1,000,000 in extra revenue. Telephone accounts were used to encourage payment after the discount was phased out; phones were easy to disconnect and reconnect without a service call.



The utility responded by implementing a mechanical punchcard system, powered by a Remington Rand Univac computer, in August 1952.

Each customer account had its own punchcard indexed with a nine-digit number. An address and meter number was recorded on each card, along with information that a meter reader might find helpful (i.e., is there a dog at the residence? Is it friendly? Is the house owner friendly?). Meter readers carried the punchcards with them as they made their rounds.

Working in the 1950s

According to George Faulder, working at the power plant in the 1950s required a range of different skills. "It was more hands on-involvement and [involved] a broader scope of work than it does now," he says.

We had a finger in every pie. When I first started in 1954 they put a lot of trust in a very young and inexperienced engineer. But I never screwed up anything big. Everyone worked together – there was a good camaraderie.

ABOVE: *A Univac punchcard for the account of a William Smith, who owned a dog.*

This camaraderie extended beyond normal working hours. According to Faulder, the social club began during the 1950s. The coffee canteen in the plant's machine shop financed the organization.

The social club held functions every Christmas at the Hotel Macdonald for all of the power plant employees. It was a dress-up affair, a formal gathering. There was a meal, then dancing to a band, and every employee was given a turkey.

The club also organized curling events for employees. This sense of friendship, as well as concern for one another in hard times, characterizes so many of the social and working associations of the utility's employees to this day.

New Poles

In 1953, the Electric Light Department attempted to make an improvement to the poles that held streetlights and transit system lines over city streets. The wooden poles that had long served this purpose lasted only about 30 years. Con-

Experimental Use of Waste Oil as Fuel

In 1955, the City experimented with an alternative fuel for Rossdale's boilers – recycled automotive oil.

At present, the oil, dumped in the City's south side oil pit, creates a disposal problem. This was highlighted recently when the pit caught fire and sent heavy clouds of black smoke over the city ... The City is carrying out studies to see if it can be used in the power plant. Mr. Fisher [from the testing company] said he tested the oil in an Edmonton area plant using a crude oil burner and found it burned with "amazing" ease. He said it has a more intense heat than crude.

Source: The Edmonton Journal, *1955*

Looking for Trouble

Edmonton's Electrical Distribution Department changed its late night trouble service in the early 1950s. This change improved customer service and smoothed out employee relations. The system that had been in place since the late 1920s required that some employees work overtime; those employees received desirable overtime pay. Thus, on January 24th 1951, a 24-hour, seven day a week trouble service was implemented. A dedicated staff inspected streetlights, responded to customer complaints, and did repairs that were difficult to do during the day.

Ed Carson worked on the trouble service shift from 1956 until his retirement in 1985. During this time, the utility experienced expansion, and Ed found himself working with a growing team of employees that he found to be "very dedicated." Ed also experienced adverse weather conditions that sometimes complicated his job.

My most frightening experience happened during a lightning storm in April 1956. I found a line on the side of a transformer burned. I went up the pole and with rubber gloves and bull cutters, I tried to clear it. As I was in the process of cutting, I touched a messenger cable and I was suddenly in the centre of a huge ball of fire. All the wires for two spans were burnt. There was a policeman below me, and two more a span away. They looked up the pole and saw me still alive! They were so scared they could hardly talk. I contacted the power plant and got permission from Bob McClary [former engineering manager] and the assistant superintendent to dump the circuit at the nearby substation so I could clear the de-energized line. I was then able to close the circuit back in and call for a line crew. My rubber gloves were badly shrunk up and the sleeves of my jacket were burned, along with a few eyelashes.

Source: Interview with Ed Carson

crete poles, though more expensive initially, seemed more cost effective in the long term. Not only that, but they were also much neater in appearance. Thus, in December 1953, the completion of this changeover marked the end of wooden streetlighting poles for much of the city.

