

APPENDIX E

**OTHER PROJECTS AND ACTIVITIES
CONSIDERED IN CUMULATIVE EFFECTS
ASSESSMENT**

E.1. INTRODUCTION

The following appendix material provides a brief description of past and current projects and activities and information on future projects and activities considered in the cumulative effects assessment. More information on these projects can be found on the Manitoba Hydro website (<http://www.hydro.mb.ca/>).

E1.1 Past and Current Projects and Activities

E1.1.1 Manitoba Hydro Generation – Related Development in Northern Manitoba

Churchill River Diversion

The Churchill River Diversion Project involved diverting flow from the Churchill River into the Burntwood-Nelson river system to increase power production at existing and future generating stations on these two rivers. The diversion raised the level of Southern Indian Lake by approximately 3 m, reduced flows on the Churchill River downstream of Missi Falls, and increased flows on the Rat River/Burntwood River/Nelson River system.

The Churchill River Diversion Project was announced in 1966 and received an interim license in 1972. Construction began in 1973 and the diversion was in operation by 1977. The three main components of the diversion plan included:

- A control dam at Missi Falls that raised the lake by 3 m and controls the outflow of water from Southern Indian Lake.
- Excavation of a channel from South Bay of Southern Indian Lake to Issett Lake which created an outlet for the diverted Churchill River to flow into the Rat River/Burntwood River/Nelson River system.
- A control dam on the Rat River at Notigi that regulates the flow into the Burntwood-Nelson River systems.

Under the terms of the license, Manitoba Hydro is permitted to divert the river flow up to 991 m³/s from the Churchill River into the Nelson River between May 16 and October 31 and up to 963 m³/s during the rest of the year. The license also stipulates that outflow from the control dam at Missi Falls must be at least 14 m³/s during the open water season and 43 m³/s during the ice-cover period.

Two weirs have been built, one on the Nelson River system and another on the Churchill River, to partially mitigate changes in water levels caused by the Lake Winnipeg Regulation (LWR)

and Churchill River Diversion (CRD) Projects, respectively. The Cross Lake Weir was constructed in 1991 to reduce the impacts caused by reversal of the historic pattern of water levels and fluctuations at Cross Lake. The weir at the Jenpeg Generating Station raised the minimum water level on Cross Lake by nearly 1.4 m during low flow conditions without raising water levels during floods in excess of the 1:100-year flood. This results in more moderate seasonal fluctuations than in the past. The effectiveness of the Cross Lake Weir continues to be monitored.

The weir on the Churchill River at Churchill was developed as part of a water level enhancement project to help offset reduced water levels resulting from the diversion of flows into the Burntwood-Nelson River system. Before the diversion, outflows from Southern Indian Lake averaged 991 m³/s. Below Missi Falls, tributaries bolstered the Churchill River's natural flow to an average of 1,274 m³/s emptying into Hudson Bay. With the diversion, the river's flows into Hudson Bay were reduced to an average of 510 m³/s. Following receipt of environmental approvals, construction of the weir and associated works began in the late spring of 1998 and was completed in the summer of 2000.

Lake Winnipeg Regulation

The Lake Winnipeg Regulation was developed to use Lake Winnipeg as a natural reservoir to regulate water flow for generating stations located on the Nelson River and also for flood and drought control.

The natural outflow of Lake Winnipeg into the Nelson River naturally increased in the summer and decreased in the winter, the opposite of energy requirements of the Province of Manitoba. Manitoba Hydro was granted a license in 1970 to regulate the outflow of Lake Winnipeg into the Nelson River. New channels were excavated and the Jenpeg Generating Station and Control Structure was constructed by late 1976. This new control structure allows Manitoba Hydro to adjust outflow patterns of Lake Winnipeg to meet the energy needs of the Province.

The three channels excavated were the 2-Mile Channel, 8-Mile Channel and the Ominawin Bypass Channel. They were excavated to a depth of 7.6 m for a total of 37.3 million m³ of material excavated. The 2-Mile Channel was excavated to increase the natural outlet at Warren Landing. The 8-Mile Channel was excavated to increase water flow from Playgreen Lake. The Ominawin Bypass Channel was developed to avoid natural restrictions in the Ominawin Channel.

The Jenpeg Generating Station and Control Structure was constructed to regulate water in the main channel that provides outflow from Lake Winnipeg and to generate 135 megawatts of electricity from a 7.3 m operating head (waterfall). Construction was completed in 1979.

