NORTHERN LIGHTS

VOL. 5 1948 TO 1985 No. 1

A Staff Publication of Northern Canada Power Commission
With Head Office in Edmonton, Alberta
Published January, March, May, July, September & November

NORTHERN CANADA POWER COMMISSION

1948 -- 1985

TALES FROM THE PAST

DOMINION OF CANADA

NORTHWEST TERRITORIES POWER COMMISSION

ANNUAL REPORT
OF THE
NORTHWEST TERRITORIES POWER COMMISSION
FOR THE FISCAL YEAR ENDED
MARCH 31, 1949

OTTAWA, CANADA

J.M. Wardle, Chairman, Northwest Territories Power Commission,
turning switch to formally initiate operation of
Snare Rapids Power Plant & transmission Line to Yellowknife

Others in picture: at left, Fred Fraser (District Administrator, NWT, Fort Smith, A.K. Ken Muir, Manager Giant Yellowknife Gold Mine; at right, A.F. Totzke, Chairman, Yellowknife Board of Trustees. -- October 4, 1948.

How it All Began

Early History of the Commission

The origin of the Commission, originally known as the Northwest Territories Power Commission, was directly associated with the development of the Giant Yellowknife Gold Mine in Yellowknife. In late 1945 or early 1946, officials of Ventures Limited, a mining development company headquartered in Toronto were in the process of developing the Giant Mine. They applied to the federal Department of Mines and Resources for a licence under the Dominion Water Power Act to develop a hydro power site on the Snare River at a point approximately 70 miles northwest of Yellowknife. At that time there was considerable mining exploration activity in the Yellowknife area and four gold mines had been developed, namely the Con Mine at Yellowknife, Negus, adjacent to the Con Mine, Ptarmigan and Thompson-Lunmark; the latter two east of Yellowknife.

Cominco had constructed the Bluefish hydro plant on the Yellowknife River some 25 miles northeast of Yellowknife to supply the Con Mine; this plant was also supplying the Negus Mine and the Thompson-Lunmark and Ptarmigan properties. In addition, the water licence for the Bluefish plant stipulated that "100 shaft horsepower" (approximately 75 kilowatts) must be reserved for supply to the Yellowknife townsite.

In view of the optimism of the times regarding the future of the mining industry in the Yellowknife area, federal officials felt it would be inadvisable for another hydro power site to be developed in the Yellowknife area by a mining company for its own use. Consequently, arrangements were made with Ventures Limited whereby the federal government undertook construction of a hydro plant on the Snare River and the mining company would build the transmission line from the hydro plant to the Giant Yellowknife mine adjacent to Yellowknife.

Responsibility for construction of the hydro plant was assigned to the Special Projects Branch of the Department of Mines and Resources with technical administration being handled by the director of the Water Resources Branch of that department. An engineering consultant, (Montreal Engineering Company Limited) was engaged to review the mining company's plans for the hydro project. This led to the selection of a more favourable site, now known as Snare Rapids, of somewhat higher capacity some 20 miles further upstream on the Snare River near Big Spruce Lake.

An attractive feature of the selected site was the existence of a small island in the middle of the river which facilitated construction. Hence the design concept was to drive an intake tunnel through the island, locate the powerhouse at the downstream end of the tunnel and construct the earth fill dam across the river incorporating the island into the dam. The firm of Northern Construction and J.W. Steward Limited of Vancouver was engaged as the general contractor and arrangements were made with the giant Yellowknife Mine organization to excavate the tunnel through the island, over the winter of 1946/47.

Arrangements were made to procure a substantial quantity of heavy construction equipment that had been used in construction of the Canol Pipeline from Norman Wells to Whitehorse during World War II years. This equipment, comprising caterpiller tractors, power shovels, concrete mixers, pumps, etc. was in storage at Norman Wells.

The general contractor's first activity was to select and assemble the equipment items that would be required for construction of the hydro plant and move it from Norman Wells to Snare river. This was accomplished by water transport from Norman Wells to Hay River thence by winter tractor train across Great Slave Lake and on to Snare River (Snare Rapids).

A construction camp was built at the Snare power site comprising 3 or 4 bunkhouses, a kitchen and mess building, and office quarters -- the concept of portable prefabricated trailers now used for construction sites had not yet come into being.

Construction of the power plant and associated facilities initially comprising a 10 bedroom staff house and 2 separate dwellings, the main dam, powerhouse and a spillway structure remote from the dam site (Drill Lake) and small holding dams on the periphery of the Big Spruce Lake reservoir proceeded during the summers of 1947 and 1948 and was essentially completed by mid-September of 1948. In the meantime the mining company had contracted with the Gowganda Timber Co. from northern Ontario to build the transmission line and terminal sub-station at Yellowknife in accordance with design by the firm of Sutcliffe and Company of Sudbury. The transmission line and terminal station were taken over by the Commission from the mining company, at the audited cost of construction, concurrently with commissioning the hydro plant.

While construction of the plant was proceeding consideration was given by federal government officials in Ottawa as to arrangements for operation of the hydro plants. It was decided to establish an operating utility in the form of a Federal Crown Corporation patterned along the lines of the various provincial electrical utilities. Thus the Northwest Territories Power Commission was created by Act of Parliament and came into being on September 1, 1948.

Originally this was a one man Commission, the Director of the Special Projects Branch of Mines & Resources, Mr. J.M. Wardle having been named Chairman. Initially the Act provided for a maximum membership of 3 members; 2 additional members, one from the Department of Finance, the late George Lowe and the late Norman Marr of the Water Resources Branch became members in 1952. The Commission's name was changed to Northern Canada Power Commission in 1956.

The Snare River Plant was commissioned by Mr. Wardle on October 4, 1948 followed by a buffet luncheon served on plywood "trays" made for the occasion by the Snare plant carpenter. The luncheon was held in the new staff house at Snare River attended by some 25 or 30 mining executives, government officials and businessmen from Yellowknife.

During the summer of 1948 arrangements were made with Cominco Ltd. to interconnect the Snare River hydro supply with Cominco's Bluefish Hydro system. This was accomplished by construction of a short transmission line extending from the Snare River transmission line terminal station near the Giant Mine, to the Bluefish Hydro to Yellowknife transmission line. The interconnection was put into service in June of 1949. Subsequently, the Commission contracted with Yellowknife Power Co. to supply the entire power requirement of the City of Yellowknife over and above the 75 KW being supplied from the Bluefish plant.

In the early 1950's transmission lines were built to supply the new Rayrock uranium mine about 20 miles to the west of Snare Rapids, and the Discovery Mine some 42 miles northeast of the Bluefish hydro plant. These transmission lines were built by the mining companies. Supply to Discovery involved an agreement between the Commission and Cominco to "wheel" power from the point of interconnection of the Snare and Bluefish systems over the Cominco transmission line to the Discovery transmission line connection at the Bluefish hydro plant.

Operation of the Snare hydro plant and transmission facility was relatively trouble free, but telephone communication was a continuing problem, especially in the winter months due to repeated failure of the telephone line between Yellowknife and Snare Rapids which was carried on the power line poles. This led to installation of a power line carrier telephone system between the Yellowknife terminal station and Snare Rapids in 1954. This installation was not without incident in that the barge transporting the new power line carrier equipment from Hay River to Yellowknife was sunk during a fall storm on Great Slave Lake with complete loss of the equipment. Fortunately the supplier (Brown Boveri Ltd. of Switzerland) was able to replace the shipment by diverting a similar complement of equipment destined for a tropical country. Thus another season of communication problems and telephone line maintenance was averted - and the supplier (Brown Boveri) derived considerable satisfaction and amusement from the fact that their first installation in Canada and in the "frozen north" was originally specially built for a tropical climate!

Maintenance of the telephone link prior to the advent of the power line carrier installation, led to a human tragedy. In November (in the early fifties) the Commission's lineman, Frank Thorpe, was patrolling the power line in search of telephone line trouble (generally a broken conductor) in a two seater aircraft piloted by Max Ward (Max was then flying local charters out of his Yellowknife base - prior to creation of the current Wardair Ltd. operation). On nearing Yellowknife, just a short distance from the terminal station, apparent fuel failure caused a forced landing on too small a lake. Max was not injured but Frank sustained a major fracture of one leg. Max made him as comfortable as possible and walked into town to arrange rescue, which was quickly accomplished. However Frank, whose health was somewhat impaired from surgery a few months previously, contracted pneumonia while in hospital and died - a very tragic event.

Load growth of the Yellowknife area, particularly the City of Yellowknife, led to the development of a second hydro plant on the Snare River (Snare Falls) commissioned in 1960, a major diesel plant near Yellowknife in 1970, and in 1977 Snare Forks the third hydro plant on the Snare River.

From the outset of operation of the Snare Rapids plant, Commission Management was ever conscious of the problems and expense attendant upon maintaining an operator establishment at a remote isolated site such as Snare Rapids - some 90 miles from Yellowknife. Consequently technological advances in the field of remote control of power stations - now called SCADA (Supervisory Control and Data Acquisition) was continuously monitored,

and in 1964 it was decided to transfer control of the Snare Rapids and Snare falls plants to a control center in Yellowknife. The present Yellowknife control center building was erected in 1964 and control was transferred to Yellowknife in 1965. This move was accompanied by transfer of all operating staff, except for one on-site operator, to Yellowknife and removal of the three operator residences from Snare Rapids to Yellowknife leaving only the large 10 bedroom staff house - the latter was destroyed by fire in June 1980.

The 1950's were active, busy years for the fledgling power commission, not infrequently referred to "as the smallest power utility with the largest territory".

The Snare Rapids/Yellowknife development was quickly followed by construction of the first central diesel generating plant and distribution system in Fort Smith, commissioned in 1950; George Olson, who had graduated in 1950 from the University of Alberta with Joe Long, was the first NCPC Superintendent in Fort Smith.

Development of the Mayo hydro plant in the Yukon was carried out in 1951 and 1952 following investigation work in 1950; this plant was put into service in November of 1952.

In 1950 plans were developed to build a diesel plant and distribution system in Hay River but were aborted when the federal government declined to authorize the project due to a prohibition of capital projects of federal origin because of the Korean War; consequently the Hay River project was undertaken by Northland Utilities Ltd. later acquired by the Canadian Utilities/Alberta Power organization.

The Fort Simpson diesel plant was the next project following Mayo. In 1955, the Fort Smith plant was expanded and studies for the second unit of the Mayo hydro plant, and development of a major central generating station for the Whitehorse area were initiated. The latter included the possibility of a coal fired thermal station at Whitehorse utilizing coal from the mine near Carmacks, and hydro sites to the west of Whitehorse (viz Primrose Lake and Aishihik) before selection of the first Whitehorse Rapids hydro station commenced in 1956 and the plant was commissioned in November 1958; a third unit and the major diesel plant as well as the transmission line to the Anvil Mine at Faro were completed in 1969 and the No. 4 unit in a separate powerhouse was added by construction in 1982-84.

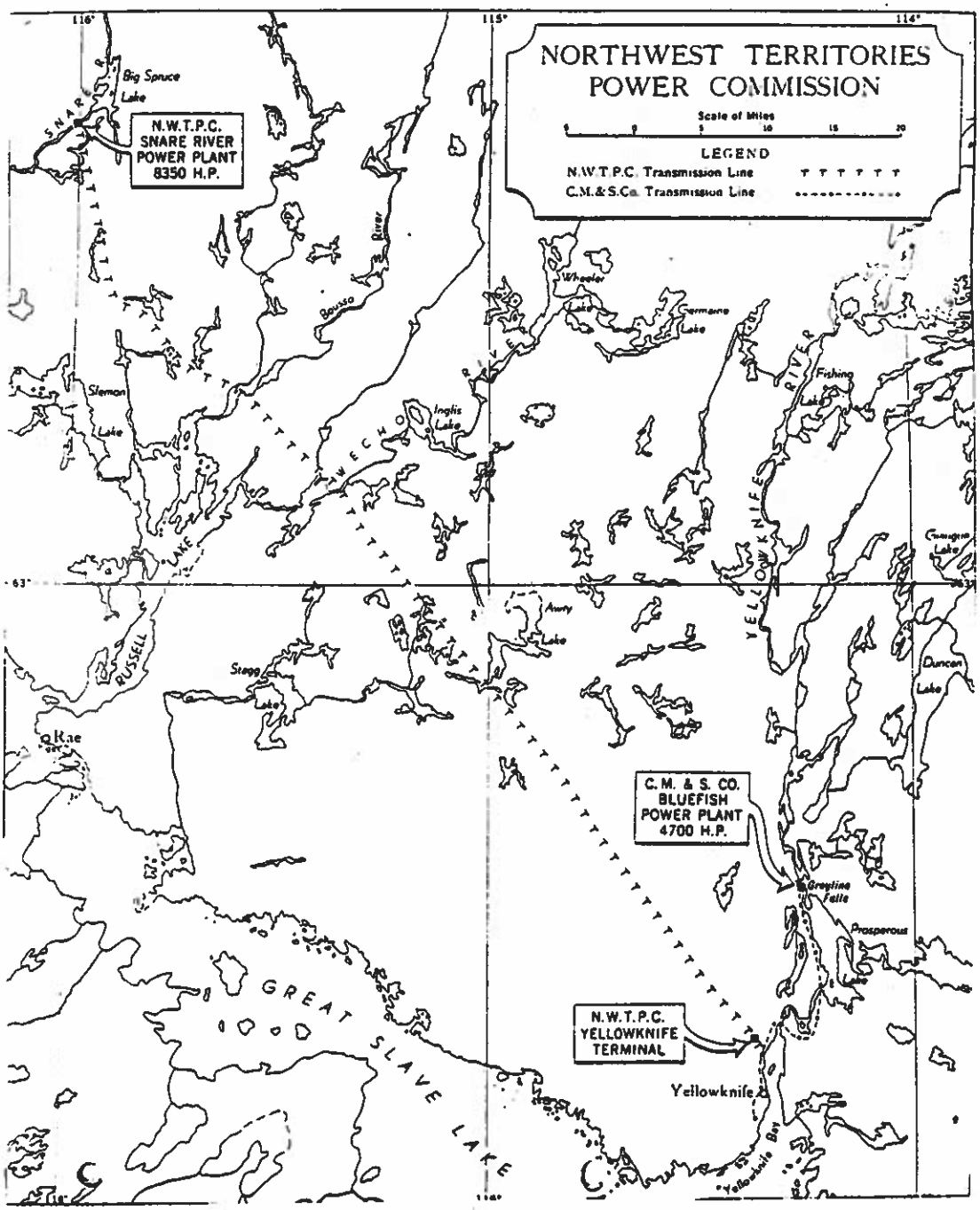
Concurrent with the Mayo No. 2 unit and Whitehorse projects of the mid-fifties, studies were in hand in respect to the electrical supply, water and sewerage and central heating/utilidor systems in Inuvik and Frobisher Bay. Inuvik construction commenced in 1957 and electrical supply was established in 1959. Meanwhile the Fort Simpson and Fort Smith plants had been expanded and operation of the Fort McPherson diesel plant and water system and central heating system were taken over from the Department of Northern Affairs and Natural Resources.

A diesel station and distribution system was constructed at Field, B.C. in 1959 and work was started on the Snare Falls hydro station in that year. A new diesel generating station and central heating plant at Frobisher Bay was commissioned in 1964.

In the early sixties studies were started for supply of hydro power to the Pine Point Mine and townsite (and to Fort Smith) resulting in construction of the Taltson hydro station and transmission system in the years 1963-65. This plant and its control center in Fort Smith,

and distribution system in Pine Point were commissioned in October 1965, whereupon the Fort Smith diesel plant was closed down. This marked completion of a 15 year period of development during which time the Commission's activities had grown from the single hydro station at Snare Rapids to embrace 5 hydro stations and associated transmission systems and six diesel stations and distribution systems.

E. W. Humphrys



Officials and Guests in Front of Snare Rapids Staffhouse

Attending Snare Rapids Hydro Plant Opening Ceremony - October 4, 1948

Mr. J. M. Wardle, Chariman, and Mr. E. W. Humphrys, Electrical Engineer can be seen in the second row, fourth and second from the right

A Thumbnail Sketch

An Act of Parliament established the Northwest Territories Power Commission in September 1948 for the purpose of facilitating the construction and operation of electric power plants in the Northwest Territories for mining and other interests. The first hydroelectric power plant was built on the Snare River.

The Act was amended in 1956 and, among other things, included a name change to Northern Canada Power Commission.

In May 1960 the "Lightning Type" N design insignia was approved.

The First Assistant General Manager, John M. Lowe, was appointed in July 1966. July 1968 saw the appointment of two more Assistant General Managers and a split of responsibilities. Mr. Lowe became AGM Technical Services, George Olson, AGM Operations and Chester Prevey, AGM Finance and Administration.

Item 7 of the Commission meeting of January 1970 read in part - "House Organ Publication -- the first issue of this publication has been distributed..."

The April 1970 minutes recorded discussion of the NCPC takeover of all NWT Government plants - some 20-30 locations. By May 1971 it was decided to take over 25 small NWT power plants over a three year period.

Regional Offices were opened in Whitehorse in November 1970 to co-ordinate the Yukon operations, and in Yellowknife in June 1971 to serve the Northwest Territories operations.

April 1970 saw the first discussion of relocating Head Office to Edmonton, and by August 1973 the move was completed.

Chairmen

1948-52	J. M. Wardle
1952-53	Major General H.A. Young
1953-63	R. G. Robertson
1963-67	E. A. Cote
1968-70	John A. MacDonald
1970-75	H. Basil Robinson
1975-	J. Smith

General Managers

1948-69	E. W. Humphrys
1969-76	J. M. Lowe
1976-78	P. G. Williams
1978-82	J. Long
1982-83	J. W. Beaver
1983-	B. G. Christie, Acting

A Brief History of Electrical Power in Dawson City

It has been my intention from almost the first day I arrived in Dawson City to someday put together a story of the history of electrical power generation and distribution of the area. To this end I have done some research but not near enough, on what turns out to be a fascinating and intriguing subject. The development of power plants and systems in and around Dawson is so intertwined with gold mining, engineering feats, large company disputes, legal battles, company take-overs and unique individuals that it makes compiling the complete history a huge project. I doubt if I would have the time or fortitude to do it real justice but here is a thumbnail sketch of what I have put together so far.

Dawson City was first supplied electrical power from a wood fired, steam driven turbine in 1899. This was some time before many southern towns and even cities could lay claim to this luxury. It is also claimed that Dawson was one of the first towns to have electric street lights. The plant, owned and operated by the "Dawson Light and Power Co., remained in operation until May of 1913 when the log structure housing it burned to the ground in a fire believed to be caused by an overload of the switchgear. The Dawson Light and Power Co. however did not die with the fire. By this time there were several other power plants operating in and around the area and the original company purchased power from one or another of these at various times. In fact, Dawson Light and Power Co. appears to have remained alive until 1966 when NCPC took over the power plant in Dawson City. Shares were sold by the company and at least one gold mining company had controlling interest at one time or another.

In 1905 the Canadian Klondike Co. built another steam driven plant at Bear Creek, six miles from Dawson to supply power to the first of many electrically powered gold dredges that were to operate in the area. This 400 KW plant also was destroyed by fire in 1915.

The region's first hydro power plant was constructed in 1906 and 1907 by the Yukon Gold Co. The plant was built on Twelve Mile River, 25 miles northwest of Dawson. The plant went into production in May, 1907 supplying power to 3 dredges on Gold Hill near Grand Forks. Power lines were later extended to 2 more dredges on Hunker Creek and 2 on Bonanza Creek. As the dredges moved along the creeks the power lines were extended to follow along. The 12 Mile Plant also supplied power to the town of Dawson for a time. The plant was shut down and abandoned in 1922 when Yukon Gold Co. ceased operations.

A bed of lignite coal on Coal Creek approximately 50 miles down the Yukon River from Dawson prompted an English company to build a coal fired steam turbine plant there in 1910. The Dawson Light and Power Co. purchased power from this plant now operating under the name of Northern Light, Power and Coal Co. The Canadian Klondike Co. also purchased power from the plant for the operation of their dredges at Bear Creek. I assume that the Dawson company ceased to purchase from the Twelve Mile plant at the time a contract was drawn up to purchase from the Coal Creek plant in 1914. The Coal Creek plant was dismantled and shipped to Japan sometime in or around 1920.

At about the same time the Coal Creek plant was being built, a second hydro-electric plant was being built on the north fork of the Klondike River, 30 miles east of Dawson by the Granville Mining Co. The plant went into operation in May 1911 under the name of Canadian Klondike Power Co. and supplied power to the Granville Mining Co. dredges. This plant also supplied power later to the Dawson Light and Power Co. for the town of Dawson, probably after the shut-down of the Coal Creek plant. The plant is reported to have had a capacity of 11 megawatts in the summer but much less in winter.

In the early twenties the disputes and legal battles between the mining and power companies seems to have come to a head. A new company evolved out of the remains and Yukon Consolidated Gold Co. was born, gaining control over the whole she-bang, including Dawson Light and Power Co.

Y.C.G.C. held this position until 1966 when they ceased operation of the last operating gold dredge. During this period power supply for Dawson was from the North Fork hydro plant supplemented by a small diesel plant in town. Of all the mining and power companies involved, Dawson Light and Power Co. seems to be the only one that remained alive from the beginning of electrical power in Dawson until N.C.P.C. came into the picture in 1966.

At the time N.C.P.C. purchased the Dawson diesel plant and town distribution system they did not take the North Fork plant with the package. The plant was later sold privately and most of the equipment removed. N.C.P.C. have recently fallen under much criticism from local residents for failing to take the old hydro plant and allowing it to become defunct. The criticism stemmed from rising power rates necessitated by the high cost of diesel plant operation. The fact that the rates were even higher when power was supplied by the hydro plant and distributed for the town by Dawson Light and Power Co. seems to have been forgotten or held to be of little concern.

Since 1966, N.C.P.C. has upgraded the old diesel plant consisting of three Blackstone units of 250 KW each to the plant of today. The plant now has five Cat units with a total capacity of 2520 KW. The plant load has increased from approximately 400 KW in 1966 to a present peak of 1500 KW. Through a waste heat recovery system of the engine cooling system the plant also now supplies heat for the town water supply, water pumphouse and outdoor summer swimming pool. In a like manner, heat is also provided for our new office-warehouse and garage building constructed in 1984/85.

In June 1985 the new office was moved into and the old office building closed. This old building was built prior to 1900 and served as the Power Company office since some time in the twenties. N.C.P.C. occupied this same building from 1966 to 1985. The building has been put up for sale but as yet has not been sold.

The town distribution system has undergone considerable upgrading in recent years but most of the network of power lines that served the gold dredges and the town from outlying plants have been removed or have fallen down.

Everything in Dawson seems to reek with history and the development of electrical power is no exception. This article barely scratches the surface.

Compiled and written by Glenn Bowers

Yellow Snow

Flying in Canada's Arctic is, as often as not, a trying experience. Trying to be first off that aircraft is a major challenge which must be mastered. To the successful goes that wonderful feeling of satisfaction.

January 28, 1947, Snare River minimum temperature was -65° F and "only during the early afternoon when the sun was high did it rise above -50°".

Early Communications

In 1947/48, during construction of Snare Rapids, 90 miles north of Yellowknife, communication was by short wave radio using Morse Code. A magneto type telephone system was constructed and lines strung under the power line but the system had many problems and was frequently out of service. The Commission, in its wisdom, retained the short wave radio set as an emergency back-up for communications, but didn't have anyone trained in the use of morse code.

One day when the phone line was out of service, an outage occurred and the operator couldn't obtain clearance to close the breaker and restore power. Johnny Stevens was resident engineer at Snare and his wife had been trained in Morse Code in the R.C.A.F. She was able to contact the Royal Canadian Corp of Signals in Yellowknife, who in turn contacted Giant Mines and obtained the necessary clearance. This information was relayed to Mrs. Stevens in Morse Code and power was restored.

Lorne Vance

Memories of Northern Canada Power Commission

Russell Devine

I arrived in Frobisher Bay in August 1956 as an employee of the Department of Transport in their diesel electric station which was just being enlarged and units installed. About 21 months later NCPC took over the power station after Consolidated Engines had installed four Lister Blackstone engines. As my job with D.O.T. was finished with the takeover, Mr. G. Olson asked me to join NCPC. He was able to negotiate my transfer without loss of benefits under my D.O.T. contract. I still looked after the beacon units for the runway until NCPC lines were installed. I had a DOT jeep as long as I had to look after the 3 beacons for all the power going out. Often the breakers tripped and all would be in darkness - just too much load. One unit could carry the load until around 4:10 p.m. when the load was too much for one unit so the second unit would have to be put on line. They operated on "load limit" on the extra unit. Once when a new operator was on shift and needed a second unit he started up the #2 - it overspeeded. He tried No. 1 and it overspeeded, then unit 4 did the same thing. He phoned for help and another operator and I went out, reset all the governor controls on the 3 units, pushed in the over-speed control and all was well. On discussing this with the Superintendent later, it was decided to do away with the load lock idea and operate all units except one on speed droop only, so that all units took some of the load changes and the unit with the no droop kept speed and time.

At that time, two of the operators did not like the 16-24 hour shift and I usually had this shift. This gave them the evening to spend in Gallaghers Lounge-Cafe-Restaurant, but mostly the lounge. The 0001 to 0800 operator would phone about 0.200 to 0.300 hrs. and say "I'll be there soon". One day I told them "You fellows owe me about $80.00". When they did not pay, the Superintendent had the hours transferred to me. They showed up for awhile, but began to slip, but paid me for the overtime.

Once, on my shift, we had the breaker trip and each time it was put in, it tripped out. Mr. Heggie, the Superintendent, had to drive from Apex, about 3 miles away, and still the breaker was tripping. After some time it stayed and we were on line again. Rumours had it that there were flashes on the runway and flashes from the airport. The fault corrected itself and no one was sure what did happen.

As the winter wore on, it was realized that more units were needed as the Blackstones could not carry all the load. About this time a lineman came up, Jack Dearness, and new breakers were installed for separate circuits. Jack was an expert knitter as well as a very good lineman, and got along well with D.O.T. and the contractors, such as Tower Construction, who were up there at that time.

After the NCPC takeover we had two temporary superintendents, then Mr. W. Heggie arrived with his family just after the Butler Building apartments were readied. These buildings consisted of 3 or 4 apartments, depending on whether they were 2 or 3 bedrooms. Slowly, as the units were finished, NCPC and DOT employees moved in.

I took my first leave in March 1960 after 33 months in Frobisher without missing a day's work and came back with my wife when an apartment became

available. We arrived at midnight in early July, and Ron Mack from the NCPC office took us to our apartment. Our furniture and a year's supply of rations were stacked in the middle of the floor. I went to work the following morning. Since there would be no sealift in until mid-September we ate out of cans till then when fresh food came in. Canned bacon, tongue, roast beef and even fish tasted all the same by the time we got fresh food. There was no sewer system and the kitchen waste was discharged onto the ground while the raw sewage was in plastic bags called "honey buckets", which the trucks picked up daily. For your own benefit you did not forget to leave it in the entrance way for them, as often these bags got broken. The water was stored above our apartment and the only indicator to the driver that the tank was full was an overflow pipe near the entrance. One evening after a "blow", the overflow was frozen. The result was it overflowed into our apartment, down on those precious rations, and the ceiling came in. It was a chilly night, but the next day crews arrived to repair it.

