Executive Summary
Qulliq Energy Corporation
2018/19 General Rate Application

This document provides an overview of Qulliq Energy Corporation's (QEC) 2018/19 General Rate Application (GRA) to the Minister Responsible for QEC (the Minister) for rates effective April 1, 2018 and April 1, 2019. The complete application is available from QEC at its office in Iqaluit, and from the QEC website at http://www.qec.nu.ca/.

1.0 OVERVIEW OF QEC

Qulliq Energy Corporation is the only generator and distributor of electrical energy for retail supply in Nunavut. QEC serves a population of 37,000 over an area of 2.1 million square kilometers and has approximately 15,000 electrical customers across the Territory.

The Corporation generates and distributes electricity to Nunavummiut through the operation of diesel plants in 25 communities meeting community peak demands ranging from approximately 200 kW in Grise Fiord to 10 MW in Iqaluit.

The Corporation provides mechanical, electrical and line maintenance from three regional centers and administers the Corporation's business activities from its headquarters in Baker Lake and executive offices in Iqaluit.

Low customer densities and a harsh climate have a profound impact on QEC's operations. QEC is the only electrical utility in Northern Canada without hydro-electric generation. This creates a large dependence on fossil fuels.

QEC's electricity systems are isolated and must be planned and operated independently. In order to supply safe and reliable power, QEC develops long-term capital plans to determine which plants require upgrades, expansions or replacements. QEC also researches emerging alternative energy technologies to determine if they can be incorporated into the capital planning cycle. QEC is currently investigating the potential for solar and wind generation in Nunavut.

2.0 GRA AND RATE APPROVAL PROCESS

Qulliq Energy Corporation operates under the Qulliq Energy Act. Rates for electricity service are approved by the Minister who receives advice from the Utility Rates Review Council (URRC) pursuant to the Utility Rates Review Council Act. The URRC is an advisory body that reviews QEC's applications for changes to electricity rates.

A General Rate Application (GRA) is a request to change the overall level of rates (revenue requirement) and how rates are recovered from customers. QEC's last GRA was for the 2014/15 fiscal year. The GRA process has two phases:

- Phase I of a GRA examines the total cost of providing electrical service (called "revenue requirement"). Phase I reviews QEC's salaries and wages, travel costs, fuel costs and costs of capital projects and infrastructure.

- Phase II of a GRA determines how the revenue requirement should be recovered through rates for different customer classes (domestic, commercial, and street lighting). As part of the Phase II process, QEC completes a cost of service study that examines how different customer classes contribute to the overall cost of running the utility.

The URRC sets the timeline for the GRA review process but an approximate timeline based on previous reviews would result in a final instruction from QEC to the Minister in March of 2018.

You can participate in the review process by attending community meetings organized by the URRC or making written submissions. More information on the URRC and the public review process is available on the URRC website at www.urrc.gov.nu.ca.

3.0 PHASE I: 2018/19 REVENUE REQUIREMENT

The GRA describes QEC's forecast costs for 2018/19 and requests approval of a revenue requirement of $134.0 million. This results in a shortfall of $8.8 million compared to revenues at existing rates with the current fuel refund rider in place.

			Current GRA	
	2014/15 Approved	2018/19 Existing	2018/19 Proposed	2019/20 Proposed
	($ millions)	($ millions)	($ millions)	($ millions)
Non-fuel O&M	53.5	60.2	60.2	60.2
Fuel	56.4	48.8	48.8	48.8
Capital related costs	21.1	25.1	25.1	25.1
Total revenue requirement	130.9	134.0	134.0	134.0
Revenue from sales	130.9	134.9	130.4	134.0
Fuel refund rider	0.0	(9.7)	0.0	0.0
Shortfall	0.0	8.8	3.6	0.0

Although the application indicates that average rate increases of 7.6% are needed to recover the shortfall compared to existing rates, in order to minimize rate impacts to customers, QEC is proposing to phase-in the required rate increase over a two-year period (2018/19 and 2019/20). This means average rate increases are reduced to 3.6% per year. The rate increase reflects the following key cost increases since the time of the 2014/15 GRA:

Non–fuel Costs: Increases in non-fuel expenses are approximately $6.7 million. This mainly reflects general inflationary pressures over the last three years as well as increases in salaries and wages from additional positions required to maintain and improve service levels, as well as salary increases consistent with labour agreements.