According to Art Baird, however, the concrete poles were not immune to structural degradation. They could be damaged, for example, when struck by vehicles, especially during severe temperature conditions in Edmonton's winters. The concrete poles were eventually replaced with the familiar metal 'davit' poles that bend gracefully over city roadways to hold lamps in place today.

A new type of lighting was also installed on some city streets. While incandescent lights remained in residential areas, mercury lighting was installed on principal thoroughfares in the downtown area. Mercury lamps provided twice the illumination of incandescent ones, but left people with pallid complexions. This, too, was a concern, and by the end of 1959, 12,407 "colour improved," high lumen, low maintenance mercury lamps had been installed throughout the city.

From Coal to Gas

The rising price of coal and the sudden abundance of oil and gas obliged the City of Edmonton to again consider switching the fuel of its coal-burning boilers to gas. The power plant was under continual pressure to reduce costs and air emissions.

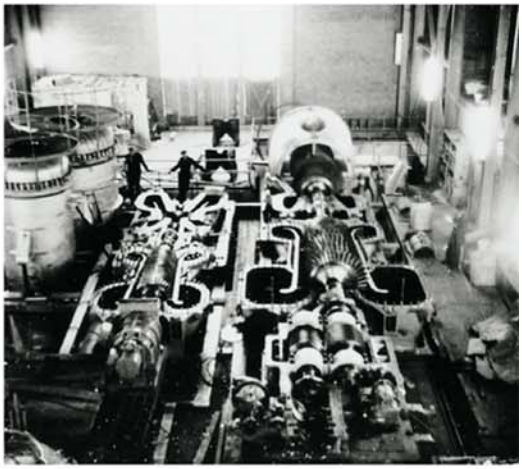
All of the boilers at the Rossdale Plant burned natural gas by the end of 1955. It was reported that the plant was using about 7 billion cubic feet of natural gas yearly by 1958, at a cost of more than $1,000,000 per year. Most of the gas came from Viking, and about 15 percent of the volume sales of the City's fuel gas supplier went to the Rossdale Plant to fire the boilers. The coal companies that once sustained the plant either closed their doors or found other contracts.

