# **QULLIQ ENERGY CORPORATION**

2025/26 General Rate Application

November 2024

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## 1 1.0 INTRODUCTION AND APPLICATION

## 2 1.1 APPLICATION

- 3 Qulliq Energy Corporation ("Corporation" or "QEC") hereby submits its combined Phase I
- 4 and Phase II General Rate Application ("GRA" or "Application") for the 2025/26 test year
- 5 and applies, pursuant to Section 12 of the Utility Rates Review Council Act ("the Act"), for
- 6 an instruction or instructions by the Minister:
- Approving the Corporation's forecast 2025/26 test year revenue requirement of
   \$183.928 million as set out in Schedule 4.1;
- Approving the Corporation's proposed rates effective April 1, 2025 as set out in
   Schedules 8.1 through 8.3; and
- For any such further and other instructions within the Minister's authority as the
   Corporation may request and the Minister determines proper.

## 13 1.2 BACKGROUND

- 14 A May 26, 2011 letter from the Minister to the Utility Rates Review Council ("URRC") on
- the URRC's 2011-01 report noted that QEC will file general rate applications in three year
- intervals and where feasible, QEC intends to provide future rate applications in advance
- 17 of the relevant test year.
- 18 The Corporation's most recent Phase I and II GRA for the 2022/23 test year was filed with
- the Minister on March 24, 2022. The Minister referred the application to the Utility Rates

- 1 Review Council for review and recommendations pursuant to Section 12 of the Utility
- 2 Rates Review Council Act.
- 3 The URRC completed its review of the GRA and issued a final report (Report 2022-02)
- 4 on August 18, 2022. Following the review of the report, the responsible Minister provided
- 5 an instruction dated October 21, 2022 ("October 21, 2022 Instruction") with the following
- 6 instructions to QEC:
- 7 1. To establish territory-wide rates for government, non-government, and municipal
- 8 tax-based customer classes, effective October 1, 2022 with the new rates listed
- 9 in the attached Rate Schedules.
- 10 2. To impose a 5.0% rate increase to streetlight customer class with the new rates
- 11 listed in the attached Rate Schedules
- 12 3. To accept the attached Revised Terms and Conditions of Services effective
- 13 October 1, 2022.
- 14 On October 5, 2023, the Corporation filed 2022/23 Base Energy Rate Amendment
- application for a 9.4% across-the-board adjustment to the 2022/23 GRA base energy
- rates effective October 1, 2023, to incorporate higher fuel prices. The URRC completed
- 17 its review of QEC base energy rate amendment application and issued a final report
- 18 (Report 2023-03) on December 18, 2023. Following the review of the report, the
- responsible Minister provided an instruction dated February 19, 2024 ("February 19, 2024")
- 20 Instruction") granting permission to QEC to proceed with a 9.4% increase in base energy
- 21 rates effective October 1, 2023.

## 1 1.3 OUTLINE OF THE APPLICATION

- 2 The Application is organized as follows:
- Chapter 2 provides an overview of the Corporation;
- Chapter 3 reviews system sales and generation requirements;
- Chapter 4 reviews the revenue requirement for the Test Year;
- Chapter 5 reviews the shortfall at existing rates;
- Chapter 6 reviews the Corporation's rate base;
- Chapter 7 reviews the COS study and results;
- Chapter 8 reviews the Corporation's proposed rate design, as well as the
- proposed rate adjustments effective April 1, 2025; and
- Chapter 9 provides responses to previous URRC recommendations.

## 1 **2.0 CORPORATE OVERVIEW**

## 2 2.1 INTRODUCTION

- 3 This chapter sets out an overview of the Corporation, its operating environment, and the
- 4 challenges and opportunities facing the Corporation today and in the future:
- Overview of the Corporation;
- Challenges and Opportunities facing the Corporation; and
- Measures Taken to Mitigate Impacts on Customers.

#### 8 2.2 OVERVIEW OF THE CORPORATION

- 9 On April 1, 2001, Nunavut Power Corporation took up the mandate to supply electricity to
- 10 communities in the Nunavut Territory. Renamed Qulliq Energy Corporation in 2003, the
- 11 Corporation is 100% owned by the Government of Nunavut (GN).
- 12 Qulliq Energy Corporation is incorporated and operates under the Qulliq Energy Act.
- 13 Rates for electricity service are approved by the responsible Minister who receives advice
- 14 from the Utility Rates Review Council pursuant to the Utility Rates Review Council Act.
- 15 QEC is the only generator, transmitter and distributor of electrical energy for retail supply
- in Nunavut and has approximately 16,000 electrical customers across the Territory. The
- 17 Corporation operates stand-alone diesel plants in 25 communities with peak demands
- 18 ranging from approximately 200 kW at Grise Fiord to 11 MW at Iqaluit. The Corporation
- 19 provides mechanical, electrical and line maintenance from three regional centers and

- 1 administers the Corporation's business activities from its headquarters in Baker Lake and
- 2 executive offices in Iqaluit.

## 3 2.3 CHALLENGES AND OPPORTUNITIES FACING THE CORPORATION

- 4 The Corporation serves a population of approximately 40,600 people<sup>1</sup> located in an area
- 5 of 2.1 million square kilometres. Electricity systems are isolated and unconnected and
- 6 therefore each must be planned and operated independently. This unique environment
- 7 has a profound impact on the Corporation's operations. QEC is the only energy
- 8 corporation in Canada without significant local energy resources or regional electricity
- 9 transmission capability which leads to a substantial dependency on fossil fuels.
- 10 In order to continuously supply safe and reliable power, QEC undertakes long-term capital
- 11 planning to determine which plants require upgrades and expansions or need to be
- 12 completely rebuilt as they have reached the end of their useable lifespan. QEC also
- 13 researches emerging alternative energy technologies to determine if they can be
- 14 incorporated into the capital planning cycle.
- 15 The Corporation remains committed to reducing Nunavut's dependency on fossil fuels.
- 16 QEC continues to explore renewable energy sources and implement conservation
- initiatives that are both financially and environmentally viable for the territory. Examples
- 18 of this work include:

<sup>&</sup>lt;sup>1</sup> Source: Nunavut Bureau of Statistics, Nunavut Population as of July, 2023 <a href="http://www.stats.gov.nu.ca/en/home.aspx">http://www.stats.gov.nu.ca/en/home.aspx</a>

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- QEC implemented a Net Metering program in January 2018 to enable customers
  to install renewable energy sources that can supply surplus energy to QEC. In
  August 2023, QEC received Cabinet approval to revise the Net Metering Program
  (NMP) Policy and the Terms and Conditions of Service to incorporate the following
  changes:
  - Increased individual customer renewable energy generation capacity limit from 10 kW to 15 kW.
  - Tracking and reporting on the financial impacts of the program (net revenue loss as a percentage of revenue requirement).
  - Expanded municipal accounts eligibility from 1 to 2 municipal corporationowned accounts per community.
  - Removed the March 31st deadline for annual energy credit resets.
  - The policy effective period was extended until August 9, 2026.
- The Corporation had 21 net metering customer connections as of June 30, 2024.
  - QEC launched the Commercial and Institutional Power Producer (CIPP) program
    in May 2021. The program is designed to allow existing commercial and
    institutional customers (government departments, hamlets, businesses) to
    generate electricity using renewable energy systems and sell it to QEC. CIPP
    participants are currently paid the avoided cost of diesel (i.e., what QEC pays for
    diesel per kWh of power generated) for energy produced by a CIPP program

- customer. This makes the CIPP program revenue-neutral, meaning that it will not increase the cost of electricity for QEC customers. As of September 2024, the Corporation received 24 CIPP applications of which:
- 4 o Three are active.

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- One is pending electrical inspection.
- Three have been interconnected to QEC's grid and are pending energization.
  - Three applications were moved to the Net Metering program.
    - Six applications have been approved, and the connection impact analysis
       (CIA) studies have been completed.
    - o One application is pending a Connection Impact Assessment (CIA) study.
  - Three applications were denied due to ineligibility.
    - Four applicants were given letters of support, but QEC has not received a deposit/application package to date.
  - As part of its continued efforts to reduce Nunavut's dependence on diesel, QEC
    has been working with the Government of Nunavut and other territorial
    stakeholders to develop programs promoting renewable energy use. The
    Independent Power Producer (IPP) program allows Inuit-owned organizations and
    companies, including Regional Inuit Associations and municipalities, to sell energy

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- generated by their renewable energy systems to QEC. Cabinet approved the final IPP policy in December 2023 with a program period until December 2026. The main characteristics of the program are:
  - Eligibility for the IPP program is for Community Power: Inuit-owned
     Organizations and companies, including Regional Inuit Associations and municipalities.
    - Municipalities, Inuit organizations, and Inuit-owned companies can apply to the IPP Program anytime for community power generation.
    - Municipalities and Inuit-owned companies/organizations must have a controlling interest (51% or greater) in large-scale community power projects.

As of April 2024, six Connections Impact Assessments (CIA) have been received from Sanikiluaq, Naujaat, Coral Harbor, Rankin Inlet, Baker Lake, and Cambridge Bay communities.

• In 2017 QEC started replacing all conventional streetlights across Nunavut with energy efficient LED (Light Emitting Diode) streetlights with a target completion of streetlight conversion by 2024. LED streetlights offer a number of advantages over conventional streetlights. Along with energy savings, LEDs last five times longer than conventional lights, allowing significant savings in operational and maintenance costs. LEDs are also brighter resulting in improved visibility on the roads during the winter season. The streetlight conversion program was completed

- as scheduled with the remaining LED streetlight replacement in Sanikiluaq, Baker
  Lake, Chesterfield Inlet, Naujaat and Kinngait in the 2023/24 fiscal year.
- All ongoing and future power plant replacements undertaken by QEC will have
   capability of integrating renewable energy sources.

#### 5 2.4 MEASURES TAKEN TO MITIGATE IMPACTS ON CUSTOMERS

- 6 QEC together with the Government of Nunavut, have taken efforts to mitigate rate impacts
- 7 on customers. These include efforts to contain the revenue requirement where possible,
- 8 without sacrificing safety and reliability, as well as developing measures that provide
- 9 customers with the benefits of a managed transition to the required higher rate levers.
- 10 Most notable measures include:

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- Continued Emphasis on Fuel Efficiency: The Corporation forecasts a corporate-wide fuel efficiency of 3.75 kWh/litre for the 2025/26 test year. This is aligned with fuel efficiencies in previous applications of (2022/23 forecast fuel efficiency of 3.78 kWh/litre, 2018/19 GRA fuel efficiency of 3.76 kWh/litre, and average of 3.71 kWh/litre in the 2014/15 GRA).
  - Maintaining Station Service Improvements: QEC has been able to maintain similar station service levels to the 2022/23 GRA. The 2025/26 test year station service forecast 3.1% of generation, same as for the 2022/23 forecast and lower than the 2018/19 forecast (3.3% of generation), as well as the 2014/15 forecast (3.5% of generation).

- Territory-wide Rates Proposal: In the 2022-23 GRA proceeding QEC proposed implementing territory-wide rate structure better aligned with the Government of Nunavut's policy objectives and Inuit societal values. The proposed rate structure was also consistent with the URRC's recommendation in Report 2018-01 of adopting higher revenue to cost ratios for Government customers with a view to minimizing the harmful effects of high rate increases for investment and economic growth in Nunavut. The new territory-wide rate structure was approved by the Ministerial Instruction dated October 21, 2022. The proposed rates in this Application have been designed consistent with the approved territory-wide rate structure.
  - Rate proposal to adjust fixed charges: In Report 2022-02 with respect to QEC's 2022/23 GRA, URRC noted that there was a large disconnect between existing demand and customer charges and the average unit cost as determined by QEC's cost-of-service (COS) study.<sup>2</sup> Having considered the implications of the demand and customer charges adjustments, the URRC recommended that QEC move at least one third of the way toward full revenue-cost coverage (RCC) ratio with respect to demand and customer charges. The Corporation addressed the URRC's recommendation in this matter, which reduces energy rate adjustments for all customers and mitigates bill impacts for non-government residential

<sup>&</sup>lt;sup>2</sup> The URRC Report 2022-02, p. 50-52.

- 1 customers. Further details on the Corporation's rate proposals are provided in
- 2 Chapter 8.

## 1 3.0 SYSTEM SALES AND GENERATION REQUIREMENTS

## 2 3.1 INTRODUCTION

- 3 QEC's 2025/26 GRA reflects a revenue requirement based on the costs to operate the
- 4 QEC system and to service the loads expected to arise in the test year.
- 5 This section sets out specific details on the QEC system, loads, generation requirements
- 6 and fuel requirements including:
- Forecast methods for 2025/26; and
- System overview and comparison of 2022/23 and 2025/26 forecasts.
- 9 Schedule 3.1 sets out corporate-wide sales, revenue, line losses, generation and fuel
- requirements for the actual years 2022/23 and 2023/24, as well as forecasts for 2024/25
- and 2025/26. Community-by-community detail is provided in Appendix A.