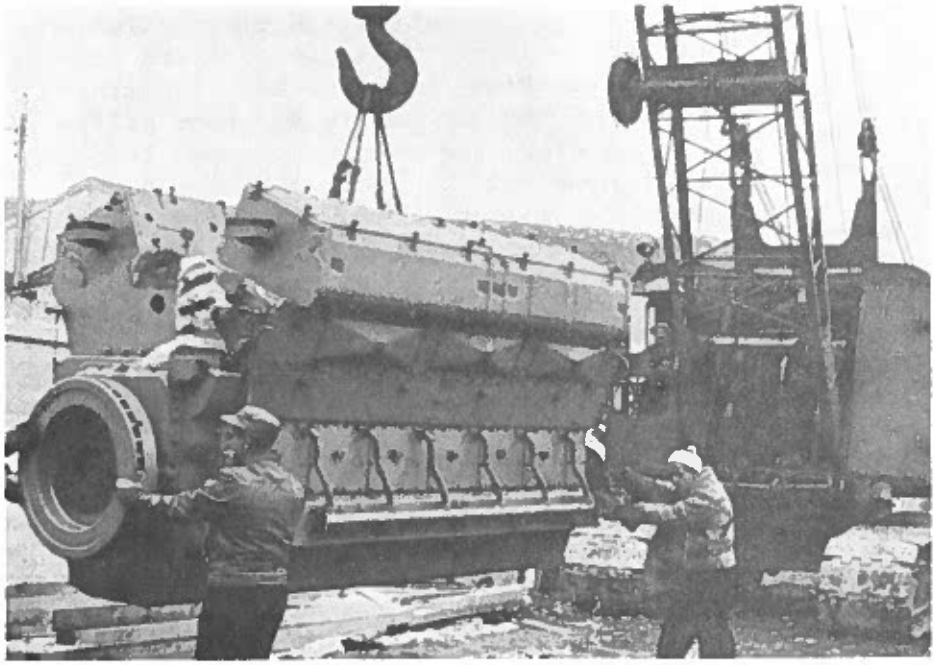
Just after arriving back I was promoted to plant supervisor and the headaches began because of power shortages. Two Mirrlees engines, complete with generators, as some of the pictures show, arrived on the sealift. The contractor who put in the forms for the foundation could not get the forms out and had to burn them out, which did not help the foundation. No steel bases came with the units so they had to be set right on the concrete which changed shape twice a year due to the permafrost, so alignment was a problem in spring and fall. One half of a wall had to be taken down to get the units in. Between Tower Construction and the NCPC employees, the units were moved in and on to the foundation. Some of the hold-down bolts were off target and had to be cut off and welded, some off centre, but it worked.

The NCPC crew were installing the copper water pipes etc. to the second unit. I was on the 1600-2400 shift, when an RCMP officer rushed in on the double and grabbed a fire extinguisher while yelling "FIRE". I could not see any fire and wondered if he had developed "cabin fever" However, the fire was in the attic coming through the roof and he had spotted it as he came over the hill from Apex village. I called the DOT Fire Department and Bell Telephone to take all phone calls as we had no time. The DOT Fire Department had the fire out in a short time, and we relayed this information to Bell Telephone for further incoming calls to the plant, as we were still looking for the cause of the fire. It turned out to be a propane torch used to solder the copper pipes in the ceiling. This could not be seen in the townsite and only from the top of the hill, so we were fortunate that the RCMP officer was out, and no real damage was done. Credit must go to the RCMP and the DOT Fire Department and Bell Telephone as their cooperation was excellent. An RCMP Officer and a fireman stayed with me for the balance of the shift.

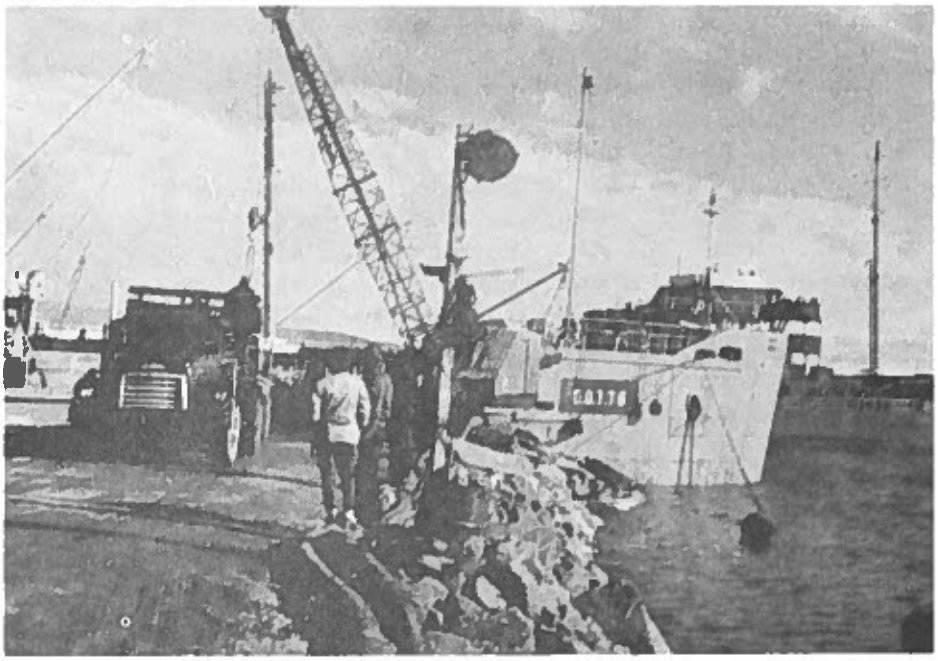
At this time another operator, Alfie, and myself each worked 12-hour shifts to free the rest to help the contractors with the new installation. Since the beacons were now on NCPC power, the radio operator looked after them on his trips to the beacon, and DOT had their own mechanic so our trips to the beacons were finished.

When both the new units were on line, shifts returned to normal and there was sufficient power for about two years. When power consumption began to rise again with more power takeover, and a new hospital being built, so that NCPC had to eventually build a new power plant further up the hill.

Fall 1956
DOT New Powerhouse West 40
Frobisher Bay, NWT
Russell Devine on right



1960
Installation of Mirrlees Engine
Frobisher Bay, NWT
NCPC Operators McDougall
and Jamieson



Sept. 1960
Sealift Frobisher Bay
Bringing in NCPC Mirrlees

NCPC Historical Notes

Five Years Ago - 1965

Arrangements were made to place Snare Rapids & Snare Falls Plants on remote control from Yellowknife.

The Honourable E.J. Benson, Minister of National Revenue commissioned the new Taltson Hydro-Electric Plant in October 1965.

Phil Johnson, Superintendent at Fort Simpson was transferred to Frobisher Bay replacing Bill Heggie who came to Head Office as a Technical Officer.

A study was conducted at Dawson to determine the capability of the existing water pumping plant to operate on diesel power. Preliminary estimates indicated that expenditure of $300,000 would be required to renovate the system.

NICPIC News, April 1970

Progress in Frobisher Bay

The powerhouse which NCPC took over from the Department of Transport just plain got tired one day in 1965 and was unceremoniously retired from service.

As I recall, this plant was called Powerhouse Number Three. Powerhouse Number Two had long since been converted into a line shack and Number One some sort of storage shed.

Fortunately NCPC had built the existing Powerhouse Number Four.

The story doesn't end there. It was not uncommon for the NCPC family to hoist a few on Friday night at Powerhouse Number Five (Legion).

P. E. Johnson

The Great Northwest

(Submitted by the boys in the Plant -- Whitehorse Rapids)

Away up here in this Great Northwest
with all it's comforts we are blessed;
Every wish is gratified
and with life we are satisfied.

This isn't true, but sounds well
the fact of the case is simply hell!
As we sit in this ice fog,
the days just seem as peas in a pod.

We sit around with little to do
and smoke our pipe till all is blue.
The pig in the pen much better by far,
but we can't do better, so here we are.

The wind she howls outside our door,
the snow she drifts ten feet or more.
Well! we have no summer here at-tal
there's 10 months winter and 2 months fall.

And all day long and through the night,
we keep the fires burning bright.
But yet we shake and shiver and sneeze,
and fear some night in bed we'll freeze.

But if we live and keep our health,
Some day we'll have some wealth;
And if the future looks bright, we'll labour and toil in keen delight.

Then some distant day
All our debts we will repay;
But yet we'll keep enough in store,
to keep ourselves and a dozen more.

NICPIC News, December 1969

NORTHERN JUSTICE

Over the years of NCPC's presence in the north, many Commission employees have played an important role in community activity by accepting positions as JP's, Coroners, Commissioners for Oaths, etc. Through the process of Justice many acquaintenances and friendships have developed.

Digging through my closet of memorabilia recently produced a group photo dated 1968 of nearly every Justice of the Peace in the NWT at that time. The occasion was the First Annual JP's Conference held in Yellowknife's Court House under the direction of Magistrate Peter Parker. His Circuit Court travelled throughout the north and his efforts towards improving dispensation of justice through training of JP's has always been appreciated.

Many members of our present staff will recall these early participants in this most important function. Not only could this group look after the serious side of life as necessary, they could handle a good time as well.

P. E. Johnson

FIRST ANNUAL JP's CONFERENCE

Yellowknife Court House 1968

Standing, left to right: J. Simon(dark glasses) Ft. MacPherson; Ted Williams - Yellowknife Lawyer; Fred Wittlinger - NCPC Aklavik; Walt England - Yellowknife Hardware; Pete Payne - NCPC Ft. Simpson; John Miltenberger - Ft. Smith; Herman Pieper - Ft. Smith; D. Wooten; Phil Johnson - NCPC Frobisher Bay; Rev. Holman - Anglican Hostel - Inuvik; J. Norberg - Tuktoyaktuk; Terry Ryan - Cape Dorset: Rudy Steiner - Hay River: K. Gaetz; N. Kakfi - Ft. Good Hope; H. Bartels - Igloolik; E. Cook - Ft. Good Hope; Fred Ross - Cambridge Bay; D. Priest - Coppermine; Leo Hardy - Norman Wells; Mark De Weerdt - YK Lawyer, now NWT Supreme Court Justice

Sitting, Left to right: Barney MacNeil - DOT Inuvik; Ron Milligan - Churchill; Orvil (Tiger) Troy - Crown Prosecutor; Larry Shelton - NWT Deputy Judge; J. Varco - Yukon Judge; Peter Parker - NWT Chief Magistrate; F. Hayes - Ontario Magistrate; R. Hayes - Dept. of Justice; John Anderson Thompson - Yellowknife,"Order of Canada"; Fred Smith - DEW Line - Cambridge Bay; G. Koneak - Ft. MacPherson - member of Dawson Patrol

From the Minutes of Commission Meetings

Twenty Years Ago -- 1950

At the 12th Meeting of the Northwest Territories Power Commission, June 19, 1950, the Chairman, Mr. J. M. Wardle, announced the appointment of Mr. George Olson as Superintendent of the Fort Smith Power Plant and Distribution System, effective 15 May, 1950.

At the same meeting the Chairman announced the appointment of Mr. Joe Long as Junior Operator at the Snare River Hydro-Electric Plant. Later that year he was re-assigned to the position of Engineer Grade 1 at Mayo River.

The Commission's PAB Norseman aircraft was sold to Yellowknife Airways Limited in return for services to the value of $32,340.00.

Fifteen Years Ago -- 1955

Consideration was given to the installation of a power plant at Fort Simpson, NWT, and negotiations were commenced for acquisition of the necessary land. Construction of the plant was approved in January 1956.

Engineering studies are being made to investigate the possibility of a hydro plant at Whitehorse and to assess possible sites for a steam plant.

The Commission received a petition signed by 60 ratepayers from Mayo Landing requesting that the Commission take over the distribution system with a view to improving service and reducing rates.

It was proposed to amend the NWT Power Commission Act to Change the name of the Commission to Northern Canada Power Commission. (This did not actually take effect until mid-1956).

Discussions were held on the possibility of future power shortage at Frobisher Bay and some thought was given to the installation of a central plant. At the time it was felt that the small load would not warrant such construction.

Ten Years Ago -- 1960

At the Fifty-Fifth Meeting of the Power Commission, February 24th, 1960, the Chairman, Mr. R. G. Robertson, pointed out that the Commission did not have an emblem and suggested that the design of one be given serious consideration. This was approved, and Mr. Hymphrys, General Manager and Chief Engineer, was requested to look into the matter.

At the same meeting it was agreed to move the Regional Office from Fort Smith, NWT, to Edmonton, Alberta.

Mr. Humphrys reported that the Yellowknife Diesel Plant had been completed and was put into operation on 16 December 1959.

It was decided to undertake the operation of the sewer and water system at Fort Simpson for the Department of Northern Affairs and National Resources.

NICPIC News, February 1970

Highlights of the Year - 1969

- Sustained growth 1968-69 with 10.1% increase in electric power consumption and 6.6% increase in heat consumption.

- Three new diesel electric plants added. Total plants now 21 - 5 hydro, 13 diesel and 3 thermal.

- 28 miles -- 115 kv transmission line connecting Rae and Frank's Channel to Snare River system, NWT completed and energized.

- 5000 kw standby diesel generating unit authorized for installation at Yellowknife, NWT in 1969-70.

- Landslide at Fort Smith, NWT necessitated abandonment of standby diesel plant and warehouse. Powerhouse equipment salvaged and temporary 960 kw diesel standby service established pending permanent replacement.

- 200 kw diesel unit installed at Fort Simpson to replace 75 kw unit, to provide adequate reserve capacity.

- Two diesel generating units with total capacity of 9000 kw installed in new building adjacent to Commission's Whitehorse Hydro Plant to provide for peaking and standby capacity.

- At year end installation of No. 3 hydro unit at Whitehorse was well advanced and the 250 mile - 138 kv transmission line to Faro, Yukon to serve Anvil Mining Corporation's mine-mill complex in Vangorda Creek area, was nearing completion to meet July 1969 deadline.

- Second half of 3000 ft. utilidor extension system through a complex of 50 row houses at Inuvik, NWT was completed.

- 200 kw diesel unit to replace 75 kw unit at Fort Resolution, NWT for standby service was installed.

- 250 kw diesel unit installed at Aklavik to meet increasing electrical power requirements.

- Power generation increased 30% at Taltson to meet Pine Point Mines Ltd. requirements and increased demands at Fort Smith. Pine Point distribution system was extended to meet requirements.

- 350 kw . . . installed at Cambridge Bay bringing plant capacity to 1200 kw.

- Two 350 kw gas turbine generating units installed in new powerhouse at Norman Wells for supplying power to community and Imperial Oil Company.

- Department of Transport transferred responsibility for supplying power at Baker Lake to the Commission, August 1, 1968. Plans in hand to add 700 kw diesel unit to increase total capacity to 1450 kw so as to adequately serve the community.

- September 1, 1968, Commission assumed responsibility for supply and distributing electric power, formerly handled by Department of Transport, at Chesterfield Inlet. Two 150 kw and one 100 kw diesel electric units installed. A 2400/4160 volt distribution system was erected.

- Plans in hand to construct 375 kw diesel plant at Fort Good Hope, NWT in summer of 1969.

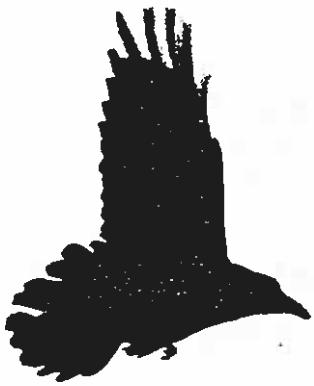
- $162,542 was recovered from Federal Departments and others for contract work thereby reducing overhead costs of the Commission for its operations.

• Net Income for the year totalled $352,384 after provision for payment of $1,446,990 interest on advances from the Government of Canada and $888,231 repayment of debt.

• Aklavik, NWT power plant; the hostel heating plant and the water and sewerage systems at Fort McPherson; the central heating and water treatment plants at Fort Simpson and the water treatment plant at Frobisher Bay were operated by the Commission for the Department of Indian Affairs and Northern Development.

• $191,000 was allocated from earned surplus to the contingency reserve fund at various locations.

NICPIC News, December 1969



Wives a part of NCPC

This incident happened in Cambridge Bay many years ago, Eric had just started with NCPC. At that time NCPC had operators on a 24 hour basis. One of the operators was an older gentleman by the name of McDougall. He used to do his house work when he came off shift at midnight and on one of these nights around 3 a.m. there was somebody banging around our house. At first we did not pay too much attention, since sometimes the kids would hang around between the garage and the house. But this banging did not let up. We got out of bed and investigated. Lo and behold here was McDougall in his slippers and his housecoat half frozen to death and all blue from the cold. As it turned out, he had taken his garbage out and had locked himself out. He said he had tried the other house first, but did not get an answer and he was outside for nearly an hour. We sure were happy that this was a happy ending and not a tragic one and McDougall had promised not to empty his garbage again in the middle of the night in his dressing gown and slippers at -40°.

Annita Deutschmann

NICPIC News, December 1969

Two 350 kw gas turbine generating units installed in new powerhouse at Norman Wells for supplying power to community and Imperial Oil Company.

Department of Transport transferred responsibility for supplying power at Baker Lake to the Commission, August 1, 1968. Plans in hand to add 700 kw diesel unit to increase total capacity to 1450 kw so as to adequately serve the community.

September 1, 1968, Commission assumed responsibility for supply and distributing electric power, formerly handled by Department of Transport, at Chesterfield Inlet. Two 150 kw and one 100 kw diesel electric units installed. A 2400/4160 volt distribution system was erected.

Plans in hand to construct 375 kw diesel plant at Fort Good Hope, in summer of 1969.

$162,542 was recovered from Federal Departments and others for contract work thereby reducing overhead costs of the Commission for its operations.

Net Income for the year totalled $352,384 after provision for payment of $1,446,990 interest on advances from the Government of Canada and $888,231 repayment of debt.

Aklavik, N.W.T. power plant; the hostel heating plant and the water and sewerage systems at Fort McPherson; the central heating and water treatment plants at Fort Simpson and the water treatment plant at Frobisher Bay were operated by the Commission for the Department of Indian Affairs and Northern Development.

$191,000 was allocated from earned surplus to the contingency reserve fund at various locations.

NICPIC News, February 1970

January 1st, 1970, Inuvik became a town. We are now complete with Mayor and eight Councillors. Give things a new tone to be a Town.

Frobisher Bay Highlights
NICPIC News, October 1970

A cloudy chilly Sunday saw her Majesty the Queen and her daughter Princess Ann alight from Air Canada's DC-8. Her arduous trip through Canada's Northland with her journey starting here in "The New Frob".

Residents young and old, Eskimo and white, thronged the carpeted walkway to view Her Majesty as she mingled gracefully and freely through the hundreds of curious onlookers. For a vast majority of Frob's residents, this was their first glimpse at Royalty and by all reports some of the senior residents showed some disappointment as they were under the impression that the "Queen" should wear the finery as worn by her in the Royal Portraits.

Some of the members of NICPIC's Bull Gang assisted by Frank Allured, casual mechanic, made a large welcome sign in Sylabics out of aluminum pipe coverings. This sign covered a complete hill directly in front of the Frobisher Inn, the hotel used by her Majesty during the visit.

The sign, common as it was, expressed sincerity by the people of Frobisher Bay "Welcome the Queen".

Simonie Alainga and friend Johnassie Tiglik presented Her Majesty with a 2½ foot replica of the authentic Kayak.

Capital Budget Plans
1970-71

A new year is always started at Head Office with firming Capital Budget plans. This year was no exception and a brief review of some of the larger projects follows:

At Frobisher Bay a new 4000 KW engine will be added in an extension to the existing power plant. The unit will be supplied with an exhaust heat boiler, and the design to be operated at a high jacket water temperature so that heat, which is normally wasted from the jacket water and exhaust systems, will be utilized and fed into the central heat system. A utilidor connection to service the new school is also scheduled for this summer.

At Inuvik a new power plant is being designed and the first stage to consist of a single 500 kw diesel unit, is scheduled for completion this summer. This unit will also comprise waste heat recovery facilities. The second stage of this new plant will consist of installation of new central heat facilities, probably HTP generators. The financing aspects of the Central Heat additions are being negotiated now, but it is doubtful that these can be concluded in time to enable 1970 construction. The first stage of some water and sewer main extensions is also scheduled to start this year.

A small transmission line from Pine Point Townsite to Buffalo River will be undertaken this year, as well as an investigation related to construction of approximately 40 miles of line from Pine Point to Fort Resolution.

At Pine Point a 5000 kw standby peaking diesel will be installed this summer.

On the Taltson System engineering studies will soon be underway relating to the addition of No. 2 hydro unit at Twin Gorges.

At Norman Wells the installation of a 500 kw diesel generator is being accelerated from the scheduled summer installation, and the unit is being flown to Norman Wells for installation during March.

In Yellowknife a 34.5 kv feeder from the new diesel plant to the Giant Terminal will be built this summer. In connection with the same project automatic equipment for remote start and operation of the diesel will go forward this summer.

At Chesterfield Inlet another unit will be shipped in this summer. This unit almost made it to Chesterfield last fall, but because of high winds could not be off-loaded, with the result that the unit is now in storage at Quebec City.

At Dawson a new 560 kw generating unit will be installed this spring.

At Faro a new 5000 kw standby unit will be installed this season.

At Whitehorse a similar size unit will also be added at the existing diesel plant. This will bring diesel capacity in the Whitehorse system up to 19,000 kw.

Go North Young Man

Tucked up here in this great northland
Away from the noise, the rush and demand
We glean from nature a wondrous lesson
Patience is learnt and that's a blessin'.
The sun never moves from its place in the sky
Yet accomplishes more than do you or do I.
When hidden from view by gossamer grey
A smile on our face in the "sun" for today.
Variety they say is the spice of life
And its variety we've got here in Yellowknife.
A warning is given, you better not die
Our undertaker left us, and that's no lie.
If its miniskirts you want, well we got them too
No doubt the wearer will come down with the flu.
Widen our belts, so our belts we did widen
Seems nothing left for us gals to be hidin'.
All joking aside we're proud to live here
To breath in the air so crisp and so clear
To watch as the sun sets the rocks all aglow
At times Mother Nature puts on quite a show!
Our Creator sifts snow to season the land
At night he waves the wand in his hand
And sets all a-swirl 'neath the stars shining bright
The midnight rainbow we call northern lights.

Submitted by Snare/Yellowknife Staff

NICPIC News, February 1970

Bruce Christie can speak from experience about the frozen Holman Island shale and those weather delayed charters we used to run out of Regional Office in Yellowknife. Bruce got stranded at Holman one fall day in the early seventies and had to do something to pass the time. The guy watching is being paid. Bruce appears to be instructing.

The Phantom

Baker Lake News

Everybody is talking weather these days. This is the coldest winter that we have experienced in Baker Lake in the last five years. Since the middle of January our temperature has stayed in the 45 to 53 degrees below zero. This is not bad when there is no wind but one day it was 46 below and the wind was gusting to 45 miles an hour. Our windchill chart only goes to 112 below so we will let you figure this one out yourselves. On February 2 we had another of our favorite winds slightly gusting over 70 miles. In the early part of November we had seven consecutive days of 50 gusting to 80 miles an hour. Baker is noted for being a windy spot in the north.

We had the honor of Mr. Olson paying us a visit in the early part of December. Guess he had a little trouble getting here and to Chesterfield on account of our airline and weather. While here he enjoyed our 20 above temperature.

At present we have Shell Oil personnel looking at the possibility of erecting storage tanks for airplane gas. This is to insure you with gas when you come flying to Baker on your next vacation.

NICPIC News, February 18, 1970

A Christmas Carol

(With apologies to Charles Dickens)

Christmas time was fast approaching
With thoughts of parties, fun and snow,
When suddenly, Frobisher's friendly power plant,
Was dealt the first of many blows,
Within the space of four short weeks
Three seizures, a fire and some broken arms,
Caused the normal dazzling lights
To dim and die to everyone's alarm.
However the NICPIC boys at Frobisher
Rallied round and worked hour after hour,
No lonely Christmas or New Years for them
They toiled and somehow produced more power.
And now, slowly, but surely, things have got better
And all the guys hope that it'll stay that way,
For surely no-one will ever forget
The '69 Christmas at Frobisher Bay!
In December, Neil Patenaud got married,
But before wife Monique could talk
He persuaded her to sign a one-hour pass
To the Happy Hour at five o'clock!
Frank Dodd and Bob Brown have both left us
And King for a week rejoined the clan,
Carol MacDonnel transferred to Head Office
Come summer she'll certainly be seeking a tan.
Our brand new K-8 Diesel
Throbs away on a concrete bed.
We're thinking of building a statue
With a sign "Built by Honest Ed"
So that's Frobisher's February Story
It's naturally not very formal
And we are sure of one last thing
When we say that "OPERATION'S NORMAL!"

Control Room Staff
Frobisher Bay

NICPIC NEWS, February 1970

Mayo Blows Hot and Cold

As an item of possible general interest, Mayo has the official distinction of being known as the Hottest and Coldest place in the Yukon. Record temperature for cold still is -80°, record for heat was 95°.

I say **was** for the heat record at this temperature was matched and broken in 1969. On June 13, 14 and 15 the temperature came up to 95, 97 and 95 respectively and we were known at the hottest place in Canada.

We haven't broken our cold record yet, but we still retain our boast as being the coldest spot in the Yukon. On November 16, 17, 18 and 19 we were the coldest place in North America with temperatures of -46, -51, -53 and -46 respectively.

With diverse temperatures such as this we have a good market for our product of electric power. It would be better, though, if we could convince people to "Live Better Electrically" and purchase electric baseboard heaters for winter, and air conditioners for summer use.

As a parting note, there is a story told about a fellow, without whose assistance we would not be with the Commission, namely, Tom Edison. When trying to leave a party one night Tom was asked by his host, "on what was he working now"? He replied - "On my Exit".

NICPIC News, February 1970

Dawson Highlights

Dawsonites are content this winter as we have had one of the warmest winters on record. We had one week of rather cold weather in November and we all held our breaths as the temperature began to climb and did not stop until it hit 36 degrees above on New Year's Eve. However, when we got up to work this morning, January 15, we made sure we had on all our winter gear as the temperature dropped to a mean 55 degrees below - with forecast for 60 below.

Because we had so much mild weather, until now, the government crew had a hard time constructing the ice bridge across the Yukon River. There is still an open channel of water from St. Mary's Nursing Home north to the old abandoned Native village of Moosehide. The mile and a half of bridge has had to be built almost completely of the shore ice. A great deal of excitement was created when two Cassiar Asbestos Ore trucks weighing approximately 45 tons each went through the shore ice on December 21st. One of the trucks turned on it's side and is still frozen to the ice. The other truck went through the ice only to the axle and the crew was able to get it out last week. We are thankful that no one was injured.

To date we have had only 13 frozen water and sewer lines. These being caused by lack of overflow or other minor reasons. After last winter when we had six major fires and countless freeze-ups, we consider ourselves very fortunate.

Everyone here, with the exception of the office staff, have been spending every moment trying to get the new "Cat" unit into operation. This unit was brought from Anvil Mines, where NCPC has it's newest instalation at Faro. Without any further delays, we expect that the "Cat" unit should be producing power within a week or two.