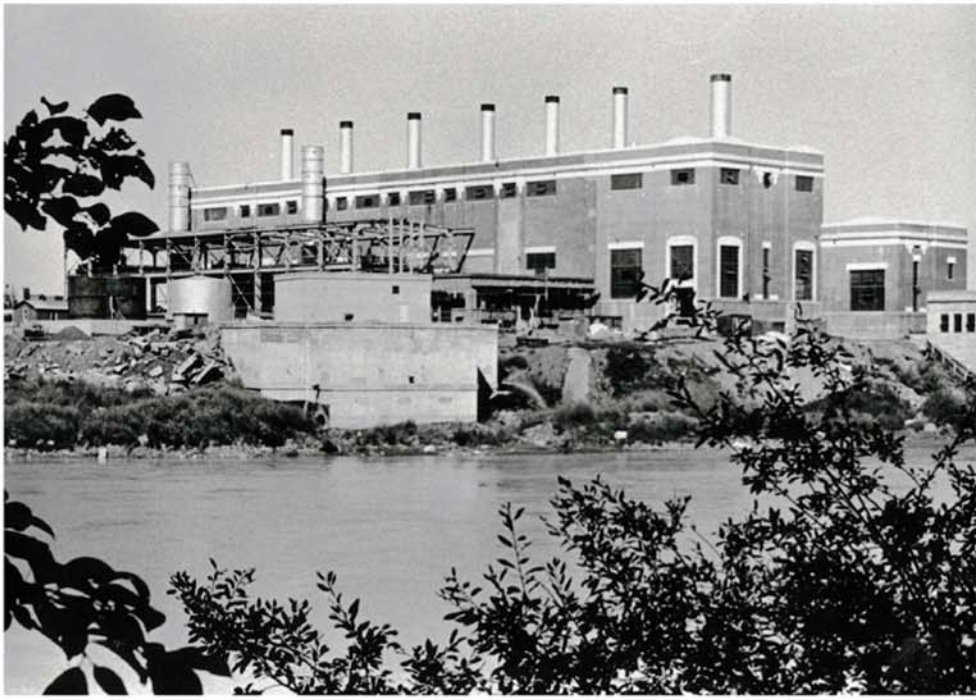
New Gas Turbines

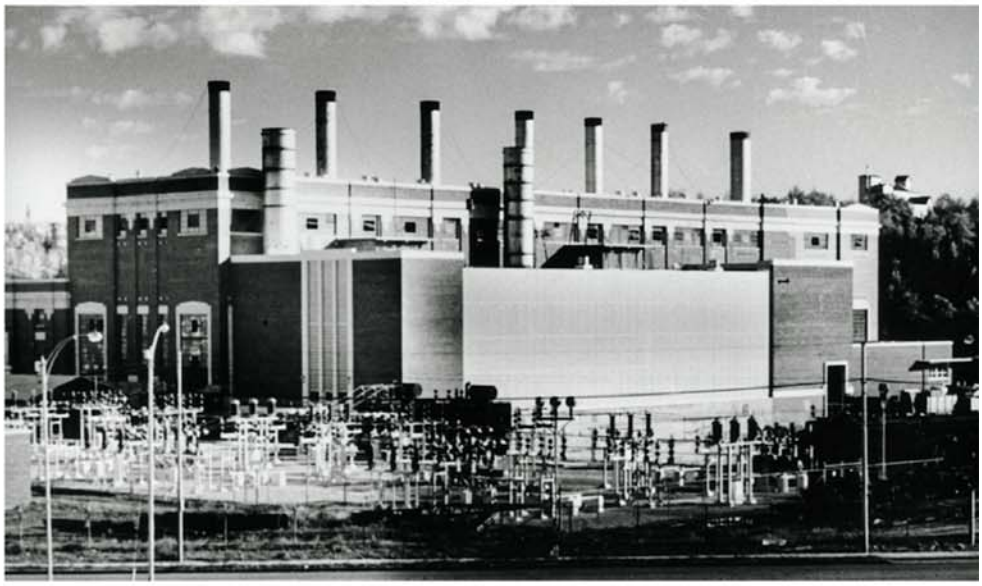
It was forecast that yet another expansion of Rossdale's capacity would be needed by the late 1950s. It was then decided to add this capacity using gas turbine generators. These machines used jet engine technology to produce power. A new building adjoining the west side of the Low Pressure Plant was constructed to house two 30 MW gas turbine generators, at that time the largest gas turbines in the world. Units 6 and 7 were commissioned in 1958 and 1959, respectively. The two gas turbines cost well over $2,875,000, and the building built to enclose them — the Gas Turbine House — cost $525,000. This expansion brought the utility's production capacity to 180 MW.

A short distance north of the Gas Turbine House, a new 72,000-V switchyard was also constructed. The switchyard tied all of the power output of the plant together, then sent it to transformers and substations throughout the city where it fanned out to every light bulb and electric socket in homes and industries.

A new control room was also necessary. This was built at the south end of the Gas Turbine House, and included $250,000 in panels, switches, instruments, and wires. It would not be long before this control room would also







TOP LEFT: *Construction of the new Gas Turbine House.*

TOP RIGHT: *The new gas turbines were assembled on site.*

MIDDLE: *The Gas Turbine House was built on the west side of the Rossdale plant.*

BOTTOM: *The 72 kV switchyard is visible in the foreground of this photograph; the completed Gas Turbine House is directly behind the switchyard.*

contain boiler controls and electrical panels to serve the High Pressure Plant in the sixties.

Cinders or Nitrogen Oxides?