## 12 3.2 LOAD FORECAST METHODS

- 13 This section provides an overview of the methods used to develop the 2025/26 GRA load
- 14 forecasts. The 2025/26 load forecast has been prepared based on the same load forecast
- methods reviewed by the URRC in the 2022/23 GRA.
- 16 QEC's load forecast is based on a two-step process:
- 17 1. A baseload forecast is prepared based on a customer forecast and a use-per-
- 18 customer (UPC) forecast.

- 1 2. The baseload forecast is reviewed and adjusted if necessary for any known or
- 2 reasonably expected load changes such as the addition of a major new
- 3 commercial customer in a community.
- 4 QEC's load forecast includes the following components:
- 5 1. Customer forecasts by community and rate class;
- 6 2. Sales (kWh) forecasts by community and rate class;
- 7 3. Generation (kWh) forecasts by community and rate class;
- 8 4. Fuel requirements; and
- 9 5. Non-electricity revenue forecast.

## 10 3.2.1 CUSTOMER FORECAST

- 11 Customer forecasts were prepared separately for the domestic and commercial rate
- 12 classes.

## 13 **Domestic Customers**

- 14 A baseload customer forecast is prepared for domestic customer classes using the
- 15 following method:
- 1. Calculate the average number of customers per month using the most recently
- 17 available 12 months of actual customer accounts.

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- 2. Review annual customer changes and confirm or revise any significant change in customer counts by community (e.g., 10% and higher).
  - 3. Calculate population growth estimates based on the Nunavut wide average annual population growth projections to year 2048 from Statistics Canada.<sup>3</sup>
    - The Corporation adopted the Statistics Canada population growth projections because the previous method which was based on Nunavut Bureau of Statistics data that had not been updated since 2014.
    - 4. Apply the annual population growth rates from step 3 to the most recent year of actual customer counts from step 1 for non-government customers and one-half of the annual population growth rate for government customers.<sup>4</sup>
      - In previous 2022/23 GRA, the Corporation did not differentiate between government and non-government customer growth parameters as there were no different territory-wide rates in place for domestic government and non-government customers. Given the introduction of separate territory-wide rates in 2022/23 for these classes of customers, this approach of reviewing customer growth projections for each specific customer class is deemed appropriate.

<sup>&</sup>lt;sup>3</sup> Statistics Canada. Table 17-10-0057-01 Nunavut Projected Population by projection scenario, age and gender, 2023 to 2048. Available at: <u>Projected population</u>, <u>by projection scenario</u>, <u>age and gender</u>, <u>as of July 1 (statcan.gc.ca)</u> (accessed November 14, 2024).

<sup>&</sup>lt;sup>4</sup> This approach is based on the assumption that non-government domestic customers growth aligns with the StatCan projected population growth while government domestic customers growth is around half of the population growth for any given community. This approach also recognizes that material new customer additions for domestic customers are likely to be identified by the top-down adjustment following completion of the base load forecast.

#### **Commercial Customers**

- 2 A baseload customer forecast is prepared for commercial customers using the following
- 3 method:

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- Calculate the average number of customers per month using the most recently available 12 months of actual customer accounts from the QEC billing data by community. Review annual customer change and confirm/revise any significant change in customer counts by community (e.g., 10% and higher).
  - 2. Obtain population growth estimates from Statistics Canada and calculate the average growth rates. This calculation is identical to step 2 in the domestic customers forecast.
  - 3. Apply one half of the annual population growth rates from step 2 to the most recent year of actual customer counts from step 1 for non-government customers and one quarter of the annual population growth rate for government customers.<sup>5</sup>
    - In previous 2022/23 GRA, similar to the domestic customer growth forecast, the Corporation did not differentiate between government and non-government customer growth parameters as there were no different territory-wide rates in place for commercial government and non-government customers. Given the introduction of separate territory-wide rates in 2022/23 for these classes of

Chapter 3: System Sales and Generation Requirements

<sup>&</sup>lt;sup>5</sup> This is different from the growth estimate applied to domestic customers. This approach is based on the assumption that commercial growth is around half of the population growth for any given community. This approach also recognizes that material new customer additions for commercial customers are likely to be identified by the top-down adjustment following completion of the base load forecast.

- customers, this approach of reviewing population growth projections for each specific customer class is deemed appropriate.
- 3 Once the baseload customer forecast is completed, QEC reviews the Government of
- 4 Nunavut's capital plan, and monitors news releases, planning and licensing documents
- 5 for resource developments to determine if adjustments should be made to the customer
- 6 forecast to capture additional loads from potential new developments. The load forecast
- 7 is adjusted by community based on this information. Typically, these adjustments are only
- 8 made when it is relatively certain the new development will proceed and it is of a material
- 9 size.

## **Top-down Adjustments**

- 11 For the 2025/26 test year, the Nunavut Government's NU3000 housing units plan and the
- 12 affordable housing units projects for each community were incorporated into the domestic
- 13 customer forecast as a top-down adjustment. This relates to the Nunavut Housing
- 14 Corporation (NHC) plan to develop 3,000 new public housing units<sup>6</sup> across the territory
- by 2030 and the affordable housing projects of 1,300 new units across the territory.
- 16 Based on the Corporation's discussions with the NHC, the Corporation reflected
- 17 additional housing units expected to be completed by 2025/26 throughout the Territory in
- the load forecast, which has increased the sales forecast by 1,756 MWh for the 2025/26
- 19 test period.

<sup>&</sup>lt;sup>6</sup> Nunavut Housing Corporation. NU 3000 Progress Report. Available at:
NHC Nunavut 3000 Progress Report ENG 8a2d73db7f.pdf (strapiapp.com) (Accessed November 14, 2024)

#### 1 3.2.2 SALES FORECAST

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## **Domestic and Commercial Customers**

- 3 The load forecast is prepared by community. The baseload sales forecast for domestic
- 4 and commercial customers is prepared using the average UPC method. The method
- 5 involves the following steps:
  - A 3-year historic average annual UPC is calculated for each rate class by dividing actual total sales by actual average annual customer counts. The 3-year annual average UPC is intended to smooth out variations that may be caused by shortterm weather patterns.

The rate reclassification which was completed in 2022/23 GRA resulted in material differences in energy rates between customer class. As a result of the rate redesign, the UPC which was previously calculated as total UPC for domestic and commercial customers class in prior load forecast models has been adjusted to reflect the UPC for government, non-government and municipal customers for each domestic and commercial category. This was introduced to reflect a more accurate baseload sales forecast analysis.

The Corporation notes that there has been a generally declining trend in UPC for most communities since the 2022/23 GRA. For example, in Cambridge Bay, the 2023/24 commercial UPC was about 4.6% lower compared to 2022/23. In order to reflect the most recent changes in the communities a 3-year average UPC was used for both commercial and domestic forecast sales.

- 1 2. The 3-year historic average annual UPC is multiplied by the customer count
- 2 forecasts.

## Streetlights

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- 4 The streetlight sales forecast is prepared using the actual sales for the most recent year
- 5 as a baseload. The baseload forecast is then reviewed for any adjustments reflecting
- 6 changes in the lamp counts due to community expansions, or lamp types.<sup>7</sup> No
- 7 adjustments have been made to the streetlight sales.

## 8 3.2.3 GENERATION FORECAST

- 9 Line losses and station service are forecast based on a rolling 5-year average actual
- 10 percentage of sales, excluding 2019/20 due to the COVID-19 pandemic impacts. For this
- 11 calculation the model calculates the 5-year average of line losses and station service in
- terms of percentage of actual sales. The calculated 5-year average percentage is applied
- to forecast sales to calculate forecasts for line losses and station service.
- 14 Forecast generation is calculated as the sum of sales, line losses and station service.

## 15 3.2.4 FUEL REQUIREMENTS

- 16 Schedule 3.2 shows the calculation of the forecast fuel efficiencies. The forecast
- efficiency for each community is calculated by taking the efficiency for the 3 most recent
- actual years (2021/22, 2022/23 and 2023/24) and calculating a weighted average. The

<sup>&</sup>lt;sup>7</sup> QEC has completed the process of replacing conventional street light bulbs with energy efficient LED (Light Emitting Diode) lights.

- 1 year with the highest efficiency is given a weighting of 3, the second highest year a
- 2 weighting of 2, and the lowest efficiency year a weighting of 1. The volume of fuel required
- 3 in each community is calculated by taking the forecast diesel generation and dividing it
- 4 by the forecast fuel efficiency. This is consistent with the approach used in the 2022/23
- 5 GRA.

#### 6 3.2.5 NON-ELECTRICITY REVENUE FORECAST

- 7 Forecasts of non-electricity revenues are prepared for three categories joint use,
- 8 miscellaneous charges, and project time and materials. Forecast joint use revenue and
- 9 miscellaneous charges was prepared based on the approved budgeted 2025/26
- 10 numbers.

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- 11 Project time and materials revenues include forecasts of work done by QEC for other
- 12 companies, equipment rental and recovery of time and materials on small scale repair
- 13 works (for example, broken pole replacements or lighting installations). Time and
- materials revenue forecast was prepared based on the 2025/26 budget.

#### 3.3 SYSTEM OVERVIEW AND DEVELOPMENTS SINCE 2022/23 GRA

## 16 **3.3.1 FACILITIES**

- 17 QEC is the sole generator and distributor of power for retail supply in Nunavut. QEC
- 18 provides generation and distribution services to retail customers in 25 communities.
- 19 Currently, QEC has no industrial or wholesale customers. All 25 communities are supplied
- 20 by diesel generation.

## 1 3.3.2 MAJOR FACILITY CHANGES SINCE 2022/23 GRA

- 2 There have been several changes to QEC's facilities since the time of the 2022/23 GRA
- 3 that have a material impact on power costs in Nunavut. These changes are summarized
- 4 below.
- 5 Arctic Bay Power Plant: QEC completed construction of the new Arctic Bay power plant
- 6 in 2022/23. QEC was granted a major project permit for the project through a Ministerial
- 7 Order dated February 26, 2020, as recommended in the URRC's report 2020-01 dated
- 8 February 5, 2020.
- 9 **Emergency Unit Connections:** The Corporation is undertaking emergency unit
- 10 connections in communities with a short airstrip runway (Grise Fiord, Sanikiluag, Coral
- 11 Harbour) that cannot accommodate large airplanes to deliver back up units if needed.
- 12 Naujaat Fuel Load Station: This project will provide a safe and spill-free fuel transfer
- mechanism between the PPD mobile fuel truck and QEC's bulk fuel tanks that reduces
- 14 environmental and operational safety risks. The project is set to be completed during the
- 15 2024/25 fiscal period.
- 16 **Generation Set Replacements:** QEC has completed generation set upgrades in Gjoa
- Haven and Sanirajak in 2021/22, Whale Cove, Pond Inlet and Clyde River in 2022/23 and
- 18 2023/24, and currently undertaking planned upgrades in Igaluit, Kugaaruk, Baker Lake,
- 19 and Sanikiluag in 2024/25 and 2025/26.

## 1 3.3.3 **SYSTEM TRENDS SINCE 2022/23**

- 2 Since the 2022/23 GRA, the system has experienced a number of changes in loads and
- 3 generation. This section compares 2022/23 GRA forecasts with 2025/26 test year
- 4 forecasts.

## 5 Total Sales

6 Table 3.1 compares total forecast sales for the 2022/23 and 2025/26 test years.

7 Table 3.1: 8 System Sales – 2022/23 GRA Forecast Compared to 2025/26

	2022/23 GRA Base Rate Amendment Forecast	2025/26 Forecast	Average Annual Growth	Change in MWh
Sales by Rate Class (MWh)				
Domestic	71,135	72,102	0.5%	967
Commercial	110,308	112,293	0.6%	1,985
Streetlights	1,691	961	-17.2%	-731
Total Sales	183,135	185,356	0.4%	2,221

- Total forecast sales for 2025/26 are higher than the 2022/23 GRA forecast by 2,221 MWh,
- 11 corresponding to an average annual increase of 0.4%. The sales growth forecast average
- 12 reflects some communities with large increases in sales and some communities with
- 13 decreases in sales:

- 14 Communities with notable increases in sales include Iqaluit, Rankin Inlet, Kugaaruk and
- 15 Grise Ford. This is mainly driven by increases in overall customer counts forecast
- attributed to the Nunavut Housing Corporation projects discussed in section 3.2.