The Kiskitto Dam was developed to prevent water from the Nelson River from spilling into Kiskitto Lake. Water levels in Kiskitto Lake are regulated by inlet and outlet structures within their natural range to provide maximum benefit for fish, wildlife and recreational users. The Kiskitto Dam is 600 m long and a maximum of 15 m high, with an additional 16 dykes, totaling a length of 14 km to prevent water from flowing directly from the Nelson River.

Construction began in 1991 on the Cross Lake Weir to raise the water levels on Cross Lake during low flow conditions. The construction included a rock weir and channel excavation at the outlet of Cross Lake for a total of \$9.5 million.

Under the Lake Winnipeg Regulation license, Manitoba Hydro must regulate water levels between 216.7 m (711 ft) and 217.9 m (715 ft) above sea level. The licence allows Manitoba Hydro to set outflows as required for power production purposes along the Nelson River when the lake is level is between 216.7 m and 217.9 m. During periods of high inflow when water levels in Lake Winnipeg rise above 217.9 m, Manitoba Hydro must maintain maximum outflow into the Nelson River to return the lake to below 217.9 m. During periods of low inflow and drought, the water level of the lake may fall below 216.7 m. When this occurs, Manitoba Conservation determines outflow from the lake. Eight separate locations on Lake Winnipeg are measured daily to determine the water level. The average level of the lake has not significantly changed following the regulation. Prior to 1976, the average water level was 713.4 ft above sea level while following the implementation of the Lake Winnipeg Regulation the average level of the lake has been 713.6 ft above sea level.

Lower Nelson River Generation Projects

In association with the Lake Winnipeg Regulation and the Churchill River Diversion water management system, four large hydroelectric generating stations were developed between 1957 and 1995. The Kelsey and Kettle Generating Stations were built prior to the Lake Winnipeg Regulation and the Churchill River Diversion. The Long Spruce and Limestone Generating Stations were constructed after the water management systems implementation.

The Kelsey Generating Station (GS) is located on the upper Nelson River close to where it enters Split Lake, 40 km south-west of the community of Split Lake. Kelsey was the first hydroelectric generating station built on the Nelson River in order to provide 100 MW of power to serve INCO's mining and smelting operations in Thompson. The Kelsey forebay raised water levels approximately 9.5 m above natural levels and flooded around 5,767 ha for 150 km along the upper Nelson River from Kelsey to Sipiwesk Lake.

The Kettle Generating Station is located at the Big Kettle Rapids (Kitchi Askiko Powstik) site, approximately 7 km northeast of the Town of Gillam. It was the first of four projects outlined in Phase One of the framework for northern hydroelectric development recommendations submitted by the Nelson River Programming Board in 1965 to meet the forecasted demand of

electricity in Manitoba. The Kettle Generating Station construction activities took place over seven years from 1966 to 1974. The Kettle Generating Station has twelve generating units with a generating capacity of 1,232 MW. The station was fully operational in 1974. Construction of the Kettle Generating Station involved several projects that had effects on the local study area, such as construction of the Radisson Converter Station, transmission lines from Kelsey to Radisson, electrification and expansion of Gillam to accommodate the construction workforce, a new airstrip and a road. With the creation of the reservoir, water levels at the structure raised 30 m, flooded 21,000 ha and tripled the size of Moose Nose Lake, which was then renamed Stephens Lake.

The Long Spruce Generating Station is located approximately 27 km east of Gillam and 16 km downstream of the Kettle Generating Station on the Nelson River. Long Spruce was selected for hydroelectric development after Kettle Rapids to continue to meet the growing electrical demands in Manitoba. Construction activities took place over seven years from 1972 to 1979. At peak construction, 2,000 workers were employed on the Long Spruce Construction. The Long Spruce forebay was created in 1977, which raised the water level by about 26 m, flooding approximately 1,400 ha of land. The Long Spruce Generating Station has ten generating units with a generating capacity of 1,010 MW. Related project activities to the Long Spruce Generating Station included roads, a converter station and transmission projects, which in total affected approximately 9,300 ha of land.