Soot and cinders, byproducts of coal burning, had dirtied everything from fresh laundry to ice rinks in Rossdale's vicinity for decades. City Council had been receiving letters of complaint for years. It was hoped that the complete conversion to gas in 1955 would alleviate this problem and bring an end to citizen's concerns.

Switching to gas did eliminate soot and fly ash from the boiler stacks. However, Rossdale's new gas turbines introduced a different type of pollution to city skies. Oxides of nitrogen (NOx), a byproduct of burning gas, now gave the air over Rossdale Power Plant a yellowish tinge. This haze was characteristic of gas turbines at the time.

The provincial health department moved to investigate the yellow smoke coming out of the Rossdale gas turbine stacks. Officials continued to insist that the smoke was harmless and non-sulphurous; they adjusted the temperature at which the gas turbines operated for further reductions. Further testing was required. This issue would remain unresolved until future decades.

Distribution and Transmission

While Frank Sinatra crooned and Elvis was rocking his way to the top with *Blue Suede Shoes,* members of the Distribution Department put on steel-toed boots and hard hats. It was time to find better ways to deliver electricity to the hotels and industrial plants that were popping up all over Edmonton. Demand was increasing, and improved technology seemed the only way to address the problem.

BELOW: *A redesigned distribution system allowed linemen to work on energized lines. Note the insulation wrapped around the conductive surfaces in this photo.*

The Birdie Solution

The power plant's new gas turbines produced more than yellow-tinged air. Soon after the turbines were started up, a noise problem became evident. The high-pitched whine was both annoying and penetrating. We began researching to come up with a solution.

One day I received a call from Commissioner Menzies; he said that he had another complaint about the noise from the Rossdale Plant. Although he knew we were working on the problem, he wanted immediate action.

Art Baird, George Knowles, George Faulder and I rushed over to the complainant's address. We found a tiny house perched on the riverbank with a clear view of the power plant. The inhabitant, an elderly woman, invited us in to discuss the noise problem.

We were struck by the tomblike silence in the house. There was no radio, no ticking clock, no furnace fan, none of the usual sources of noise.

We tried to assuage the woman's concerns by telling her we were working on the problem. She was unimpressed; it was apparent that we had to do something to alleviate the situation.

As we were discussing the problem on our way back to the plant, someone said, "She needs something to break the silence." Out of this came an idea. We purchased a canary and delivered it to the house. The lady was impressed; we heard nothing more from her.

We subsequently addressed the noise problem by changing the air intake at Rossdale, which reduced the noise level considerably.

Adapted from text prepared by Frank Battistella

Substations Built in the 1950s

Year	*Station Number*	*Location*
1950	450	119 ST. & 114 AVE.
	650	135 ST. & 103 AVE.
1955	540	86 ST. & 95 AVE.
1956	520	115 ST. & 76 AVE.
1957	550	80 ST. & ARGYLL RD.
	250	97 ST. & 118 AVE.
1958	NAMAO	97 ST. & 127 AVE.
	STRATHCONA	99 ST. & 51 AVE.
1959	350	135 ST. & 115 AVE.

Numbered substations operated at 15 kV; named substations (such as Namao, right*), operated at 72 kV.*

By 1954, distribution voltage was increased to 4,160 V, up from 2,300 V. Substations featuring modern failsafes and designed for high voltages were built.

The utility's aerial distribution system was rebuilt starting in 1957. The new system included larger space clearances between electrified wires and non-energized components. This allowed "Rubber Glove Hand Contact" maintenance on energized conductors; previously, lines had to be de-energized when maintenance was done, which interrupted service. The new system allowed linemen to do repairs without interrupting service. The Alberta Government Electrical Protection Branch approved this practice in 1958.

In 1958, technological changes demanded higher voltage in the primary distribution line. This voltage was upgraded to 13,800 V after the installation of Namao Substation on 127 Avenue in north Edmonton. The Namao, Hardisty, Strathcona, and Woodcroft substations were designed to operate at 60/80 MVA, and were supplied by a transmission system operating at 72 kV. A substantial innovation was the use of oil-filled pipe-type (OFPT) cable, which operated at 72 kV and 60/80 MVA. OFPT cable carried current from Rossdale's 72 kV switchyard to Namao.