NICPIC News, February 18, 1970

Fort Good Hope Round-Up

Electric Power in Fort Good Hope prior to 1960 was supplied by R.C.C.S. (Canadian Army), at which time it was taken over by the Department of Transport, Telecom Branch.

By 8th of November 1969 a new power plant had been constructed and power distribution responsibilities had been taken over by NCPC. Quite a number of families are now looking forward to having electric lights and even electric stoves, in the near future.

The climate is said to be one of the warmest places in the north in the summer, and one of the coldest in the winter, several times during the past winter the temperature has dropped to 58° below zero.

NICPIC News, April 29, 1970

Snare/Yellowknife News

Yellowknife has been the centre of activity this year, being the Centennial Year for the Northwest Territories. First, mid-March we had Prime Minister Trudeau assist with the opening of the first Arctic Winter Games. And then in July the Northwest Territories hosted the Royal Family with great enthusiasm from all. Yellowknife was honoured to have the Royal Family tour Cominco Mines and the town in general. Fort Providence was the scene of happinings on Thursday, July 9, 1970, when Prince Philip gave the starting signal for the commencement for the long journey for the Sir Alexander Mackenzie canoe race. As we all know NCPC donated over ten thousand dollars to this event.

During the month of July we had practically one continuous lightning storm losing four poles. Apparently the weather office maintains that there are no lightning storms in the NWT but it does puzzle us where we are getting all these lightning storms from. Also during the month of July, professional divers from the Province of Alberta attached a new cable to our number two headgate at Snare Rapids.

NICPIC News, October 1970

T'WAS THE DAY BEFORE CHRISTMAS

T'was the day before Christmas
And all down the line
The generators were turning
And everything was fine

The crew were all ready
For a good Christmas cheer
When all of a sudden
They were hit in the rear

The line must be down
From the wind and snow
Peter knew in a moment
Anvil Line had to go

So the Line, T'was down
And a patrol it must be
A helicopter was hired
So Graham must see

So up to the treetops
The 'copter-they flew
One passenger was sick
So Graham turned blue

A phone call was made
To the lineman on leave
To see-he would come
He appeared-somewhat peaved

The break they located
Which a tree had brought down
With equipment all ready
The boys, they left town

On a ice-steep hillside
The fellows had "fun"
Till at two in the morning
The job, T'was done

Vern phoned into Whitehorse
To tell them all clear
Wish a Merry Christmas
And a Happy New Year

Two of the boys, Witt and Breaden
While on their way back
And rounding a curve
Ran into a wolf pack

Witt hit the rhubarb
And Breaden too
Spent the next three hours
Debating what to do

Help, they knew would come
But the boys were in a rush
To build a fire, they must
From the timber in the bush

No rifle they did have
So the boys were chewing the fat
And the wolf pack kept a howling
While around the fire they sat

When Vern came along
He did pull with his winch
So t'was Witt and Breaden
Were out in a pinch

At ten in the morning
With the crew all in town
Breakfast they had
And then bedded down

But I heard them exclaim
As they went out of sight
Happy Christmas to all
And to all a "good night!"

By Peter Garside
NCPC Whitehorse

NICPIC News, February, 1971

Sounds Familiar

NICPIC NEWS, April, 1972

Editor's Comments

. . . . . Other food for thought - a comment was made recently that a newspaper of this type generally has a life span of two years. As the response from Field Editors has fallen off, I wonder if NICPIC has reached its life span. However, I do think this type of communication can be utilized in providing a much needed personal connection between employees at Head Office, Regional, Plant and the new development of satellite Plants. Without it or something similar, a sterile, negative, indifferent attitude, abortive to any feelings for association, understanding, guidance between one and another individual or group could develop.

As we all know, the Commission does not employ writers or photographers, therefore, all the responsibilities for the editing of NICPIC must be done by employees, who in most instances already have a heavy work load. As 'Hams', we do enjoy the challenge but need lots of help, understanding and guidance by all!

Computer Services

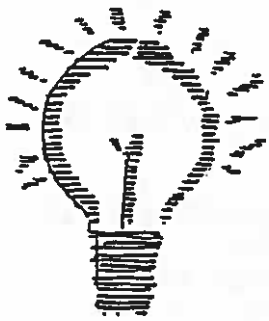
The billing for all plants is now computerized.

NICPIC News, June 1972

News from Mayo

The Stroller Column of our local newspaper quoted "Most surprised guy of the week was Andy Nelson, auditor from Ottawa. He had to leave before the Rendezvous action started, but the Klondettes and the Can-Can girls made an impromptu appearance at the Kopper King Tuesday night and Andy got the Royal Order of the Garter".

NICPIC News, April 1972



R. Devine Reports from Fort McPherson - 1971

Since our last report the weather has been the main interest here in Fort McPherson. A long cold winter and higher than normal temperatures in the southern territories caused the Mackenzie River to back up into the Peel River on which Fort McPherson is located. Ice between here and the mouth of the Peel caused flood conditions on the long weekend. The river backed up into Sewage Lake and Sewage Lake overflowed into Intake Lake, which is used for the town's water supply. A road built up between the lakes was covered by about 5 feet of muddy water. The pumphouse had to be shut down and the power turned off. We had to get a canoe to do this as the water was 3½ feet deep in the pumphouse and the flow very swift. Then hoses and a gas pump had to be installed in the muddy Peel to bring water to the treatment plant. Water was pumped from the Peel River for 6 days until the water receded from the lake pumphouse enough to restore power and dry out equipment.

The high water also damaged about 400 feet of utilidor at its outlet into Sewage Lake. This utilidor is not yet completely repaired as the water is still too high. Our main oil line at the dock was damaged by ice and is only repaired to the first dock. The last 1½ mile is badly damaged with some lengths of pipe pushed 40 to 50 feet back into the bush. A lot of the line is under a foot or more of silt.

During flood troubles a fire broke out in a yard where they were pumping gas from a barrel when it took fire. It was quickly extinguished by the volunteer fire department. The muddy Peel water was a real help here.

About a week later the Hudson Bay Staffhouse was destroyed by a grass-fire. The fire department again got the fire out but the building was a total loss and unable to save because of the fuel oil tank on the outside of the building exploded causing the extensive damage.

During all this time, no plane service was available and for a few days we were completely surrounded by water. Finally a few small planes were able to come in, thanks to Reindeer Air Service, and brought us mail and took mail out.

On June 1st at about 1900 hours, someone thought we needed a wind to dry us out. For about one-half hour, the settlement was almost in darkness due to the high winds picking up dust, shingles, garbage, T.V. antennas, utilidor covers and insulation was flying around about 25 to 100 feet up. We lost the power and could not keep on line for about 20 minutes. The older children had a field day gathering up insulation and another field day spending the money NCPC paid them for gathering up the insulation, which was a total of 186 pieces, 2" x 16", 18' x 8' long. The wind was estimated to be around 70 miles per hour and no one can recall any wind as bad as this one. To add to the damages a couple of boats capsized but luckily no loss of life or injuries were reported. One family, living up the Peel from here, had just enough time to gather children and a few belongings into their boat before the rising waters of the Peel destroyed their tent and their dogs were drowned at their stakes.

R. Devine -- Fort McPherson

A few evenings after the high winds another grass fire got going close to the Hudson Bay Company Store but was quickly put out by the fire department with very little damage done.

Now that the 'elements of nature' (we hope) are finished with Fort McPherson for awhile, everyone is enjoying their 'outings' on the river and some are out 'ratting' (catching muskrat). The weather is now exceptionally hot and dry and the waters of the Peel are receding very fast. Some barges have arrived with supplies, I hope the rest will come soon before the river is too low.

NICPIC News, July 1971

Superintendents Attend Training Session

It was back to school for the Superintendents as the Commission carried out a training course in Modern Management. The course involves individual study of six basic subjects, followed by a seminar complete with workshops, under the direction of a seminar leader.

The first candidates were the Plant Superintendents, those selected as potential leaders, and the Officer-in-Charge, Edmonton Office. Those who completed the individual study successfully, attended the seminar in Modern Management at the DIAND Conference Centre, The Palissades, Jasper Park, Alberta, on 4-6 April, 1971. The setting was excellent, food great, and comradeship, as usual, marvellous. The arguments in seminar indicated both the interest and the desire of the Superintendents to improve personally, for their plants, and for the people who serve with them.

NCPC SUPERINTENDENT'S CONFERENCE

Vancouver, B.C. - Fall 1972

Front Row: G. Walmsley(Faro), A.Watkiss(Ottawa), J.Pyne(Inuvik), E. Newcombe(Snare/Yellowknife), N. Thuesen(Cambridge Bay), R. Mack(Ottawa), J. Long(Ottawa), A. Joe(Aklavik)
Second Row: D. Gibbs(Igloolik), T. MacDuff(Fort Good Hope), B. Sims(Norman Wells), G. Ford(Dawson City), A. Todd(Ottawa), F. Wittlinger(Field)
Third Row: J. Menard(Coppermine), L. Vance(Taltson/Fort Smith), P. Johnson(NWT Reg.Off), A. Jones (NWT Reg.Off), G. Tench(Whitehorse), R.Mayers(Pangnirtung)
Fourth Row: B. Christie(Ottawa), C. Jacobson(Fort Simpson), M. Fairbrother(Fort McPherson), G. Podhora(Mayo), S. Sime(Frobisher Bay), A. Page(Cape Dorset), J. Smith(Moose Factory)
Back Row: L. Cole(Pine Point), B. Rudy(Baker Lake), G. Olson(Ottawa), J. Reynolds(Ottawa), C. Jones(Rankin Inlet), S. McQuade(Eskimo Point), L. Couvrette(Chesterfield Inlet), P. Boyle(Ottawa), F. Mooney(Whitehorse Reg.Off.)

More KWhrs for Tuktoyaktuk

Conversation overheard near Tuktoyaktuk International Airport, NWT (actually on terrace of Tuk Hilton):,
Nick: "Man look at those funny trees, only one branch and string hanging from it".

Pik: "those ain't trees stupid, that's NCPC's power line and it's going to bring juice to Tuk this fall".

And then the story poured forth -

It seems during the summer of 1970 an important member of the Commission's Management team was drifting through the Inuvik area and commented that there sure should be a better way to supply the small communities with electrical energy than the present, with each settlement having a series of small generators. No sooner said than out of the woodwork spring the local entrepreneurs. One said he'd deliver poles 100 ft. long if you need them, to Inuvik, cut and pealed, the works within 6 weeks, for 50 bucks a pole. Another contractor was quick to state that he'd be glad to locate the poles along the right of way, frame them, dig the hole and stand them up, for something between 50 and 100 bills a pole, and he could start next week and finish in two. Unfortunately, Virginia, physics being what they are, pushing the little ergs of electrical energy is a little tougher than falling off a wet log, but the design shouldn't take too long and this would give the entrepreneurs time to deliver their poles. Our man ran into a little difficulty in the fall of 1970 because of the ice on the Mackenzie, and requested NCPC to accept his poles in the spring of 1971. Being reasonable chaps, the Commission reluctantly said yes. Come the fall of 1971, where are our 50 cent poles? You guessed it, frozen in the river at Arctic Red, where they still rest on the beach. Some people call them wooden gold now. Fortunately other entrepreneurs fell from the woodwork and sufficient poles (trees) were obtained to start construction. In the rush, the bark was forgotten on the odd pole. Thus, poor old Nick's remarks. Wire, insulators, cross arms, etc. trickled into Inuvik and Tuk during the summer of 1971, and sticking to Murphy's law as much as possible, ended up in the wrong place and did. Tenders were called and the $100 pole soon became a $500 pole. NCPC decided to go it alone and hire the contractors as they needed them. Our friend who was going to do the whole bit for $100 never got past the starting line. Operation here was commissioned and Nodwells, drill rigs and hydraulic fluid flew north from Yellowknife, courtesy of PWA and the big bills. Somehow one piece went through the Yukon but success was marginal, as they only have small airplanes.

Construction dragged on through wind, bitter cold and more equipment failures. Finally when all looked impossible again the important member of the Commission's management team flew north to Inuvik. April 9th blossomed forth, the sun shone, the wind went down and 18 poles were set. Thirteen days later the line was in sight of Tuk. To welcome the press who came to see it, the crew tipped NCPC's best drill rig on it's side, bending the boom - 5 days later they dropped it again, returning it to it's new condition, minus some paint.

Now all that's left is a few transformers, a bit of clean up, management to fly north and throw the switch sometime this fall and Inuvik juice will serve the citizens of Canada's northern-most hamlet, Tuk.

NICPIC News, June 1972

Frobisher Bay
Film Capital of the North

Super Stars - Did you know that two prominent members of our staff reached the heights of stardom? They are Syd Sime and Barry King who were recently involved in the filming of CBC's production "Two Arctic Tales". The film relates the hardships of the Arctic explorers, Franklin and Hall. With the aid of the staff in the CBC's make-up department, Syd and Barry were transformed into two skinny scrawny, half starved sailors with their feet wrapped in yards of gunny sack, to portray the roles of lost seamen. The highlight of Syd's (rather, the noble Crozier's) acting ability was when he and his crew were rescued and offered hard frozen mucktuk and they had to react by vigorously chewing on it as if this was the most delicious, enjoyable food they had ever partaken. Our two stars appeared to have enjoyed their short-lived acting careers and were well rewarded with a few hefty slaps and a few grams of hot buttered rum. Syd enjoyed the making of the film but felt the frozen mucktuk was too, too, much.

NICPIC News, January 1972

Frobisher Bay
2nd Annual Robbie Burns Night

"Better late than never", as the saying goes, and this applies to the much-anticipated Robbie Burns night, which was held in the famous gathering place, The Legion, on Saturday 5th February.

The majority of NICPIC Scotties actively participated in this event to ensure that Robbie Burns was well remembered. Although the evening was a smashing success and everyone had a splendid time, this year's event was not as colourful as last year's, the reason being that the piper was not around to pipe in the Haggis. The absence of the piper was in no way the fault of the organizers but that of Nordair and local weather. From all reports, a few NICPIC members had difficulty in recalling the specific celebration and were doubtful as to their actions during the festivities. Unfortunately, some of the photos taken are now being processed but one gets the impression that as the evening progressed, photos of the event would not be suitable publication.

NICPIC News, April 1972

News from Regional Office, Yellowknife

Nobody can say that Regional Office staff do not get out in the field and visit the plants. Since the last issue Andy Jones has been away to Fort Simpson, Fort Smith, Pine Point and Fort Resolution. Charlie Burgess has also been busy travelling to Fort Simpson for the installation of the new D399 Cat unit there, he has also been up to Fort Norman, Fort Franklin and Norman Wells, gathering information for updating the distribution system drawings there. Phil Johnson has spent considerable time away on the take-over of the new Power Plants, the latest series being the acquisition of facilities at Spence Bay, Pelly Bay, Gjoa Haven and Holman.

NICPIC News, April 1972

Superintendent Conference

By George Olson

Vancouver, March 7, 8 and 9th, 1973, grass growing green, flowers starting to bloom, this was the lovely setting for Bruce Christie's 1973 Superintendent's Conference.

Thirty eight Commission people were on hand from the plants, regions and head office along with Chester Prevey who temporarily came out of retirement to help us with local arrangements.

From General Manager John Lowe's opening address through to the wind-up session discussions were frank and open and as a result we now know one another better.

In addition to presentations by Operating, Technical Services, Personnel and Accounting Departments, a very interesting visit to Finning Tractor Company in Vancouver was arranged which included a delicious buffet lunch.

We have requested comments, suggestions and evaluations from all participants. To date about one third of those attending have replied and a quick review indicates the conference has been judged a success.

We urge all participants to let us have their comments - they are essential for the planning of the next conference.

Our thanks and compliments to Bruce for a good job well done.

NICPIC News, April 1973

NCPC SUPERINTENDENT'S CONFERENCE Apr./May 1973

The Pallisades, Jasper, Alberta

Back Row: Buzz Simms, Lloyd Cole,.Syd Sime, Erwin Barber, Bill Rudy, Tony Whitford
Second Row: Gerry Podhora, A.H. Todd, Reg Coy, Ed Newcombe, Gordon Walmsley, Joe Pyne, Floyd Strand, Fred Wittlinger
Front Row: Graham Tench, Bob Leffingwell, Bruce Christie, John Dube, Lorne Vance, Bill Stott, George Ford.

Head Office Relocation

Ottawa to Edmonton

Summer 1973

June 10th News Release From Edmonton, Alberta

The Honourable H. A. Olson, PC, MP, Minister of Agriculture, on behalf of The Honourable Jean Chretien, PC, MP, Minister of Indian Affairs and Northern Development, announced the pending migration of our Head Office Complex from Ottawa to Edmonton shall take place during the summer of 1973.

NICPIC News, June 1972

Edmonton Move

The move of our head office is scheduled for July and August. To assist both those moving to Edmonton and those not moving, a joint Manpower Adjustment Committee has been set up. This consists of an independent Chairman, (an ex-director of the Department of Supply and Services), two employee representatives, and two management representatives. The Department of Manpower supplies a technical adviser.

Information meetings have been held for both those moving and those staying.

Quite a number of the prospective neo-Edmontonians have rented or purchased residences. Still others are just arranging for their house-hunting trips. A number of the employees not moving have obtained other positions and the remainder are working hard at resumes, interviews, and considering the alternatives open to them.

It's a busy time at 251 Bank Street as we zero in on the moving date.

NICPIC News, April 1973

Construction Report on New Office Building

Construction of the Commission's new Edmonton office building, on a 15 acre site on 51st Avenue some two miles east of the Calgary Trail, began on January 11th. The office building, consisting of two floors of 20,000 square feet each and 5,200 square feet of basement area and complete with parking facilities in the rear for 74 cars, faces north overlooking downtown Edmonton. The outward appearance of the building will feature horizontal ribbons of sand-blasted precast concrete panels and grey tinted glass, accentuated by curved brick-faced stairwell walls on the east and west side exposures and by curved brick entry walls and quarry tile pavers the north or front exposure.

The interior of the building will be featured by a central open stairwell consisting of sandblasted concrete, wood glulam handrails and quarry tile pavers, skylit from above through acrylic domes. Based on progress to date by the contractor, Krawford Construction, all indications are that the building will be ready for occupancy on or before the scheduled completion date of August 1st.

NICPIC News, April 1973

Spence Bay 1973

Spence Bay experienced some freezing rain in August of 1973 which knocked over some 10 poles and left the town without power and without telephone since the radio transmitter tower had toppled over as well. The then local telephone operator managed to get one short sentence out to me in Cambridge Bay - "this is Spence Bay - the poles are falling". Standing in the kitchen at 5 a.m. and getting cold feet, I was wondering if this was a hoax since I was supposed to go on vacation the very same day. But as it turned out, it was no joke as we had it confirmed via the RCMP radio.

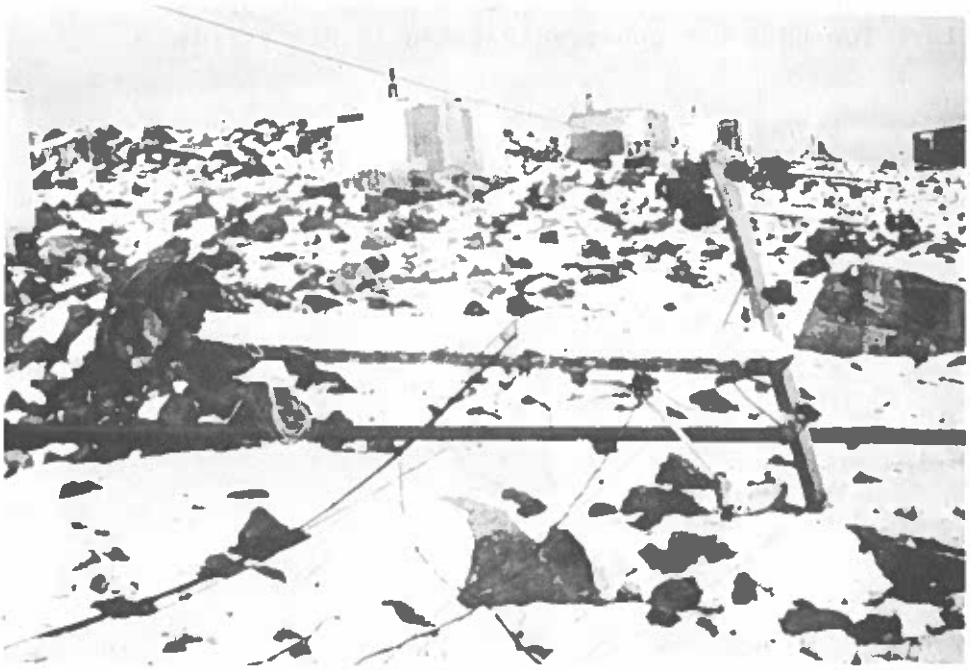
The Cambridge Bay stationed airline refused to fly due to the all-around bad weather conditions. After getting an aircraft from Yellowknife, the line crew flew into Spence Bay the next day to clean up the mess.

Temporary power was on after approximately 20 hours. I still could not go on holidays, since Holman Island had a power outage in the meantime and I was told to go over there to check it out. After getting the power back on and being back in Cambridge Bay I took my still-packed bags and proceeded on my, by now, 3 day delayed vacation. My wife and daughter were waiting for me after all.

Maybe some of you heard the rumbles coming out of the payroll office when my time sheet hit the desk!!

Well, I'm glad these occurrences don't happen too often, but I was reminded just the other day, when we had freezing rain in the middle of October.

Eric Deutschmann



Tune to North to Alaska

Movin-on

The Commission moved from Ottawa, in the year of 73
And everyone was anxious to get to the prairie
With many of our brave men, equal to the test
To establish our headquarters, in Alberta's west

They crossed the open prairie plains, to the land of beef and oil
And landed in Alberta, where they began their toil
To keep the lights a-shining bright, in the frozen land
Yes, these brave souls were hero's, working hand in hand

Chorus

Where the rivers are winding, big hydro sites they're finding
North to the vastland, going north, the push is on

Now Roger, John, Joe and Bruce, among the good guys
Who travel through the vastland, in our northern skies
To build for our government an electrical home
And satisfy our northern friends, so they've no need to rome

For a man needs a purpose to struggle all his life
And when he travels northward, he often leaves his wife
To work just for our customers, with unselfish pride
His love for this big country is taken in his stride

Chorus

Where the waters are flowing our hopes are still growing
North to the vastland going north the push is on
Way up north, way up north, north to
The vastland going north, the push is on.

Jack Behl

Waiting for Winter's Return - 1974

On a sunny afternoon at Lac La Martre, Syd Sime and Eric Jones enjoy lunch prior to completing the takeover of power plant operations from the Territorial Government represented by Bill (bear hunter) McGill. We should have taken the skidoo's instead. At least they prove of some limited use after blowing up.

Long Service Awards

Last December, the Commission hosted three functions in honour of employees who had been in its employ for ten years or more.

The idea of Long Service Awards was very well received and they will now be presented on an annual basis. It was the first time that the Commission has given special recognition to Long Service Employees.

Awards were presented in Edmonton, Yellowknife and Whitehorse and a similar function will be held in Moose Factory in February.

The NCPC Courier, January 1977

1976

Congratulations to All Recipients of Long Service Awards

NORTHWEST TERRITORIES

10 Years
Akeeshook
Alexander Crawford
Gerald Dupuis
Roy Huitson

11 Years
Louis Couvrette
R. Linklater
Joseph Menard
Edwin Newcombe
Sydney Sime

12 Years
Charles Firth
William Bourque

13 Years
Ernest Debastien
Ronald Mabbit

14 Years
Mann Fairbrother
Andre Jerome

15 Years
William Hancock
Charles Linklater
Andrew Joe

16 Years
Siegfried Wittlinger
Charles Neyando
Walter Alexie

17 Years
Cecil Jacobson

18 Years
James Firth

20 Years
John Evans

24 Years
Lorne Vance

28 Years
James Woodman

YUKON TERRITORIES

10 Years
Peter Garside
Vernon Parkin
Dianne Pilloud

12 Years
Orville Bennett

13 Years
Gerd Podhora

18 Years
Henry Breaden
Lloyd Cole

HEAD OFFICE

10 Years
Kenneth Colpitts
Ollie Metcalfe
Charles Quelch
Steve Szabo

11 Years
Miller MacKinnon

15 Years
Sydney Coulas
Reginald Coy

17 Years
Phillip Johnson
Ronald Mack

25 Years
Joseph Long

Reprinted from the December 1976 issue of The NCPC Courier

Corporate

The Commission has filed applications with the NWT Public Utility Board and the Yukon Electric Utilities Board for utility rate adjustments to take effect with the April, 1977 billing cycle. The applications were filed prior to January 1st, 1977 to meet the 90 day notice required by the PUB. The rate adjustment will coincide with the Commission's fiscal year. Our General Manager, Mr. Phil Williams, stated "The new rate structure reflects the recommendations to minimize rate increases contained in the task force report on Electrical Energy Costs in the north, recently released by the Minister of Indian and Northern Affairs. The new rate structure will also eliminate any rate difference between Government and non-government consumers in the Yukon.

In the NWT, no adjustment is stated for Yellowknife residents in April because of the contractual agreement with Plains-Western Gas and Electric Co. Ltd. that requires one year's notice for adjustments. Other communities in the NWT which will not be affected by the rate increase are Arctic Bay, Clyde, Fort McPherson and Fort Simpson.

A cost study recently completed by the Commission on its operations has also been forwarded to the Public Utility Board. This is the most comprehensive cost study ever carried out by the Commission and it will provide the PUB with more up to date and complete information than was previously available, to assist them in considering the proposed rate adjustments. In addition, Management will be making themselves available to answer any questions or provide any additional information regarding the proposed rate adjustments.

Management Notes

The construction equipment from Aishihik, Strutt Lake and Taltson are to be advertised, by agreed procedures, for sale as soon as possible.

The total loss in revenue to the end of December, 1976 due to the Anvil strike is estimated to be $925,000. Total loss of revenue for 1976/77 is to be determined.

All documentation including Cost of Service Study were delivered to NWT and Yukon PUB's for proposed rate adjustment from April 1, 1977. All municipalities, etc., were advised by registered mail of the increases in their area. Press release was issued and the main customers were contacted to provide more information to them if required.

NWT Public Utilities Board advised that interim order will be issued to proceed with proposed increase to Pine Point Mines. NCPC to bill at new rate and complete contract agreement with Pine Point Mines for two years from January 1, 1977.

An enquiry was received from the Federal Department of Communications regarding power supply to communities in which they will be providing telephone facilities. This involved all Northern communities with population of 50 or more. Department of Communications is to follow up in writing stating locations involved so that NCPC may consider further.

Letters were exchanged with Fire Commissioner regarding our intentions of upgrading fire protection and monitoring devices in plants and requesting their co-operation. Financial limitations have been explained and a meeting is to be arranged to progress further.

Management Notes cont'd

Investigations concerning payment of bills in communities in the eastern Arctic through the use of Hudson's Bay Co. has commenced. Present collection arrangements in various Eastern Arctic plants is to be clarified before the co-operation of Hudson's Bay Co. is requested.