Capital Investments: Increases in capital related costs (financing and amortization expenses) are approximately $4.0 million. The requirement for capital investments in the aged electricity system in the territory is also one of the main drivers of the required rate increase. The Corporation cannot delay capital investments needed to provide safe and reliable electricity to customers.

Diesel Fuel Cost: Diesel fuel prices have decreased since 2014/15 and lowered fuel expense by approximately $7.6 million. QEC currently refunds these fuel savings to customers with a fuel refund rider. A refund rider of 5.41 cents/kWh is in place as of October 1, 2017. The fuel rider will end March 31, 2018 and the lower fuel prices will be built into QEC's energy rates as part of the current GRA to offset other revenue requirement increases.

Sales Revenues: Revenue at base energy rates has increased since the 2014/15 GRA. However with the fuel refund rider of 5.41 cents/kWh in place, the combined revenue at existing rates with the fuel rider has decreased by approximately $5.7 million.

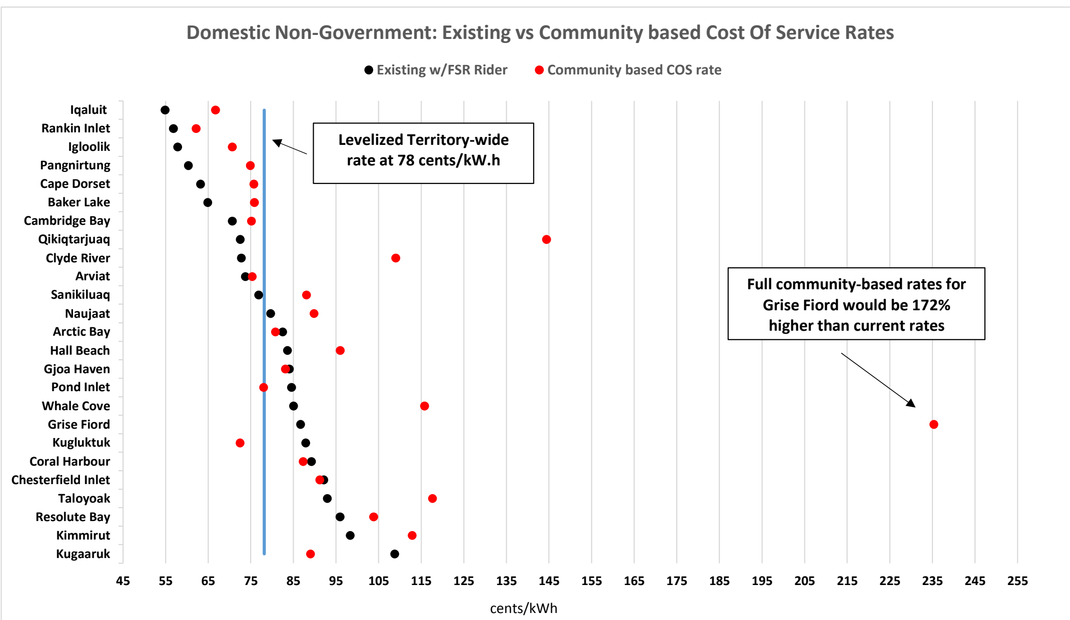
QEC has made efforts to mitigate rate impacts on customers in a number of ways without sacrificing safety and reliability. These include:

- **Fuel Efficiency Improvements:** QEC's corporate-wide fuel efficiency has improved since the last GRA reducing forecast fuel consumption by 730,000 litres (or $677,000) for 2018/19.

- **Station Service Reductions:** Station service (electricity used by QEC at its facilities) has been reduced through a variety of initiatives and plant upgrades. The 2018/19 forecast is lower than the 2014/15 forecast (3.3% vs 3.5% of generation, or savings of $112,000).

4.0 PHASE II: PROBLEMS WITH EXISTING RATE STRUCTURE

QEC currently has different rates for each community it serves. QEC inherited the existing rate structure from the Northwest Territories Power Corporation (NTPC). Community-based rates are intended to reflect differences in costs to provide service in each community. However, the current rates do not accurately reflect community-based costs. The rate adjustments needed to achieve community-based rates that fully reflect community-based costs would be substantial, far greater than rates proposed in this GRA. For example, Grise Fiord would require a rate increase of 172% and Iqaluit would require a 22% rate increase.