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- Iqaluit forecast sales increased from 55,631 MWh in the 2022/23 GRA to 58,275
   MWh in the 2025/26 test year, an increase of 4.8%. Iqaluit accounts for 31.4% of total corporate forecast sales.
  - Rankin Inlet forecast sales increased from 18,187 MWh in the 2022/23 GRA to 19,181 MWh in 2025/26, an increase of 5.5%. Rankin Inlet accounts for 10.3% of total corporate forecast sales.
- Kugaaruk forecast sales increased from 3,481 MWh in the 2022/23 GRA to 3,633
   MWh in 2025/26, an increase of 4.4%. Kugaaruk accounts for 2% of total corporate
   forecast sales.
- Grise Ford forecast sales increased from 1,140 MWh in the 2022/23 GRA to 1,190
   MWh in 2025/26, an increase of 4.4%. Grise Ford accounts for less than 1% of total corporate forecast sales.
- Communities with decreases in sales include Cambridge Bay, Pangnirtung, Pond Inlet, and Igloolik. These are mainly driven by decreases in average use per customer.
  - Cambridge Bay forecast sales decreased from 11,986 MWh in the 2022/23 GRA to 11,381 MWh in 2025/26 (about 5.1% decrease reflecting lower actual sales in 2022/23 through 2023/24). Cambridge Bay accounts for 6.1% of total corporate forecast sales.
  - Pangnirtung forecast sales decreased from 6,723 MWh in the 2022/23 GRA to 6,263 MWh in 2025/26 (about 6.8% decrease reflecting lower actual sales in

- 1 2022/23 through 2023/24). Pangnirtung accounts for 3.4% of total corporate forecast sales.
- Pond Inlet forecast sales decreased from 6,644 MWh in the 2022/23 GRA to 6,418
   MWh in 2025/26 (about 3.4% decrease reflecting lower actual sales in 2022/23
   through 2023/24). Pond Inlet accounts for 3.5% of total corporate forecast sales.
  - Igloolik forecast sales decreased from 6,658 MWh in the 2022/23 GRA to 6,489
     MWh in 2025/26 (about 2.5% decrease reflecting lower actual sales in 2022/23 through 2023/24). Igloolik accounts for 3.5% of total corporate forecast sales.

## **Domestic Sales**

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- 10 Forecast increases in domestic sales for 2025/26 relative to 2022/23 are approximately
- 11 967 MWh or 0.5% average annual increase.
- 12 The communities forecast to experience material domestic sales growth are Naujaat (136
- MWh, or 7.8% increase over 2022/23 GRA forecasts), Pangnirtung (245 MWh, or 9.3%
- 14 increase over 2022/23 GRA forecasts), Pond Inlet (198 MWh, or 6.6% increase over
- 15 2022/23 GRA forecasts), Igloolik (193 MWh, or 6.4% increase over 2022/23 GRA
- 16 forecasts) and Kugaaruk (131 MWh or 8.3% increase over 2022/23 GRA forecasts).
- 17 The growth forecast in these communities is consistent with recent housing development
- 18 and economic activity in Nunavut. The Nunavut Government housing development
- 19 projects (NU 3000 and affordable housing programs) accounts for majority of the
- 20 increased load growth in these communities driving over half of the increased load growth

- 1 in Naujaat (77 MWh of 136 MWh), Pangnirtung (125 MWh of 245 MWh), Pond Inlet (115
- 2 MWh of 198 MWh), Kugaaruk (110 MWh of 193 MWh) and Igloolik (all of the increase).

## Commercial Sales

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4 Commercial sales are forecast to increase by 1,985 MWh or 0.6% average annual 5 increase for 2025/26 relative to 2022/23. This increase mainly relates to increased loads 6 in Rankin Inlet (952 MWh, or 7.8% increase over the 2022/23 GRA forecast) and Iqaluit 7 (3,016 MWh or 8.1% increase over the 2022/23 GRA forecast) as a result of increases in 8 actual average number of commercial customers, which serve as a basis for the sales 9 forecast projections, compared to the 2022/23 GRA. These sales increases were partly 10 offset by reduced sales forecast in Cambridge Bay (494 MWh, or decrease of 6.3% over 11 the 2022/23 GRA forecast), Pangnirtung (629 MWh, or decrease of 16.0% over the 12 2022/23 GRA forecast), Pond Inlet (322 MWh, or decrease of 9.1% over the 2022/23 13 GRA forecast), and Igloolik (296 MWh, or decrease of 8.4% over the 2022/23 GRA 14 forecast).

## Streetlight Sales

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Streetlight Sales are forecast to decrease by 731 MWh or 17.2% average annual decrease for 2025/26 relative to 2022/23. The forecast which is based on the most recent actual year 2023/24 sales has been on a decline due to the project undertaken by QEC to replace all conventional streetlights across Nunavut with more energy efficient LED streetlights installed in all communities. This has allowed for energy savings hence the

- 1 reduction in streetlight sales. The last phase of the conversion was completed in 2023/24
- 2 fiscal period.

## 3 Electricity Revenues at Existing Rates

- 4 Forecast electricity revenues at existing rates for 2022/23 compared to 2025/26 are
- 5 shown in Table 3.2. Electricity revenue forecasts at existing rates are higher for 2025/26
- 6 compared to 2022/23, generally matching the trends in sales (MWh).

7 Table 3.2: 8 Forecast Electricity Revenues at Existing Rates

	2022/23	2025/26	
	GRA Base Rate Amendment Forecast	Forecast	Average Annual Growth
Revenue by Rate Class (000\$) 1			
Domestic	64,838	66,236	0.7%
Commercial	87,249	89,106	0.7%
Streetlights	2,013	1,185	-16.2%
Total Revenue	154,101	156,526	0.5%

Notes:

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1. Excludes rider revenues.

## 10 Generation, Losses and Station Service

- 11 Forecasts for corporate-wide generation, line losses and station service are shown in
- 12 Table 3.3. Forecast total generation has increased from 2022/23 to 2025/26 mirroring
- 13 sales forecast increases. Line losses are forecast to increase slightly in absolute terms
- 14 (860 MWh) and as a percentage of generation (4.6% in 2022/23 to 4.9% in 2025/26).
- 15 Station service consumption is expected to remain at the same level as the 2022/23
- 16 forecast at 3.1% of generation level.

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Table 3.3: Generation, Losses and Station Service

	2022/23 GRA Forecast	2025/26 Forecast	Average Annual Growth
Generation (MWh)	198,389	201,472	0.5%
Losses (MWh)  Losses as % of Generation	<b>9,063</b> 4.6%	<b>9,923</b> 4.9%	3.1%
Station service (MWh) Station Service as % of Generation	<b>6,192</b> 3.1%	6, <b>194</b> 3.1%	0.0%

## 4 3.3.4 NON-ELECTRICITY REVENUE

- 5 Forecast non-electricity revenues for the 2022/23 GRA compared to the 2025/26 forecast
- 6 are shown in Table 3.4.

Table 3.4:
Non-Electrical Revenue
2022/23 GRA Forecast Compared to 2025/26 (\$000)

Description	2022/23 GRA Base Rate Amendment Forecast	2022/23 Actual	2023/24 Actual	2024/25 Forecast	2025/26 Forecast	Average Annual Growth 2025/26 over 2022/23 GRA
Miscellaneous Charges	1,865	1,942	3,924	1,785	2,745	13.8%
Time and Materials	44	11	45	19	65	13.7%
Total	2,511	2,536	4,554	2,384	3,391	10.5%

11 Non-electrical revenues are forecast to increase from \$2.511 million in the 2022/23 GRA

to \$3.391 million in the 2025/26 test year. This increase is mainly driven by higher

miscellaneous charges and increased time and materials revenues, which is prepared

based on the actual revenue in recent years. Actual 2022/23 time and material revenues

were lower than the GRA forecast. This reduction was offset by an increase in

16 miscellaneous charges.

Schedule 3.1:
Qulliq Energy Corporation 2025/26 General Rate Application
Summary of Generation, Sales and Revenue

**QEC Summary** 

Line Description no.		2022/23	2022/23	2023/24	2024/25	2025/26
		GRA Base Rate Amendment	Actual	Actual	Forecast	Forecast @ Existing Rates
S	ALES AND REVENUE					
	Domestic					
1	Sales (MWh)	71,135	68,203	68,041	70,615	72,102
2	Customers	12,355	12,305	12,353	12,635	12,980
3	Av. MWh Sales/Cust.	5.76	5.54	5.51	5.59	5.55
4	Revenue (000s)	64,838	55,640	60,082	64,779	66,236
5	Cents/kWh	91.15	81.58	88.30	91.73	91.86
	Commercial					
6	Sales (MWh)	110,308	111,477	110,961	112,604	112,293
7	Customers	3,501	3,558	3,578	3,584	3,590
8	Av. MWh Sales/Cust.	31.51	31.33	31.02	31.42	31.28
9	Revenue (000s)	87,249	78,764	82,523	89,334	89,106
10	Cents /kWh	79.10	70.65	74.37	79.34	79.35
	Streetlights					
11	Sales (MWh)	1,691	1,102	961	961	961
12	Revenue (000s)	2,013	1,302	1,288	1,185	1,185
13	Cents /kWh	119.03	118.20	134.09	123.29	123.29
	Total					
14	Sales (MWh)	183,135	180,782	179,963	184,179	185,356
15	Customers	15,856	15,863	15,930	16,219	16,571
16	Revenue (000s)	154,101	135,705	143,893	155,297	156,526
17	Cents /kWh	84.15	75.07	79.96	84.32	84.45
G	ENERATION (MWh)					
18	Total Station Service	6,192	6,239	6,303	6,152	6,194
19	Station Service - % of Gen.	3.1%	3.2%	3.2%	3.1%	3.1%
20	Total Losses	9,063	9,199	10,565	9,773	9,923
21	Losses - % of Gen.	4.6%	4.7%	5.4%	4.9%	4.9%
22	Total Generation	198,389	196,221	196,830	200,105	201,472
	Source					
23	Diesel Generation (MWh)	198,389	196,221	196,830	200,105	201,472
24	Diesel Efficiency (KWh/L)	3.77	3.70	3.74	3.75	3.75
25	Liters (000s)	52,661	53,050	52,683	53,373	53,755
	Peak					
26	Peak Load (KW)	36,405	35,457	35,905	36,537	36,753
27	Load Factor	62%	63%	63%	63%	63%

Note: Revenues do not include fuel rider revenues/refunds.

Schedule 3.2: Qulliq Energy Corporation 2025/26 General Rate Application Fuel Efficiency Forecast

				2021/22			2022/2023		2023/24 Weighted Fuel Efficience			2023/24 Wei-		Weighted Fuel Efficiency		
Line No.	PLANT #	PLANT NAME	Generation (KWh)	Fuel consump. (Litre)	Fuel Efficiency (kWh/L)	Generation (KWh)	Fuel consump. (Litre)	Fuel Efficiency (kWh/L)	Generation (KWh)	Fuel consump. (Litre)	Fuel Efficiency (kWh/L)	3	2	1	Average Fuel Efficiency (kWh/L)	
			Α	В	C=A/B	D	E	F=D/E	G	Н	I=G/H	J=MAX(C,F,I)x3	K=MED(C,F,I)x2	L=MIN(C,F,I)x1	M=(J+K+L)/6	
4	504	Cambuidae Day	44 704 747	2 200 270	2.50	44 000 050	2 244 445	2.50	44 720 252	2 270 560	2.50	10.78	7.18	2.50	2.50	
1	501	Cambridge Bay	11,784,747	3,280,276	3.59	11,802,656 6.089.081	3,311,145 1,754,248	3.56 3.47	11,738,353	3,270,568	3.59 3.54		7.18	3.56 3.47	3.59	
3	502 503	Gjoa Haven	6,313,034	1,742,130	3.62 3.68	4.062.139	1,754,248		5,874,112	1,658,596 1,148,693	3.63	10.87 11.05	7.08	3.47	3.57 3.65	
J 4	503 504	Taloyoak Kugaaruk	4,080,419 4,039,883	1,108,262 1,082,903	3.73	4,002,139	1,119,223	3.61 3.58	4,167,325 3,957,373	1,068,609	3.70	11.05	7.26 7.41	3.58	3.70	
5	505	Kugluktuk	6,334,627	1,699,523	3.73	6.290.838	1,730,916	3.63	6,302,269	1,771,598	3.70	11.18	7.41	3.56	3.67	
6	601	Rankin Inlet	19,408,334	5,236,028	3.73	19,821,343	5,325,412	3.72	21,240,664	5,416,711	3.92	11.76	7.44	3.71	3.82	
7	602	Baker Lake	9,124,052	2,391,191	3.82	9,044,244	2,374,525	3.81	8,837,159	2,304,351	3.83	11.50	7.63	3.81	3.82	
8	603	Arviat	9,210,364	2,433,245	3.79	9,017,708	2,688,107	3.35	8,989,030	2,432,300	3.70	11.36	7.39	3.35	3.68	
9	604	Coral Harbour	3,712,898	1,052,950	3.53	3,730,628	1,042,908	3.58	3,677,635	1,002,370	3.67	11.01	7.15	3.53	3.62	
10	605	Chesterfield Inlet	2,174,900	583,217	3.73	2,175,400	582,354	3.74	2,033,800	594,806	3.42	11.21 7.15		3.42	3.68	
11	606	Whale Cove	2,020,097	592,368	3.41	2.081.332	594.794	3.50	2,231,468	640,365	3.48	10.50	6.97	3.41	3.48	
12	607	Naujaat	4,703,640	1,284,972	3.66	4,710,579	1,283,910	3.67	4,428,149	1,211,031	3.66	11.01	7.32	3.66	3.67	
13	701	Igaluit	60.589.938	15.807.354	3.83	61.050.960	15.298.737	3.99	60.876.104	15.607.610	3.90	11.97	7.80	3.83	3.93	
14	701	Pangnirtung	6,621,072	1,836,486	3.61	6,758,630	2,130,207	3.17	6,741,930	2,048,577	3.29	10.82	6.58	3.17	3.43	
15	702	Cape Dorset	5,981,888	1,681,913	3.56	5.937.913	1.634.107	3.63	5,707,274	1,589,840	3.59	10.90	7.18	3.56	3.61	
16	703	Resolute Bay	4,207,724	1.171.583	3.59	4,425,850	1.195.990	3.70	4,535,778	1,217,790	3.72	11.17	7.40	3.59	3.69	
17	705	Pond Inlet	7.031.794	1,877,351	3.75	7.128.234	1,938,146	3.68	6.657.690	1.842.986	3.61	11.24	7.36	3.61	3.70	
18	706	Igloolik	6,460,065	1,749,466	3.69	6,581,258	1,778,921	3.70	6,682,824	1,754,176	3.81	11.43	7.40	3.69	3.75	
19	707	Hall Beach	3,539,053	863,445	4.10	3.697.525	1,038,248	3.56	3.861.772	943,451	4.09	12.30	8.19	3.56	4.01	
20	708	Qikiqtarjuaq	2,688,371	726,952	3.70	2,691,936	757,376	3.55	2,660,452	752,513	3.54	11.09	7.11	3.54	3.62	
21	709	Kimmirut	2,026,030	592,326	3.42	1.995.761	577,800	3.45	1,987,787	586,582	3.39	10.36	6.84	3.39	3.43	
22	710	Arctic Bay	3,504,572	950.896	3.69	3.348.497	967.743	3.46	3.383.751	945.808	3.58	11.06	7.16	3.46	3.61	
23	711	Clyde River	3,984,406	1,137,955	3.50	4.233.801	1.292.920	3.27	4,528,233	1,264,200	3.58	10.75	7.00	3.27	3.50	
24	712	Grise Fiord	1,270,600	386,531	3.29	1,300,200	380,866	3.41	1,379,700	432,289	3.19	10.24	6.57	3.19	3.33	
25	713	Sanikiluag	4,394,923	1,192,611	3.69	4,240,558	1,127,655	3.76	4,349,817	1,177,364	3.69	11.28	7.39	3.69	3.73	
_3			.,00.,020	.,,	0.50	.,2.0,000	., .2.,500	30	.,0.0,011	.,,504	3.30	20		0.00	55	
26		TOTAL	195,207,431	52,461,934	3.72	196,221,339	53,050,160	3.70	196,830,449	52,683,185	3.74				3.75	