The new reactor at Takhini on the Whitehorse/Aishihik system was energized on December 14th and voltage control on the system was noticeably improved. Aishihik plant virtually at full load. Testing of the system is to be conducted to ensure satisfactory operation.

Operations

The remaining utility operations in Moose Factory were transferred to the Department of National Health and Welfare on December 31, 1976. Three employees were offered transfers to various Commission Operations in response to their requests.

At the end of December, 1976, the contracted mechanical overhaul work with Waterous G.M. of Edmonton was completed, while Cummins of Edmonton has completed all but the diesel units in Fort Norman, Fort Laird and Fort Franklin (scheduled for early January, 1977). Hewitt of Montreal, on the other hand, have 15 units yet to be completed this winter. Future contract maintenance of Caterpillar units is proposed to be divided into several contracts to ensure completion before December of each year.

Hall Beach and Pond Inlet operations were transferred to the responsibility of the Frobisher Bay Area Superintendent from that of the Resolute Area Superintendent.

Mr. Fred Richinger was appointed as Plant Superintendent for the Snare/Yellowknife system during the month. Mr. J. Sanders was appointed as Assistant Plant Superintendent at Frobisher Bay during the week of December 13, 1976.

Training

A training program for Plant Operators was started this month.

The Commission saw an urgent need for training in the Operational Area and as a result will be concentrating over a period of time, on conducting training for Plant Operators, System Operators, Contract Operators, and the upgrading of unqualified journeymen presently on staff. Also viewed as being essential is training for first-line supervisory staff, expansion of the Commission's apprenticeship training program and a review of training requirements for operational maintenance personnel. . . . A pilot training seminar, for plant operators, was conducted in Fort Smith from January 10th to 14th, 1977.

Norman Wells

The first apartment building to be built in Norman Wells is nearing completion. The 19 suite, one bedroom bachelor apartments, are in the process of having meters installed and should be ready for occupancy very shortly.

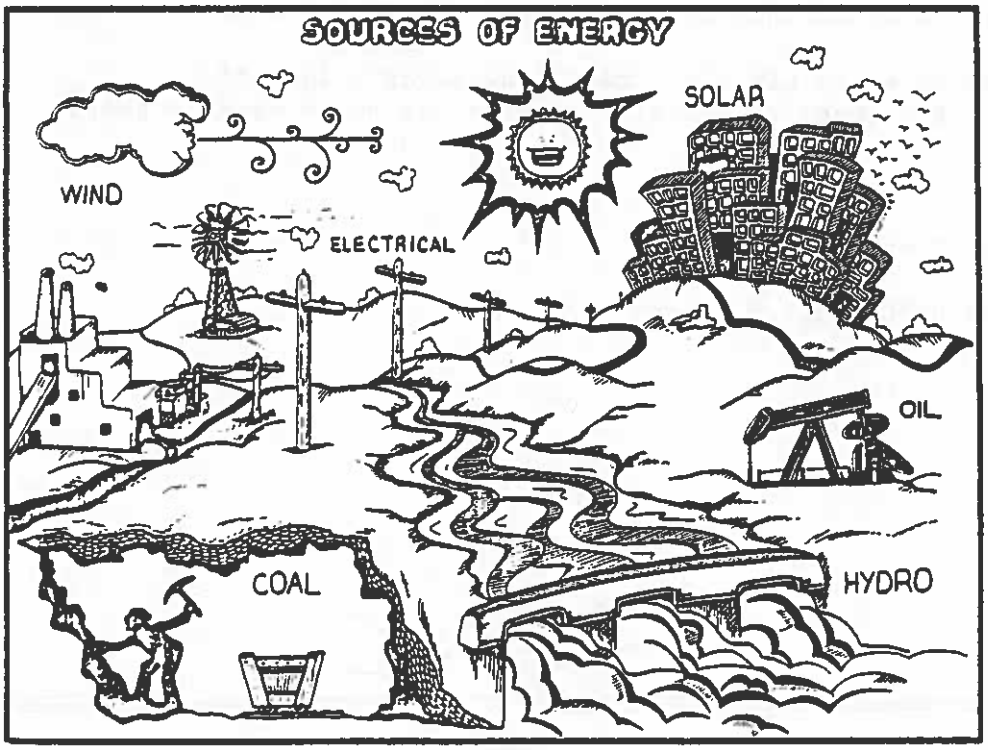
Rankin Inlet

Two weeks before Christmas, our main engine had a piston seizure which resulted in having to replace all the pistons, liners and heads during Christmas and into the early part of the New Year. Happy to report that things are back to normal.

The NCPC Courier February 1977

In going through some files it was discovered that in February 1977 there were no less than five Information Bulletins listing Head Office employee travel to plants and seminars.

In those days information was dispensed easily. Where did we go wrong?



Lineman's Revenge

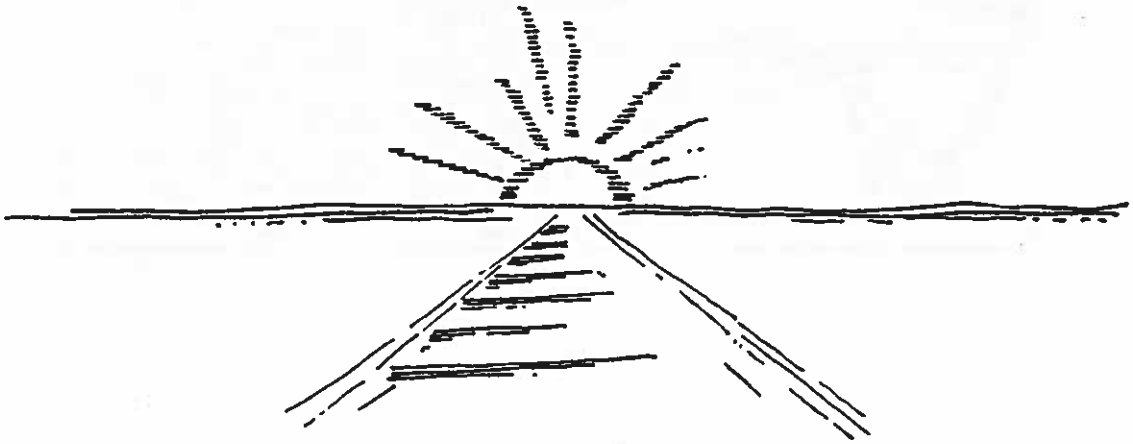
It was in Clyde River and the wind was blowing cold
The boys were building line, just the way that they were told
They were digging holes in permafrost and doing it by hand
The setting of the poles was by means that other linemen would never understand.

They back strung all the wire and sagged it in just right
They tied it in, then hung the pots and pulled the services up tight
They did all this in record time by working day and night
They lived together and batched together and only had one fight.
They were almost finished in the snow and in the wind and rain
And were looking forward to the day the plane would fly them home again.

At last the plane did come and much to their surprise
Off stepped the boss from Yellowknife and looked around, so wise
As he checked the work they'd done, they thought they heard him say -
"There is another line to build - I guess you'll have to stay."
Now on every Lineman's face, there was a look of pain
And the funny thing is, that boss was never seen or heard again!!

By: Glenn Bowers

The NCPC Courier, March 1977



Modular Approach for Emergency and Stand-by Electric Power in Northern Canada

by Dave McGuinness, A.G.M., Planning & Engineering, Northern Canada Power Commission

The following is an excerpt from article by Dave McGuinness, published in the January-February issue of Turbomachinery International.

Steps Taken Toward Modularization

To cater for conditions of extreme emergency, Northern Canada Power Commission purchased, in late 1975, two modularized 90/104 KW gas turbine powered packaged generating units. These units were designed of such size and weight limitations that they could be urgently dispatched, by aircraft, to a remote community whenever a disaster might occur. Once at the site, the unit could be man-handled if necessary.

The second step in the NCPC module program was embarked upon also in 1975. This work included the manufacturing of one 300 KW completely packaged flyable Arctic diesel module generating unit. For test purposes, this unit was installed at Fort Simpson where it has undergone nearly 6,000 hours of Arctic test operation. The results of these tests have indicated design strengths and weaknesses.

The result has been that NCPC have now designed and intend to build a number of 350 and 700 KW flyable self-contained diesel module units.

Since some of the large Northern settlements have electrical loads of 3 to even 50 MW, it was decided advisable to maintain flyable stand-by units suitable for these systems. Again the same design parameters were required to be maintained. In November 1976, a suitable specification was prepared for a 2½/3 MW flyable packaged gas turbine modular unit and after calling tenders and thoroughly evaluating proposals submitted, an offer from Clarke/Turbine Power Systems was selected.

The 2½/3 MW gas turbine generating unit was designed and arranged to take into consideration the factors described.

The complete flyable packaged generating unit is composed of three main modules:

1. The Machinery Module - Module A
2. The Control Module - Module B
3. The Exhaust Module - Module C

In addition to the three main modules, loose components for shipping purposes are paletized on a special skid. To move the modules from aircraft to site and to move from site to aircraft, an adjustable, steerable wheeled bogey has been designed and is provided. Each module section contains battery operated emergency lighting in addition to normal AC lighting.

Each module contains its own Halon fire protection system and the environment is thermostatically controlled in each compartment to best suit the equipment housed. In the case of the control module, not only is the temperature controlled and held within manning limits, but also adequate ventilation is provided as would be needed by operating personnel.

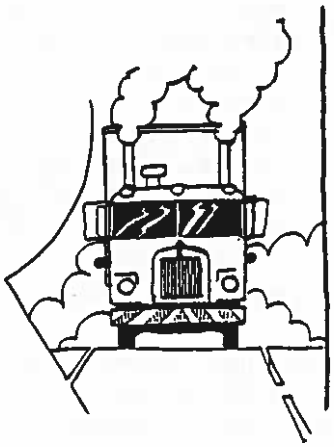
Design simplicity has been the key word. The unit will be located near residential areas hence sound levels were given serious consideration and from tests, so far, external sound levels appear to be quite satisfactory.

The variety of spares and components have been minimized by reduction in the numbers of different types of components such as relays, etc. Because the unit will go into service in remote areas, where even a spare bolt may be unavailable, the minimum of loose, detachable parts has been a design endeavor.

The complete packaged generating equipment has undergone extensive factory tests. In mid-January, the unit underwent commissioning tests at Fort Smith.

The home base for the unit will eventually be Yellowknife, Northwest Territories, where it will be coupled into the electrical system to provide for standby and peaking duty.

The Courier, April 1978



Plant Superintendent Training Program

In cooperation with the Department of Manpower in Yellowknife, the Commission has developed a two-year training program to qualify local persons as plant superintendents.

The first trainee under this program is James Tagalik of Eskimo Point.

Working closely with the area superintendent in Rankin Inlet, James will travel to satellite plants with journeyman electrician, lineman and mechanics, troubleshooting and maintaining equipment. He will then be posted to the Canadian Armed Forces base at Chilliwack, B.C. for hands-on operating experience. On his return to Eskimo Point, he will work closely with the plant superintendent.

We wish James success and hope to see this program extended to other communities.

The Courier, October 1978

The Courier, April 1978

Manager's Report

It would appear that the major efforts made by the whole organization are bearing fruit and that 1977/78 should see us in a small surplus position as against the $6 million loss in 1976/77.

There is no doubt that the 77/78 results themselves have been good and show a reasonable surplus. One major complicating factor is interest of approximately $900,000 on the $9 million outstanding debt to Canada from 1976/77 which seriously affects the overall picture.

Some anomalies will also be removed during the present fiscal year such as realizing losses on equipment sold and a change in allocation of administration costs charged to capital. The Board has decided that only incremental costs may be charged to capital which means that more of the administration costs will have to be charged to operations each year.

New rates are proposed for 1978/79, and although the majority of increases are to the government, averaging about 10½ percent, there will be rate increases to other customers as well in Pine Point, Fort Smith, Yellowknife and the Yukon (excluding Dawson and Johnson's Crossing).

Some progress has been made in our discussions in Ottawa regarding refinancing of the Commission and proposals are before our Minister for possible consideration. The outcome is anticipated with interest but will not now have any effect in 1977/78 as previously hoped.

The pipeline agreement, which is now being finalized, at least indicates that the use of hydro power for powering the compressor stations is to be given due consideration and this is of major importance as it would establish a large base load in the Yukon. This could be the start of the development of larger power plants and eventually import, export of power into and from the north with its many advantages. Because of this requirement in the pipeline agreement we are at last hopeful of receiving the funds we applied for over a year ago which would allow us to start investigations of a major plant in the Yukon.

Some activity is also taking place regarding the possibility of a hydro development on the Slave River near Fort Smith and, here again, NCPC involvement would be of major importance.

The sale of residual heat from diesel plants has now definitely become an accepted practice in the NWT and the first project with the NWT government was completed at Cambridge Bay where jacket water is being used to heat one of their buildings located near the power plant.

Increased efforts in this area could greatly improve the poor economics of diesel generation and having now proved the system to everyone's satisfaction, it is anticipated that residual heat sales will increase greatly.

Discussions have taken place with a university regarding the possibility of using exhaust gases to grow produce in the north by using a special design of greenhouse system that they have developed. This will be followed up further during the next few months. Although not improving the economics of diesel generation, this type of development could be beneficial to northern communities generally.

NCPC - Thirty Years Old

by Joe Long

This fall the Commission is thirty years old and, on the whole it has ably served the people of Northern Canada. From a single hydro plant on the Snare River in 1948 to over 60 operations scattered throughout one and half million square miles in 1978, the Commission experienced many growing pains. However, these pains have not been suffered in vain because many of these experiences will guide us well in a new era of the Commission which is about to emerge.

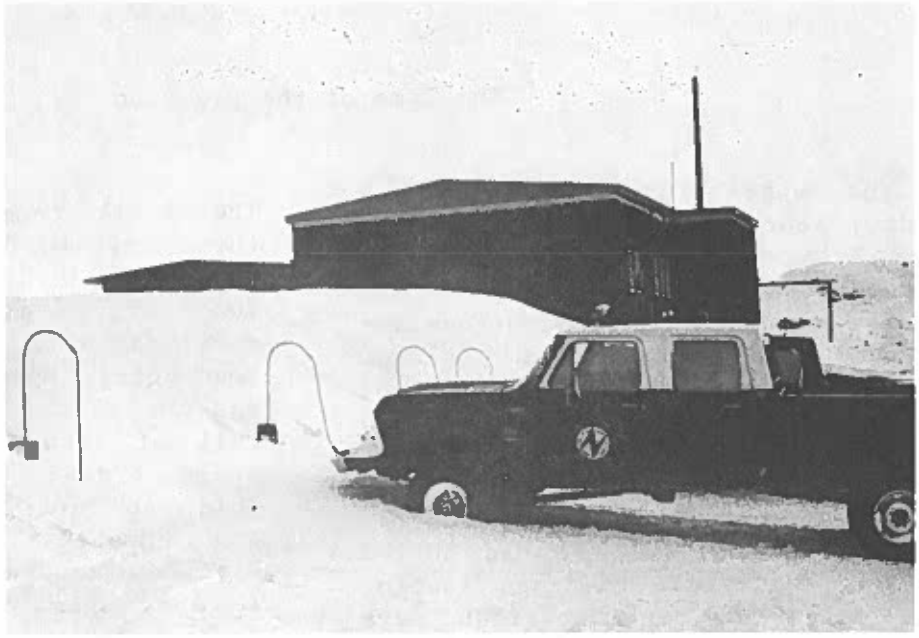
While criticisms have been many and praises few in past years we must sort the wheat from the chaff and recognize only the constructive ones. There is not a single organization in the world that cannot benefit from constructive criticism. We, therefore, like anyone else, must "live and learn" but each and every employee of the Commission should feel that they are performing a useful task in the provision of electric power and other services for people of the Canadian North. Whether we are an operator, technician, clerk, superintendent, or in any one of the jobs in our head or regional offices, we are a cog in the wheel of progress of Canada's last frontier. Those who are in daily contact with the public we serve are in the fore-front and must consider themselves ambassadors for the Commission.

Recent news reports indicate that the Alaska Highway Natural Gas Pipeline is a step closer and the likelihood of developing a major hydro project becomes more realistic. At the other end of the country we expect to direct our attention to remote monitoring of unattended plants in order to improve reliability and safety. In the Mackenzie area we look forward to a transmission line tie to the Alberta system to add stability and reliability to our Taltson/Pine Point system. Across Great Slave Lake the load at Yellowknife continues to grow and additional hydro generating sources will have to be considered.

Along with the Commission's thirtieth anniversary, one of the Commission's original employees, Jim Woodman, completed 30 years service on October 2nd. Congratulations Jim and hopefully more will follow your example of service and devotion.

The Courier, October 1978

Looking from Plant
Towards Water Plant



Frobisher Bay Blizzard 1979

The only pictures I still have are the aftermath of the February 1979 blizzard.

Most of the NCPC people were involved in keeping things going in very trying circumstances. Linecrew out trying to restore power to blacked out areas of town were blown around unless they were tied on to something.

Convoys of skidoos took engineers, operators, mechanics and electricians to the powerhouse and sometimes stayed two to three days because it was too dangerous to try going home. To get into the plant they had to climb a 20 foot snowdrift then slide down to the plant door. A good many people struggled to maintain power -- a lot of unsung heros!

Alex Crawford

Plant Main Door
after clearing
Drift was 18-23
feet thick

The Time of the Big Blow

When the wind started to blow on Thursday, February 9, 1979, the citizens of Frobisher Bay were not overly concerned. Wind storms and whiteouts are quite frequent in this north-eastern community on Baffin Island. However, after gale-force winds of up to 130 kilometers per hour had blown continually for several days, it became apparent that this was not just another of many winter storms. In the final analysis, it had boiled down to a full-scale blizzard lasting for a total of nine straight days with no let up. Even Inuit people who have lived there all their lives admitted to never having experienced a blizzard of that magnitude before.

There were many problems within the community, but surprisingly few serious incidents occurred as a result of this historical storm. There was no air traffic in or out of Frobisher for the duration of the storm, nor for a few days thereafter. One NCPC head office employee can well attest to this fact, as he was unfortunately stranded in Frobisher Bay at the time.

Many of the community's homes are supplied with water daily by truck and, consequently, soon ran out of water. Water trucks, sewer pumping trucks and fuel delivery trucks, along with all other wheeled vehicles were immobilized by snow-blocked roads and zero visibility.

Several homes froze up, forcing the occupants to be evacuated to other residences when their heating fuel ran out, or the furnace broke down. The stores, unable to reach their warehouses to replenish supplies, ran very low on, or completely out of, many food items.

The small community of Apex, about three miles from Frobisher proper, was of special concern. It has no food store and its utilities are serviced from Frobisher. The road connecting Apex and Frobisher Bay was one of the first to become drifted full of snow. Finally, a few hardy souls braved the weather and were able to get through with skidoos and kamutiks (sleds). The Hudson Bay Co. managed to get a warehouse in Apex open and disperse some basic foodstuffs to the people. Two very ill people were brought to the Frobisher Bay hospital by skidoo and kamutik.

The NWT government set up a dispatching point at one of the local contractor's offices, being unable to reach their own offices, and distributed what food, fuel and honeybags they could by skidoo. The hospital was used as a central communications point for people needing help. The local CBC radio station held open-line programs that anyone in trouble, or with advice to offer, could call into. Bell Canada must be complimented on their phone system, and on the fine efforts of their operators and other personnel in keeping the communication lines working. Telephone communication was invaluable throughout the duration of the storm. Many individuals lent support and assistance to friends, neighbors and anyone else they could help. Due to great efforts on the part of the community's citizens, there was no loss of life or serious injury.

While NCPC in Frobisher Bay feel it is only part of their job to keep the power on under any conditions, it was at the same time very satisfying to receive the many compliments and gratitude of the people for a job

Eskimo Point Fire

Fire was detected at the Eskimo Point power plant at about 4:30 Christmas morning. Early reports indicated that a D398 Cat unit had been badly damaged by fire with the alternator and an adjacent D353 being damaged extensively. It was evident that emergency power equipment to the site would be required.

At 3:00 a.m. December 26, 1978 a Hercules aircraft departed Edmonton with a GM 250KW unit, arriving at Eskimo Point 8:00 the same morning. The Hercules then proceeded to Frobisher Bay to pick up a 700KW Cummings Modular unit to take back to Eskimo Point.

Partial power was restored late Tuesday night, December 26, 1978., and full power on December 31, 1978.

Many employees willingly gave tremendous help and support over the Christmas holiday and to them we give our special thanks and appreciation for their dedication.

Departments and plants concerned were: Head Office Engineering, Operations and Purchasing, Yellowknife Plant personnel, Rankin Inlet and Eskimo Point personnel, Frobisher Bay personnel.

The Courier, January 1979

Frobisher's Big Blow

well done. NCPC were very fortunate in having only a few outages on one of the four feeders during the big blow. Almost every one of the NCPC personnel played some part in keeping the system running. The operators and engineers put in long nerve-racking shifts. Mechanics and electricians made several dangerous trips to the plant to effect repairs. Two of the line crew used their skidoos to transport people to and from the plant under almost impossible conditions - both day and night. Superintendent, plant chief, and supervisors kept in constant telephone contact with each other and with their respective crews. The office personnel and storesmen played their major role after the storm was over, by coping with the heavy work load caused by the shut-down of the office for more than a week.

We can be very proud of our NCPC personnel in Frobisher Bay and indeed of all the citizens of this remote northern town. It's a good feeling to know that in a crisis, people can and still do pull together to help their fellow man.

Glenn A. Bowers
NCPC Line Superintendent
Frobisher Bay

The Courier, October 1979

Yukon 1981

My first week at work in June 1981 involved attending government hearings on NCPC operations by a parliamentary committee. Many of the briefs were not very complimentary, and almost everyone seemed to be mad about the project at Aishihik. The Conservation Society presented a play which dramatically stated that bones of native ancestors were crying out in rage at the development, and one dressed as a moose cavorted around predicting that moose would disappear. This ended by dumping a sack of moose manure in front of the committee.

Another local character gave a presentation blaming most of the problems in Yukon on the Anglican Church, but failed to indicate how this related to NCPC.

The same night a Mirlees Diesel threw a piston through the crankcase causing much damage and expense. Fortunately John Allan was in town for the hearings, but it didn't take me long to get into the operational role in Yukon.

There was a lot of activity in Yukon during this period. The price of gold and silver was high. The pipeline was still anticipated. There was major expansion at Faro both at the mine and substation. Feasability studies were underway for five hydro sites. The Yukon River Basin study was in progress and it seemed that only Yukon Electric and NCPC were concerned about hydro. The water levels at Aishihik had dropped to dangerously low levels and at the same time the Yukon River was flooding cottage owners property at Marsh Lake. The cottage owners were convinced that NCPC was responsible. Studies were underway for a proposed dam at Atlin, much to the concern of Atlinites. There was periodic flooding at the north low-lying end of Whitehorse during freeze-up in the fall due to the formation of "Anchor Ice". There were other areas of concern such as getting an assured five year supply of diesel fuel under contract. There were problems with reliability of the Dawson system. Approval was being sought for construction of Unit No. 4, and NCPC was not thrilled at the prospect of being responsible for operating a fish hatchery.

How things had changed when I left approximately three years later. The price of gold had plummeted. The pipeline was a dead issue. Cyprus Anvil was shut down. The Yukon River Basin study was essentially completed with considerable hydro input primarily as the result of the experience and input from Dave Duguid of Monenco who assisted NCPC on the committee. The water was returning to Aishihik, and after several meetings with the Marsh Lake committee, with detailed explanations of the Yukon River system by Dave Duguid, I believe most agreed the problem was beyond the control of NCPC. We did however have a lawsuit which was lost on the first go-around. Henry Breaden who had spent a lifetime studying the Yukon River presented a fine report on anchor ice and concluded the only solution to flooding is to move those affected. In addition, the need for an assured diesel supply disappeared and major improvements were made to the distribution and plant at Dawson. Unit No. 4 was built and ready to roll. However, I noticed on T.V. recently that NCPC is still not thrilled about operating a fish hatchery.

There were some humorous incidents, some of which should not be put into print. However, I still chuckle when I think of an irate hotel owner at Dawson phoning when his power had been cut off for non-payment of bills. When I tried to calm him down to find out the details he would have none of that. "Don't try and

be diplomatic with me" he said. Nevertheless, the problem was settled amicably.

In looking back on our experience, the most gratifying part was the many fine interesting people we met and worked with, and the support I got from Head Office staff.

What is "life after NCPC" like? Well, Ingrid and I are both enjoying retirement, but I am so busy I don't know how I ever had time to work for a living. Our summers are spent at our small farm near Davidson, Saskatchewan, but we only farm the yard. Gardening, maintenance and the social activities of a rural community keep us occupied. However, when the geese start to fly south it's nice to move back to our home in Regina equipped with a thermostat and gas heat. So far we have spent some time down south and in Vancouver after Christmas each year. Next summer we hope to Van up to Yukon again to renew acquaintances. We would like to browse around Mayo a bit if Eileen or Les are still around to direct us. We also hope to explore some of the back trails around Dawson if Bill Grandy can supply us with maps, and perhaps travel up the Dempster to pick some more Cloud Berries or "Bake Apples" as Bill calls them.

We have a satellite dish so we can get CBC North and we hear from Yellowknife that Mr. Johnson is having troubles with Ravens on his power line. It seems that even hanging dummy Ravens on the line won't deter them. Keep up the good work Phil, along with Ravens and Woodpeckers you have problems.

Best regards to all our friends at NCPC.

Harold & Ingrid Kaldor

Picking Cloud Berries
(Bake Apples in Newfoundland)

A Parliamentary Sub-Committee of the Department of Indian and Northern Affairs has scheduled public hearings in a number of Northern Communities to hear briefs from interested citizens, companies and agencies on the role of the Commission in Northern Canada and recommendations on changes to the Commission's present mandate, organization and authorities under which it is required to function. An internal briefing session was presented to the sub-Committee in the Edmonton office on Wednesday, May 13, 1981, with additional hearings scheduled in a number of Northern Communities during late May and early June for the purpose of hearing presentations from various interested parties.....

Northern Lights, May 1981

Faro News

Faro plant is just coming out from under the hectic times caused by an electrical short and fire in our substation. The suspected cause of the start of this was believed to have been when a squirrel grounded himself between a phase of casing or opposing phases on a recloser, resulting in a chain reaction leading to damage to our main step-down transformer. From there on in we had problems with our diesel and some damage had occurred in the D.C. circuits as well. However, we managed to keep the town from freezing up and apart from a few components we are nearly back to normal.

Good weather is upon us and so are the contractors who are building our extension and new gas turbine plant....One of the two new gas turbines was expedited the last week in March from Inuvik down the Dempster Highway under the able direction of S. Sime and a crew from Fort Smith.

Northern Lights, May 1981

Hydro Development Investigation Program

Press Release issued May 15, 1981

Mr. Joe Long, General Manager of Northern Canada Power Commission in Edmonton has recently announced an active hydro development investigation program for the Southern Yukon area to determine future hydro sites.

The investigation program includes two large potential dam sites. One in the Granite Canyon area and the other "Mid-Yukon Project" in the Eagle Rock area of Yukon. Preliminary studies of both these areas began last year.

In addition to the two above areas, there will be five small to medium size potential sites selected for testing.

The overall investigation program, which should take two to three years to complete, will involve seismic surveying to determine rock structures and some topographic mapping of each area. From this information, preliminary designs of each site will be drawn up and comparisons made to determine which sites are most feasible for development.

