

Planned Transmission Infrastructure Upgrades (October 2020)

Project Name	Description	Status (Committed / Proposed / Under Study)	Schedule Range
L1242 138KV Line from Keswick to Sisson	Build a new 42 km 138 kV transmission line from Keswick Terminal to Sisson Mine. A new 138 kV transmission line will be constructed from the Keswick terminal to a new mining operation located in the Sisson Brook area. The line is expected to be completed by 2024. This project is dependent on the outcome of the customers Environmental Impact Assessment.	Proposed	2022-2024
Keswick Term L1242 Addition	The bay for Sisson Mine line.	Proposed	2023-2024
PGM BREAKER OVERHAUL PROGRAM	The purpose of this program is to re-furbish certain breakers to extend the life of them at least another 12-15 years. This is done in lieu of replacing them. Asset management will review the condition of these breakers, and where practical a refurbishment will be done.	Committed	2021-2031
Irving Sub #2 Circuit Breaker, P&C Replacement	Maintain acceptable levels of reliability at the Irving Oil Refinery.	Committed	2021-2022
Power Transformer On Line Monitoring	To install on-line dissolved gas analysis monitors on all 345 kV transformers.	Committed	2021-2031
Line Life Extensions	Life extension and/or rebuild transmission lines reaching end of life	Committed	2021-2031

Eel River SC1, SC2 and SC3 10 Year Overhaul	To assess the timeline and complete the work of rebuilding all three Synchronous Condensers that are 40+ years old and in service at the Eel River HVDC Station.	Proposed	2023-2029
PGM Telecom Battery Chargers Banks	Replacing end of life batteries and chargers on a budgeted plan instead of on failure. Also have equipment already on hand to replace failed chargers if the need arises mid project (being prepared to replace problematic/suspicious equipment as soon as it is identified).	Committed	2021-2031
Spare Tie Transformer	Purchase a spare dual-secondary 138/230:345 kV tie transformer equal in size to the largest such transformer currently on the system.	Committed	2022-2023
Capacitor Bank Program	The proposed system changes will allow continued operation and supply of internal loads and external exports while maintaining acceptable voltages in noted problem areas.	Committed	2021-2025
Upgrade to Revenue Metering (Failures)	Replacement of failed transmission meters to ensure continued communication and accuracy of the Large Industrial customer meters.	Committed	2021-2030
Switch Replacement Program	Replace the switches on our bulk power system, or any others with known maintenance or safety issues. As discussed we should be doing on average 24 switches a year based on our population and an expected life of 50 year.	Committed	2021-2031

PGM Instrument TX Replacement Program	Ongoing program to replace aging instrument transformers, ones with design defects, or leaking units. Over the next 5 years approximately 100 instrument transformers are planned to be replaced.	Committed	2021-2031
PGM Trans Circuit Brkr Switcher Replacement	On-going program to replace breakers with design problem, old breakers that parts cannot be sourced, or under rated breakers.	Committed	2021-2031
PGM Tap Changer Rebuilds	Performing re-builds and design upgrades of tapchangers on transmission transformers as per the manufacturer's recommendation.	Committed	2021-2031
PGM Transformer Replacement Project	Replace deteriorated or failed tie, generator step up and station service transformers.	Committed	2021-2031
PGM Trans Building Yard Upgrade	Maintaining the safety and operation of electrical and civil assets at all Transmission sites.	Proposed	2021-2031
PGM HVEM Battery Banks Chargers	Project to replace battery banks that are at the end of their life, and chargers that are not functioning properly.	Committed	2021-2031
PGM Equipment changeout PCB Regs	This goal of this program is to replace apparatus that is likely to be, or has been positively identified as being above 500 ppm PCB, by the required date of December 31st, 2025.	Committed	2021-2025
St Andre install switches on Reactor	Switches for R1 & R2	Committed	2024

PGM Compressor Repl Air System Design	Install new compressors for identified sites to ensure that the air systems are up to today's design standards.	Committed	2022-2025
Moncton Bus Breaker	Improvement in Moncton area voltage and thermal performance.	Committed	2023-2024
PGM P&C Infrastructure Upgrade	Replace aging/obsolete protection and control equipment at terminal locations.	Committed	2021-2031
Eel River 13 kV Filter Bank Cable Replacement	Cable replacement	Proposed	2026-2028
Fredericton South Transmission Upgrade	To ensure reliable power supply and satisfy load demands.	Committed	2021-2023
Planned Transmission Infrastructure Upgrades Required due to Substation Changes			
Supply to Sussex West Substation	Construct a new 138 kV sub on NB Power property behind existing 69 kV sub and dismantle existing sub.	Proposed	2027-2028