While the Namao substation was being designed and built, it was decided to operate an aerial transmission ring around the periphery of Edmonton to act as a standby for the substations.

Another First

Another distribution "first" followed quickly on the heels of the OFPT cable to Namao. An 850-foot OFPT cable was installed under the North Saskatchewan River. Encased in a concrete-covered pipe, the cable was installed the same way as the cable to Namao had been *(see Installation, page 57)*, except it was buried in the riverbed rather than under a street. According to a November 2, 1957 *Edmonton Journal* report, the

> *cross-river electrical power pipeline is the first to be built in western Canada, and is the longest in Canada. A considerably shorter span is strung across the Don River at Toronto.*

Back to Coal?

The use of coal again became an option as the decade came to a close. Gas prices had begun to rise, the demand for power continued to increase, and the City again needed to explore expansion. In 1958, building a new power plant on an altogether new site was considered. Calgary Power had built a plant at Wabamun, where coal was close at hand. It was unquestionably more cost-effective to build a plant near a coal mine than to transport fuel for long distances.

Genesee, not far from Wabamun, had

Installation of Oil-Filled Pipe-Type Cable

The Light and Power Department, under the leadership of Superintendent Monaghan, used innovative new technology to build a transmission system capable of handling increased loads. One of the most significant new developments used in this new system was OFPT cable, which could carry previously unheard of amounts of electricity.

In April 1957, work was begun to install four miles of underground OFPT cable from Rossdale to the new Namao substation. An *Edmonton Journal* report of April 22, 1957 gives the details:

[The] first phase of the project will be to lay the cable along 104 St. underneath the east-west tracks near 105th Ave. Twelve-inch pipe will be drilled underneath the tracks from both sides, meeting in the middle. The 5 9/16 - inch cable will then be placed through the casing pipe.

C.Z. Monaghan ... said that power should be flowing through the 72,000-volt line by next November. It will be capable of delivering 60,000 kilowatt-hours of power to the substation. The new system will tie in with the gas turbines being installed at the power plant. The cable to be laid this summer is the first step in a new distribution system for the city to provide about 30 miles of the new type cable laid at a cost of $2,500,000.

The cable is insulated with oil under 200 pounds pressure per square inch, the first time this type of cable has been used in Canada. Ultimately, there will be six substations, on the city's perimeter, similar to the Namao one, supplied with power by the new lines.

The present system, at 13,800 volts, becomes uneconomical to operate over a long distance because of the unwieldy size of the cable in relation to the power carried, and the relatively high proportion of power loss.

The OFPT cable installation process was fascinating. Lengths of 5 1/2-inch diameter pipe were laid down along 102 Street. A thin line was blown through each pipe; this line was used to pull a small cable through. This in turn was used to pull three high-tension cables through the pipe. The 2,000-foot pipe sections had to be spliced together and sealed. Dry nitrogen was used to keep out air and moisture.

Public curiosity was piqued when transparent polyethylene tents began popping up along streets heading into north Edmonton. Set over manholes, these tents provided shelter from rain but permitted light to enter the manhole in which teams of expert line splicers were hard at work installing the OFPT cable. The art of line splicing was acquired through years of experience and training. Although it might have looked like a simple matter of wrapping tape around wire, it required considerable skill in obtaining the right tension thickness and number of wraps.

Once the splicing job was complete, high-grade oil was put through a purifying machine to remove moisture and gas, then pumped into the pipes. The oil used was very thin and manufactured especially for electrical insulation. This meant that more volts could be passed through the lines without risk of fire. Despite its ambitious scale, the cable installation project was completed two weeks ahead of schedule.