The selected site will provide hydro energy to mining developments in the MacMillan Pass area, and will tie in with the existing Whitehorse-Faro hydro grid system.

Feasibility testing is being continued at Granite Canyon; similar investigation work covering possible development of hydro potential at Ross Canyon on the Ross River is being investigated; at Hoole Canyon on the Pelly River; at False Canyon on the Frances River; and a possible small development on Squanga Creek.

NCPC will also be conducting preliminary environmental studies for all sites to determine fish and wildlife populations of each area.....

General Manager's Comments

We have recently closed our books for the final year ending on March 31, 1981 and although the accounts are still unaudited, it appears we made a modest loss. During the past year we were still plagued with low water levels in some of our hydro reservoirs and thus required more diesel generation and unscheduled diesel repair costs. While we lost some ground on the financial side we made some advances in most of the other areas of our operation.

The New Woodman Inn Opens

On July 5, 1981 the new Snare Rapids House was officially opened, and was named the WOODMAN INN in honour of Jim Woodman, one of the oldest employees still on strength with the Commission. Jim has been the resident cook at Snare for many years.

...Jim cut the ribbon, and John Allan presented Jim with a commemorative trophy on behalf of the Commission and the Yellowknife staff in appreciation for his care and concern for all employees who spend any time at Snare. The trophy featured a brick salvaged from the fireplace of the old staff house which was destroyed by fire in June, 1980. On either side are pictures of the old house and the new one. The names of all the Yellowknife staff are engraved on the base.

Northern Lights, July 1981

Information Systems

The Computer Department has increased memory capacity on the 9030 to 393K and are now busy implementing Release-7 which will allow the use of terminals in various locations. We are also anxiously awaiting the arrival of the new Cyborg payroll system which should be implemented by January 1, 1982.

For those of you who don't know, the definition of Cyborg is -- a human being who is linked (as for temporary adaptation to a hostile space environment) to one or more mechanical devices upon which some of his vital physiological functions depend.

Northern Lights, September 1981

News From Whitehorse

Hawker Siddeley is well underway replacing the "A" bank block on one of our KV-16's (we have two 16's). The new block is set to go on and "B" bank is getting an overhaul as well. If you know anyone interested in a 10 ton engine block - give us a call; don't forget to tell them that only seven cylinders are useable. We also have bent con-rods, broken valves and warped heads for sale but quantities are limited.

Faro is presently undergoing installation of two new gas turbines; one being the infamous "orange machine" that has seen Yellowknife, Inuvik and other "fortunate" places. These two new gas turbines will accompany the KV-16 already there to provide the extra 8 meg's that Cyprus Anvil needs by October.

Northern Lights, September 1981

NCPC Presentation to the Sub-Committee on the
Standing Committee on Indian & Northern Affairs

The Commission in its initial presentation to the Sub-Committee, included a summary which outlined eight concepts the Board feels will provide a positive approach to the future of NCPC. These eight concepts are:

1. The early transfer of NCPC's administrative component from Edmonton to the North and, at the time of transfer, division into two operational units one serving NWT and the other the Yukon (now approved and planning to accomplish is underway).

2. Creation and implementation of a clear and concise Northern energy Policy. Without such a policy, no long range strategies can be developed by NCPC.

3. Establish a licencing and regulatory agency to which NCPC would be required to report, as would all other sponsors of electrical power installations of an established capacity (The British Columbia Utilities Commission is a possible example). This regulatory body would be composed of an equal number of representatives of the Federal and Territorial Governments. Thus the views of the three Governments would be embodied in its decision.

4. NCPC continue to equalize and rationalize its rate structure to reflect the actual cost of providing a service, free from all hidden subsidies. Further, NCPC seeks the freedom to realize a legitimate return on its investment - a right enjoyed by many Crown Corporations.

5. The present reporting relationship through DIAND might best be terminated and NCPC's Parliamentary "home" become the Ministry of Energy. Also the return of NCPC to Schedule "D" of the Financial Administration Act (where it was originally) would classify the Commission alongside its major Northern commercial counterparts, i.e. Northern Transportation Co. Ltd. and Canadian National (Northwes-Tel).

6. Flexibility in loan terms and conditions - allowed by our Act - but never implemented.

7. Access through the Parliamentary route before, or applicable section of NCPC Act after, for realistic investigation funds, so planning for the future is properly done; and

8. To generate a new set of internal and external attitudes towards NCPC, we strongly recommend that the 'Commission' change its name, or be referred to as Northern Canada Power.

The Commission appeared before the Sub-Committee at a public hearing in Yellowknife, September 21, 1981 and Whitehorse, September 22, 1981, to expand upon the proposals listed above. The Sub-Committee must now examine all the representations made to it by NCPC and the numerous witnesses who appeared before them and prepare their report to Parliament. It is our hope of course, that the Sub-Committee will recommend the implementation of the proposals presented by the Commission, but we will have to wait for their report to find out.

The Sub-Committee has several months of work ahead before issuing their report. The Commission, therefore, does not expect to hear what the outcome is until early in the New Year.

J. Smith, Chairman

Letters of Appreciation

February 10, 1982

The Manager
NCPC
Fort Smith, N.W.T.

Dear Sir,

Last weekend when our power was cut off, because of a tree falling across the power lines, we were very concerned at the situation we found ourselves in.

We need not have worried. Within less than 15 minutes you and your men were on the scene. The power was restored in ample time to prevent any problems.

I would like to express our heartfelt thanks to NCPC for the way in which they responded, turning out in the middle of a very cold and windy night. Please express our appreciation to your staff.

Yours sincerely,
(signed) Bill & Maureen Stapleton

System/Plant/Sattelite Operator Training Program On GO April 1, 1982

On March 30, 1982, Regional Superintendents, Parent Plant Superintendents, Union Representatives from the Parent Plant areas and a Public Service Alliance Representative from Ottawa attended a Training Program Orientation Seminar held in the Gold Room at the Yellowknife Inn.

The Seminar centred around program familiarization and implementation effective April 1, 1982. ...

This training program has been in the development stages for the past three years and has finally climaxed towards implementation. System, Plant and Sattelite Operators will now have the benefit of an ongoing, in-house, training program to further their education in their trade and the training will be consistent throughout the Commission. Upon successful completion of the training program, Operators will be awarded a three-part Certificate indicating each course and level successfully completed.

# # # # #

Mines Expected to Reduce Average Consumption of Electric Energy This Year

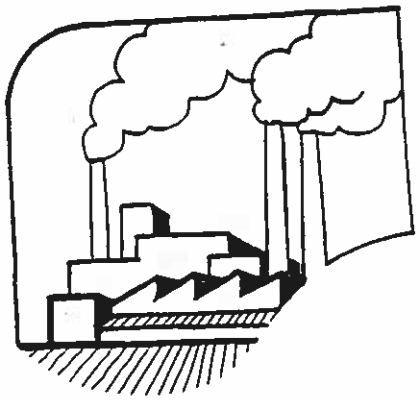
The present state of the Canadian economy is surely taking its toll on the Yukon Territory and Northwest Territories. High interest rates, a weak Canadian dollar and a depressed metal market have placed the mining industry in financial dire straits. To address these problems, some mines have taken measures that will result in reduced demand for electric energy from NCPC.

Some months ago, United Keno Hill Mine at Elsa laid off a number of its employees. Later this year the mine may embark on a one shift operation. Cyprus Anvil Mines at Faro is expected to shut down for two months with the possibility of an extended shut-down if the economy does not recover. Whitehorse Copper is expected to close down at the end of 1982, a few months earlier than anticipated. Low gold price is also hurting Giant Mines in Yellowknife. The future of this mine is uncertain at this time.

The net effect of the anticipated curtailment in mine operations will be a reduction in consumption of electric energy not only in the

Mines Reduce Consumption (cont'd)

industrial sector but, to some degree, in the residential and commercial sectors as well. The impact of the ailing mining industry on the economies of the north is expected to be more depressing in the Yukon Territory than in the Northwest Territories since the latter is less dependent on the survival of the mining industry than is the Yukon Territory. Unless the Federal Government implements measures to assist the industry, the present infested economy may create ills that will take the north years to cure.



Northern Lights, May 1982

From News Release Package, April 19, 1982

Whitehorse No. 4 Hydro Turbine

The Whitehorse No. 4 hydro project, initially announced March 16, 1982, represents a significant component of the larger package of initiatives in the Energy Policy for North of 60.

The 20-megawatt expansion of the existing Whitehorse installation is expected to cost between $52 and $58 million and will commence immediately, with completion scheduled for early 1984. Financing for the project is to be provided by the federal government at favourable Crown Corporation borrowing rates with the loans to be repaid over a period of 40 years.

The new facility is expected to generate 63 gigawatt hours per annum of power, resulting in a reduction of diesel fuel consumption of 18.2 million litres per year. It will include a new powerhouse for the turbine and electric generator, intake, tail-race and penstock, as well as a small fish hatchery to ensure there is no change in salmon productivity in the area.

Approximately 85,000 hours of work will be created for local tradesmen with a total expenditure of $150.0 million in the Yukon economy for sub-contractors, suppliers and local business. The peak work force is expected to be 120. It will be a 99 percent Canadian-sourced project.

Whitehorse No. 4 will enhance the hydro efficiency of the Aishihik-Whitehorse-Faro system and provide stability in power costs after 1984 when diesel prices are expected to be much higher than at present.

The basic concept of the Whitehorse No. 4 hydro turbine is to utilize the higher volumes of water flowing in the Yukon River in the summer, now surplus to the requirement of the existing generators. There is no additional water storage required and there will be no effect on water levels during the year as a result of the installation of the fourth turbine. The generation by Whitehorse No. 4 will decrease the diesel generation at a cost saving of $8.2 million per year in today's dollars.

Objectives of Energy Policy North of 60°

In early 1981, the Honourable John Munro established a Northern Energy Strategy Task Force to investigate energy issues and to provide recommendations related to concerns North of 60°. The Task Force included representatives of the two Territorial Governments, the Northern Canada Power Commission and the federal departments of Indian Affairs and Northern Development, and Energy, Mines and Resources.

After consideration of the Task Force's work, the Government of Canada has adapted the following objectives for energy use in the North:

i) fair energy prices;

ii) reduced oil dependency through enhanced conservation and the development of alternative energy sources;

iii) security of supply;

iv) an improved capacity for forward planning of northern energy systems;

v) further energy self-reliance, by encouraging economic supply alternatives to oil products from southern Canada; and

vi) participation of Northerners.

These objectives are consistent with the objectives of the NEP and reflect the specific energy problems North of 60°. They also reflect the federal government's appreciation of energy policy positions that have been proposed by the governments of Yukon and the Northwest Territories in recent months.

The stabilization of electricity costs over the longer term by the capital investments in the Whitehorse No. 4 hydro turbine is a program initiative related to fair energy prices.

The new Remote Community Demonstration Program, from which the Government has set aside $10 million for the North to demonstrate the cost-effectiveness and feasibility of alternate energy supplies, is an example of a program addressing objectives two and three.

The intention to review the present energy subsidy programs and to study various alternatives that would address the underlying causes of high energy costs over the longer term are responses to the fourth and fifth objectives.

The impact of these initiatives on utilizing local resources results in enhanced opportunities and benefits for northerners.

The foregoing excerpts taken from a Government of Canada News Release Package made jointly by The Honourable John Munro and The Honourable Marc Lalond and dated April 19, 1982.

Northern Lights, May 1982

Recommendations of
SubCommittee on the Northern Canada Power Commission

Organizational Alternatives

1. The federal government should enter into discussions with the territorial governments for the purpose of creating separate territorial Crown corporations to assume present NCPC responsibilities.

2. The NCPC should be relocated in the North if the alternative of complete federal devolution of the NCPC's responsibilities to the territorial governments is not quickly accepted.

3. The territorial governments should enter into discussions with the NCPC and the private utilities to determine how they can assist the territorial Crown corporations in discharging their responsibilities.

Need for Leadership and Co-ordination in Planning

4. The federal government and the government of each territory should prepare a long-term energy policy identifying the overall energy needs of each territory and how they might be satisfied.

5. A planning council (made up of representatives from the governmental utilities, private utilities and other producers and consumers of electrical power) should be established in each territory to prepare and annually update an electrical energy plan, taking into account the long-term energy policy of the governments, and to make recommendations for government funding of feasibility and other planning studies.

Solution to Regulatory Dilemma

6. All electrical power utilities operating in the Yukon and the Northwest Territories should be fully subject to regulation by their respective public utility boards.

Financing of Electrical Power North of 60

7. The existing debt of the NCPC to the Government of Canada should be written off in the accounts of Canada.

8. The Government of Canada, in consultation with the territorial governments, should annually establish maximum prices for purposes of subsidization of electrical power in the North.

9. Private capital should be considered as a source of financing when the costs of a power facility can be fully recovered within the maximum prices.

10. Flexible financing arrangements, calling for the debt charges to be deferred for a period of time whenever costs exceed the maximum prices, should be established for loans to finance hydro facilities that are ultimately, but not immediately, expected to generate electrical power at costs less than the maximum prices.

11. The capital costs of all other electrical power facilities should be financed through capital grants.

12. If the foregoing measures are not adequate, operating grants should be provided to reduce rates in those areas where costs exceed the maximum prices.

Northern Lights, May 1982

Superintendents Graduate From Chilliwack Training

July 6, 1982 marked the successful conclusion of the first Diesel Training Program of NCPC employees in a military training program.

Congratulations were extended to Superintendents Jim Sweetland and Martin Carrol upon successful completion and graduation from the military school.....NCPC can be proud of both superintendents for their efforts and achievements but especially Jim Sweetland who was commended by "military brass" for being the Top Honor Student throughout the entire course.

The second Chilliwack course will commence September 13, 1982. Selected to attend this course are superintendents George Slatter from Coppermine and Robert Schmidt from Fort Good Hope.

Northern Lights, September 1982

New Policy

The Commission has recently approved a policy whereby it is now possible for northern electrical consumers to use available wind energy to supplement or fully supply their electrical consumption requirements. A limited connection of such equipment will be permitted in recognition of the potential energy conservation/off oil programs. These connections will be subject to specific restrictions to ensure the safety and protection of Commission property, equipment and operating personnel as well as the general public.

Northern Lights, September 1982

Dawson City News

With summer coming to an end and winter just around the corner things in Dawson City are beginning to slow down. The tourists are going home and the miners are working like mad to get as much gold as they can before freeze-up.

The work at the plant is just about at its completion stage...The new cooling system for the engines will be quite an improvement over the old system and it should supply a lot more heat for the plant this winter....

Northern Lights, September 1982

Purchasing Department News

Greetings from Purchasing! Well, the sealift is nearly over for another year. Now comes the time to try and catch up on the backlog of requisitions received while we were involved with the priority sealift orders. Holidays are over for us here, and, before we know it, it will be time again for annual resupply requests to be coming in again!

This has been a busy summer and we are still spinning in our desks after ordering, expediting and organizing deliveries on all the summer resupply orders. We would like to take this opportunity to thank all the plants for their cooperation and patience during the summer months and to remind you to keep those final receivings coming in!!

Northern Lights, September 1982

A Message from the General Manager

The economic situation in the territories continues to cause concern. Because there is no significant industrial and manufacturing base, there is great vulnerability to recessions and to the high cost of energy.

NCPC is vulnerable in the same fashion and I ask all of you to manage in as cost-effective a manner as it is possible for us to do. The proportion of our costs that we can control is limited but it is essential we do all we can to ride out the rough economic weather we are now experiencing.

I wish to express my appreciation to all of you who have already had to significantly modify your work plans to accommodate these new conditions.

J. W. Beaver

Northern Lights, September 1982

Greetings from Rankin Inlet

Warm, sunny weather has finally arrived in Rankin. There have even been a few days warm enough for wearing shorts. But, unfortunately, the mosquitoes have also found us....

School will start here on the 9th of August. The new Maani Ulujuk school is a beautiful building. The community library and the Resource Centre are also housed in the new facility. The students have used the community library since the previous school was destroyed by fire in 1978. The gym and elevated jogging track have been in use several evenings a week this summer for exercise classes and basketball games...

Northern Lights, September 1982

From Spence Bay

I have just received one of those unexpected thank you letters which I would like to share with you. It began while the sea lift was just at the end and the Camsell Icebreaker needed a hertzmeter badly. Thus the Chief Engineer, Pete Blight, came up to the powerhouse and asked if I would have one he could borrow. I was glad to help and loaned him one I had.

He returned the meter with a thank you letter and mentioned that he had found one just like it at an abandoned DEW line station where they had stopped off for a look around. I had mentioned to him that the one I loaned him had come from a DEW line station originally, so no wonder he found an identical one. The address on the letter is also most interesting - Amundson Gulf - a big place that is...

Eric Deutschmann

Northern Lights, November 1982

On the October 16, 1982 weekend Coral Harbour employees Ted Felepchuk and Patrick Nester were called to the airport to repair three engines and get them back in service. Before they were able to leave, a blizzard blew in and Ted & Patrick had to wait it out. In the meantime the MOT personnel saw to it that they were well fed and housed during the two nights and also helped to get their truck free from the snow so they could return the ten miles back to base....

Northern Lights, November 1982

MAIL DAY -- MAIL DAY

We know that the mail is slow, but..did you know just how slow? How about 24 years?!

On Saturday, July 31, 1982 mail was found approximately 30 km out of Spence Bay at a place the people call Netselik Lake. The mail was dated October 6, 1958 in Acton, Ontario and addressed to Ernie Lyall our neighbour. Some of you probably know Ernie from some trip or other or from his book "An Arctic Man". Besides the letter from his friend, some slides from Kodak and some 78 rpm. records were found which are all in very good condition, considering the length of time they have been scattered around the tundra and in our northern weather. The letter is still legible and holds a promise for a Christmas parcel with some toys and decorations for the tree. These items still have to be found. Ernie figures the parcel probably was in the same pannier with the rest of the mail, since mail in those days was dropped by parachute every now and then from a Canadian Air Force plane. Nothing much was left of the pannier in which the mail bag was dropped and of course the misshap was that the pannier fell out of the plane prematurely without a parachute.

.....We are past the mail-drop days, but it sure takes its time just the same - ask anybody - don't we know it?!

Hope this gets to Edmonton on time for the next edition of our Northern Lights.

Eric Deutschmann, Spence Bay

Northern Lights, November 1982

Whitehorse #4

Construction work for our new 20 megawatt hydro unit at Whitehorse got underway last spring. Good weather during the summer helped progress generally, with rock excavation for the powerhouse completed and the first concrete for the draft tube foundation placed in late August. The construction schedule calls for work on the powerhouse to continue all winter, primarily on the installation of the turbine components and second stage concrete work. The completed powerhouse will be 18 by 24 meters in size, housing the single turbine/generator unit and auxiliary equipment.

Other aspects of the project under construction include major modifications to the regulating sluiceway to create an intake for the new unit, excavation of a 300 meter long tailrace channel, and a new 138 kV sub-station.

In addition to the new hydro facility under construction, we are also building a fish hatchery for the Department of Fisheries and Oceans as a requirement of our water licence. The idea is that the new hatchery will provide young salmon to the Yukon River to compensate for those lost by passing through the hydro turbines during the downstream migration period.

Our construction schedule calls for the new unit No. 4 to be in service in November of 1983.

W. C. Fox

Northern Lights, November 1982

NWT Regional Office

Hello from Yellowknife. We are pleased to welcome Lorne Cooper into our midst and though (at time of writing) he is working from a table surrounded by coffee pots, postage meters and filing cabinets, he is equipped with a telephone and lots of paper. Hopefully as you read this Lorne will be relocated into our expanded facilities and will have revised systems in place to assist in administering our property and licencing programs.

Housing, Water Licences, Rights of Way and Land are the significant features Lorne is overseeing. I'm confident this decentralized activity will produce the results everyone wants.

A new (and decentralized) activity which will result in improved meter service to all plants is rather slow in becoming a reality due solely to the lack of housing in Yellowknife. Unfortunately there is a very tight market here. It is an ill wind which doesn't blow some good, and continued mining activity in the area is the enjoyable penalty we pay with the current housing shortage. If we ever locate suitable housing our meter technician's position can be filled quickly with some excellent and experienced persons to choose from.

A Bit of History

Reviewing a recently uncovered copy of the final report on the construction of our cornerstone plant at Snare Rapids during the late 1940's, we discovered that late season construction has been with us from day one.

The fall of 1947 was a bad one, as was the preceeding summer, however, engineering perseverance, foresight and ability to rally the forces resulted in this project being completed on time (September 1948) and within the budget price of $3,100,000.

Another fact generally understood by everyone today is our inability to load test newly installed generating equipment. Some things never change. In 1948 load tests of 30% were all that could be achieved on the Snare Rapids unit.

Criticism is also nothing new to our organization or various parts of it. Cost of the construction camp at Snare was no exception. Timing (winter) was a major factor, however late arriving material, need to utilize available manpower for other jobs, (25% of all time was spent gathering firewood) and lack of proper storage and equipment service space all contributed major difficulties while living in tents and erecting what turned out to be a $37,945.25 camp for some 88 persons. Hardly your standard Hilton, but considered fairly pricy at the time.

Equipment utilized in this project was mostly second hand, purchased, freighted and repaired from Norman Wells (I.O.L.) for thehefty price of $620,650.81. The only complaint registered was due to no bath being provided.

All the above sounds like pretty familiar stuff. Hope you enjoyed it.

Have a Merry Christmas everyone and a Prosperous New Year.

P. E. Johnson

Northern Lights, November 1982

Inuvik Fire

At approximately 1630 hrs. November 3rd, 1982 the fire alarm indicated that a fire was in progress in the Old Plant. Quick action by the Stationary Engineer and Plant Operator located the fire in the crawl space in the middle of the plant near the wall. Attempts were made to contain the fire with the use of portable fire extinguishers and the crawl space water sprinkler system but the fire engulfed the middle half portion of the Old Plant and all attempts by our employees to contain the fire were in vain.

Luckily, the Inuvik Fire Fighters were already at the Fire Hall preparing for their regular fire practice and responded in record time in what turned out to be the ultimate real-life practice.

Outage time was minimal and repairs to engines and switchgear were effected by our employees soon after the fire was snuffed. The fire flared up several times after initially being put out and the Fire Department maintained vigil at the plant until around noon the following day.

The weatherman didn't cooperate in this situation when temperatures dropped from -16 at the time of the fire to -35°C the following day. Insurance adjustors and engineering consultants scrambled to assess the fire damage and make temporary repairs to ensure adequate heat to maintain operations until permanent repairs can be started next spring and summer.

All indications are that the fire was the result of a welding operation earlier on the day of the fire... All of our employees involved acted in a safe, professional manner. We are indeed fortunate that actual fire damage was contained to a small portion of the plant and did not involve damage to the superstructure.

Northern Lights, November 1982

Impact of Precipitation On NCPC Diesel Generation

The amount of diesel generation in some of NCPC's diesel/hydro systems varies according to the water supply, which in turn has a bearing on precipitation amounts. In the Mayo system diesel units are maintained primarily for use in emergency situations only, as the capacity of the existing hydro-electric generators has, over the years been more than enough to meet the maximum energy demand.

In the Taltson system, on the other hand, diesel provides a significant proportion of total generation. This occurred when Pine Point Mines selected diesel generation as the lowest cost alternative for their short-term expansion. However, because there is so much more water in the Taltson River system than the hydro turbines use at full capacity, water levels remain fairly constant from year to year, diesel generation increases only when the total system load increases.

The use of diesel generation in the Snare/Yellowknife system, on the other hand, varies greatly from year to year according to the available water supply. For the most part there is more than enough water for full utilization of the hydro generators. However, the capacity of the hydro units is not enough to meet energy demands at all times of the day (peaking) so that some diesel generation is required. During years of water shortages, substantial additional diesel generation is required. Consequently there can be a wide yearly variation in diesel generation depending on the precipitation.

Hydro generation in the Whitehorse-Aishihik system, even in years of abundant precipitation, must be supplemented by diesel generation, so that peak hour energy demands can be met. In years of below normal precipitation, additional diesel generation must be used to make up hydro generation deficiencies. With the completion of Whitehorse #4 unit, diesel generation requirements will drop considerably.

Northern Lights, November 1982

Northern Development Conference

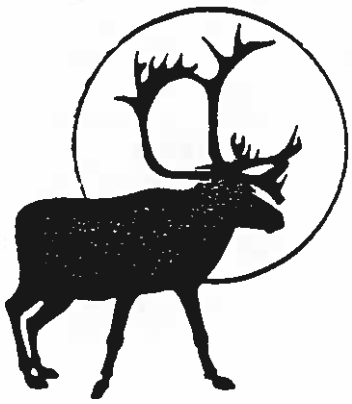
The Ninth Northern Development Conference was held October 27 - 29, 1982 in Edmonton. The Conference theme this year was Partners in Progress.....

Northern Lights, November 1982

Northern Tax Exemption Extended One Year

On October 27, 1982, Energy Minister Marc Lalonde said -
"Instead of termination next January 1 of the tax exemption for housing and travel benefits of employees in Northern Canada, the present regime will be extended one more year and a modified system of taxing these benefits will be phased in over a four year period beginning January 1, 1984."

Northern Lights, November 1982



NCPC Career Day Presentation

NCPC managed to create quite a stir with favorable comments from adults and students alike at the Yellowknife Annual Career Days presentations. Career Days are organized by the G.N.W.T. Economic Development and Tourism department and were held at Sir John Franklin Territorial High School on November 3 and 4, 1982.

...The NCPC Booth contained a miniature model of a high voltage transmission line that housed a 1.2 - 15 kV neon transformer hooked to the transmission line. The model is capable of displaying the power of electricity by demonstration of electrical arcing on a Jacobs ladder. Other high voltage demonstrations of the model include the cause and effects of attempting to retrieve a kite that has lodged on a high voltage transmission line, the hazards of working in close proximity to transmission lines, the effects and hazards of a transmission line that has fallen across a vehicle as a result of an accident with a power pole and an accidental contact with energized lines by heavy duty equipment. In addition, the model shows the energy and money saving capabilities by the installation and use of dimmer switches in the home. ...

Although the entire presentation was geared toward careers, it also touched on energy saving and safety with electricity. Pamphlets and handouts were distributed outlining available careers and their educational requirements, energy saving methods, and safety with electricity.....

Northern Lights, November 1982

Chilliwack Diesel Course #2

For George Slatter of Coppermine and Robert Schmidt of Fort Good Hope, March 31st will mark the graduation day after six months of training at the Chilliwack Canadian Forces Base, School of Military Engineering. Both of our employees have done well and are expected to graduate without hitch.....

Looking ahead, Course #2 will likely start sometime in November 1983.

Northern Lights, January 1983

NCPC Provides Speaker

In October, 1982, Dalibor Zita was one of about a dozen speakers at the Seventh Turbo Machinery Dynamics Seminar held in Edmonton. Dalibor's paper was entitled "Vibration Engineering Aspects in Diesel Power Generation, Electrical Utility Operation."

Northern Lights, January 1983

Co-operation = Success

It is a pleasure to announce that our first commercial combined engine exhaust and engine cooling water waste heat recovery system has been installed in Lac La Martre and is working above our expectation.