Rate Adjustment Needed to Achieve COS Rate	
Iqaluit	22%
Rankin Inlet	9%
Igloolik	22%
Pangnirtung	24%
Cape Dorset	20%
Baker Lake	17%
Cambridge Bay	6%
Qikiqtarjuaq	99%
Clyde River	50%
Arviat	2%
Sanikiluaq	15%
Naujaat	13%
Arctic Bay	-2%
Hall Beach	15%
Gjoa Haven	-1%
Pond Inlet	-8%
Whale Cove	36%
Grise Fiord	172%
Kugluktuk	-18%
Coral Harbour	-2%
Chesterfield Inlet	-1%
Taloyoak	27%
Resolute Bay	8%
Kimmirut	15%
Kugaaruk	-18%

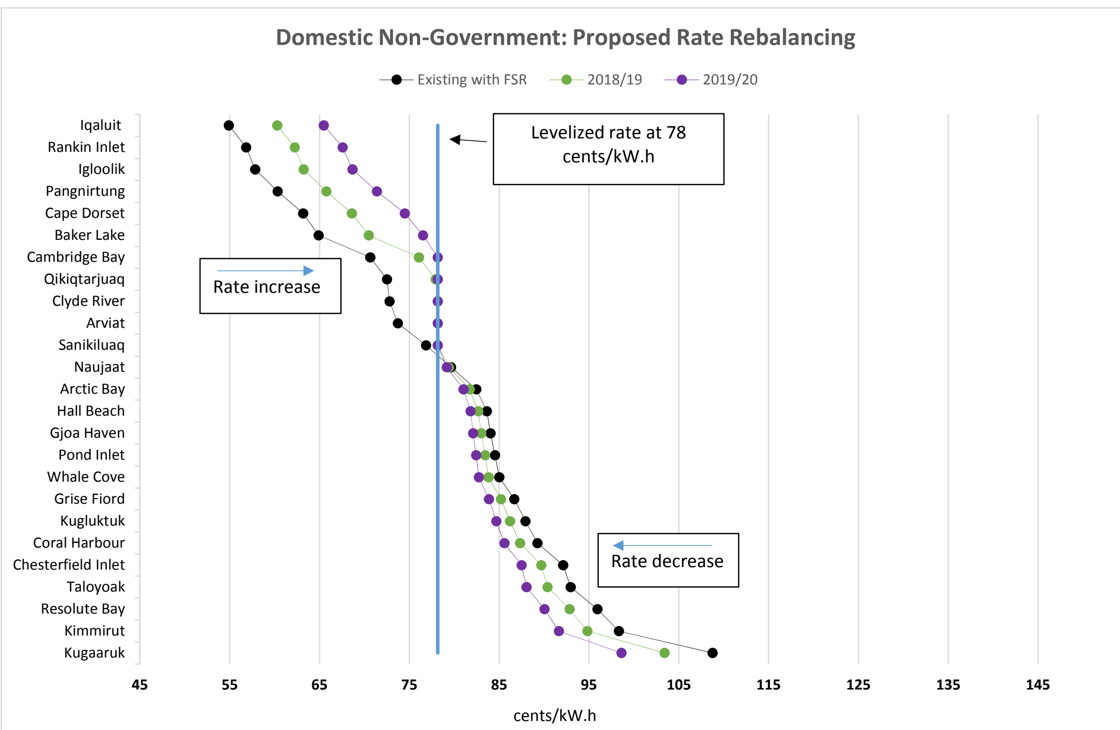
Other problems with community-based rates include:

- The recent practice of applying rate increases on an equal percentage basis to all customers results in higher rate increases (in cents per kWh) for some communities. For example, a 7.6% increase to domestic rates is about 4 cents/kWh in Iqaluit and about 8 cents/kWh in Kugaaruk.
- Large capital projects put enormous upward pressure on rates, especially for small communities. A community that needs a new power plant may face rate increases of 50% or more.
- As QEC begins to roll out alternative energy projects, under community-based rates only the community where the alternative energy project is located takes on the risks (such as higher initial capital costs) and benefits (lower fuel expense) of the project.

5.0 PHASE II PROPOSAL TO MOVE TO TERRITORY-WIDE RATES

To address the issues with the existing community-based rates, the Corporation is proposing to transition to a Territory-wide levelized rate structure (sometimes called a “postage stamp rate”). Under the Territory-wide rate, all customers in the same rate class would pay the same rates, regardless of where they live. These types of rates are common across Canada. In 2010, NTPC introduced a levelized rate structure for non-government customers in its thermal rate zone. Yukon also has levelized rates for most customers and consumption levels.