The Limestone Generating Station is located approximately 6 km east of Fox Lake and 50 km northeast of Gillam. Construction of the Limestone Project began in 1976 with the development of a road, rail spur and construction of the Sundance town site. In 1979, construction was suspended as growth in electricity demand dropped. Construction activities were resumed in 1985 after a sale of power to the Northern States Power Corporation and took place over seven years. Power was first generated in 1990 and fully operational in 1992 when water levels at the station had been raised by 33.5 m. The Limestone Generating Station has ten generating units with a generating capacity of 1,340 MW. The Limestone Generating Station was developed as a run of the river station to minimize upstream effects. Increased water levels were mainly contained within the Nelson River banks resulting in 209 ha of flooding. Approximately 1,500 to 1,800 workers worked at Limestone during peak construction. Transmission projects associated with Limestone used approximately 1,100 ha of land. An all-weather road system was completed at this time from Thompson to Gillam.

Wuskwatim Generating Station Project

The Wuskwatim Generation Project is currently nearing completion of construction and involves the development of a 200-MW generating station, access road, construction camp, and other infrastructure. The Wuskwatim Generating Station is located at Taskinigup Falls on the Burntwood River, approximately 1.5 km downstream from the outlet of Wuskwatim Lake. The Wuskwatim Generating Station includes a main dam, across Taskinigup Falls, a

powerhouse/service bay complex and a three-bay spillway built into the north bank of Taskinigup Falls. Using a low head design reduced flood impacts to less than 0.5 km².

The Wuskwatim Generating Station will utilize the Churchill River Diversion flow and the combined 22-m elevation drop at Wuskwatim and Taskinigup Falls. The Wuskwatim Generating Station is expected to produce an average of about 1,550 GWh of electricity per year that will be fed into the northern ac transmission system.

This location of the Wuskwatim Generation Project is within the Nelson House Resource Management Area. Manitoba Hydro and the Nisichawayasihk Cree Nation have jointly undertaken all the necessary engineering, environmental, consultation and other related activities to allow for the construction of the Wuskwatim Generation (and Transmission) Project. The Wuskwatim Generation Project is unique because it represents the first time Manitoba Hydro entered into an equity partnership with a First Nations community on a generating station project.

E1.1.2 Linear Development

Linear Development

Past Transmission Lines

Manitoba Hydro's high-voltage transmission line system carries electricity from the generating stations in northern Manitoba to terminal stations in southern Manitoba where large transformers convert the high voltages to low voltages. Sub-transmission lines then feed the electricity into a distribution system where the voltages are again converted to lower levels. Manitoba Hydro's major high voltage transmission lines operate at 115 kV, 138 kV, 230 kV and 500 kV. At the terminal stations located in heavily populated areas, large transformers convert the voltages to 66 kV, 33 kV or 24 kV.

Manitoba Hydro generates and transmits electricity as alternating current (ac) because of the relative ease of transforming voltages to the desired levels. It is more efficient and economical to transmit electricity as high voltage direct current (HVdc) for the long distances between the Nelson River generating stations and southern Manitoba, where most of the electricity is used. Manitoba Hydro's HVdc transmission system consists of two identical steel tower lines, Bipole I and Bipole II. They follow a 900 km route from Gillam through the Interlake area to Rosser, located 26 km from Winnipeg on the northwest side.

The Jenpeg Generating Station has a 230-kV transmission line to Ponton. The Kelsey Generating Station has three 138-kV ac transmission lines to Thompson, two 138-kV ac lines to Gillam (which feed Gillam, Ilford and Churchill) and one 138-kV ac line to Split Lake. The Kettle Generating Station has one 138-kV ac transmission line to the Radisson Converter Station where a ±450-kV dc line traverses to Winnipeg. The Limestone Generating Station has a 230-

kV ac transmission line traversing to the Henday Converter Station and a 500-kV dc transmission line from the converter station to the Radisson Converter Station. The Long Spruce Generating Station has a 230-kV ac transmission line to the Radisson Converter Station, a 230-kV ac transmission line to the Henday Converter Station and a ± 450 -kV dc line to the Dorsey Converter Station.

Wuskwatim Transmission Project

The operation of the Wuskwatim Generation Project required new transmission lines and substations to connect the new generating station to the existing Manitoba Hydro transmission system.

The new transmission facilities include a 230-kV station at the Wuskwatim Generating Station site. This substation will collect the electricity from the generating station and transform it to a higher voltage for transmission to the existing hydroelectric transmission system. A second switching station (Birchtree Station) is located at the Local Government District of Mystery Lake, just south of the City of Thompson. A 230-kV transmission line connects the Wuskwatim Switching Station to the Birchtree Station. This line was responsible for providing power to the Wuskwatim GS during its construction. Two 230-kV transmission lines connect the Wuskwatim and Herblet Lake Stations and one 230-kV transmission line connects Herblet Lake to the existing Ralls Island Station in The Pas.