Simply speaking, the total thermal energy leaving our plant via the piping system linked to the showpiece school located nearby is noticeably higher than the electrical energy we sell to the entire Hamlet. The fuel saving in the school heating is so substantial that the school boilers are not even required to cut in to boost temperatures!....

Northern Lights, January 1983

Fort Simpson Electrified

Several years ago the residents of a new subdivision of Fort Simpson requested electrical power. However, since there were too few customers willing to make a firm commitment, and since the subdivision hadn't been developed in an orderly manner, NCPC was unable to justify a capital expenditure at that time. Finally, this fall, there were enough applications from potential customers, and whose dwellings had been wired by an electrical contractor, that NCPC was able to undertake the connections to these homes. In order to expedite the matter, the Fort Simpson staff, ... spent days in sub-zero temperatures and deep snow, digging holes and setting the poles in readiness for the line crew. This dedicated effort on the part of everyone led to these Fort Simpson customers having their service ahead of schedule.

The following is a letter of appreciation on behalf of these residents.

Ft. Simpson, NWT
November 19, 1982

Mr. Donald Macdonald
c/o NCPC
Edmonton, Alberta

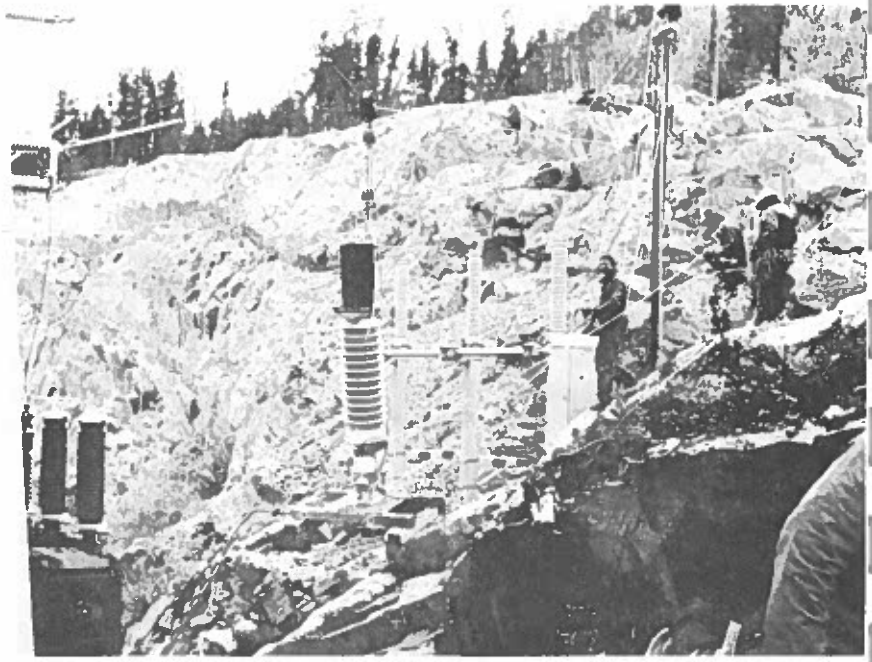
Dear Mr. Macdonald:

As residents of the new area of Fort Simpson we are extremely pleased with the work done by the local crew. They worked steadily through weekends and holidays and in very cold weather. Mr. Cazon should be commended for supporting and expediting this project.

Yours truly,

(signed) Nancy Makepeace

Northern Lights, January 1983



Capstan Winch
Hauling Material

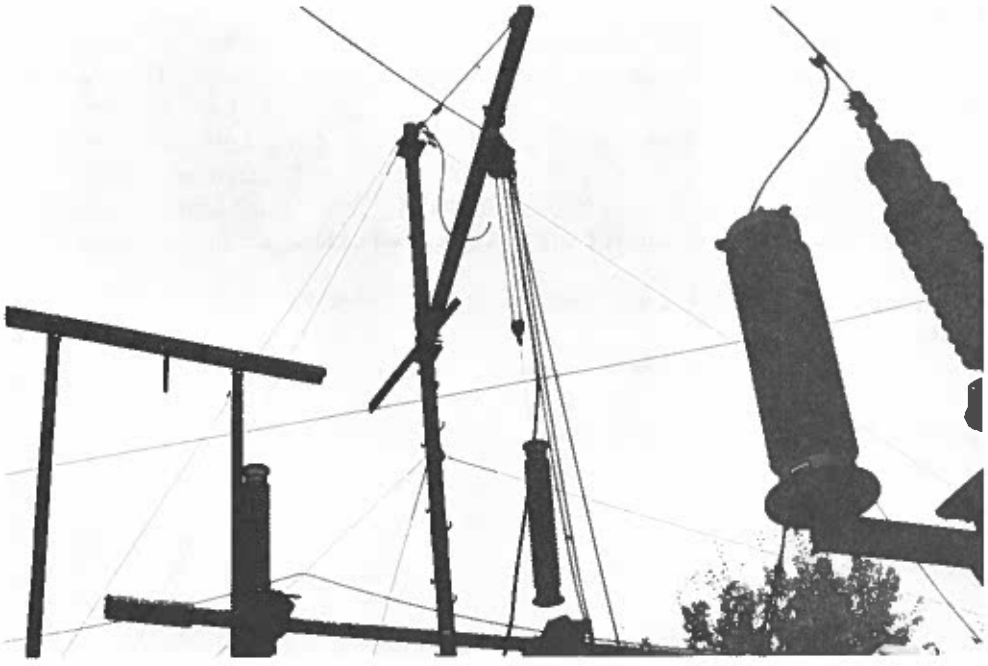
Taltson Power Plant

The 1983 addition to the Taltson substation was thought to be a minor excavation for the footings. However the removal of the surfact debris revealed huge boulders in a deep hole which contained permafrost. Digging continued most of the summer through about six feet of this permafrost to reach bed rock.

A home made jin pole was rigged with an electric hoist, the arm of which could be swung within 180° and the winch could be rolled back and forth about 12 feet. This enabled the breaker for the substation to be transported from ground level down on to the footings.

Wayne Martin and Brian Willows, along with several casual workers, did an excellent job of constructing this substation.

Wilbert Miskolzie



Jin Pole

October Monthly Report
W. Nye
Area Superintendent, Resolute, N.W.T.

We recently experienced one of the worst storms to hit this neck of the woods since 1974. It really started on Thursday, October 28th, with blowing snow and strong winds, zero visibility and ceiling. Then it moderated on Friday afternoon and Nordair landed on its scheduled flight. Shortly after it left, about 1600 hrs, it really started to pick up in gale force and commenced snowing. By Saturday morning it worsened. I went to the powerhouse shortly after 0900 and could not see the powerhouse until I was about halfway between it and the houses, and then could just make out the outline of both between gusts. I called the weather Office, and they reported winds of 75 to 85 KPH, and were not forecasting any improvement until Monday afternoon. I felt a little uncomfortable about it as our lineman was in Arctic Bay, stuck there on account of the weather. I had sent him there on Tuesday, October 26th on the MOT Charter (free ride) to hook up the new N.H. & W. Hospital, do some line maintenance checks and inventory checks and return on the sched flight on Thursday, that flight never happened due to the weather at Resolute. Then on Friday when it did let up a bit, the weather was down at Nanisivik, so he never got back here until Monday night, November 1.

Anyway everything held at Resolute until Saturday night, and at 2345, I was just going to shut the TV off when everything went black. The wind was making so much noise I couldn't hear the engines running, and thought we had lost everything. Outside, on my way to the powerhouse I could see lights on, so I breathed a little easier. When I got in the powerhouse I went to the switchgear room and found the North Beacon feeder tripped with 2 flags up. I closed it to see what would happen. It held for about 20 seconds and tripped again, so I figured we had a broken tie wire on the 2400 line. The main function of this feeder is the North Beacon transmitter site which has a standby engine that starts automatically on AC failure. This had done its thing, as I phoned Aeradio to see if they had power and they were on. Other than this, the only thing affected was my house, the electrician's house, the telecom manager's house, the post office and living quarters, the Imperial Oil residence trailer and the Hudson Bay store and manager's house. I rounded up the MOT electrician, Mike Rideout. While they were getting some heavy clothes on I got the skidozer started and brought it around to the powerhouse. That manoeuver made me think as to just how they were going to see anything at all. However, we had a chance of getting the base side restored. I told the electrician that there was no way they could find the break in the high line, much less fix it in these conditions. If he could get to the corner by Narwhal Arctic Services, there was a transformer bank on the corner, with 3 cutouts. If he could pull these cutouts, I would try the breaker again, and if the break was above that point we would have power at the base again. If not, the break was somewhere between that corner and main camp, a distance of about a mile. It took them an hour to get to that corner, after almost going off the road about a dozen times. There were big drifts on the road, and they couldn't even see the transformers, so they came back.

I called John Goodman at MOT and told him the situation, and that the only thing we could do was drain the plumbing on our 2 houses, and wait till it let up. Fortunately,

it was not too cold +6°C. He said he would get his plumbers out, and do the same for the telcom house, post office, Imperial Oil and Hudson Bay. They would put the people involved up in the Hotel, and for myself and the electrician to check in as soon as we had our houses protected. We drained everything, hot water heater, water lines, water pump, and all the traps, as everything is plastic and would break easily. I covered up all my plants, and we checked into the hotel at 0330 hrs. Sunday, October 31.

The weatherman was giving winds then of 90 gusting to 100 KPH, with zero visibility and ceiling. His forecast for Monday was for about 1 mile and winds of 40 to 50 KPH by late afternoon. I got up early as usual in the morning, had breakfast and went to the powerhouse. I could see then that it was getting better, so I got the electrician up, got the MOT electrician and by 0900 it was not too bad. They went out, opened the cutouts at the crossroads and we were able to get the base side back on just as I had hoped to do last night. MOT was plowing the road with a D-8 to the transmitter site, a distance of about 3 miles, so they followed it, and about half way they spotted the break. 2 phases had broken tie wires. He didn't want to do any work on it unless I killed the whole line, didn't want to take any chances at all, even though the cutouts were open, so we had a planned outage for 1 hour, while repairs were made. Got our houses returned to normal and by 1600 had 68°F inside and no plants lost, wilted a little, but they bounced back. The co-operation from my pals at MOT was certainly great. No charge for anything. The lineman got back at 1800 hrs, missed all the fun.

Northern Lights, January 1983.

Pelly Bay Celebrates Opening

The $2.6 M Pierre Henry Community Centre was officially opened on January 28th although it has been in use since November. This special day was also celebrated by the children of Pelly Bay when two cases each of oranges and apples were donated to them by MLA Kane Tologanak.

The community centre houses a gym, the post office, radio station and the Hamlet and government offices. For heating the building, the water jacket heat and exhaust heat from NCPC diesel generators is recycled. While the community centre has back-up boilers, so far even in -40° temperatures the boilers haven't been used. Public Works officials estimate a $50,000 a year fuel savings; enough to pay off the added expense of the waste heat recovery system in three years.

Northern Lights, March 1983

Letters of Appreciation

In his letter of February 8, 1983, Insp. R.T. Byam expressed his appreciation of the support given to the RCMP by Joop Sanders on the occasion of their two-day conference at Frobisher Bay January 26 and 27. Insp.Byam goes on to say "Over the years, we have enjoyed an excellent working relationship with Mr. Sanders in his position with NCPC and as a Justice of the Peace. His continued support is held in high esteem by all our men and I ask that a hearty thanks be conveyed to this gentleman on our behalf."

Northern Lights, March 1983

NEWS Approach for Northern Lights

With your help, Northern Lights is going to contain more NEWS. Each employee is still encouraged to submit items of interest but in order to get a more complete news coverage of the whole Commission, volunteer representatives from each plant area or department will be our contact to assist us in keeping you informed.

Each representative will be given all the help he/she requires from the editors and will be encouraged to submit items on an ongoing basis throughout the year.

However, in order to ensure that items are published in the next newsletter, all material will have to be in our hands no later than the second Monday of the publishing month. The publishing months are May, July, September, November, January and March.

For your convenience we will print a notice on the inside front cover of each issue announcing the deadline date for the next newsletter. Telex reminders have not been effective and will no longer be used.

We must count on you to supply the news for our company newsletter.

...Names of volunteers from the Plants and Regional Offices should be sent to us as soon as possible, but no later than April 18, 1983.

Northern Lights, March 1983

Understanding & Co-operation Needed

The fiscal year of 1982/83 has been one of the most difficult years that the Commission has ever faced. We have managed to survive but it has not been without a price. Several employees have had to be laid off in areas where the mining recession has rendered certain of our operations unnecessary.

Our most important resource is our staff and only when absolutely necessary will staff be released.

Over the next two years the mining recession, due to low metal prices, is not likely to spring back to the 1981/82 level. The belt tightening process we have been experiencing this year is therefore likely to continue.

The understanding and co-operation of all staff in this period is very much appreciated.

On the brighter side, I am happy to report that the Whitehorse #4 project is essentially on schedule and within budget. Another achievement this year is a beginning on the formal qualification training of plant and system operators. The majority of our operating staff are now embarked on this course and I wish them well.

J. W. Beaver
General Manager

Northern Lights, March 1983

Here Comes Norman Wells

We're back! Yes, we're back. Let the bells ring and the banners fly, we're back. Aloha, Bonjour and Greetings from Norman Wells.

The scribe has finally made it back from that high mountain sabattical with a new quill and the news from Norman Wells will flow again.

Along with the community, our operation here has been a bee-hive of activity. The town of Norman Wells is gearing up for the full impact of the pipeline project and so are we. Our operation here, in the very near future, will be commissioning a new prime mover in our fleet; a 1250 kw natural gas Norwalk turbine. This addition will boost our total generating capacity to 3805 kw from 2555 kw.

...On April 15th, 1983 our humble abode was visited by the Chairman of the Board of NCPC, Mr. Jim Smith, and several board members, also Mr. Phil Johnson. They toured the town, our facilities and finished the visit off with a luncheon with local Hamlet officials.

The community as a whole is anxiously awaiting the break-up of the Mackenzie River for Norman Wells will become a real bee-hive of activity. What with major construction projects due to begin, many barge arrivals, a large influx of workers and of course the beginning of the pipeline, the community will never be the same.

...

Chief Scribe and Quillman
William J. Byrne

Northern Lights, May 1983

Congratulations in Order

For the past three years, the employees of Northern Canada Power Commission have qualified for the Canadian Electrical Association Accident Frequency Reduction Award granted to electric utilities who, in the past year, reduced their accident frequency rate by 25% of the previous three-year average.

A certificate will be presented to NCPC by the CEA President during their Annual Meeting in Halifax, Nova Scotia on June 27, 1983.

Northern Lights, May 1983

Letters of Appreciation

A letter from the Principal of the Naani Ulujuk School, Rankin Inlet was addressed to Keith Kent, Regional Superintendent and reads as follows:

"I would like to take this opportunity to express thanks to you, on behalf of the students of our school, for your contributions to the Careers Day program.

Our students were indeed interested in your presentations and information. This type of program gives our students a great deal to think about in the upcoming years, as they begin to make career decisions.

Thanks again Keith."

Northern Lights, May 1983

Ospreys Get Government Housing

According to NEWS/NORTH, July 1, 1983 -
An undetermined number of determined ospreys will be getting new homes, courtesy of the territorial government and NCPC.

The ospreys, large fish-eating birds of prey from the eagle family, have been making nests since 1948 on NCPC's main hydro line between Yellowknife and the Snare River dam, 150 km north. The birds make large stick nests and in rain or moist weather, they have a tendency to short out power to Yellowknife.

The birds like to nest in high places overlooking a lake, and unfortunately, NCPC's poles fit the bill nicely. They will build a nest on the cross-pieces of the poles, usually overlapping the insulators. In the rain, the wet branches act as conductors and short circuit the whole line.....

Last year two experimental platforms were built on the poles. Using angle irons, the platform was built 30 to 40 cm above the wires and insulators. A Wildlife crew carefully moved the nest, with chicks inside, built the platform, and replaced the nest. ...The parent birds returned to the nest within ten minutes.

During the annual power shutdown scheduled for July, NCPC will helicopter Wildlife biologists to the sites where they plan to shift six nests.... Great Slave Lake is the northern limit to the birds' range. There are an estimated five to ten nests along the line.

NCPC area supervisor, Ron Hilton, said the birds cause three or four blackouts in Yellowknife each summer.

Northern Lights, July 1983

Accident Statistics
June 1983

During the month of June, there was a total of four accidents reported; two were back injuries involving a total of 30 days lost time. The other two involved no lost time - casualties were one hand and one pair of broken glasses.

Northern Lights, July 1983

Congratulations in Order

Brent Mason, Yellowknife, won the highest marks of all apprentices in the trade during 1983 when he received his fourth year Power Electrician award.

Jon Culley, Cost of Service Analyst, has received his R.I.A. certification. ...

Northern Lights, September 1983

Inuvik Fire Update

- wall to separate EMD and burned out plant completed,
- south-west wall expected to be completed first week of October,
- boiler installed and expected to be commissioned by mid-October,
- demolition of burned out plant hoped to be completed by mid-October,
- hope to have engineering proposals for new plant by mid-October.

Northern Lights, September 1983

Superintendents Graduate

March 30, 1983 marked the graduation ceremony of Robert Schmidt and George Slatter from the Canadian Forces School of Military Engineering Diesel Technician TQ3 Course at Chilliwack, B.C.

Our Superintendents were treated to an unusual extravaganza graduation ceremony not seen by many school personnel who normally graduate from the Military School.

...

Northern Lights, May 1983

Fort Simpson News

....

Maintenance Work in Progress

Fort Simpson Unit 2, Ruston 12RK3C is in the process of being majored.

New Industrial Developments

Interprovincial Pipeline right-of-way winter clearing is completed.

...

Northern Lights, May 1983

It's Only a Matter of Time

The Commission has recently developed a manual to assist employees to plan for their retirement. The manual is distributed to all employees 55 years or older and was designed with the purpose of making employees aware of the need to plan for their retirement.

Many of the activities are centered on Alberta, however these types of program are available elsewhere and the employee should check with the appropriate province or territory where he intends to reside upon his retirement.

To complement the manual, a two year subscription to a quarterly magazine entitled "Foresight" is purchased for the recipients of the manual. The magazine will be sent directly to the employee's residence.

We hope the recipients will find the manual informative as well as useful to their future needs.

Northern Lights, May 1983

Yukon Training Program

Yukon Supervisory Staff attended an in-house training program held at Whitehorse March 20, 21 and 22, 1983. The training program by Commission Training Co-ordinator, Dale Davies, consisted of a two day course at the Supervisory Management level 1 and a one day Safety and Security Seminar.

...The supervisory course, condensed to two days from the original week long course, prompted good discussion and class participation while teaching by illustration the fundamentals of good supervision. Employees attending this course were given all the basics of supervision to assist them in their day to day work as supervisors and prepare them for the level 2 Workshop Training Program to be held in 1984.

...Although Whitehorse was the first location within the Commission to receive this training program this year, all other parent plant areas are scheduled for the training program during the 1983/84 fiscal year.

Northern Lights, May 1983

Frobisher Bay

It's been a very hectic and busy summer in the Baffin Region. Visitors to Frobisher Bay ranged from Movie Stars to Cabinet Minister, to even a couple of real horses! Not to mention the 400 delegates to the Inuit Circumpolar Conference, which was held in Frobisher during the last week of July, 1983.

Canada Day saw a first for Frobisher Bay. With a little help from Nordair, the Frobisher Bay RCMP Detachment brought in two horses from the Musical Ride to take part in the Canada Day parade. Needless to say, the horses were the hit of the parade, especially with the kids, many of whom had never seen a live horse. It was actually quite a sight, one that few residents of Frobisher Bay ever expected to see. Rumours about next year's visit by the complete Carlsberg Team and Wagon have been running rampant since the parade. (No one actually believes this rumour, but it sounds like fun!)

Richard Chamberlain and Rod Steiger visited Frobisher in July, to film a movie entitled "Race to the Pole". They were neither impressed by the weather, wet and cold; nor by the mosquitoes, voracious! The horses won the popularity contest hands down.

Late July saw four hundred Inuit from Alaska, Canada and Greenland gather for the Inuit Circumpolar Conference, the first time it has been held in Canada. With the heavy media coverage of the Conference, numerous politicians showed up to try and get their names in print. Hopefully they were more successful elsewhere.

...

Northern Lights, September 1983

Inuvik Fire - No One Injured

Fire destroyed the 25 year old powerhouse at Inuvik on August 11, 1983. The fire which occurred at about 2:00 p.m. was presumably started by a welding spark from the contractor's equipment, as repair work was in progress at the time.

It is believed that the two EMD diesels will be restored and back in action but a 600 kW steam turbine, a Mirrlees KS6 diesel, three steam boilers and the main control room will have to be written off.

The community was without heat and electric power from the outbreak of the fire until shortly after four the next morning when heat was supplied from the small boiler in the second powerhouse and electric power was rotated from feeder to feeder from the small diesel also located in the second powerhouse. The large diesel in the second powerhouse was undergoing overhaul at the time of the fire but was back in service by 5:30 p.m. August 12th and supplying the entire community.

In order to provide reliable service for this winter the Commission is replacing the boilers, moving the emergency 1500 kw gas turbine from Faro, refurbishing and closing in the EMD diesels.

Letters of commendation for their outstanding efforts went to:

Chris Chatwood	Dave Musselwhite
Derek Forsyth	Peter Shaw
Lawrence Gresl	David Smith
Anthony Jensen	John Wilkie

and to all the Inuvik Plant Staff, appreciation for their loyalty and dedication in this emergency.

Northern Lights, September 1983

NCPC Markets Interruptible Energy Sales

The availability of surplus hydro energy from the Whitehorse/Aishihik hydro system has prompted the Commission to seek alternative markets for this energy. This surplus hydro capacity has come about as a consequence of the shutdown during the past year of several major mining companies serviced by this system, and with the imminent addition of a fourth hydro unit at Whitehorse Rapids Plant.

Negotiations have been underway with the Yukon Electrical Company Limited, the retail distributor in Whitehorse supplied on a wholesale basis by the Commission, directed towards assisting the Commission in a distribution of interruptible hydro energy to provide an alternative electric heating source to certain of their larger retail customers. The interruptible energy would be made available to qualifying commercial type customers on an interruptible basis to replace existing conventional (oil-fired) heating systems at a rate competitive with alternative fuel costs.

Under the proposed marketing arrangement, the capital cost of electric heating equipment and distribution system modifications, would be offset by sales revenue from the customer over a relatively short period of time (possibly 12 mos. or less), where such investment is financed by the Commission. Following full payout of this investment, the interruptible energy would be priced more competitively with alternative fuel costs. In return for the attractive retail rate for this electric heating energy, the Commission would be permitted to discontinue the supply of this energy at any time that firm energy requirements on the system exceed available capacity. The result of this marketing strategy is expected to be an overall improvement in utilization of existing hydro capacity and an enhancement of the federal off-oil and oil substitution energy conservation program.

Several potential interruptible energy customers in the Whitehorse area have been identified and discussions with these potential customers have already commenced.

Northern Lights, November 1983

The Saga of the Inuvik Fire

The saga of the Inuvik fire is now old hat, but the requirement for replacing the lost steam boiler generated (excuse the pun) a little humour along the way and some pretty interesting records were set.

When it became obvious that everything "steam" was out of business at Inuvik, an extremely serious situation would exist if the 90 million BTU Volcano boiler went O/S in the winter, possibly requiring disaster measures up to total evacuation of the Town. Additional back-up high temperature water generation for the 30 million BTU Cleaver Brooks boiler was essential and, to that end, the order went out, "get minimum 60 BTU's NOW"!

Now that's pretty easy to say, and there are plenty of manufacturers falling over themselves to supply, but, this was August 12, 1983 and who keeps 60 M BTU boilers on the shelf? So the thing had to be made, shipped, and reach Inuvik before the freeze-up stopped barge and ferry traffic. This restriction sorted out the men from the boys and only two manufacturers said that they could make it. Volcano could supply a 90 M BTU high temperature water boiler matching the existing boiler, but this would be partially manufactured and erected down south with a massive tubing job to be carried out on site. Cleaver Brooks said they could do it with 60.3 M BTU completely assembled, ready to connect to the existing system. Cleaver Brooks got the go-ahead on August 16th with the condition that there were to be no excuses. That boiler HAD to come out of the factory door, in one piece, by September 26th or they could keep it, shove it, or whatever, because it would be too late after that date. They said they could, but more of that later.

Getting a boiler would be one thing, but getting it to Inuvik would be an entirely different kettle of fish. How were we to transport 100,000 lbs. (45,360 kgs) of boiler from Stratford, Ontario to Inuvik, NWT? The weight made it difficult enough but the size of 41 feet long by 11.5 feet wide by 14.5 feet high proved to be the real stumbling block.

Could it go by rail? Yep - there is a spur line right into Cleaver Brooks plant, and it could go right through to Hay River, without unloading. Great!!! How long will it take? Three weeks!!!, forget it!!! "Can you guarantee that it will be in Hay River in eight days?" They fell about laughing, but what ended the conversation was our suggestion that it only took the Transcontinental four days from Montreal to Edmonton, so why not tie a low boy on the end, then a special loco to pull it from Edmonton to Hay River. Well, it seemed logical enough to us!! Even threats of having their subsidy stopped didn't do any good, and as for the Emergency Measures Organization, we might just as well have used the Women't Institutes as a threat.

So we turned our attention to road transport all the way from Stratford to Inuvik via the Trans Canada, Alaska and Dempster Highways. Brocklesby were able to supply a special low boy which would satisfy provincial regulations of Ontario, Manitoba, Saskatchewan, Alberta, Yukon and NWT, but not British Columbia. Would you believe that a specially designed articulated lowboy, manufactured in B.C. was not able to be used on B.C. roads? This meant that two trailers would have to be used, with a load transfer from one to the other in Edmonton.

Then we really hit trouble, the height of the combined boiler and trailer proved to be four inches too great to pass under a CPR bridge and over a road bridge in Ontario. These two snags were two hundred miles apart between Thunder Bay and the Manitoba border. (For the smart Alecs - yes we did consider letting the air out of the tires). If we could overcome these two snags we were away, up to the Yukon, where a road bridge near Carmacks would have to be shored up. Even then we were not high and dry because the Ferry crossing over the Peel River was a big question mark, with the ferry at Arctic Red River also being questionable due to depth of water at that time of the year. (We might well have been high and dry here - literally!) Attention then had to turn to the Hay River and barge route, which got us nowhere fast because the last barge would have been long gone before we could get the boiler, even if everything clicked into place. What's left? Fly the beast in!! Now what would fly with a 90,000 lb. load and height of 14½ feet? A "Hercules"? No, 45,000 lb. maximum. what about a "Boeing 747"? No, boiler too big to go through the door, and besides, MOT say it can't land at Inuvik without wrecking the runway. A "Guppy"? No, too heavy. Would the United States Air Force lend us a C5A Transport through the Canadian Forces at Northern Command? We got through to the powers that be and, yes, with pleasure, we could have the services of a C5A. Problem over you think? No, the plane can land, at Inuvik, it can carry twice that weight but the boiler is fourteen inches too high to go through the door. What about loading it on it's side? Cleaver Brooks said "NO". Now what? O.K. back to NTCL. Here they came up trumps, if we could get that boiler to Hay River by noon of October 5th they would have a single barge standing by with its own tug and would go flat-out to Inuvik as a special trip, providing, Oh yes, don't think it would be easy, providing nature played her part and didn't freeze up the east Channel, and the tractor/trailer travelled with the barge ready to unload at Arctic Red River if freeze-up beat us.