Sources: The Edmonton Journal, *1956, 1957*

attracted the attention of City officials and the power plant superintendent. The Genesee site had rich deposits of economical and relatively clean-burning coal. Cooling water would be available from the North Saskatchewan River, and the site's proximity to Edmonton would keep the cost of transmission low relative to other mine-mouth sites. Consequently, coal leases were purchased in anticipation of the day when vast coal reserves would be needed to meet the City's demand for electrical power. Those days were fast approaching.

A New Garage in 1959

The number of repairs that the Electric Light and Power Department needed to make to transformers, poles, relays, switches, circuit breakers, and other equipment grew along with the size of the utility's infrastructure. A garage and warehouse were needed to service such equipment. By 1955, the existing facilities were small and outdated; a new building was clearly needed. However, Superintendent Monaghan had to

Wes Knutson

Wes Knutson was chief engineer at Rossdale during the 1950s and 1960s. Wes was a most competent engineer, not only in the area of plant operations, but also in dealing with major plant expansions. The plant mechanical crew not only looked after maintenance, but also carried out turbine installation. Wes was in charge of all this work.

Knutson served on the British cruiser HMS *Sheffield* during World War II, and was in on that vessel's engagement of the *Bismarck*. Wes had a cutting wit, and never took himself too seriously. He was a very warm and colourful person. As a young mechanical engineer right out of school, I had a lot to learn from Wes.

The following incident tells a lot about Wes. It was 1955. We had just completed the installation of a large diameter cooling water piping system that ran east from a new pumphouse. The day came when number 2 pumphouse was to be started for the first time. Things didn't go all that well ... someone reported that water was coming out of the ground between number 1 pumphouse and the turbine room. All attention turned to the spot, and sure enough, a leak of some nature was evident. We shut down the pump and arranged for a backhoe to dig the area.

After the pipe was exposed on top, [I] went [and] looked for the leak source. Be darned if it wasn't from a half-inch coupling that had been welded to the pipe to attach a pressure gauge used in testing the line. Someone had forgotten to place a plug in the coupling. While I was down in the hole, Wes was standing on the stairway platform at the end of the turbine room awaiting the verdict. [When I called my report to him,] he retorted back with his fist held high, "Faulder, your father wasted his money on your education!"

That incident was one of a number of memorable events that punctuated our days with Wes. Everyone held him in high esteem, and was always anticipating his colourful reactions in the course of conversation.

Told by George Faulder

LEFT: *Until the late 1950s, Edmonton's electrical utility used a small shed attached to the Rossdale plant for maintenance. This was replaced with a modern facility in 1959.*

present many arguments to the mayor and City commissioners to get a new garage.

According to a letter Superintendent Monaghan wrote to the mayor in 1955, the old garage had been made hopelessly inadequate by the utility's expanding infrastructure. The increase in the number of transformers and streetlamps illustrates this expansion. In 1945, there were 1,580 distribution transformers in service, which meant that approximately 100 transformers needed overhauling and repair every year. By 1950, the number of transformers in service had increased to 2,264, and by 1955 that number had climbed to 3,673. Of these, 800 required repair and testing every

Meet the Mayor

Good afternoon, fellow citizens! Last Sunday, on my first broadcast of the new year, I reviewed briefly the outstanding events of 1954. It was an impressive year for the City of Edmonton in all respects – in sports, in industrial and commercial growth, in construction, and particularly in improvements and expansion of municipal services to fill the growing needs of our people.

As many of you know, Edmonton is the only city in Canada of comparable size where so many public utilities are municipally owned and operated.

This means that services can be provided at little more than cost, only allowing for operating expenses, taxes, and sinking funds for expansion and improvement.

Furthermore, results of profitable operations are used to provide more and better services and to reduce the burden of taxation.

Since these utilities are owned by the citizens, there is greater interest in their operation, resulting in better service for everyone.