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# Schedule 3.3: Qulliq Energy Corporation 2025/26 General Rate Application Non-Electric Revenues (\$000)

	2022/23 Forecast	2022/23 Actual	Year over Year Change	2023/24 Actual	Year over Year Change	2024/25 Forecast	Year over Year Change	2025/26 Forecast
Joint Use	602	584	-	584	(4)	580	_	580
Miscellaneous Charges	1,865	1,942	1,983	3,924	(2,140)	1,785	961	2,745
Fees & Charges	975	686	333	1,019	41	1,060	(35)	1,025
Interest Income	22	544	1,341	1,885	(1,846)	38	949	987
Administration Fee - Housing Support	395	405	6	411	(1)	410	-	410
Other	473	307	303	610	(334)	276	47	323
Time and Materials	44	11	35	45	(26)	19	46	65
TOTAL	2,511	2,536	2,017	4,554	(2,170)	2,384	1,007	3,391

#### 4.0 REVENUE REQUIREMENT

#### 2 4.1 INTRODUCTION

- 3 QEC's revenue requirement for 2025/26 reflects the forecast cost of providing service in
- 4 the test year, including a fair return on equity. The revenue requirement is recovered by
- 5 way of rates charged for electrical services, as well as non-electrical revenues (such as
- 6 from pole rentals and other sources). This section reviews QEC's revenue requirement
- 7 for the test year 2025/26. Chapter 5 compares this revenue requirement to the revenues
- 8 from existing rates (set out in Chapter 3) to calculate the shortfall in the 2025/26 test year.
- 9 Similar to previous GRAs, there are four major components of QEC's revenue
- 10 requirement:
- Operating and Maintenance costs, including, salaries and wages, supplies and
- services, and travel and accommodation expenses;
- Production fuel and lubricants expenses;
- Amortization expense; and
- Return on Rate Base.
- 16 Table 4.1 summarizes the 2025/26 revenue requirement and indicates where more
- 17 detailed explanation on each revenue requirement category is provided. The 2025/26
- 18 forecast non-fuel operating and maintenance expenses exclude residual heat related
- 19 expenses in the amount of \$0.928 million. Further details on the forecast 2025/26 revenue
- requirement and comparisons with other years are available in Schedule 4.1.

1 Table 4.1: 2 2025/26 Revenue Requirement (\$000s)

	2025/26 Forecast
Non-Fuel O&M (section 4.3)	83,963
Production Fuel (section 4.4)	70,014
Amortization (section 4.5)	11,525
Return on Rate Base (section 4.6)	18,426
Revenue Requirement	183.928

- 4 This chapter is organized under the following headings:
- Revenue Requirement Changes since the 2022/23 GRA: Provides an overview
   of the key drivers of revenue requirement changes since the 202223 GRA.
- Non-Fuel Operations and Maintenance Expenses: Reviews non-production fuel
   expenses including salaries and wages, supplies and services and travel and
   accommodation.
- Production Fuel and Lubricants: Provides an overview of forecast fuel volumes
   and prices for the test year.
- **Amortization Expense:** Reviews fixed asset amortization expense and refinancing cost amortization.
- **Return on Rate Base:** Discusses the forecast capital structure as well as return on equity and cost of debt in the test year.

#### 1 4.2 REVENUE REQUIREMENT CHANGES SINCE THE 2022/23 GRA

- 2 Table 4.2 provides a comparison of the 2022/23 and 2025/26 test year revenue
- 3 requirements.

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4	Table 4.2:
5	Revenue Requirement –
6	2022/23 GRA Forecast Compared to 2025/26 Forecast (\$000s)

	2022/23	2025/26		
	GRA Base Rate Amendment Forecast	Forecast		
Non-Fuel O&M	64,620	83,963		
Production Fuel	64,116	70,014		
Amortization	13,747	11,525		
Return on Rate Base	14,130	18,426		
Revenue Requirement	156,612	183,928		

- 8 The overall revenue requirement has increased by \$27.3 million from the last GRA.
- 9 Revenue requirement changes are driven by the following:
- Operating and Maintenance costs have increased by approximately \$19.343
   million since the last GRA, or 9.1% average annual growth;
- Fuel costs have increased by \$5.898 million, or a 3.0% increase per year on average;
  - Fixed assets amortization costs have decreased by \$2.222 million, or 5.7% average reduction per year, reflecting increase in the rate base offset by the proposed depreciation parameters based on a new depreciation study; and

- Return on rate base has increased by \$4.296 million, or 9.3% average increase
   per year reflecting increase in the effective cost of long-term debt.
- 3 These revenue requirement increases are offset to a degree by increases in electricity
- 4 sales revenue. Further details are provided in the following sections.

#### 5 4.3 NON-FUEL OPERATING AND MAINTENANCE EXPENSES

- 6 QEC's forecasts for total operating and maintenance expenses for 2025/26 are set out in
- 7 Table 4.3.

8 Table 4.3: 9 Non-Fuel O&M Expense – 10 2022/23 GRA Forecast Compared to 2025/26 (\$000s)

	2022/23 GRA Base Rate	2025/26		
	Amendment Forecast	Forecast		
Salaries and Wages	36,371	40,115		
Supplies and Services, total includes:	22,340	38,809		
Supplies and Services	22,204	38,588		
Site Restoration expense	161	401		
Corporate donations	(25)	(180)		
Travel and Accommodation	5,909	5,039		
Total Non-Fuel O&M Expense	64,620	83.963		

- 12 Overall, the Corporation's non-fuel 2025/26 Operation and Maintenance (O&M) expenses
- have increased by \$19.343 million since the 2022/23 GRA or an average annual increase
- of 9.1%. Average annual inflation for Nunavut for the period from January 2022 to January

- 1 2024 was 4.4%8, therefore in real terms, the average annual increase of non-fuel O&M
- 2 expenses is about 4.3%. Overall, the changes in QEC's O&M expense reflect the
- 3 Corporation's priorities on safety, reliability, efficiency and responsiveness to stakeholder
- 4 concerns.

#### 5 4.3.1 SALARIES AND WAGES

- 6 Forecast salaries and wages expense is \$40.115 million for 2025/26, an increase of 3.744
- 7 million since the 2022/23 GRA, or an average annual increase of 3.3%. The \$3.744 million
- 8 increase in salaries and wages expense compared to the 20022/23 GRA forecast reflects:
- Employee salaries indexation to align with the Government of Nunavut structural
   salaries adjustment;<sup>9</sup> and
- Changes to staff complement in response to a number of strategic priorities for the
   Corporation.
- 13 Corporate wide, average annual salaries and wages per Full Time Equivalent positions
- 14 (FTE) are forecast to increase from \$174,000 in the 2022/23 GRA to approximately
- 15 \$183,000 in 2025/26, or an average annual increase of 1.7%.

<sup>&</sup>lt;sup>8</sup> Statistics Canada, Table 18-10-0004-01 (formerly CANSIM table 326-0020), data for Iqaluit, Nunavut. The 4.4% is average of 2-year fiscal year CPI increase (4.6% increase in January 2023 over January 2022; 4.2% increase in January 2024 over January 2023). Available at: <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000401">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000401</a> (accessed November 3, 2024).

<sup>(</sup>accessed November 3, 2024).

<sup>9</sup> The Government of Nunavut announced that effective September 30, 2024, GN employees will receive a nine percent (9%) salary increase. In addition, an extra two percent (2%) will be applied to more senior and specialized roles (pay ranges 18-25) to allow for role progression and incentives for employees to take on added responsibilities. <a href="https://www.gov.nu.ca/en/newsroom/gn-announces-significant-salary-increase-neu-excluded-and-senior-management-employees-2024">https://www.gov.nu.ca/en/newsroom/gn-announces-significant-salary-increase-neu-excluded-and-senior-management-employees-2024</a>

In order to continue to provide safe and reliable service the Corporation revised its organizational structure in response to a number of strategic priorities with the objective of improving control over functional areas where organizational gaps are identified. By revising the organizational structure, the Corporation promotes better opportunities for growth through cross training and collaboration, as well as to increase Inuit Employment initiatives in management roles. Further, this organizational restructure allows for increased work efficiency between various regions improving the Corporation's ability to deliver services throughout the Territory. This activity resulted in a need to revamp existing job positions with new work accountabilities and new positions were added where the gaps were identified. Overall, in the 2022/23 GRA the forecast FTE complement was 209. For the 2025/26 test year the number of FTEs is forecast to be 214 for a net increase of five FTEs.

For the 2022/23 test year the Corporation is forecasting a vacancy rate of 15%, based on the most recent two years of actuals review. This vacancy rate is higher than the vacancy rates used in the last three general rate applications (2014/15 to 2022/23 GRAs).<sup>10</sup>

#### 4.3.2 SUPPLIES AND SERVICES

Supplies and services expense represents the cost of maintaining the plants and equipment including materials, freight, contractors, professional development and administration. Forecast costs for supplies and services are \$38.809 million for 2025/26. Compared to 2022/23 GRA levels, this reflects an increase of \$16.469 million, or an

<sup>&</sup>lt;sup>10</sup> In the 2014/15 GRA a 10% vacancy rate was applied as per the URRC's recommendation; in the 2018/19 and 2022/23 GRAs QEC used a vacancy rate of 10.2% for salaries adjustment.

- 1 average increase of 20.2% per year. The key driver of the increase is genset overhaul
- 2 expenses across QEC's power plants, which has increased by \$6.817 million over the
- 3 2022/23 GRA forecast reflecting both higher number of units requiring overhaul as well
- 4 as contract labour and freight cost pressures related to inflation and market conditions.
- 5 Other drivers of the increase in supplies and services over the 2022/23 GRA include:
- General materials, freight and repair costs, which have increased by \$3.620 million
   reflecting cost pressures related to inflation and market conditions.
- 8 External consultant and contractor services expenses, providing support for
- 9 feasibility studies, reports and expert advice and regulatory support, which have
- increased by \$2.968 million. The scope of the external services has increased to
- 11 address vacancies of senior and management positions.
- Insurance expenses increase of \$1.608 million reflecting overall trend in the utility
- industry; and

- Software licensing and support cost increase of \$1.190 million, reflecting general
- market trend in recent years.