Well, as you know, we made it, but it was hairy at times. Cleaver Brooks worked three shifts for the first time in many years. Everybody else's boilers and parts went on hold, the employees broke every rule in the Union book, and the boiler came through the door two days ahead of an "impossible" schedule.

Brocklesby were waiting and took off within three hours. Speed was held to maximum 35 mph because of heavy swaying of the load, but they reached the first obstacle, the bridge under the railway. Here two 125 ton cranes were waiting. One half inch steel plate was laid on the roadway, the crane unloaded the boiler and it was winched under the bridge on rollers and loaded at the other side by the second crane. Traffic was stopped on the Trans Canada highway for an hour and single lane for four hours. The C.P. Transcontinental came to a screaching halt, and we were threatened with prosecution for trespass. Ah well, press on!!

At the next hazard, the bridge over a river near the Manitoba border, Lady Luck came to the rescue. By letting the air out of the tires the bridge was traversed, without unloading, with <u>one</u> inch to spare. One of the two escort cars was equipped with a compressor so off it went again after re-inflation.

In the centre of Winnipeg the whole shebang - boiler, tractor/trailer and escort cars were arrested by a policeman who had not been told about special permits! The Police then escorted the cavalcade around

Inuvik Saga

Winnepeg until reaching two bridges which were not listed on the routing charts. Eight hours delay then resulted while necessary permits were received to cross them. (It would normally take two days to get clearance but somebody made some threats!)

From then on everything went as per copybook. The convoy reached Edmonton, changed to a smaller trailer, dropped one escort car and off to Hay River without further delaying incident, even though contact was lost on the Mackenzie Highway. We were about to start dredging operations at Peace River when everything turned up in one piece at Enterprise weigh scale.

NTCL were as good as their word, the barge and tug were waiting, and all set sail at 1500 hrs. on Sunday, 2nd October. The Tug Skipper seems to have broken a few rules too in that this was the fastest trip ever made down the Mackenzie River, reaching Inuvik in five days flat. (Some uncharitable people have said that the barge covered one stretch of the river at 35 mph! That would be against the rules of navigation in landlocked waters!) One and a half days later the East Channel froze.

Overall, this was a truly fantastic effort on the part of many people, and new records were set all along the line. Here are some of them.

1. NCPC decision to purchase a boiler! (to purchase anything!),
2. Cleaver Brooks production of 60.3 M. BTU HTW Boiler,
3. Brocklesby Transport, weight/miles/time
4. NTCL barge trip down the Mackenzie River, time,
5. Threats made to Provincial Highway Departments of Ontario, Manitoba and Saskatchewan,
6. Phone calls made by the writer, 49 in a six hour period. (Beat that, a certain Area Superintendent who shall be unnamed)!

Submitted by

WE Dunnit, H.O.

Northern Lights, November 1983

FLASH

NORTHERN LIGHTS to be provided with news from Board, Management and Department Head Committee. This page has been designed in anticipation - so watch for it in future editions.

* * * * * * * * * * * * * * * * *

Travel Rate Schedule increased.
See Procedure #006, Appendix 1.

* * * * * * * * * * *

NCPC will appear before Standing Committee on Indian & Northern Affairs, Ottawa, December 8, 1983 to discuss National Energy Board Report.

* * * * * * * * * * *

Studies underway between NCPC and Alaska Power Administration on jointly funded economic/financial analysis for proposed interconnection between Yukon and southeast Alaska.

* * * * * * * * * * *

See N.E.B. recommendations elsewhere.

* * * * * * * * * * *

Inuvik Boiler arrives - Full Steam Ahead! Look for story by Eric Jones this issue.

* * * * * * * * * * *

NCPC to participate in Yellowknife Career Days November 7 & 8. See story this issue.

* * * * * * * * * * *

NWT , YUKON outlook improves as rise in lead and zinc prices reopens mines, is reported in the Globe & Mail of November 21st. The report goes on to say, in part, that the over-all mining situation in the Far North is much improved from last year, when all mines were closed at one point. Further gains in demand are expected as capital spending rises and the key European and Japanese economies improve. Lead and zinc prices are expected to rise 10 to 20 percent in 1984.

* * * * * * * * *

NEB report not popular in Yukon or NWT. Penner describes it as inept, inadequate and insulting.

* * * * * * * * * * *

Site Representative Dies

Allen Arthur (Al) Wright, NCPC Site Representative on the Whitehorse #4 project died October 18th after a three year battle with cancer. Mr. Wright had spent many years in the Yukon and was very interested in its history.

* * * * * * * * * * *

Superintendent's Meeting September 13th indicated following <u>recommendations</u> --

- fire extinguishers should be standardized,
- fire detection and alarm systems should be installed and checked regularly.

After the Fire

In recent months, management, local employees and the residents of Inuvik have been focusing their attention on the restoration of the Inuvik plant. The six million dollar fire in August which destroyed the old plant has taxed the abilities of management and employees alike in their attempts to provide the power so vital to daily life in the North. Now, with winter approaching it is more important than ever that the employees of Inuvik work together to rebuild the plant to a level which will provide a reliable source of power.

The rebuilding of the plant had to be done in a period of four months, a project which would normally take up to two years to complete. Along with this severe time constraint were added the problems of maintaining effective communications between operating groups in the plant, accommodating the needs of the many contractors working on the site, performing work in temporary work environments, and operating two plants without interconnecting monitoring systems. In addition to these problems were the ongoing responsibilities of operating the plant to provide power to our customers.

Despite the challenge it appears now that there is some light at the end of the tunnel. Much of the restoration work is completed and with a new boiler in operation at the present time and the KV 16 expected back in operation by the week of December 5th the Inuvik plant will once again be in a position to provide more reliable service.

With the existing plant back in operating condition the employees of Inuvik can look forward to construction of the new plant scheduled for completion in late 1984. This plant will contain many of the safety and protection features so vital to the Inuvik operation.

Out of adversity often comes some very positive results. The Inuvik situation has been no exception. First and foremost is the realization that we can successfully meet what seem to be insurmountable challenges. By pulling together, the employees of NCPC and Inuvik in particular, have achieved in four months what would normally take two years. It is now more evident than ever that communications between operating and support groups must be enhanced and more training programs implemented and carried out on an ongoing basis.

Of equal importance is the need to maintain effective communications with the residents who rely on our Inuvik operations for power. Local and head office management have maintained a close liaison with the Inuvik town council and responded to the many enquiries from residents affected by the all too frequent power outages. Resulting from experiences in Inuvik, a number of community relations initiatives have been developed which can be applied to other locations as well.

The Inuvik staff are to be congratulated for their accomplishments during this trying period. With the new plant on line at the end of 1984 the challenges encountered since the fire will quickly become history and the future will definitely look brighter.

So, hang in there NCPC Inuvik!

Northern Lights, November 1983

Excitement at Spence Bay

Hi to you all from Spence Bay, where we had a bit of excitement lately and therefore have something to write about.

To start with, there were the whales - Narwhales!

Narwhales had not been sighted around Spence Bay for the past 18 years and on September 9th the phone was ringing off the hook "do you know about the narwhales?" It is known that some people just dropped everything and took to their boats with gun in hand - the hunt was on.

The whales were hanging around for a week and our plant operator, Ralph Totalik, and his dad shot one and were mighty proud of the kill. A tusk sells at $100/foot (not by metres) and a tusk with a small one growing on the side pays $10,000 right off the bat. This was a good week for the hunters and anybody else who managed to get a morsel of muktuk which is still considered a delicacy, and not just by the Inuit people.

All in all, 5 narwhales were brought to town - a happy event, which, in the old days, would have called for all sorts of festivities.

...

Eric Deutschmann

Northern Lights, November 1983

Direct Deposit Pay System

Commission management has indicated it's intention to proceed with the direct deposit pay system.

Initially, the program will only involve non-union employees at Head Office and at field operations where on-line banking facilities are available. At the present time, such services exist at Yellowknife, Inuvik and Frobisher Bay in the NWT, and at Whitehorse in the YT. Other locations are likely to be considered by the major banks as communication systems are installed.

As the system evolves, it is thought that many employees will want to avail themselves of this service. Pay cheques would be deposited directly into the account designated by the employee. The employee would continue to receive a statement setting out the earnings and deductions.

The direct deposit system would save the individual's time as arrangements won't have to be made to deposit the cheque and cash would be made available by writing withdrawals against the account.

A high priority is not being given to implementation of the direct deposit system due to the pressure of meeting the requirements resulting from the recommendations of the NEB. As time permits, the system will be worked into place until fully operational. We will keep you informed as to the progress of the direct deposit pay system.

Northern Lights, November 1983

National Energy Board Recommendations

Extracted from an N.E.B. News Release, October 28, 1983

- rates for electricity charged by NCPC be made subject to approval of separate federal regulatory agency

- a duly appointed federal regulatory agency be given complete and final authority in establishing NCPC's annual revenue requirements for a given period, and in determining the cost based rates associated therewith

- NCPC be permitted to operate as a public utility on a business like basis, with any subsidy from the federal government provided independently of NCPC operations

- NCPC continue to operate as a single entity owned by the federal government, with the head office remaining in Edmonton

- NCPC rates be based on the true costs of providing electricity to its customers in the north, with separate rate zones for areas supplied from hydro or diesel generation

- some debt should be converted to equity

- the proportion of debt that exists because of prior losses, and outstanding loans incurred in respect of assets no longer useful, should be forgiven

- that all changes proposed in its report become effective April 1, 1985. This date was selected to provide sufficient time for completion of all steps necessary to implement a rate regulation scheme. These steps would include:

1) the choice of a federal regulatory body to oversee the rate regulation of NCPC

2) the holding of public hearings by the regulatory agency in Whitehorse and Yellowknife and in other locations throughout each territory wherever public interest warrants

3) the issuance of the decision of the regulatory agency following such hearings, and,

4) the decision by the federal government on the amount and form of any subsidies which might be required to reduce the cost of electricity to a level that northern customers could afford to pay.

Northern Lights, November 1983

short lines

All Commission owned housing in Whitehorse and Yellowknife to be offered for sale to the occupant.

# # #

Temporary repairs to the Inuvik plant completed in December.

# # #

Crew trailer at Tuk destroyed by fire January 25th. No one was injured. Replacement is underway.

# # #

ESSO to sponsor NCPC Blackouts Hockey Team who are tops in the Yellowknife League.

# # #

Contract for new powerhouse at Inuvik has been awarded to A.V. Carlson Constructors Ltd. in association with A.D. Williams Engineering for the mechanical and AME for the electrical. The project is expected to be completed by November 15, 1984. Approval has also been given to purchase a 2500 kw EMD to be included in the new powerhouse.

# # #

Managing Change to be theme for M.I.S. April 9 - 11.

# # #

Whitehorse #4 unit picked up 20 MW of load Jan.24th. Testing is continuing.

# # #

Congratulations NCPC **Frobisher Bay** on third prize for your float in the 1983 Santa Claus Parade

# # #

The following are dates and locations of the Commission Board meetings for 1984:

April 12 - Whitehorse (combined with opening of Whitehorse #4)

June 21 - Inuvik

September 20 - Whitehorse

December 6 - Yellowknife

# # #

84/85 Operating and Capital Budget approved by Commission Board at January meeting in Yellowknife.

# # #

Jim Woodman is now at home in Edmonton and would like to hear from his friends. His address and telephone number are:

11141 - 129 Street
Edmonton, Alberta T5M 0Y6 452-7260

# # #

Semi-Annual Snare Operations Meeting Feb. 7-9.

# # #

Northern Canada Power Commission
1948-1983
Thirty-five Years

Northern Lights would like to feature a history of the Commission. If you have pictures of the early days, interesting anecdotes, or whatever, please send them along to help us prepare for this issue.

Northern Lights, January 1984

Norman Wells Involved

All the best in '84 from the gang here in Norman Wells to all our NCPC co-workers and their families.

The latter part of 1983 was certainly a beehive of activity at the old 17th precinct. The 23rd precinct in Fort Norman had its revitalization completed and 10 precinct in Fort Good Hope was beginning to have its face lift. The 22nd precinct of Fort Franklin is scheduled for similar treatment in early '84.

In Norman Wells, we saw the introduction into service of our Norwalk Turbine. As with any new technology there were a lot of bugs in the unit receiving attention.

The community here is starting to reach a frantic pace again now that pipeline construction is commencing.

...With the arrival of '84 and the holiday season over we find our gang here busily involved in community organizations and activities.

...

Northern Lights, January 1984

Alaska Intertie

Due to the indecision on the part of Cyprus Anvil Mines to return to full operation and the advent of the new 20 MW fourth wheel at Whitehorse the Commission finds itself in the position of having surplus hydro generation in the Whitehorse/ Aishihik system.

In order to prepare for the surplus hydro situation the Commission jointly entered into an agreement with the Alaska Power Administration and the Alaska Power Authority to study the economic and financial feasibility of interconnecting the Whitehorse grid to both Skagway and Juneau, Alaska. These areas in the Alaskan Panhandle utilize significant diesel generation for both base load generation and supplementary generation to their hydro supply. This study will be completed by the end of January 1984.

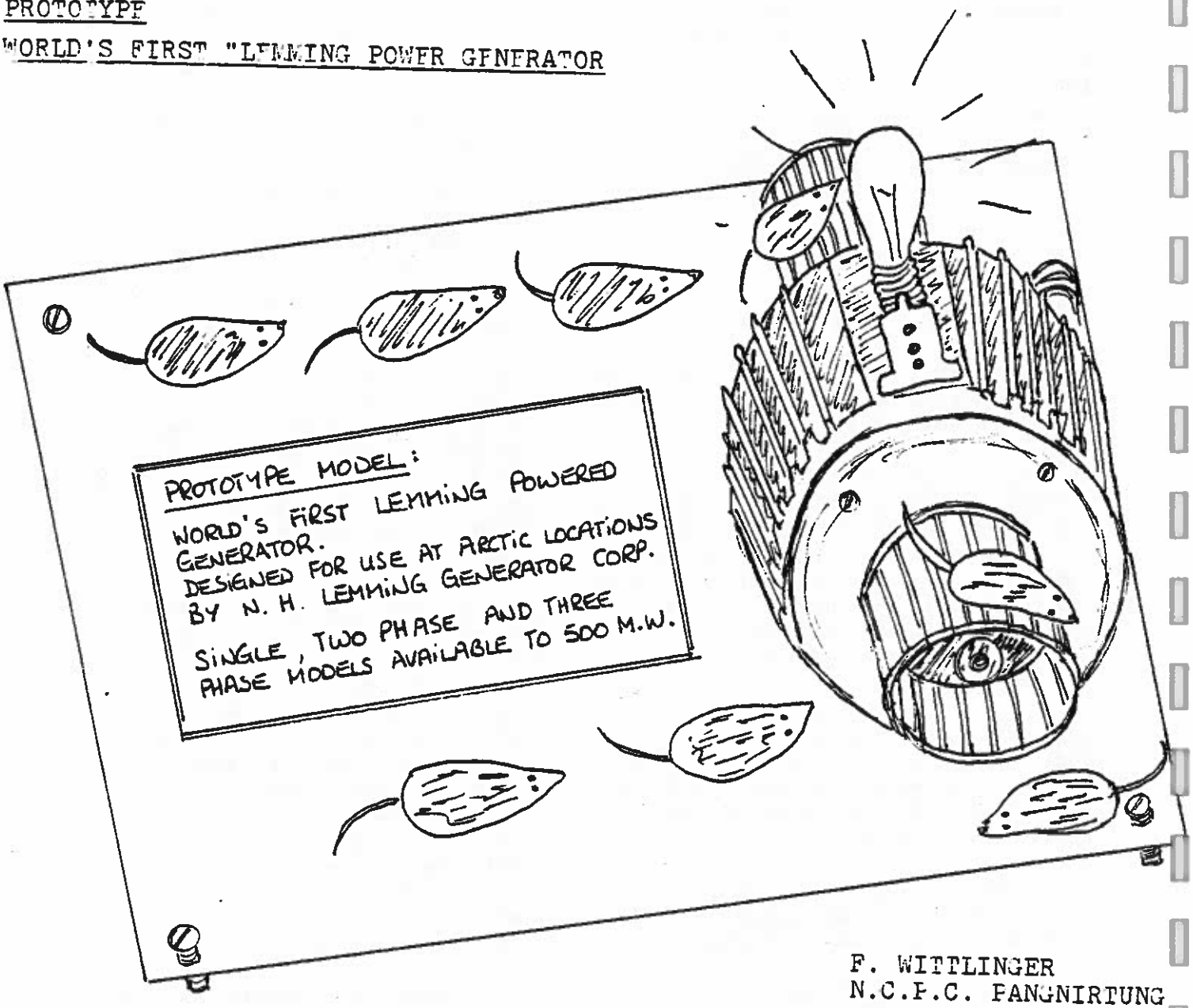
In the long term, preliminary indications are that it is the practical thing to do from an economic point of view and it could evolve to a further interconnection to B.C. Hydro at Prince Rupert. From a financial point of view it appears it will only benefit both Canada and the United States under specific load growth scenarios. A joint summary will be prepared by all parties after the study is reviewed in order to plan a course of action for the future of this possible project.

John Allan, AGM Operations & Engineering will be going to Vancouver February 2nd to meet with Alaska Power Administration and the Alaska Power Authority to prepare a summary and course of action to be taken over the next couple of years. This will include incorporation in future plans of the three parties.

Northern Lights, January 1984

PROTOTYPE

WORLD'S FIRST "LEMMING POWER GENERATOR



F. WITTLINGER
N.C.P.C. FANGNIRTUNG

News from Pangnirtung

We've been quiet for some time now - but that's just because we have been rather busy. Here now is a short summary of the activities which took place during the past six months.

Last fall an overhaul crew came in to perform a major overhaul on one of our D398's, followed by the line crew to do distribution extension.

Approaching the festive season Pangnirtung dressed up for Christmas and saw the NCPC truck taking part in the annual Christmas parade. After that the cold season set in with six weeks of -45° to -50°C temperatures. However, to the Superintendent's delight, no big windstorms took place. The dark and cold of winter didn't hinder us from being kept busy by the continual presence of construction crews building and upgrading older houses in the community.

During January, the senior grade students - in several small groups - were given a talk about the role of NCPC in the community, and a tour of our generating facilities. They showed such keen interest that in recognition they each received an NCPC hat (which can now be seen all over town).

In mid-February, with great enthusiasm, we greeted the returning sun. Also, during that month, we were called into Frobisher Bay for a Regional Superintendent's Conference. I am thanking Messrs. Sanders and Sullivan for lending us a listening ear. I believe this was a very helpful and worthwhile event and should be repeated periodically.

In keeping with the Commission's constant goal of finding an inexpensive alternate power source, a prototype called "Lemming Power" is now on display at the NCPC office here in Pangnirtung. (see picture of prototype)

Northern Lights, March 1984

Operations Snare Meeting
February 5-10, 1984

During the week of February 5 to 10, area and plant superintendents gathered together at the semi-annual operations planning meeting which has become known as the Snare meetings. It was kicked off on Sunday and Monday morning in Yellowknife by John Allan, AGM Operations and Engineering who responded to questions and concerns held by the superintendents and field employees. Following John's departure for Edmonton on Monday the superintendents attempted an ill-fated trip to the Snare campsite for the remainder of the week. When poor weather prohibited a landing by the plane it returned to Yellowknife where the group remained for the week....

Northern Lights, March 1984

Hollywood North

Well, once again, Frobisher Bay is playing host to a large film crew. In 1983 we saw the race to the North Pole by Cook and Peary; this year we have the race to the South Pole by Scott and Amundson. The mainly British crew of approximately 100 people, have been in town for most of April and May, making accommodations somewhat tight in town.

Changing Frobisher Bay of 1984 to the Antarctic Circle 1911 has provided some interesting and unusual sights. Not only was a two mile road built out onto the ice of the bay but convoys of trucks, horses, dog teams, wind machines (?) and antique caterpillar tractors have been seen using it. No penguins have yet to be seen in town however.

...

Northern Lights, May1984

Safety Award to Norman Wells

The 1983 Loss Prevention Committee Safety Award Plaque for recognition of the greatest reduction in accidents over the preceeding year for all areas within the Commission, as well as Head Office/Regional Offices, went to the employees of the Norman Wells area.

Northern Lights, May 1984

Cover Story
The New Look

A permanent cover has been designed for use on NORTHERN LIGHTS and appears for the first time on this issue. We believe this will add more dignity to our publication and encourage all of us to contribute on a regular basis.

Northern Lights, May 1984

Retrofit

The Commission has established an ongoing program to retrofit and upgrade NCPC housing, office and other building facilities throughout the Yukon and Northwest Territories.

This year will see the retrofitting of the Commission owned houses in Dawson, Mayo, Faro, Fort McPherson, Pond Inlet and Baker Lake. In addition to this, NCPC will be installing energy efficient windows in Commission owned houses in the majority of the remaining communities.

...

Northern Lights, July 1984

Asset Appraisal Program

Under the National Energy Board guidelines the Commission has been asked to perform an asset appraisal to determine whether assets are used and useful. This appraisal is to be completed within the next twelve months and is currently underway utilizing the services of the consulting firm from Vancouver known as General Appraisal Ltd.

Since this exercise is extremely important to the Commission in terms of timing and accuracy the Commission requests total cooperation from its field staff while assisting the consultant in identifying all of the Commission's assets.

...

Northern Lights, July 1984

Orientation Course - Head Office

A Head Office Orientation Course was held on June 18 to 22, 1984 at our Edmonton offices.

In attendance at the course were four Plant Superintendents, the Inuvik Maintenance Superintendent, and two northern Office Managers.

In the course of the week's activities the participants had the opportunity to visit all Head Office Departments, meet employees in each Department and obtain guidance and a learning experience regarding concerns and problems being encountered at both field and head office levels.

Northern Lights, September 1984

NCPC Regulatory Process

In February of 1984, the Federal Government appointed the National Energy Board as the Regulatory Agency for NCPC. The Commission's revenue requirements and rates will become the subject of a full public inquiry during the latter part of 1984 and the early part of 1985. NCPC is extremely pleased that the regulatory process has come about to present greater accountability to its publics in regulatory matters. The NEB has indicated that the actual Hearing dates will begin in Whitehorse on November 19, 1984, and continue in Yellowknife on November 26, 1984. The final Hearing dates are scheduled for early January 1985.

Northern Lights, September 1984

Cheaper Generation Methods Sought

The cost of diesel fuel is unavoidably reflected in the higher rates we must charge our customers where diesel generation is our only source of production. Cheaper generation costs would, of course, permit the assessment of lower rates for utility supply. Northern Canada Power has a fundamental interest in alternatives to costly diesel generation, and that is why we are a co-operating partner with Energy Mines and Resources Canada in a feasibility study of Small Hydro-electric Development in several NWT communities. The study is being totally funded by EMR at no cost to our customers. We are hopeful that small scale hydro generation will become one proven method of reducing the high cost of diesel generation as we know it today.

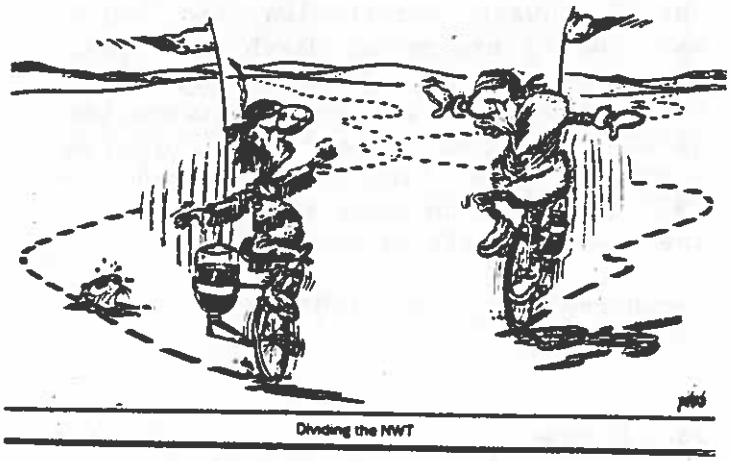
Northern Lights, September 1984

Inuvik Citizens Welcome New Plant

The new plant, which increased the generation capacity to approximately double the community's peak demand requirements is a welcome addition to the Town of Inuvik.

Along with the increased electrical generation capacity, the new plant also houses the new 63 million BTU boiler. Needless to say NCPC staff, as well as the other citizens of the Town are very pleased that this facility is in place....

Northern Lights, November 1984



Management Information Seminar
June 17-20,1985

For the first time in a number of years, MIS is going to take the form of work shops. Hopefully this will result in a more concrete solution to some of the problems presented.

Northern Lights, May 1985

Utility Rates Unchanged

On April 9, 1985, Indian Affairs and Northern Development Minister, David Crombie, announced that he has accepted an NCPC proposal to freeze utility rates pending the receipt of a National Energy Board report resulting from the recently completed hearings in Whitehorse and Yellowknife. Mr. Crombie also announced that the Federal Power Support Program, which reduces the cost of electricity to domestic non-government customers in Yukon and the Northwest Territories and which was due to expire on March 31, 1985, is being extended beyond that date. NCPC has acted as an administrative agent to facilitate this program since it was first implemented in 1978 and will continue to do so during the approved life of the program.

Northern Lights, May 1985

Joe Donaher receives his certificate and congratulations from Phil Johnson after successfully completing the Dangerous Cargo Course held at Yellow-knife recently.

Northern Lights, July 1985

NCPC Booth

The NCPC booth at the Lions Annual Trade Fair held in Whitehorse May 3, 4 and 5 was manned by Joe MacEachern, Jim Newnham, Terry Rafferty, Ed Chaplin, Bucky Koebke and Jim Hutchinson. Part of their job was to answer questions regarding the Whitehorse Rapids Power Plant by the many local residents who stopped by.

Vern Parkin and Peter Garside provided tours of Whitehorse No. 4 and those taking part in the tours found them very interesting.

The theme of the display was a scale model of the Whitehorse Rapids Power Plant....

Northern Lights, July 1985

From the Board Room

After a recent trip to Inuvik, Mr. E.W. Humphrys, Advisor to the Board, expressed concern about the Utilidor System in Inuvik. He believed the old Utilidor is still in pretty good condition but the extensions and add-ons are in a terrible condition.

...

Northern Lights, July 1985

National Energy Board Releases Report

On August 11, 1985 the National Energy Board (NEB) released its advisory report on the Northern Canada Power Commission (NCPC) and the rates charged for electricity supplied to Yukon and the Northwest Territories. The publication of the NEB report followed an inquiry held in Whitehorse and Yellowknife during February and March of this year. The purpose of the public inquiry was to look into the revenues of NCPC and to provide advice on rates which may be charged for the current 1985/86 fiscal year. Included among the NEB recommendations are:

1. The NEB found that rates set pursuant to the NCPC Act were not consistant with normal criteria used in setting utility rates and recommended that rates should be set using the rate base/rate of return methodology to determine revenue requirements. At present, the rates charged by NCPC must recover not less than the estimated cost of supplying service in each rate zone. Under this arrangement there is virtually no public input into the setting of rates.
2. NEB considers Whitehorse #4 as not being used and useful at this time and recommends that the facility be removed from rate base until such time as demand requirement dictates the need.
3. The NEB believes that some of the over expenditures in relation to the Aishihik hydro facility were the result of imprudent action on the part of NCPC and indicated that it would be reasonable to remove $12,000,000 from the original cost of the plant. The Board therefore recommends a net downward adjustment to the Yukon hydro rate zone test year rate base of $10,246,157.
4. The Board recommends that loans in the amount of $41.9M be forgiven and written off by the federal government.