Because our population continues to increase at a faster rate than any other city in the Dominion, greater demands are being made on the city's services than ever before. New residential and industrial districts are being developed which must be provided with public services.

...

Basic necessities of any modern city are power to turn the wheels of industry ... electricity to light homes and streets ... water for domestic and industrial use and for fire protection.

In Edmonton, these services originate in the municipally-owned and operated power plant and water treatment station located at the north end of the 105th Street Bridge.

...

[In 1912,] the total value of the plant was just over one and a quarter million dollars, and the cost to the city of generating one kilowatt of power was about three cents.

Today, because of the use of less expensive fuel, automatic machinery and bigger units, this figure had been reduced to less than half a cent.

...

Today, capital investment in the plant is estimated at $6,700,000 and further extensive additions are even now underway or on the planning board.

Since the end of the war annual power sales have doubled every seven years, with recent indications that this rate is accelerating all the time.

...

Because revenue from operations is increasing by 12 – 15 per cent annually, while operation costs are decreasing, the department is able to put aside appreciable sums each year for reserves out of which it will finance its own expansions as it has done in the past.

...

As part of the celebrations marking the city of Edmonton's golden anniversary last October, many of our municipal departments were opened to the public. In all cases this proved very successful and particularly at the power plant where the superintendent, William Kirkland, reports [that] more than 10,000 citizens toured the premises as well as the adjoining water treatment station.

Members of the staff were stationed throughout the plant to answer questions and offer information of interest. Pamphlets explaining operations were also prepared and distributed.

It was gratifying to note the interest expressed by our citizens who visited the plant.

From a CFRN radio broadcast made by William Hawrelak, dated January 9, 1955

year. Similarly, 2,621 streetlights were operated and maintained in 1945. By 1955, there were 7,500 streetlights to look after. Maintenance of the streetlights alone required both workspace and storage facilities. Spare parts for all of this work had to be on hand and yet, at the time, equipment and supplies were stored at various locations around the city.

Monaghan got his wish. The Electric Light and Power Department moved into new facilities in early 1959. The new location, located at 108 Street and 121 Avenue, included a warehouse, shop, storage, and a garage.

The 1950s marked the beginning of renewed need for technological advancement and innovations within Edmonton's electric utility. New ideas, technologies, and demand increases pressured the utility to respond in ways that were progressive and met customer needs. In an almost breathless flurry of

Dangerous Work

Edmonton's electrical utility continued to be reliable throughout the 1950s, in part because it effectively responded to population growth and technological change. The design of the distribution system ensured that faults could be compensated for; thus, service interruptions were rare and brief.

Occasionally, though, Mother Nature reminded the utility that she was really in charge. One weekend in early August 1958, a huge storm damaged power lines, toppled about 25 poles, and damaged at least two transformers. So many lines had been downed by falling trees and branches that customers were warned to watch for energized wires in their yards. The utility responded to over 2,500 reports of power disruption after the storm. Some households were without power for 24 hours.

The weather also took its toll on the utility's human assets. Lineman Waldemar (Goldie) Lehmann, aged 28, was toppled from a pole during the storm. He had climbed one pole adjacent to another that had fallen on a house. As he was disconnecting the damaged lines, the broken pole shifted, knocking over the one Lehmann was on. He received a broken arm and two broken ribs. He chuckles when he tells the story today, but he wasn't laughing when it happened!

Most on-the-job accidents in the 1950s were not fatal; however, a few took the lives of employees of both the power plant and the Light and Power Department. For example, a City Safety Department report reveals that between January 1956 and September 1958, three employees were killed on the job, a reminder that the utility's employees are always exposed to danger.

Source: Interviews and The Edmonton Journal, *1958*

expansion and addition of equipment, Rossdale Power Plant's peak capacity grew from 60 MW in 1950 to 180 MW in 1959. This would not be the last dramatic increase in capacity; future decades would see the utility grow even faster.

LEFT: *Meter maintenance at the North Service Centre.*