#### 4.3.3 TRAVEL AND ACCOMMODATION

- 17 Travel and Accommodation expense includes all costs associated with travel, meals and
- 18 accommodation for operational, professional development and employee medical needs.
- 19 Forecast travel costs of \$5.039 million in 2025/26 represent a decrease of \$0.870 million
- 20 compared to the 2022/23 GRA forecasts or about 5.2% average annual reduction.

- 1 This decrease reflects lower Medical Travel expenses (\$0.959 million lower compared to
- 2 2022/23 GRA forecast). As indicated in prior GRAs, the Corporation's medical travel
- 3 policy covers travel, accommodation, meal and incidental expenses for employees and
- 4 dependents of employees who require medical treatment which is not available in their
- 5 community of employment. 11

#### 6 4.4 PRODUCTION FUEL

- 7 QEC's actual and forecast production fuel costs are set out in Schedules 4.2.1 through
- 8 4.2.4. Forecast production fuel expenses in 2025/26 are \$5.898 million higher relative to
- 9 the 2022/23 GRA.

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10 The change in forecast fuel reflects the following:

forecasts for 2025/26 are provided below.

- Load Forecast (\$0.980 million increase over 2022/23 GRA forecast at 2022/23
   prices and fuel efficiencies). The increased sales noted in Chapter 3 result in increased generation fuel requirements.
- Fuel Price Change (\$4.269 million increase from 2022/23 GRA forecast).

  Average 2025/26 fuel prices are forecast to be \$1.28/litre, an increase relative to 2022/23 average fuel prices of \$1.20/litre. Further details on QEC's fuel price
- Fuel Efficiency Change (\$0.479 million increase from 2022/23 GRA forecast).
   Fuel efficiencies slightly declined from an average of 3.78 kWh/litres in the 2022/23

<sup>&</sup>lt;sup>11</sup> QEC 2014/15 General Rate Application, page 4-9 and QEC 2018/19 General Rate Application, page 4-7.

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- GRA to an average of 3.75 kWh/litres. This change has increased the fuel volume by about 0.375 million litres which increased overall fuel cost at the 2025/26 forecast fuel prices by \$0.479 million as compared to the 2022/23 GRA forecast.
  - Lube Cost (\$0.170 million increase from 2022/23 GRA forecast). 2025/26 forecast lube costs are higher by \$0.170 million compared to the 2022/23 GRA forecast.

Table 4.4:
Generation, Fuel Consumption and Fuel Cost –
2022/23 GRA Forecast Compared to 2025/26 Forecast

	2022/23 GRA Base Rate Amendment Forecast	2025/26 Forecast	Change	Average Annual Growth
Generation (MWh)	198,389	201,472		0.5%
2022/23 GRA Fuel efficiency (kWh/L)	3.78	3.78		
Fuel Volume at 2022/23 efficiency (L 000)	52,540	53,356		0.5%
2022/23 GRA average fuel price (\$/L)	1.20	1.20		
Fuel cost at 2022/23 GRA fuel price and efficiency (\$000)	63,073	64,053	980	0.5%
2025/26 forecast average fuel price (\$/L)		1.28		
Fuel price change from 2022/23 GRA (\$/L)		0.08		
Cost change due to fuel price (\$000)		4,269	4,269	
Fuel efficiency (KWh/L)		3.75		
Cost change due to fuel efficiency (\$000)		479	479	
Lube Cost (\$000)	1,043	1,213	170	
Total fuel and lubricants (\$000)	64,116	70,014	5,898	3.0%

#### Fuel Price Forecast

- 12 QEC purchases fuel through the Petroleum Products Division (PPD) of the Department
- 13 of Community and Government Services (CGS) of Government of Nunavut.

- 1 Approximately 41% of QEC's forecast generation fuel requirements are supplied through
- 2 bulk fuel purchases in seven communities. The remaining 59% is purchased at nominated
- 3 fuel prices set by the Territorial government.
- 4 Fuel costs represent approximately 40% of QEC's total 2025/26 revenue requirement.
- 5 QEC's current fuel prices are higher than the fuel prices included in the 2022/23 GRA.
- 6 QEC captures differences between actual fuel prices and GRA approved fuel prices in
- 7 the fuel stabilization rider (FSR). However, the Nunavut Electricity Subsidy Program
- 8 (NESP) does not subsidize fuel stabilization riders, therefore, if fuel prices built into base
- 9 energy rates are too low, customers pay the full amount of future fuel riders associated
- with higher fuel prices compared to the GRA forecast prices.
- 11 In preparation of the current rate application, QEC requested information from the
- 12 Government of Nunavut on the Petroleum Products Division's (PPD) fuel pricing and
- 13 forecasting practices. In the response letter from the Department of Community and
- 14 Government Services dated June 6, 2024, the Government of Nunavut explained the
- main parameters of PPD's fuel pricing practices as follows:
  - PPD's pricing is heavily influenced by the price of oil and exchange rates
- Historically, PPD charges QEC the landed cost (product plus freight) for bulk fuel
- delivered directly to QEC tankage during resupply. The price for nominated
- 19 product, delivered to QEC over the course of the year from GN tankage, includes
- 20 product cost, freight, delivery fees, and overhead expenses, and is approved by
- 21 the Financial Management Board (FMB).

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- Traditionally, PPD makes pricing recommendations to the FMB in the fall, following
  the annual bulk fuel resupply. At this time, PPD determines the weighted average
  and forecasts its Cost of Goods Sold (COGS), which enables PPD to make
  informed pricing recommendations. PPD's goal is to set retail prices at a level that
  ensures the long-term break-even financial performance of the Petroleum
  Products Revolving Fund (PPRF).
  - Over the 2022-2024 fiscal periods global events, including the Russian invasion of
    Ukraine and the post COVID-19 world economic recovery, caused significant spike
    in the landed cost of fuel, causing deviations from PPD's normal fuel price setting
    practices. However, moving forward, PPD plans to return to their standard practice
    of making pricing recommendations to the FMB in the fall, with subsequent rate
    adjustments shortly thereafter.<sup>12</sup>
- 13 The June 6, 2024, letter from the Department of Community and Government Services is 14 provided in Appendix B.
- Based on these considerations, QEC prepared a 2025/26 GRA fuel price forecast that reflects the following:
- Summer 2024 bulk fuel prices based on information provided by the PPD of the
   Department of Community and Government Services of Government of Nunavut.

<sup>&</sup>lt;sup>12</sup> In October 2024, the Government of Nunavut announced that it expects retail fuel prices to hold through the remainder of the 2024-25 fiscal year with no increase.

- 2025/26 forecast nominated fuel prices based on the retail fuel price adjustments
   announced by Government of Nunavut effective January 1, 2024.
- 3 Average GRA fuel prices reflect a forecast of fuel inventory and mixture of bulk and
- 4 nominated fuel consistent with previous operating experience.

#### 5 4.5 AMORTIZATION EXPENSE

- 6 The 2025/26 test year amortization expense comprises the sum of fixed asset
- 7 amortization and Asset Retirement Obligations (ARO) accretion costs.
- 8 Table 4.5 shows changes to amortization expense from 2022/23 to the 2025/26 forecast.
- 9 The change in amortization expense reflects growth in fixed assets as detailed in Section
- 10 6.3 and additional factors, including:

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- Fixed Asset Amortization Rate Changes: QEC commissioned a new depreciation study for the current application. The major changes include longer expected life for some assets. The new amortization rates reduce the 2025/26 test year amortization expense by about \$2.606 million offset by \$0.455 million due to growth in the asset base. The updated depreciation study is provided in Appendix F.
- Asset Retirement Obligations: On April 1, 2022, the Corporation adopted
  Canadian Public Sector Accounting Standard (PSAS) PS 3280 Asset Retirement
  Obligations (ARO). This standard requires public sector entities to recognize
  liabilities for legal obligations to incur costs associated with the retirement of
  tangible capital assets on their acquisition, construction, development, or through

their normal use and to expense those costs systematically over the life of the asset. The Corporation recognized ARO relating to buildings that are owned by the Corporation that contain either asbestos, lead, mercury or polychlorinated biphenyls (PCBs) as explained in the Corporation's 2022/23 annual report. <sup>13</sup> For 2025/26, QEC calculated ARO accretion of \$0.178 million, which has been added to the 2025/26 test year amortization expense.

Financing Cost Amortization: Financing cost amortization of \$0.249 million was included in prior years revenue requirement in accordance with the URRC Report to the responsible Minister on QEC's 2004/05 GRA.<sup>14</sup> This cost has now been fully recovered and is therefore no longer included in the 2025/26 test year.

Table 4.5:

Amortization Expense –

2022/23 GRA Forecast Compared to 2025/26 Forecast (\$000s)

	2022/23 GRA Base Rate	2025/26		
	Amendment Forecast	Forecast		
Fixed Asset Amortization Add: Financing Cost Amortization Add: Asset Retirement Obligation	13,498 249	11,347 - 178		
Total	13,747	11,525		

#### 4.6 RETURN ON RATE BASE

<sup>13</sup> QEC 2022/23 Annual Report, p. 51, Note 2 to the Financial Statements.

<sup>&</sup>lt;sup>14</sup> URRC Report to the Minister Responsible for the Qulliq Energy Corporation, February 18, 2005. Schedule B-1.

- 1 Return on rate base represents the weighted average cost of long-term debt, equity and
- 2 no-cost capital required to finance the Corporation's rate base. Changes to return on rate
- 3 base occur as a result of changes to the Corporation's net plant in service, changes to
- 4 the mix of debt and equity in the Corporation's capital structure and changes to the relative
- 5 costs of debt and equity.

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- 6 The Corporation's capital structure, rate base and return on rate base for 2025/26
- 7 compared to the 2022/23 GRA test year are shown in Table 4.6.

Table 4.6:
Return on Rate Base –
2022/23 GRA Forecast Compared to 2025/26 Forecast (\$000s)

	2022/23 GRA Base Rate	2025/26
	Amendment Forecast	Forecast
Mid-Year Net Plant in Service Working Capital	272,277 33,676	270,231 39,227
Mid Year Rate Base	305,953	309,459
Average Rate of Return on Rate Base	4.62%	5.95%
Return on Rate Base	14,130	18,426

Return on rate base is forecast to increase by \$4.296 million relative to the 2022/23 test year. This increase majorly relates to the higher average rate of return on rate base driven by an increase in the effective cost of long-term debt. Since the last GRA, significant investment in new infrastructure and re-investment in existing infrastructure has been undertaken to ensure the Corporation can continue to meet load growth in a safe and reliable manner. This growth however was largely aligned with the increase in the accumulated amortization, resulting in the forecast increase of \$3.506 million in net mid-

- 1 year rate base from the 2022/23 test year to the 2025/26 test year. The average rate of
- 2 return on rate base however is forecast to increase from 4.62% in the 2022/23 GRA to
- 3 5.95% in the 2025/26 test year reflecting increase in the average cost of long-term debt
- 4 as discussed in Section 4.6.2. Calculation of the return on rate base is detailed in
- 5 Schedule 4.4.

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#### 4.6.1 CAPITAL STRUCTURE

7 Section 25 of the Qulliq Energy Corporation Act requires the Corporation's borrowings

8 not to exceed three times its equity at any time. In its Report 2011-01 to the Minister

respecting QEC's 2010/11 GRA, the URRC considered a 40% equity ratio to be

appropriate for the determination of a fair return on rate base in 2010/11.15 QEC's

proposed capital structure shown in Schedule 4.4 reflects a deemed 40% equity ratio

consistent with the URRC Report 2011-01 as well as QEC's 2022/23 GRA and the URRC

Report 2022-02. A continuity schedule of the Corporation's capitalization is provided in

14 Schedule 4.5.

#### 4.6.2 AVERAGE COST OF LONG-TERM DEBT

16 The forecast average cost of long-term debt increased from 2.17% in the 2022/23 GRA

to 4.40% for 2025/26. The increase in average cost of long-term debt reflects overall

higher interest rates for QEC's debt, which are all subject to variable rates. At the time of

the 2022/23 GRA, QEC secured an interest rate of prime minus 0.5% per annum for its

existing long-term debt. However, the Corporation stated in the 2022/23 GRA that the

<sup>&</sup>lt;sup>15</sup> Page 34, URRC Report 2011-01 to the Minister responsible for Qullig Energy Corporation, March 2, 2011.

- 1 Corporation expected the cost of debt for the forecast years would increase. 16 In 2022,
- 2 the Corporation entered into a loan agreement with the GN for a total funding of \$75
- 3 million in addition to the \$20 million GN loan to the Corporation issued in the 2019/20
- 4 fiscal year. The \$75 million loan was issued to QEC in three tranches of \$25 million in
- 5 each of 2022/23, 2023/24 and 2024/25. The GN loans are subject to interest based on
- 6 the operating account's deposit paid by the GN's banker plus 0.15 percent per annum.
- 7 Schedule 4.6 shows the calculation of the average cost of long-term debt consistent with
- 8 the URRC recommendation in the URRC Report 2014-04 based on mid-year balance of
- 9 the debt.