These, and many other recommendations outlined within the NEB Report are currently being analysed by Corporate Affairs in preparation for implementation.

Northern Lights, September 1985

§ § § § §

Whitehorse #4 Officially on Stream

On September 11, 1985, NCPC publicly conducted a brief ceremony to mark the official start-up and inauguration of the 20 MW hydro facility at Whitehorse, commonly known to all NCPC employees as Whitehorse #4.

...

Northern Lights, September 1985

Power Purchase Agreement

NCPC has recently endorsed a power purchase agreement with Esso Resources Canada Limited in Norman Wells. The contract, which permits NCPC to purchase power at wholesale rates, enables total discontinuance of diesel generation in Norman Wells.

Northern Lights, September 1985

Relocation of Head Office

In anticipation of the proposed relocation of the Commission's head office to Yellowknife by the summer of 1987, the Board of Directors approved the designation of the Edmonton head office building as surplus, and authorized the sale of the building, subject to acceptable terms yet to be approved.

Northern Lights, September 1985

Yellowknife for Excom Meetings

Consistent with the relocation of Head Office in 1987, the majority of Executive Committee meetings will be held in Yellowknife. The first of these meetings was held October 17, 1985.

Northern Lights, November 1985

Devolution

Chairman, J. Smith met with head office staff on November 8, 1985 to confirm the Minister's statement regarding devolution of NCPC to the two territories.

During the planning and eventual take-over of NCPC scheduled for March 31, 1987, Mr. Smith indicated that "it's business as usual, the lights must remain on". He also indicated that governments are notorious for missing scheduled dates.

Northern Lights, November 1985

Career Days

"Expand Your Horizons" was the theme for Career Days held in Yellowknife November 5, 6 and 7, 1985.

...

Northern Lights, November 1985

Safety Award Program

For the initial year of the Commission Safety Award Program, 1984 marked a milestone for future annual awards. Area Superintendent Rudy Mayers and his area employees stole the show.

Cambridge Bay area employees recorded an accident-free year in 1984 and were individually awarded the Annual Loss Prevention Committee Plaque in recognition of the Area Plant who had the greatest reduction in accidents over the previous year.

...

Northern Lights, November 1985

Devolution of NCPC

Following two days of meetings in Ottawa on November 4 and 5, an announcement was made by the Yukon and Northwest Territories Governments on November 5, 1985 of the intention to transfer NCPC from the Federal Government to each of the Territorial Governments, with a target date of March 31, 1987 being established for completion of this devolution process.

The memorandum of understanding, which was issued jointly by the three levels of government, identified the objective of devolution is "to achieve a fiscally responsible, self-financing, and dependable utility operation, providing power at reasonable and stable rates". This decision is in accordance with one of the major recommendations contained in the April, 1982 Report of the Subcommittee on the Northern Canada Power Commission entitled "Electrical Power North of 60°" which was chaired by Keith Penner, M.P., better known as the Penner Report, which stated that "the Federal Government should enter into negotiations with the Territorial Governments for the purpose of creating separate territorial Crown Corporations to assume the present NCPC responsibilities".

The devolution process is intended to be carried out according to four basic principles:

1. The integrity and quality of electrical service will be maintained;

2. The legal and financial integrity and the mandate of NCPC shall be maintained during the transition period;

3. The interests of Northern consumers will be protected; and

4. The implementation plans shall include a course of action for the fair and equitable treatment of NCPC employees on staff at the date of transfer.

A work group of all parties, including NCPC, has been formed to develop a workable plan of action, dealing with financial, institutional, legislative and timing matters, as well as reviewing the positions advanced by the two territorial governments with respect to devolution. The work group has been requested to report back to the Federal and Territorial Ministers by January 30, 1986, following which the Ministers intend to meet again by February 28, 1986 to review the plans and decide on further action. The work group has scheduled its first meeting to take place at Head Office on Thursday, November 28, 1985.

During the Ottawa meetings, NCPC Chairman, Jim Smith, stressed the need to consider the interests of all NCPC employees in arriving at a workable plan for devolution. The Minister of Indian Affairs and Northern Development, David Crombie, responded to this concern by letter, stating that "You certainly have my assurances that every effort will be made to ensure that all NCPC employees receive fair and equitable treatment throughout the transition period". He further stated that all participants recognize the contribution that NCPC employees are making to the development of the North.

B. G. Christie
Acting General Manager

Fort Smith Christmas Party 1985

On the evening of December 14th, the staff had their annual Christmas get to-gether at the Wine Rack. A prime rib dinner was enjoyed by all, followed by dancing and story telling.

Also at this time two of the Fort Smith staff were presented with Long Service Awards.

Ron Mabbit - 20 Year Award
Wayne Martin - 15 Year Award

A special thanks to Lorna and Beth for making the meal arrangements, arranging corsages for the ladies, etc. Also Tony Clements for the photographs.

Best wishes for 1986 to all NCPC staff from the Fort Smith Staff.

Ron Hilton
Ron Mabbit
Wayne Martin

Wayne Martin 15 Years
Ron Mabbit 20 Years
John Evans, Asst.Supt.
John Dube, Ex.Supt.
Norman Wells

POINTS NORTH

Notes from the back of an old envelope.

We Have Wrought Much That is Good

We must thank the poet John Davidson for telling us that "Nothing is lost that is wrought with tears."

It is not that we do not already know this. There are lots of tears and frustrations in our business. But John Davidson's poetic line is not lost on us. We have "wrought" much - despite a few tears - in our 37 years of existence.

And we have had a few laughs along the way. They, magically, balance those moments that we have all experienced from time to time when we would like to chuck the job and find another one that is easier on the muscles or the mind or the soul.

When we feel that way it is good to remember that it matters little where we are situated, we will always be faced with problems - some of our own making, some foisted on us by others, and some fall our lot by sheer happenstance.

I guess it's not so much what happens to us in our work-a-day lives - but how we react to what happens that counts.

Reacting creatively to our problems is an important part of our business. Sure, we plan, and we advance on a broad front, but we must be nimble enough, and fast enough on our feet to react to the unexpected - the onslaughts of nature, the vital part that has been lost in shipment, the restraints of budgets, the seemingly impossible demands on our physical and financial resources, the irate customer who may have a point, and those dark days when we just don't feel like keeping our noses above the water line.

Yes, working for a living is tough at times, but this is nothing new.

The history of the Northern Canada Power Commission is a history of hard work. It is not shelves full of reports and loose leaf binders of statistics. No, the history of our organization is the history of its people. It is the story of thinking, active and dedicated people who have built it and made it run from day one.

POINTS NORTH

Notes from the back of an old envelope.

Our history is the essence of innumerable biographies. It is the record of hundreds upon hundreds of people who have devoted their energies, their skills and their talents to creating a company of people who can produce and deliver electrical energy throughout the Canadian north.

That takes some doing.

They did it yesterday - and made history. And we are still doing it today - building on the foundation of the past. Others will come and they will take over where we leave off. In short, we are now, and always will be, a part of the Northern Canada Power Commission's history. I feel very positive about that, and I hope that you do too.

The trouble with history is that it is hard to see. It's there, just like grass. But try as we might, we cannot see the grass growing, neither can we hear it.

But it is there - just like we are. We are part of the landscape that makes our Northern Canada Power Commission what it is today.

Perhaps Thomas Sugrue said it best when he wrote, "The meaning of history is never apparent to those who make it..."

But we <u>are</u> making it - and it's good history that we are making. That is something we can be proud of - something we should never forget.

It has been a busy 1985 - but now it too is history. But I thank you for what you have done - and are doing - to keep the pages of our history packed with action and our northern industry and homes aglow with energy, light and heat.

Happy New Year.

J. Smith
Chairman, and C.E.O.

Offloading Taltson River
August 6, 1985

Taltson First

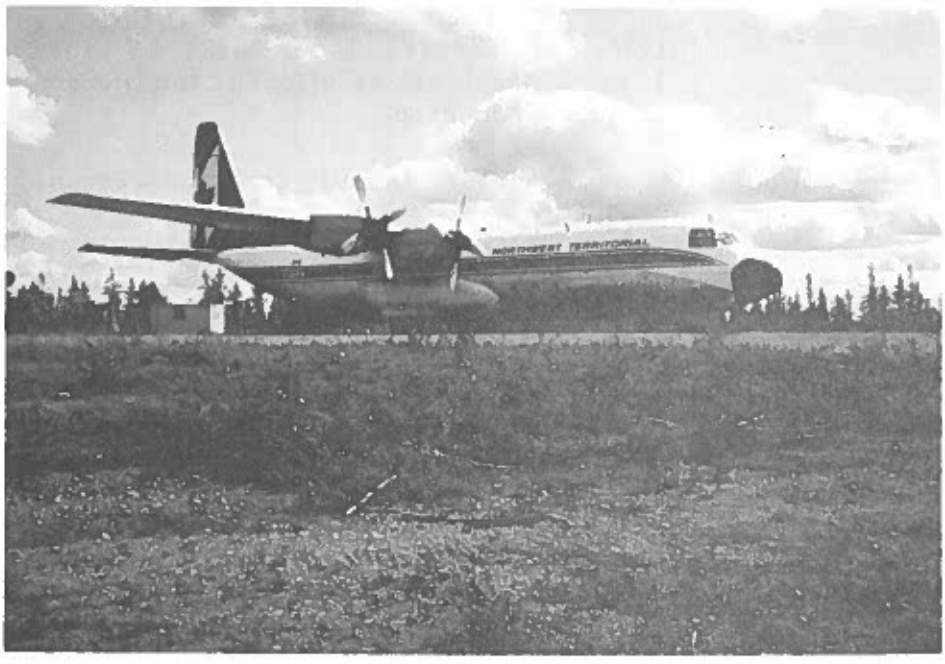
On August 6, 1985, C-GHPW, a stretched Hercules belonging to Northwest Territorial Airways landed at the Taltson Hydro Plant's airstrip to deliver a 936 Caterpillar Loader. The flight originated at Yellowknife and returned there with an HD6 Allis Chalmers Loader from Taltson.

In order to carry out the charter a considerable amount of work was carried out on the strip by resident operator Pat Bell and summer student Alan Dube. The strip had to be lengthened from 3,900 feet to 4,000 feet and brush on both sides of the strip had to be cut back 100 feet. This work was completed by the third week in July.

A strip inspection was carried out by N.W.T. Air and approval granted for the Hercules to use the Taltson Strip.

The aircraft can take in a gross payload of 30,000 pounds from either Edmonton, Fort Smith or Yellowknife. The use of this aircraft will eliminate the need of a winter road from Fort Smith to the Taltson Hydro, which in years past was necessary to take in fuel and large pieces of equipment. There are plans for another trip in late February or early March of 1986 to haul in a Static Exciter Ossberger Runner and fuel.

Ron Hilton



Prior to Departure
from Taltson
August 6, 1985

Deadlines for
Receiving Copy for
Future issues of Northern Lights

March 10, 1986

May 12, 1986

July 14, 1986

September 8, 1986

November 10, 1986

January 12, 1986

Some of the reprinted stories in this issue will trigger memories of other versions or of different stories altogether. Why not share them with us all.

We'll continue to print anything pertaining to NCPC, past, present or future, and look forward to hearing from you.

Let's have those stories that you've been thinking about but never quite got around to sending. Don't forget the pictures as well.

Jack Behl
Vera Huffman
Ed Rarog
Howard Southwell

Decentralized Billing

As a significant step toward improved customer service, the Commission is currently developing a local customer service program which is scheduled for implementation in April of this year at Inuvik. The program, once implemented, will provide complete customer services from the local office and thereby become a more efficient and concerned company from a customer point of view. Local billing will also provide a vehicle to more accurately identify costs associated with the area service supply and as a consequence, costs may be allocated in a more equitable manner.

First Time Grandparents

Hilda and Harry Dey are happy to announce the arrival February 7, 1986, of Carissa Rose Barke, 7 lbs. 3 oz., daughter of Gloria and Gordon Barke of Edmonton.

Grandma Hilda is in the Engineering Department.

Frobisher Bay

It is not often that anyone hears from us. We try to keep a low profile, do our thing, and mainly keep things running smooth as possible.

We're not as isolated as some places, and yet more so than our western counterparts.

Probably the main reason you haven't heard from us is because we lost our best mouthpiece when it comes to putting pen and paper into production, namely, Glenn Bowers. So, in a small way and not as effective as Glenn would put it, this is what has been happening in Frobisher Bay.

We have this Person that goes around with pieces of cardboard, with a lot of lines and squares, where you sign your monogram, even before he has extracted the normal fee. You then have your name permanently on the Hit List.

Some of the employees of the Commission that don't even reside in Frobisher have fallen victim to this person's tactics. We appreciate their patronage.

You might check around Head Office and find a few of these nice people; right Clive! and then there's Mr. John Fenton and his Office Manager out of Rankin Inlet.

I guess you might say the best thing that happened to Frobisher is Mr. Joop Sanders making Eastern Area Manager. He now brings in a lot of victims, particularly because we have a lot more visitors. Keep up the good work Joop!

Now the proceeds from this victimization scheme go to a very good cause as the photographs indicate - mainly a staff picnic held this past summer. The next event to happen is the Employees Children's Christmas Party, and also to raise funds for equipment for our baseball team. We're proud of our team. We're not quite as good as the B.C. Lions and often resemble the Toronto Maple Leafs, but who cares, we just keep trying -- and who knows, one day we might just take the big award instead of a small one.

Anonymous

PHASE CHANGES

NOVEMBER

Ed Chaplin from Electrician to Electrical Maintenance Supervisor, Whitehorse

DECEMBER

Reg Crozier from Plant Operator Pine Point to System Operator Fort Smith

HOOKUPS

NOVEMBER

John McArady, Plant Operator, Fort Simpson
***Juanita Herring**, Office Manager, Fort Simpson
Don Sanders, Stationary Engineer, Frobisher Bay
Kiyoshi Kawata, Electrical Systems Engineer, Whitehorse
* in training (L. Cazon to transfer to Aklavik January '86

DECEMBER

Rene Vandendooran, Clerk II, Stores
Rod Purchase, Electrician, Fort Smith
Al Manuel, Lineman, Fort Simpson
Eileen Bishop, Clerk (PPT), Pine Point

DISCONNECTS

NOVEMBER

Sim Murthy, Meter/Relay Test Engineer, Engineering
Aaron Addy, Telecontrol Technician, Yellowknife
Bob Reynolds, Electrician, Fort Smith
Martin Carroll, Plant Superintendent, Aklavik
Cerralyn Moore, Clerk (PPT), Pine Point
Colin Smyth, Diesel Mechanic, Resolute Bay
Merribeth Worsell, Plant Operator, Dawson

DECEMBER

Brenda Morse, Clerk II, Stores
Nick Sierink, Diesel Mechanic, Fort Simpson
George Proud, Plant Superintendent, Pine Point
Roy Landry, Stationary Engineer, Frobisher Bay
Heinz Petersik, Electrician, Frobisher Bay
Bruce Bunce, Instrumentation Technician, Inuvik

LONG SERVICE AWARDS

As submitted by Personnel Department

1983 and 1984 Recipients

10 Years

Oscar Zawalsky
Dale Entus
Raymond Wellspring
Walter Rupnarain
John Nixon
Lawrence Sheck
Natsiapik
Anthony Jensen
Tartu Sammurtuk
Rufina Te
Thomas Ugjuk
Eric Parsons

15 Years

Samuel Kikpak
Douglas Steen
Eric Deutschmann
George Doolittle
Michael Maybroda

20 Years

Ronald Mabbit
Andrew Joe
Charles Firth

25 Years

Henry Breaden
Philip Johnson

1985 Recipients

10 Years

James Greenwood
Dianne Lessard
Howard Southwell
Marcel Dubeau
Kenneth Carson
Leslie Moran
Grant Allan
Charles Suley

15 Years

Bruce Christie
Bernard Doucet
William Fox
Eric Jones
Louis Cazon
John Allen
Clifford Sweetland
Wayne Martin
Joseph Donaher
Hendrick Vanthull

20 Years

Sydney Sime
William Bourque
Louis Couvrette
Joseph Menard
Steve Szabo

History of Northern Canada Power Commission

Reprinted from the National Energy Board Report, June 1985

The Northwest Territories Power Commission was created as an agency of the Government of Canada in 1948 to operate a single hydroelectric plant on the Snare River near Yellowknife, Northwest Territories. In 1956, the name of the organization was changed to Northern Canada Power Commission. NCPC gradually took over the operation of generating facilities built by others and undertook the construction and operation of electrical utility systems at various additional sites. Now, NCPC owns and operates facilities at 59 locations throughout Yukon and the Northwest Territories in a service area which covers all Canadian territory north of the 60th parallel, except in Quebec and Labrador, and includes numerous communities separated by vast distances. NCPC's only operation outside of the territories is in Yoho National Park, where it has supplied electricity to the community of Field, British Columbia since 1959 following a request from the Park to consolidate power facilities in the Park previously owned and operated by the Park and Canadian Pacific Railway.

NCPC's facilities include hydroelectric and diesel generation plants, five transmission systems and numerous isolated electrical distribution systems. Many of the facilities were originally installed by other agencies to serve their particular needs and were transferred to NCPC over the years. Some facilities have been developed to serve isolated mining operations and the associated communities so that a single customer may utilize a large portion of a particular power station's output. In such locations, the economics of the utility service are thus heavily dependent on the business of one customer.

While NCPC distributes electricity to the ultimate consumer in most locations, it supplies power on a wholesale basis to two investor-owned companies, the Yukon Electrical Company Limited and ICG Utilities (Plains-Western) Ltd., for distribution in parts of Yukon and the Northwest Territories respectively. In addition, NCPC supplies heat, and water and sewage services in Inuvik, provides wholesale heat supply in Frobisher Bay and makes residual heat available in various other locations. It also provides minor services under contract.

Northern Canada Power Commission Act

The NCPC Act, as amended, established the utility as a Crown corporation which is empowered to supply electric power and other public utilities in northern Canada. NCPC is accountable to Parliament through the Minister of Indian Affairs and Northern Development. The Act does not preclude other private corporations and other government agencies from supplying power to communities North of 60°.

The Commission consists of a chairman and four members, all of whom are appointed by the Governor in Council and hold office during pleasure. Two of these members are appointed, one each, on the recommendation of the Commissioner in Council of the Northwest Territories and of Yukon.

Under the terms of its enabling legislation, NCPC as an agent of Her Majesty may acquire and maintain plants within the Northwest Territories and Yukon, and with the approval of the Governor in Council of the Northwest Territories and of Yukon.

Under the terms of its enabling legislation, NCPC as an agent of Her Majesty may acquire and maintain plants within the Northwest Territories and Yukon, and with the approval of the Governor in Council, elsewhere in Canada subject to the laws of the province in which the powers are exercised.

Subject to the approval of the Governor in Council, NCPC is required to set ranges of rates for its services applicable to each zone in which it operates; Yukon and the Northwest Territories being separate rate zones within the meaning of the NCPC Act. Such rates are required to recover not less than the estimated cost of supplying the public utility service in the rate zone. These costs must include all operating, maintenance and administration costs as well as payments of interest and principal in respect of loans, and a provision for contingencies currently set by Order in Council at four percent of annual sales.

The Minister of Finance may authorize payment to NCPC of $50,000 from the Consolidated Revenue Fund for the purpose of funding investigations of new electrical generation projects. If a project is constructed, the cost of such investigation is charged to the capital cost of the facility. If a project does not proceed, the cost of the initial investigation is written off as a budgetary charge of the federal government.

Loans to the Commission for capital expenditures may be authorized by the Minister of Finance, on terms and conditions approved by the Governor in Council, from Parliamentary appropriations provided specifically for that purpose. In addition, with the approval of the Governor in Council and on terms and conditions approved by him, the Minister of Finance may authorize loans of up to one million dollars at a time out of the Consolidated Revenue Fund, such loans being submitted to Parliament for approval in the estimates of the following fiscal year.

All accounts of NCPC are subject to audit by the Auditor General of Canada.

N.C.P.C. Operations

NCPC is an unusual electric utility in that it is comprised of over 50 separate power systems serving populations of some 23,000 located in an area of 536,000 square kilometres in Yukon and 46,000 located in an area of 3,245,000 square kilometres in the Northwest Territories. The two major communities are the cities of Whitehorse, Yukon and Yellowknife, NWT. There is some concentration of population in southern Yukon and along the Mackenzie River Valley in the Northwest Territories but most other communities are small and scattered. The net peak load in the fiscal year 1983/84 was about 126 MW and sales were 580.5 GW.h, down 5.7 percent from the previous year's total of 615.9 GW.h. The separate power systems have generating capacities ranging from 80 MW in the Whitehorse area to 61 kW at Jean Marie River in the Northwest Territories. The total installed capacity as of 31 March 1984 was approximately 267 MW. Each of the power systems must be planned and operated independently.

Hydro generation exists in Mayo and in the Whitehorse-Aishihik-Faro area, both in southern Yukon, and in the Great Slave Lake region in the Northwest Territories. Diesel generators are used in all other locations. The larger systems having hydroelectric plants and the diesel systems in regional centres have full-time staff but many of the smaller stations are operated by local part-time operators. The skilled linemen, maintenance men and operators at the regional centres travel to the smaller plants

as required to supplement the work of local part-time operators. For major maintenance of machinery and equipment, this staff is supplemented when necessary by representatives of the manufacturers.

In the larger diesel plants, the staff have the necessary skills to run two or more generators in parallel but in the smaller plants only one generator is used at any one time. For the best fuel economy, a larger unit is used to supply loads in the winter, while a smaller unit is used to meet summer loads. In this way the diesel engines can be run at or close to full load, which is the most efficient level, at all times. Additional diesel capacity is installed to provide reserve capacity to deal with breakdowns and to allow for routine maintenance. Regular maintenance schedules are planned on the basis of the number of hours the units have run. This situation leads to a wide variation from year to year in maintenance work and associated costs at each station.

The criterion used for determining the size of a new unit to add capacity at a diesel station is the forecast of load growth for the next five years, thereby offering the probability of fewer changes and greater economy in the long-run. Because electricity is a necessity of life in the North, each plant system is designed to provide at least 99 percent reliability. In addition, a gas turbine powered generator is held as spare in Edmonton and can be flown by Hercules aircraft to any station in an emergency. Reserve levels are much higher than in southern electric utilities but this situation is, in general, unavoidable given the isolation of the stations from each other, the operating difficulties with some semi-skilled staff and the need to provide secure service.

Territorial Regulation of Electric Utilities

The government of each territory has established an administrative board to regulate the activities of electric utilities in the territory. The Yukon Utilities Board and the Public Utilities Board of the Northwest Territories are similar in organization, jurisdiction and powers.

Under the respective ordinances, an electric utility must obtain a franchise from a municipality or from the Commissioner of the territory. These franchises cannot be granted, renewed, or altered without the approval of the territorial public utilities boards. Complaints from the Commissioner, a municipality, or from a specified number of residents of a service area concerning the rates charged by the utility or a proposed increase in those rates, the service provided by the utility, or the areas to which the utility provides service, are adjudicated by the territorial boards. The territorial boards are empowered to determine the rates to be charged, the conditions and manner in which the utility supplies electricity, and to order any reasonable extension of the facilities of the utility.

The territorial boards must conduct public hearings in the exercise of their powers, with the exception of the approval of franchises by the Yukon Utilities Board. Their decisions are final and binding.

As an agent of the federal government, NCPC is not legally subject to regulation by the territorial boards.

In an attempt to address concerns regarding the lack of accountability to its customers, NCPC, from 1976 to 1963, voluntarily submitted its proposed rate increases to the terri-

torial boards. The experience did not prove entirely satisfactory to the territories, because NCPC declined to implement certain recommendations of the territorial boards on the grounds that to do so would entail a conflict with NCPC's governing legislation. NCPC had also been criticized by the Auditor General for subjecting itself to such reviews.

Letters to the editor

312 Durham Drive
Regina, Saskatchewan S4S 4Z7

Thank you for your letter of October 22. We thoroughly enjoy "Northern Lights". It reminds us how NCPC became an exciting part of our lives. We especially enjoyed the articles by Bill Nye and Joop Sanders. It would be interesting to have more articles describing some of these remote places most of us will never see.

Harold & Ingrid Kaldor

Spence Bay, N.W.T.
XOE 1BO

Enclosed please find a couple of pictures to go with the article following. I'm not sure if these pictures come out too well, but I'm afraid I haven't got too many pictures around from NCPC happenings.

You're asking for stories and pictures - and many stories we could tell, and I'm sure many could be told better than written, and some could only be told, and never put into print.

Eric Deutschmann

Commission Newsletters

Over the Years

NICPIC News, the Commission's earliest newsletter, was published for the first time in December 1969. NICPIC continued for thirteen issues to April 1973. This was an extremely interesting newsletter put together by Head Office staff in Ottawa and printed outside. The publication obviously had a great deal of co-operation from plants, regional and head offices. Unfortunately, NICPIC didn't survive head office relocation from Ottawa to Edmonton.

June 1976 saw the birth of the NCPC Courier which was sent out for printing. It died in infancy with it's fourth issue in April 1977.

Early in 1981, General Manager, Joe Long, and the Management Committee, decided to re-establish an in-house company newsletter. This was the beginning of what became NORTHERN LIGHTS, first published in May 1981. Without exception, NORTHERN LIGHTS has appeared every other month since that date and our Volume 6, Number 1 issue makes a total of 19 issues. May 1986 will be the Fifth Anniversary of NORTHERN LIGHTS!

Of the original Editorial Committee of four, Jack Behl, Editor and Vera Huffman are still trying to get your stories. The other members of the Committee at this time are Ed Rarog, who replaced original Tony Yewchuk and Howard Southwell replacing Chris Melvin who replaced Vern Schmuland, the fourth original member of this committee.

Throughout this January publication you will find various articles of interest gleaned from several sources including newsletters and Annual Reports. This became necessary in order to fill in some of the gaps.

89 letters were sent to employees with 10 or more years of service in 1986; 20 letters to retirees whose addresses we could find, as well as requests and reminders in the last three issues of NORTHERN LIGHTS.

We are extremely grateful to the following people who have come forward with stories and pictures for our History of NCPC issue.

Annonymous, Frobisher Bay

Glenn Bowers, Dawson City

Alex Crawford, Frobisher Bay

Eric Deutschmann, Spence Bay

Annita Deutschmann, Spence Bay

R. Devine, Retired, Gibsons, B.C.

R. Hilton, Taltson

E.W.(Ted) Humphrys, Advisor to Board, Ottawa

Phil Johnson, Yellowknife

Harold & Ingrid Kaldor, Retired, Regina

Flo Mazur, Head Office

Wilbert Miskilzie, Head Office

Lorne Vance, Head Office