Currently, construction of all transmission lines, with the exception of the collector lines from the Wuskwatim Generating Station to the Wuskwatim switching station, is now complete. Commissioning is under way and has been completed for the Wuskwatim Transmission Lines to Herblet Lake, as well as to Birchtree. The Herblet Lake to Ralls Island transmission line commissioning occurred in 2012. Construction of the Wuskwatim collector lines was also completed in 2012.

Keeyask Infrastructure Project

The Keeyask Infrastructure Project (KIP) is located approximately 730 km north (by air) from Winnipeg. KIP consists of the construction of new infrastructure components required to initiate the timely construction of the proposed Keeyask Generation Project, if and when it receives the necessary approvals. KIP received approval under The Manitoba *Environment Act* License No. 2952 dated March 8, 2011, and is currently under construction. Construction consists of a new all-weather gravel access road extending approximately 25 km from Kilometre 174 on PR 280 to the proposed Keeyask Generating Station location at Gull Rapids. It also includes a clear-span bridge structure over Looking Back Creek, site development for a road start-up camp (to accommodate road construction personnel), and construction of the first phase of a main camp.

The corridor width of the road is approximately 100 m with the road being constructed from materials excavated within this corridor. The road will be approximately 1.5 m above existing grade level and will meet Manitoba Infrastructure and Transportation (MIT) standards. One stream crossing will use a single through-grade culvert at an unnamed tributary. A larger crossing at Looking Back Creek will use a clear span bridge.

The road start-up camp is located at the approximate intersection of PR 280 and the north access road. A second start-up camp is located at the bridge crossing at Looking Back Creek to house those involved in the construction of the bridge. The first phase of camp construction included clearing and grubbing of areas, applying erosion and sediment controls, laying gravel and constructing a pad to allow placement of camp facilities. Phase I construction activities were completed in 2012.

The KIP is estimated to provide 184 person-years of employment over the three-year period, which began late 2011, with an average of 80 to 126 jobs at one time.

In the event that the Keeyask Generation Project does not proceed in the future, the proposed infrastructure would not be required and would be decommissioned. It is intended that decommissioning would return the environment to the pre-construction conditions to the extent reasonable and practicable. Decommissioning activities would include removal of the roadbed, clear-span bridge, culvert crossing and through-grade drains, and camp buildings and utilities. The roadbed and camp site would be re-graded and re-vegetated. A decommissioning plan would be prepared and submitted to the appropriate regulatory authorities for approval prior to implementation. Public notification of decommissioning and associated activities would also take place.

PR 280 Upgrades

PR 280 is a provincial road classified as a Secondary Arterial with an Average Annual Daily Traffic (AADT) volume of 130 to 186 vehicles per day. PR 280 was built on rolling terrain with a road width of 9.8 m between PR 391 and Split Lake and a width of 7.3 m between Split Lake and the proposed Keeyask North Access Road.

Manitoba Hydro engaged Dillon Consulting Limited to perform a safety analysis on PR 280 and the potential effect of additional traffic on the roadway related to construction of the proposed Keeyask Generating Station. The finding was that PR 280 did not meet current Manitoba Infrastructure and Transportation (MIT) standards for alignment and cross section guidelines and that safety improvements should be considered prior to the construction of the generating station.

Manitoba Hydro and MIT signed a Memo of Understanding (MOU) in 2010 that MIT would provide the design specifications, construction standards, obtain all permits and environmental

licenses, secure necessary right-of way and associated legal surveys while Manitoba Hydro would provide the planning, detailed design and construction management of the road upgrades. Manitoba Hydro and MIT also agreed to split the project costs 50/50.

Required upgrades to PR 280 were identified in 45 locations between PR 391 and the proposed Keyyask North Access Road by both Manitoba Hydro and MIT. Improvements included correcting excessive roadway gradients, sub-standard roadway widths and deficient crest and sag curves.

The upgrades were broken into two components:

- Crushing and stockpiling road aggregates and rock cuts.
- Regrading, realigning and resurfacing.

The work was awarded as a Direct Negotiated Contract (DNC) to Amisk Construction Ltd., a joint venture between the Cree Nation Partners (CNP) and Sigfusson Northern Ltd. Crushing and stockpiling road aggregates and rock cuts began in 2010 and the re-grading, re-aligning and re-surfacing contract will be awarded in 2012. The total estimated cost of the upgrades is \$28 million.