#### 10 **4.6.3 NO COST CAPITAL**

- 11 No cost capital includes the notional hearing cost reserve account balance. The hearing
- 12 cost reserve account reflects the combined Hearing and Reserve for Injuries and
- 13 Damages (RFID) balances, reduced by the hearing costs charged to the account. Hearing
- 14 costs for 2022/23 to 2023/24 are recorded on an actual basis and forecast 2024/25 and
- 15 2025/26 expenses reflect the expected cost of the current rate application review process.

#### 4.6.4 RETURN ON EQUITY

- 17 QEC is proposing return on equity (ROE) for the 2025/26 test year of 8.30% which is
- 18 consistent with QEC's approved ROE for the 2022/23 GRA as recommended by the
- 19 URRC in Report 2022-02.

<sup>&</sup>lt;sup>16</sup> QEC 2025/26 GRA, page 4-13.

- 1 In considering the proposed ROE for the 2025/26 test year, QEC also reviewed the ROE
- 2 rates for other northern utilities and notes that the proposed ROE rate is lower than those
- 3 of the reviewed utilities:
- 4 Northwest Territories Power Corporation (NTPC): On October 30, 2024 NTPC filed
- 5 the Corporation's 2024-26 general rate application, where NTPC proposed to set its
- 6 approved ROE at 9.0% for 2024-25 and 2025-26 or somewhat lower than the most
- 7 recently available ROE approved by the Alberta Utilities Commission. 17
- 8 ATCO Electric Yukon (AEY): In the recently concluded GRA proceeding, the Yukon
- 9 Utilities Board approved an ROE of 9.50% for AEY for the 2023/24 test year 18 based on
- 10 the British Columbia Utilities Commission (BCUC) generic cost of capital (GCOC)
- benchmark rate. This is higher than the ROE of 8.75% approved for the 2016 and 2017
- 12 test years. 19
- 13 **Yukon Energy Corporation (YEC):** In its Order 2024-05, the Yukon Utilities Board (YUB)
- 14 approved an ROE of 9.65% (less 50 basis point OIC 1995/90 reduction) for Yukon Energy
- 15 Corporation (YEC) for both 2023 and 2024 test years based on the BCUC GCOC
- benchmark rate.<sup>20</sup> This is higher than the ROE of 8.75% (less 50 basis point OIC 1995/90
- 17 reduction) approved by the Yukon Utilities Board for the 2021 test year.

NTPC 2024-26 Phase I General Rate Application, p. 7-3. Available at <a href="https://nwtpublicutilitiesboard.ca:81/Documents/NTPC%202024-26%20GRA%20Phase%20I.pdf">https://nwtpublicutilitiesboard.ca:81/Documents/NTPC%202024-26%20GRA%20Phase%20I.pdf</a> (accessed November 4, 2024).
 YUB Order 2024-01, Appendix A: Reasons for Decisions, page 104. Available at <a href="Board Order 2024-2">Board Order 2024-</a>

Order 2024-01, Appendix A: Reasons for Decisions, page 104. Available at <u>Board Order 2024-01</u>, Appendix A.pdf (yukonutilitiesboard.yk.ca) (accessed Sept 16, 2024).

<sup>&</sup>lt;sup>19</sup> YUB Order 2017-01, Appendix A: Reasons for Decision, page 37. Available at <a href="https://yukonutilitiesboard.yk.ca/pdf/Board\_Orders\_2010/Board\_Order\_2017-01\_Appendix\_A\_- Reasons.pdf">https://yukonutilitiesboard.yk.ca/pdf/Board\_Orders\_2010/Board\_Order\_2017-01\_Appendix\_A\_- Reasons.pdf</a> (accessed May 14, 2024).

<sup>&</sup>lt;sup>20</sup> YUB Order 2024-05, Appendix A: Reasons for Decision, page 49. Available at: <u>Board Order 2024-05</u> Appendix A Errata.pdf (yukonutilitiesboard.yk.ca) (accessed Sept 16, 2024).

#### Schedule 4.1: Qulliq Energy Corporation 2025/26 General Rate Application Revenue Requirement (\$000)

		2022/23 GRA Base Rate			2022/23		2023/24		2024/25		2025/26	
Line No.		Ame	ndment recast		Actual		Actual		Forecast		Forecast	
1	Operation & Maintenance Expense											
2	Salaries and Wages	\$	36,371	\$	34,916	\$	38,364	\$	36,459	\$	40,115	
3	Supplies and Services		22,204		29,363		43,516		32,129		38,588	
4	Site Restoration Expense		161		44		1,601		399		401	
5	Travel and Accommodation		5,909	_	4,635	_	5,754	_	4,726	_	5,039	
6	Non-Fuel Operation & Maintenance Expense		64,645		68,959		89,235		73,712		84,143	
7	Less: Corporate Donations		(25)		(13)		(5)		(180)	_	(180)	
8	Non-Fuel Operation & Maintenance Expense for GRA		64,620		68,946		89,230		73,532		83,963	
9	Fuel and Lubricants Expense		64,116		53,823		64,347		69,481		70,014	
10	Amortization											
11	Fixed Asset Amortization		13,498		13,834		12,109		10,456		11,347	
12	Add: Financing Cost Amortization		249		249		249		-		-	
13	Add: Asset Retirement Obligation				46		177		75	_	178	
14	Total Net Amortization Expense		13,747		14,129		12,535		10,531		11,525	
15	Total Allowed Return on Rate Base		14,130		14,583		18,957		18,802		18,426	
16	Total Revenue Requirement		156,612		151,480		185,070	_	172,345	_	183,928	

Schedule 4.2.1:
Qulliq Energy Corporation 2025/26 General Rate Application 2022/23 Actual Production Fuel Cost

Line No.	PLANT No.	PLANT NAME	ACTUAL GENERATION	PLANT EFFICIENCY	FUEL REQUIRED	FUEL PRICE	FUEL COST	LUBE COST	FUEL & LUBE COST
110.	110.	10 4012	(MWh)	(kWh/L)	(000 L)	(\$/L)	(000\$)	(000\$)	(000\$)
			,	•	•	,	,	•	,
1	501	Cambridge Bay	11,803	3.56	3,311	0.96	3,184	17	3,201
2	502	Gjoa Haven	6,089	3.47	1,754	1.05	1,846	9	1,855
3	503	Taloyoak	4,062	3.61	1,124	1.05	1,181	6	1,187
4	504	Kugaaruk	4,004	3.58	1,119	1.05	1,172	6	1,178
5	505	Kugluktuk	6,291	3.63	1,731	0.94	1,628	9	1,638
6	601	Rankin Inlet	19,821	3.72	5,325	0.98	5,236	29	5,265
7	602	Baker Lake	9,044	3.81	2,375	1.05	2,496	13	2,509
8	603	Arviat	9,018	3.35	2,688	0.65	1,743	13	1,756
9	604	Coral Harbour	3,731	3.58	1,043	1.04	1,087	6	1,093
10	605	Chesterfield Inlet	2,175	3.74	582	1.02	593	3	596
11	606	Whale Cove	2,081	3.50	595	1.05	622	3	625
12	607	Naujaat	4,711	3.67	1,284	1.04	1,339	7	1,346
13	701	Iqaluit	61,051	3.99	15,299	1.04	15,915	90	16,006
14	702	Pangnirtung	6,759	3.17	2,130	1.06	2,252	10	2,262
15	703	Kinngait	5,938	3.63	1,634	1.05	1,708	9	1,717
16	704	Resolute Bay	4,426	3.70	1,196	1.05	1,256	7	1,262
17	705	Pond Inlet	7,128	3.68	1,938	1.04	2,020	11	2,031
18	706	Igloolik	6,581	3.70	1,779	1.06	1,877	10	1,887
19	707	Sanirajak	3,698	3.56	1,038	1.04	1,085	5	1,090
20	708	Qikiqtarjuaq	2,692	3.55	757	1.04	785	4	789
21	709	Kimmirut	1,996	3.45	578	1.04	600	3	603
22	710	Arctic Bay	3,348	3.46	968	1.03	1,002	5	1,006
23	711	Clyde River	4,234	3.27	1,293	1.03	1,330	6	1,337
24	712	Grise Fiord	1,300	3.40	382	1.02	388	2	
25	713	Saniqiluaq	4,241	3.76	1,128	1.05	1,187	6	1,194
26		TOTAL	196,221	3.70	53,051	1.01	53,533	290	53,823

Schedule 4.2.2: Qulliq Energy Corporation 2025/26 General Rate Application 2023/24 Actual Production Fuel Cost

Line No.	PLANT No.	PLANT NAME	ACTUAL GENERATION	PLANT EFFICIENCY	FUEL REQUIRED	FUEL PRICE	FUEL COST	LUBE COST	FUEL & LUBE COST
			(MWh)	(kWh/L)	(000 L)	(\$/L)	(000\$)	(000\$)	(000\$)
	504	0 1 11 5	44 700	0.50	0.074		0.700	40	0.044
1	501	Cambridge Bay	11,738	3.59	3,271	1.15	3,769	42	3,811
2	502	Gjoa Haven	5,874	3.54	1,659	1.25	2,072	23	2,095
3	503	Taloyoak	4,167	3.63	1,149	1.25	1,439	9	1,448
4	504	Kugaaruk	3,957	3.70	1,069	1.25	1,334	12	
5	505	Kugluktuk	6,302	3.56	1,772	1.14	2,025	28	2,053
6	601	Rankin Inlet	21,241	3.92	5,417	1.16	6,305	53	6,358
7	602	Baker Lake	8,837	3.83	2,304	1.25	2,876	11	2,887
8	603	Arviat	8,989	3.70	2,432	1.17	2,847	20	2,867
9	604	Coral Harbour	3,678	3.67	1,002	1.24	1,243	5	1,248
10	605	Chesterfield Inlet	2,034	3.42	595	1.21	718	3	
11	606	Whale Cove	2,231	3.48	640	1.25	798	8	807
12	607	Naujaat	4,428	3.66	1,211	1.24	1,498	16	1,514
13	701	Iqaluit	60,876	3.90	15,608	1.20	18,807	308	19,114
14	702	Pangnirtung	6,742	3.29	2,049	1.28	2,623	14	2,637
15	703	Kinngait	5,707	3.59	1,590	1.14	1,811	2	
16	704	Resolute Bay	4,536	3.72	1,218	1.26	1,535	5	1,540
17	705	Pond Inlet	6,658	3.61	1,843	1.24	2,278	18	2,296
18	706	Igloolik	6,683	3.81	1,754	1.28	2,241	17	2,258
19	707	Sanirajak	3,862	4.09	943	1.26	1,187	1	1,189
20	708	Qikiqtarjuaq	2,660	3.54	753	1.23	922	4	926
21	709	Kimmirut	1,988	3.39	587	1.30	764	7	771
22	710	Arctic Bay	3,384	3.58	946	1.23	1,166		1,166
23	711	Clyde River	4,528	3.58	1,264	1.21	1,529	10	
24	712	Grise Fiord	1,380	3.19	432	1.15	498	5	502
25	713	Saniqiluaq	4,350	3.69	1,177	1.21	1,429	12	1,441
26		TOTAL	196,830	3.74	52,683	1.21	63,714	633	64,347

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Schedule 4.2.3:
Qulliq Energy Corporation 2025/26 General Rate Application 2024/25 Forecast Production Fuel Cost

Line No.	PLANT No.	PLANT NAME	FORECAST GENERATION	PLANT EFFICIENCY	FUEL REQUIRED	FUEL PRICE	FUEL COST	LUBE COST	FUEL & LUBE COST
			(MWh)	(kWh/L)	(000 L)	(\$/L)	(000\$)	(000\$)	(000\$)
1	501	Cambridge Bay	12,002	3.59	3,343	1.21	4,040	72	4,112
2	502	Gjoa Haven	6,300	3.57	1,765	1.38	2,439	38	2,478
3	503	Taloyoak	4,333	3.65	1,187	1.38	1,641	26	1,667
4	504	Kugaaruk	3,961	3.70	1,071	1.38	1,480	24	1,504
5	505	Kugluktuk	6,260	3.67	1,706	1.18	2,013	38	2,050
6	601	Rankin Inlet	20,863	3.82	5,462	1.15	6,307	126	6,433
7	602	Baker Lake	9,250	3.82	2,422	1.38	3,348	56	3,403
8	603	Arviat	9,522	3.68	2,587	1.14	2,958	57	3,016
9	604	Coral Harbour	3,751	3.62	1,036	1.38	1,432	23	1,455
10	605	Chesterfield Inlet	2,086	3.68	567	1.38	784	13	796
11	606	Whale Cove	2,139	3.48	615	1.38	850	13	863
12	607	Naujaat	4,644	3.67	1,265	1.38	1,749	28	1,777
13	701	Iqaluit	62,721	3.93	15,959	1.22	19,485	379	19,864
14	702	Pangnirtung	6,673	3.43	1,945	1.38	2,689	40	2,730
15	703	Kinngait	5,851	3.61	1,621	1.38	2,241	35	2,276
16	704	Resolute Bay	4,417	3.69	1,197	1.38	1,655	27	1,682
17	705	Pond Inlet	6,893	3.70	1,863	1.38	2,575	42	2,617
18	706	Igloolik	6,678	3.75	1,781	1.38	2,462	40	2,502
19	707	Sanirajak	3,722	4.01	928	1.38	1,283	22	1,306
20	708	Qikiqtarjuaq	2,675	3.62	739	1.38	1,022	16	1,038
21	709	Kimmirut	2,037	3.43	594	1.38	821	12	833
22	710	Arctic Bay	3,540	3.61	980	1.38	1,355	21	1,377
23	711	Clyde River	4,168	3.50	1,191	1.26	1,502	25	1,527
24	712	Grise Fiord	1,311	3.33	394	1.38	544	8	552
25	713	Saniqiluaq	4,310	3.73	1,156	1.38	1,598	26	1,624
26		TOTAL	200,105	3.75	53,373	1.28	68,273	1208	69,481