Moving to a Territory-wide rate means rates will increase in some communities and decrease in other communities. QEC is proposing to complete the transition gradually, over an estimated six years. The current GRA addresses only the first two years of the process (2018/19 and 2019/20). The remaining years will be addressed in future applications. As part of the gradual transition, QEC is limiting rate increases to no more than an additional 5% over and above average revenue requirement increases.



Annual Rate Change

2018/19	2019/20
10%	9%
10%	9%
9%	9%
9%	9%
9%	9%
9%	9%
8%	3%
7%	0%
7%	0%
6%	0%
2%	0%
0%	0%
-1%	-1%
-1%	-1%
-1%	-1%
-1%	-1%
-1%	-1%
-2%	-2%
-2%	-2%
-2%	-2%
-3%	-2%
-3%	-3%
-3%	-3%
-4%	-3%
-5%	-5%

6.0 EFFECT OF PROPOSED RATE CHANGES ON BILLS

The combined impact of the termination of the current fuel refund rider, revenue requirement increases and the transition to territory-wide rates will result in bill increases for customers in communities that currently have lower than average rates and bill decreases for customers in communities that currently have higher than average rates:

Sample Bill
Kugaaruk Domestic Non-Government

No Subsidy Bill

	Rates at October 1, 2017		Proposed April 1, 2018 (NES at 50% Iqaluit base rate)		Proposed April 1, 2019 (NES at 50% Iqaluit base rate)	
Usage	700 kW.h		700 kW.h		700 kW.h	
Customer Charge		$18.0		$18.0		$18.0
Energy Charge	$1.142	$799.1	$1.034	$723.9	$0.986	$690.2
Total BASE BILL		$817.1		$741.9		$708.2
Fuel Stab Fund	-$0.0541	($37.9)	$0.000	$0.0	$0.000	$0.0
NET BILL		$779.3		$741.9		$708.2
GST		$39.0		$37.1		$35.4
NET BILL after Tax		**$818.2**		**$779.0**		**$743.6**
Change from existing bill before tax			-$37.3	-4.8%	-$33.7	-4.5%
Change from existing bill after tax			-$39.2	-4.8%	-$35.4	-4.5%

Bill subsidized by NESP

NES Customer Rate	$0.301	$211.0	$0.301	$211.0	$0.327	$229.1
NES Subsidy						
Customer Charge Subsidy		*($18.0)*		*($18.0)*		*($18.0)*
Energy Subsidy	*-$0.840*	*($588.1)*	*-$0.733*	*($512.9)*	*-$0.659*	*($461.1)*
Subsidized BILL		$173.1		$211.0		$229.1
GST		$8.7		$10.6		$11.5
BILL after Tax		**$181.8**		**$221.6**		**$240.6**
Change from existing bill before tax			$37.9	21.9%	$18.1	8.6%
Change from existing bill after tax			$39.8	21.9%	$19.0	8.6%

- Non-government domestic customers receiving the territorial electricity subsidy will see bill increases of approximately $40 per month on April 1, 2018 and $19 per month on April 1, 2019 for a typical customer using 700 kWh each month. The increase in 2018/19 reflects only removing the existing fuel refund rider while maintaining base energy rates at the existing levels. As part of the transition process, no further rate increases are proposed in 2018/19 for these customers.
- Non-government domestic customers who don't receive the territorial electricity subsidy will see bill decreases in 14 communities. Customers in Kugaaruk will see the largest decreases of approximately $39 in 2018/19 (4.8%) and $35 in 2019/20 (4.5%) on monthly consumption of 700 kWh.
- Non-government domestic customers who don't receive the subsidy will see bill increases in 11 communities. Customers in Baker Lake will see the largest increase of approximately $41 in 2018/19 (8.3%) and $44 in 2019/20 (8.3%) for a customer using 700 kWh.
- Non-government commercial customers in 18 communities will see a bill decrease. Customers in Whale Cove will see the largest decreases of approximately $109 in 2018/19 (4.8%) and $98 in 2019/20 (4.6%) on monthly consumption of 2,000 kWh.
- Non-government commercial customers in 7 communities will see bill increases. Customers in Iqaluit will see the largest increase of approximately $114 (11.4%) in 2018/19 and $91 (8.3%) in 2019/20 for a commercial customer using 2,000 kWh per month. The bill increase for customers in Iqaluit in 2018/19 reflects only removing the existing fuel refund. As part of the transition process, no further rate adjustments are proposed in 2018/19 for these customers.