E1.1.3 Commercial Forestry

The forest industry has played an important part in the development of portions of northern Manitoba. As the industry modernized and mill capacities were increased at The Pas in the 1960s and 1980s, the Forest Management License (FML) #2 was also increased to include portions of the Nelson River Forest Section (NRFS), including Forest Management Units (FMU) 85, 87 and 89. These three FMUs overlap the western extremity of the Terrestrial Environment Regional Study Area.

As these areas are furthest away from the processing facilities at The Pas, past harvesting activities have been limited to the very south-western periphery of the Terrestrial Environment Regional Study Area. The global recession has hit the Manitoba forest industry particularly slowing harvest rates by up to 40% in FML #2 and forcing the shutdown of the sawmill at The Pas in 2009. This has resulted in a virtual stoppage of harvesting activities within the NRFS, that being a primary supply of sawlog material.

If and when the forest industry recovers and the sawmill is restarted at The Pas, logging activities could resume in FMUs 85, 87 and possibly 89, however these areas remain the most distant from the processing facilities and are therefore among the least likely areas to be re-activated.

E1.1.4 Kelsey Re-Runnering

The Kelsey Generating Station was designed and built in late 1950s primarily to serve INCO load. While the full generating potential based on the site and Nelson River flows was roughly 450 MW, only a 7-unit 224-MW generating station was required to meet the design requirements for the INCO load. Consequently, the plant had historically operated at a relatively high capacity factor of 89% and spilled roughly 70% of the time.

Manitoba Hydro has considered a variety of expansion options to develop additional capacity at Kelsey over the past 30 years, including expansion of the powerhouse or replacement of the existing turbine runners with higher capacity turbines. The most attractive option from an economic perspective was re-runnering. In 2003, the Kelsey Re-runnering Project was approved in the capital plan, justified on the basis of required equipment overhauls to major mechanical and electrical components of the existing units in order to sustain reliable operation of the plant and minimize forced outages.

The Kelsey Re-Runnering Project would increase power production from Kelsey GS by adding up to 77 MW of capacity and 350 to 400 Gwh of average annual system energy production primarily through the increase of discharge capability of the generating station. The increase in discharge capability captures the benefit from river flow that was previously spilled reducing the frequency of spill from 70% down to 35%, with all seven units re-runnered.

To date, five out of seven units have been completely overhauled with a sixth to be completed in fall of 2012.

E1.2 Future Projects and Activities

E1.2.1 Bipole III

The proposed Bipole III and Keewatinoow Converter Station Project consists of building a new HVdc transmission line corridor from the new Keewatinoow converter station (northeast of Gillam) to the Riel Station located east of Winnipeg in order to increase system reliability and dependability. It includes two converter stations, two ground electrodes and transmission lines. The system will be less vulnerable to power outages due to severe weather, fires or other unforeseen events with a second transmission corridor on the west side of the province, separate from Bipole I and II that run through the center of the province, and with a second converter station located in southern Manitoba.

The Bipole III Project includes 500-kilovolt HVdc transmission line with a total length of 1,384 km from north to south. A 66m right-of-way will be developed for the transmission line with average tower spacing approximately 480m, with a total of three to four steel towers per mile. Self-supporting towers will be used in agricultural areas to reduce agricultural operation

effects. Guyed towers will be constructed in forested areas and areas compatible with this type of tower.

The Keewatinoow Converter Station is located approximately 63 km northeast of Gilliam and 268 km northeast of Thompson. The southern converter station is located at the Riel Station site east of Winnipeg. The Keewatinoow Converter Station will convert ac power to dc power for transmission, as dc power is more efficient over long distances. The Riel Converter Station will invert the dc power back to ac power for end use. One ground electrode will be located near each converter station.

Several 230-kV transmission line interconnections will be added to tie the new northern converter station to the existing northern ac system.

Construction of Bipole III and the converter stations are expected to create numerous employment and economic opportunities. The construction workforce at peak construction on the transmission line will be 700-900 employees for approximately 1,200 person years and 500-700 employees for both converter stations for approximately 1,600 person years. Construction contracts will give preference to local, Aboriginal and Manitoba businesses. Employment and on-the-job training will be encouraged for locals, Aboriginals and Manitobans.

On December 1, 2011, an Environmental Impact Statement (EIS) for Bipole III and the Keewatinoow Converter Station was submitted to Manitoba Conservation. Comments and public hearings will be held by the Manitoba Clean Environment Commission. Assuming regulatory approval, the project is anticipated to start construction in 2013 and in-service by 2017.