Schedule 4.2.4:
Qulliq Energy Corporation 2025/26 General Rate Application 2025/26 Forecast Production Fuel Cost

Line No.	PLANT No.	PLANT NAME	FORECAST GENERATION	PLANT EFFICIENCY	FUEL REQUIRED	FUEL PRICE	FUEL COST	LUBE COST	FUEL & LUBE COST
			(MWh)	(kWh/L)	(000 L)	(\$/L)	(000\$)	(000\$)	(000\$)
1	501	Cambridge Bay	11,981	3.59	3,337	1.21	4,032	72	4,104
2	502	Gjoa Haven	6,204	3.57	1,738	1.38	2,402	37	2,440
3	503	Taloyoak	4,325	3.65	1,185	1.38	1,638	26	1,664
4	504	Kugaaruk	4,144	3.70	1,120	1.38	1,548	25	1,573
5	505	Kugluktuk	6,371	3.67	1,736	1.18	2,054	38	2,093
6	601	Rankin Inlet	20,868	3.82	5,463	1.15	6,308	126	6,434
7	602	Baker Lake	9,235	3.82	2,418	1.38	3,342	56	3,398
8	603	Arviat	9,389	3.68	2,551	1.14	2,908	57	2,965
9	604	Coral Harbour	3,871	3.62	1,069	1.38	1,478	23	1,502
10	605	Chesterfield Inlet	2,177	3.68	592	1.38	818	13	831
11	606	Whale Cove	2,226	3.48	640	1.38	884	13	898
12	607	Naujaat	4,671	3.67	1,273	1.38	1,760	28	1,788
13	701	Iqaluit	62,575	3.93	15,922	1.22	19,432	377	19,809
14	702	Pangnirtung	6,882	3.43	2,006	1.38	2,774	41	2,815
15	703	Kinngait	6,002	3.61	1,663	1.38	2,299	36	2,335
16	704	Resolute Bay	4,476	3.69	1,213	1.38	1,677	27	1,704
17	705	Pond Inlet	6,976	3.70	1,885	1.38	2,606	42	2,648
18	706	Igloolik	6,899	3.75	1,840	1.38	2,543	42	2,585
19	707	Sanirajak	3,754	4.01	936	1.38	1,294	23	1,317
20	708	Qikiqtarjuaq	2,728	3.62	754	1.38	1,042	16	1,058
21	709	Kimmirut	2,083	3.43	607	1.38	840	13	852
22	710	Arctic Bay	3,522	3.61	976	1.38	1,349	21	1,370
23	711	Clyde River	4,340	3.50	1,240	1.27	1,570	26	1,597
24	712	Grise Fiord	1,369	3.33	411	1.38	569	8	577
25	713	Saniqiluaq	4,401	3.73	1,180	1.38	1,631	27	1,658
26		TOTAL	201,472	3.75	53,755	1.28	68,801	1213	70,014

## Schedule 4.3: Qulliq Energy Corporation 2025/26 General Rate Application Amortization Provision by Functions (\$000)

		2022/23	2022/23	2023/24	2024/25	2025/26
Line No.	Amortization Provision by Major FERC Category	GRA Base Rate Amendment Forecast	Actual	Actual	Forecast	Forecast
1	Diesel Plant					
2	Amortization	10,830	10,473	9,153	7,698	8,089
3	Add (Less): Adjustments	0	0	0	0	0
4	Total Diesel Plant Amortization	10,830	10,473	9,153	7,698	8,089
5	Distribution Plant					
6	Amortization	1,123	961	1,037	1,072	1,219
7	Add (Less): Adjustments	0	0	0	0	0
8	Total Distribution Plant Amortization	1,123	961	1,037	1,072	1,219
9	General Plant					
10	Amortization	2,389	2,400	1,919	1,685	2,039
11	Add (Less): Adjustments	0	0	0	0	0
12	Total General Plant Amortization	2,389	2,400	1,919	1,685	2,039
13	Total Rate Base Amortization	13,498	13,834	12,109	10,456	11,347
14	Add: Financing Cost Amortization	249	249	249	-	-
15	Add: Asset Retirement Obligation	-	46	177	75	178
16	Total Amortization	13,747	14,129	12,535	10,531	11,525

#### Note:

- 1. Amortization expenses are net of Residual Heat.
- 2. Amortization expenses reflect exclusion of the disallowed amount of \$1.745 million from utility plant in service per the URRC directive from the Final Report on QEC's 2004/05 GRA.
- 3. Generation Plant Amortization expense reflects exclusion of the amount for Government of Nunavut contributions.
- 4. Distribution Plant Amortization expense reflects exclusion of the amount for customer contributions.

Schedule 4.4:
Qulliq Energy Corporation 2025/26 General Rate Application
Return on Rate Base – Mid year (\$000)

No.			lid-Year italization	Year Capital Ratios <sup>1</sup>	Mid	-Year Rate Base	Mid-Year Cost Rate	Allow	ved Return
	2022/23 GRA Base Rate	Amendment	Forecast						
1	Common Equity		158,863	40.00%		122,381	8.30%		10,158
2	Long Term Debt		174,416	59.87%		183,186	2.17%		3,972
3	No Cost Capital		421	0.13%		386	0.00%		0
4	TOTAL	\$	333,701	100.00%	\$	305,953	4.618%	\$	14,130
	2022/23 Actuals								
5	Common Equity	\$	152,821	40.00%		110,995	8.30%		9,213
6	Long Term Debt	\$	214,512	59.89%		166,175	3.23%		5,370
7	No Cost Capital	\$	522	0.11%		318	0.00%	\$	-
8	TOTAL	\$	367,855	100.00%	\$	277,488	5.255%	\$	14,583
	2023/24 Actuals								
9	Common Equity	\$	144,771	40.00%		115,013	8.30%		9,546
10	Long Term Debt	\$	218,997	59.87%		172,158	5.467%		9,411
11	No Cost Capital	\$	457	0.13%		361	0.0%		0
12	TOTAL	\$	364,226	100.00%	\$	287,532	6.593%	\$	18,957
	2024/25 Forecast								
13	Common Equity	\$	141,733	40.00%	\$	117,183	8.30%		9,726
14	Long Term Debt	\$	218,107	59.90%	\$	175,480	5.172%		9,075
15	No Cost Capital	\$	362	0.10%	\$	295	0.00%		0
16	TOTAL	\$	360,203	100.00%	\$	292,959	6.418%	\$	18,802
	2025/26 Forecast								
17	Common Equity	\$	151,734	40.00%	\$	123,783	8.30%		10,274
18	Long Term Debt	\$	203,754	59.93%		185,462	4.40%		8,152
19	No Cost Capital	\$	245	0.07%		213	0.00%		0
20	TOTAL	\$	355,732	100.00%	\$	309,459	5.954%	\$	18,426

#### Note:

<sup>1.</sup> Uses deemed capital ratio based on URRC's recommendation (URRC Final Report, paragraph 7, page 34, March 2, 2011).

Schedule 4.5: Qulliq Energy Corporation 2025/26 General Rate Application Capitalization – Mid year (\$000)

		2022/23 GRA Base Rate	2022/23	2023/24	2024/25	2025/26
Line No.		Amendment Forecast	Actual	Actual	Forecast	Forecast
1	COMMON EQUITY					
2	Opening Balance	153,784	152,970	152,672	136,870	146,597
3	Net Income/Loss before GN Contributions	10,158	-298	-15,802	9,726	10,274
4	(Dividends)/Contributions					
5	Closing Balance	163,942	152,672	136,870	146,597	156,871
6	Mid Year Balance [(L2+L5)/2]	158,863	152,821	144,771	141,733	151,734
7	DEBT - LONG TERM					
8	Opening Balance	165,578	209,261	219,762	218,232	217,981
9	Issue	37,697	26,112	23,025	25,000	
10	Repayment	(20,019)	(15,611)	(24,555)	(25,251)	(28,455)
11	Closing Balance	183,255	219,762	218,232	217,981	189,526
12	Mid Year Balance [(L8+L11)/2]	174,416	214,512	218,997	218,107	203,754
13	NO COST CAPITAL					
	GN No-Cost Loan					
14	Opening Balance	0	0	0	0	0
15	Issue	0	0	0	0	0
16	Repayment	0_	0	0_	0_	0
17	Closing Balance	0	0	0	0	0
18	Mid Year Balance [(L14+L17)/2]	0	0	0	0	0
	Hearing Reserve and Reserve for Injuries and Dama	ges				
19	Opening Balance	459	571	473	441	284
20	Additions	0	0	0	0	0
21	Use	(75)	(98)	(33)	(157)	(78)
22	Closing Balance	384	473	441	284	206
23	Mid Year Balance [(L19+L22)/2]	421	522	457	362	245
24	No Cost Capital Mid Year Balance [L18+L23]	421	522	457	362	245
25	TOTAL MID YEAR CAPITALIZATION					
26	[L6+L12+L24]	333,701	367,855	364,226	360,203	355,732

Schedule 4.6: Qulliq Energy Corporation 2025/26 General Rate Application Cost of Long-Term Debt (\$000)

		2022/23	2022/23	2023/24	2024/25		2025/26 Forecast		
Line No.		GRA Base Rate Amendment Forecast	Actuals	Actuals	Forecast	Effective Interest Rate	Mid-Year Debt Balance	Interest Expense on Mid-year Balance	
1	MID-YEAR DEBT BALANCE (MAD)	174,416	214,512	218,997	218,107		203,754		
2	INTEREST EXPENSE								
	Interest on Long Term Debt								
	F24 \$25M Government of Nunavut Loan	140	348	1,217	1,115	3.87%	19,856	768	
	Capital loan (Facility H)	3,028	5,740	8,295	7,866	4.70%	129,001	6,063	
	Capital loan (Facility J)	89	318	492	39				
	F25 \$25M Government of Nunavut Loan				1,340	3.87%	22,095	855	
	F22 \$20M Government of Nunavut Loan	157	171	829	765	3.87%	13,740	532	
	F23 \$25M Government of Nunavut Loan	368	355	1,139	1,055	3.87%	19,061	738	
	Total Interest Expense	3,782	6,932	11,972	11,280			8,956	
3	EFFECTIVE COST OF LONG TERM DEBT (L2/L1)	2.168%	3.231%	5.467%	5.17%			4.40%	

#### 1 5.0 VARIANCE FROM REVENUES AT EXISTING RATES

#### 2 5.1 INTRODUCTION

- 3 QEC's 2025/26 revenue requirement (as set out in Chapter 4) results in a variance
- 4 compared to revenues at existing rates (as set out in Chapter 3).
- 5 This section reviews the variance in the test year on a Corporate-wide basis by two
- 6 components:

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- Variances compared to 2022/23 revenue requirement: QEC's existing base
   rates reflect the 2022/23 revenue requirement and load forecast. Changes to test
   year forecasts for 2025/26 result in a shortfall, compared to the 2022/23 revenue
   requirement.
  - Variances considering existing rate riders: QEC currently recovers incremental
    fuel expense relative to 2022/23 GRA prices by way of a fuel rider. The 2025/26
    test year revenue requirement incorporates fuel variances into the revenue
    requirement. When 2025/26 revenue requirements are compared to 2022/23 rates
    plus the existing fuel rider, it results in a net requirement to increase revenues from
    customers of approximately 14.1%.

#### 17 5.2 VARIANCES COMPARED TO 2022/23 REVENUE REQUIREMENT

18 QEC's revenue requirement and revenues at existing base rates are set out in Table 5.1.

Table 5.1:
Variance from Revenues at Existing Rates 2025/26 (\$000s)

	2025/26 Forecast
Non-Fuel O&M Production Fuel Fixed Asset Amortization Return on Rate Base	83,963 70,014 11,525 18,426
Revenue Requirement	183,928
less: Non-Electrical Revenues Revenues at Existing Rates	3,391 156,526
Surplus/(Shortfall)	(24,011)
MW.h sales Surplus/(Shortfall) (cents per kW.h)	185,356 (12.95)
Shortfall as % of Existing Revenues	15.3%

- 4 Table 5.1 indicates a shortfall from revenues at existing base rates of \$24.011 million in
- 5 2025/26, incorporating all elements of the revenue requirement described in Chapter 4.
- 6 As a percentage of existing rate revenues this reflects a shortfall of 15.3% or an average
- 7 of 12.95 cents/kWh.
- 8 Table 5.2 provides a comparison of revenue requirement, revenues and shortfalls
- 9 between the 2022/23 and 2025/26 test year forecasts. Compared to the 2022/23 GRA
- forecast, the revenue requirement increased by \$27.316 million, however, this is offset by
- 11 additional revenues from load growth (\$2.425 million) and non-electrical revenues
- 12 (\$0.879 million).