E1.2.2 Keeyask Generation Project

The proposed Keeyask Generation Project is a 695-MW hydroelectric generating station and associated facilities at Gull (Keeyask) Rapids on the lower Nelson River, immediately upstream of Stephens Lake in northern Manitoba and in the Split Lake Resource Management Area. The Keeyask Generation Project is being developed by the Keeyask Hydropower Limited Partnership, established pursuant to the Joint Keeyask Development Agreement in May 2009 between Manitoba Hydro and the Keeyask Cree Nations (Tataskweyak Cree Nation, War Lake First Nation, Fox Lake Cree Nation, and York Factory First Nation).

Principal structures will consist of a powerhouse with seven turbines, other equipment for generating electricity and a seven-bay spillway, three dams, two dykes and a reservoir. The Keeyask Generation Project will use approximately 18 m of the 27-m drop in elevation available between Split Lake and Stephens Lake, including a 12-m elevation drop through Gull Rapids.

Supporting infrastructure will consist of permanent facilities, such as access roads, and temporary infrastructure, such as a worker camp and borrow areas.

Construction of the Keeyask Generation Project will occur only after a public review of the environmental impact assessment and approval and licensing by the relevant regulatory authorities. A response to the Environmental Impact Statement Guidelines (EIS) was submitted on behalf of the Keeyask Hydropower Limited Partnership to the provincial and federal regulators in summer 2012. Assuming the necessary approvals and licenses are obtained, construction of the Keeyask Generation Project would begin in 2014 with a project in-service date of 2019. Once in service, the Project's average annual electricity production will be about 4,400 gigawatt-hours, enough to power approximately 400,000 homes.

E1.2.3 Conawapa Generating Station

The potential Conawapa Generating Station will be the largest hydroelectric project built on the Nelson River in northern Manitoba. The project will be located on the Lower Nelson River approximately 30 km downstream from the Limestone Generating Station and 90 km northeast of the town of Gillam in the Fox Lake Resource Management Area. The Conawapa site is located at a narrow section of the Nelson River, 670m wide, near Horseshoe Bay. The river bottom is limestone and rises up to create a shelf. The river banks are approximately 50m high and fairly steep at this location, the nearly 30 km forebay and reservoir will be most contained within the natural river banks, limiting the net flooded area to about 5 km². The difference in water levels between the forebay and downstream of the generating station will be 30 to 31 m. During construction, structures will need to be recessed into the north bank to accommodate the river diversion requirements.

The Conawapa Generating Station will have ten turbine generators. The generating station powerhouse will be approximately 70 m wide and 310 m long and will be designed for a water flow of 5,000 to 5,500 m³ per second. Water flow will be controlled by wicket gates during normal operation and vertical lift gates in the intake for maintenance and/or emergency situations. A seven-bay concrete overflow spillway will be used during construction and high flow conditions after the project is completed. The spillway will be approximately 120 m wide and 115 m long with each gate measuring at 13 m wide and 17 m high.

Construction is expected to take approximately 8 to 8.5 years once regulatory approvals and licenses are received with the earliest potential in-service start date in 2025. Approximately, 840,000 m³ of concrete, 186,000 tonnes of cement and 40,000 tonnes of reinforcing steel will be required to construct the Conawapa Generating Station structures. Approximately 13,000 person years of direct and indirect employment is expected to be generated during construction.

Once in-service, the Conawapa Generating station is expected to produce 1485-megawatts, enough power to service 700,000 homes.

E1.2.4 Gillam Redevelopment

The mandate of the Gillam Redevelopment and Expansion Program is to repair existing 1970s infrastructure and build new infrastructure in anticipation of additional staffing required for northern projects. The infrastructure development under the Gillam Redevelopment and Expansion Program will recognize Gillam's future as an increasingly important northern hub for Manitoba Hydro. The Gillam Redevelopment & Expansion Program will focus on renovating and expanding Gillam incorporating qualities of permanence and durability to match the northern generating stations.

The Gillam Redevelopment and Expansion Program consists of numerous housing and infrastructure projects needed to accommodate the anticipated increase of Gillam's population as a result of expected new northern Project operational staff and their families. Population increase will also come from general town growth and from FLCN Members returning home to their traditional territory. It is estimated that Gillam will experience increasing population growth over the next 10 to 15 years.

The program may be deployed in phases to ensure that Gillam Redevelopment and Expansion proceeds in areas of priority, matches available funds and is coordinated with other major Project schedules.