Table 5.2: Variance from Revenues at Existing Rates 2022/23 GRA Forecast Compared to 2025/26 (\$000s)

	2022/23 GRA Base Rate	2025/26	Changes
	Amendment Forecast	Forecast	2022/23 to 2025/26
Non-Fuel O&M	64,620	83,963	19,343
Production Fuel	64,116	70,014	5,898
Fixed Asset Amortization	13,747	11,525	(2,222)
Return on Rate Base	14,130	18,426	4,296
Revenue Requirement	156,612	183,928	27,316
Less: Non-Electrical Revenues	2,511	3,391	879 .
Revenues at Existing Rates	154,101	156,526	2,425
Surplus/(Shortfall)	(0)	(24,011)	(24,011)
MWh sales	183,135	185,356	2,221
Shortfall (cents per kWh)	0.00	12.95	12.95
Shortfall as % of Existing Revenues	0%	15.3%	

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#### 5.3 VARIANCES COMPARED TO EXISTING BASE RATES PLUS RIDERS

- 7 QEC filed an application with the Minister for a Fuel Rate Stabilization rider of 1.35
- 8 cents/kWh effective October 1, 2024 to address ongoing variances between the 2022/23
- 9 GRA-approved and actual fuel prices, as well as to recover balances in the FRS fund.
- 10 If the current FRS rider remained in place for the 2025/26 test year, the forecast charge
- 11 to customers would be \$2.502 million. With the FRS rider incorporated into the revenue
- from sales, the shortfall amount for 2025/26 changes from \$24.011 million to \$21.509
- million. This shortfall amount results in required across-the-board rate increases of 14.1%

- 1 over the existing base energy rates plus FRS rider to recover the full 2025/26 test year
- 2 revenue requirement.
- 3 Table 5.3 illustrates the calculation of the required increase to existing base energy rates
- 4 plus FSR rider for the 2025/26 test year.

### 5 Table 5.3: 6 Variance from Revenues at Existing Rates and Rider (\$000s)

		2025/26
Line No		Forecast
1	Non-Fuel O&M	92.062
2	Production Fuel	83,963 70,014
3	Amortization Expense	11,525
4	Return on Rate Base	18,426
5=Sum(1:4)	Revenue Requirement	183,928
3–3um(1.4)	Neverlue Nequillement	100,920
6	Less: Non-Electrical Revenues	3,391
7=5-6	Net Revenue Requirement	180,537
	Rate Revenues	
8	Revenue from Base Energy Rates	149,735
9	Customer charge and Demand Revenue	6,791
	· ·	
10=8+9	Total Existing Rates Revenues	156,526
11=10-7	Surplus/(Shortfall)	(24,011)
40	ANAZI	405.050
12	MW.h sales	185,356
13=11/12	Surplus/(Shortfall) (cents per kW.h)	-12.95
14=11/8	Shortfall as % of Base Energy Rates	16.0%
	37	
15	Existing FSR Rider Revenues/(Refunds)	2,502
16=11+15	Surplus/(Shortfall) after FSR Revenues/(Refunds)	(21,509)
-	, , , , , , , , , , , , , , , , , , , ,	
17=16/(8+15)	Shortfall as % of Base Energy rate and rider revenues	14.1%

#### 1 **6.0 RATE BASE**

#### 2 6.1 INTRODUCTION

- 3 This chapter sets out the calculation of the Corporation's actual Mid-Year Rate Base for
- 4 the 2022/23 and 2023/24 fiscal years as well as forecasts for 2024/25 and the 2025/26
- 5 test year. Specifically, this chapter addresses the following topics:
- Gross Plant in Service, including capital additions and disposals;
- Accumulated Amortization (amortization expense is discussed in more detail in
- 8 Chapter 4); and
- Working Capital.
- 10 The Corporation's mid-year rate base is forecast to be \$309.459 million for the 2025/26
- 11 test year as shown in Schedule 6.1. The Corporation's mid-year rate base excludes
- 12 residual heat related assets and disallowed amounts for the Baker Lake and Grise Fiord
- 13 plants.<sup>21</sup>

#### 14 6.2 CUSTOMER AND GOVERNMENT CONTRIBUTIONS

- 15 Under public sector accounting (PSA) standards, revenue received from customers and
- 16 government contributions to the purchase of tangible capital assets are recognized as
- 17 revenue when the related assets are acquired. However, for ratemaking purposes, the
- 18 Corporation's approach is to ensure that customers continue to see the benefits of

<sup>&</sup>lt;sup>21</sup> Disallowed amount of \$1.745 million for Baker Lake plant per the URRC directive from the Final Report on QEC's 2004/05 GRA, as well as \$3.939 million for Grise Fiord plant replacement per URRC Report 2018-01 on QEC's 2018/19 GRA.

- 1 customer contribution revenues in the calculation of rate base. Therefore, for GRA
- 2 purposes, the Corporation treats customer and government contributions as an offset to
- 3 rate base, consistent with the treatment as deferred revenue in rate applications prior to
- 4 adopting the PSA standards.

#### 6.3 GROSS PLANT IN SERVICE

- 6 Gross plant in service represents the accounting cost of all QEC assets in service for the
- 7 provision of electricity service. Each year the gross plant in service calculation considers
- 8 the opening balance, plus capital additions, less disposals or other adjustments to arrive
- 9 at the ending balance. The mid-year gross plant figures are the simple average of the
- 10 opening gross plant balance and the ending gross plant balance. Gross plant in service
- calculations for 2022/23 through 2025/26 are set out in Schedule 6.2. Actual and forecast
- capital additions, as well as descriptions of capital additions greater than \$400,000 are
- 13 set out in Appendix C.
- 14 Table 6.1 summarizes the changes to the gross plant in service from the 2022/23 GRA
- 15 forecast to the 2025/26 test year forecast.

Table 6.1: Gross Plant in Service (\$000)<sup>22</sup>

	2022/23 GRA Base Rate	2025/26	
Gross Plant by Function	Amendment Forecast	Forecast	Increase
Diesel Plant	334,489	359,371	24,882
Distribution Plant	58,529	59,899	1,370
General Plant	65,559	73,264	7,705
Total	458,576	492,533	33,957

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- 5 Forecast 2025/26 gross plant in service increased by \$33.957 million compared to the
- 6 2022/23 GRA forecast. The majority of the increase is driven by additions to diesel plant
- 7 (\$24.882 million). Major diesel plant additions include genset replacements in Iqaluit
- 8 (\$9.993 million), Kugaaruk (\$5.413 million), Baker Lake (\$5.754 million), Sanikiluaq
- 9 (\$4.857 million) and Clyde River (\$3.437 million). Distribution plant increased by \$1.370
- 10 million (or 4% of the total increase). The additions to general plant mainly reflect the head
- office building in Baker Lake (\$16.456 million) capitalized in 2023/24.
- 12 Detailed discussion of the actual and forecast capital additions is provided in
- 13 Appendix C.

2023/24.

<sup>&</sup>lt;sup>22</sup> The 2022/23 actual gross plant balance was \$418.8 million compared to the 2022/23 GRA forecast of \$458.6 million, reflecting project carryovers, including Baker Lake Head Office Building and genset replacements in Clyde River which were capitalized in

#### 6.4 ACCUMULATED AMORTIZATION

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- 2 Accumulated Amortization represents the collected amortization for QEC's assets in
- 3 service related to the provision of electricity service. For each year from 2022/23 through
- 4 2025/26 the Accumulated Amortization calculation considers the opening balance, plus
- 5 amortization expense, less disposals and other adjustments to arrive at the ending
- 6 balance. Schedule 6.3 sets out the calculation of the Mid-Year Accumulated Amortization.
- 7 A comparison of 2022/23 GRA forecast accumulated amortization to the 2025/26 test
- 8 year forecast is provided in Table 6.2.

9 Table 6.2: 10 Accumulated Amortization (\$000)

	2022/23	2025/26	
Accumulated Amortization by Function	GRA Base Rate Amendment Forecast	Forecast	Increase
Diesel Plant	138,438	165,486	27,048
Distribution Plant	16,033	19,312	3,279
General Plant	19,703	23,677	3,975
Total	174,173	208,475	34,302

12 2025/26 forecast accumulated amortization has increased by \$34.302 million compared

to the 2022/23 GRA forecast. The change reflects continued amortization of the

Corporation's assets offset by disposals.

#### 6.5 WORKING CAPITAL

16 Cash working capital has been calculated based on the results of a lead-lag study

17 provided in the 2010/11 GRA (Appendix D of 2010/11 Phase I GRA), which returned a

result of 14.63 net lag days. The net lag days figure is multiplied by average daily

- 1 expenses and added to the impact of GST lag to calculate a cash working capital
- 2 provision for each year.
- 3 Other components of working capital are supplies inventory, fuel inventory and pre-
- 4 payments of rent and insurance. Schedule 6.4 shows the calculation of the working capital
- 5 provision for 2022/23 through 2025/26. Schedules 6.5 through 6.9 set out the calculation
- 6 of cash working capital for each year.
- 7 The supplies inventory component of working capital also includes the balances of
- 8 significant spare parts, which previously were capitalized.

Schedule 6.1:
Qulliq Energy Corporation 2025/26 General Rate Application Rate Base (\$000)

		2022/23	2022/23	2023/24	2024/25	2025/26
Line No.		GRA Base Rate Amendment Forecast	Actual	Actual	Forecast	Forecast
1	Gross Plant in Service					
2	Beginning of Year	420,827	381,509	418,819	440,012	453,532
3	Add: Additions and Adjustments	37,749	38,160	21,193	13,520	39,001
4	Less: Disposals and Transfers	-	(850)	· -	-	· <u>-</u>
5	End of Year	458,576	418,819	440,012	453,532	492,533
6	Mid Year Balance =(L2+L5)/2	439,702	400,164	429,416	446,772	473,033
7	Accumulated Amortization					
8	Beginning of Year	160,675	161,580	174,563	186,673	197,128
9	Add: Amortization Expense	13,498	13,834	12,109	10,456	11,347
10	Less: Disposals and Transfers	-	(850)	-	-	-
11	End of Year	174,173	174,563	186,673	197,128	208,475
12	Mid Year Balance = (L8+L11)/2	167,424	168,072	180,618	191,900	202,802
13	Mid Year Net Plant in Service (L6 - L12)	272,277	232,093	248,798	254,872	270,231
14	Add: Mid-Year Working Capital	33,676	34,383	38,734	38,086	39,227
15	Mid Year Rate Base	305,953	266,475	287,532	292,959	309,459

#### Notes

<sup>1.</sup> Gross Plant in Service and Accumulated amortization are net of Residual Heat.

<sup>2.</sup> Gross Plant in Service and Accumulated amortization reflect exclusion of the disallowed amount of \$1.745 million for Baker Lake plant per the URRC directive from the Final Report on QEC's 2004/05 GRA as well as \$3.9 million for Grise Fiord plant replacement per URRC Report 2018-01 on QEC's 2018/19 GRA.

<sup>3.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs and accumulated amortization reflect exclusion of government and customer contributions.

Schedule 6.2: Qulliq Energy Corporation 2025/26 General Rate Application Gross Plant in Service (\$000)

		2022/23	2022/23	2023/24	2024/25	2025/26
Lin		GRA Base Rate			_	_
e	Cross Blant by Major FFDC Cotomony	Amendment Forecast	Actual	Actual	Forecast	Forecast
No.	Gross Plant by Major FERC Category					
	Diesel Plant					
1	Beginning of Year	332,374	297,810	331,773	333,056	340,143
2	Add: Additions	2,115	33,963	1,283	7,087	19,228
3	Add/Less: Adjustments	-				
4	Less: Disposals					
5	End of Year	334,489	331,773	333,056	340,143	359,371
6	Mid-Year Diesel Plant	333,432	314,792	332,415	336,600	349,757
	Distribution Plant					
7	Beginning of Year	47,812	46.722	48.632	50.417	52,498
8	Add: Additions	10,717	1,910	1.785	2,081	7,401
9	Add/Less: Adjustments	-	.,0.0	.,. 00	2,00	.,
10	Less: Disposals	-	-	-	-	-
11	End of Year	58,529	48,632	50,417	52,498	59,899
12	Mid-Year Distribution Plant	53,171	47,677	49,525	51,457	56,198
	General Plant					
13	Beginning of Year	40,641	36,977	38,414	56,539	60,892
14	Add: Additions	24,918	2,287	18,125	4,352	12,372
15	Add/Less: Adjustments	-	-			
16	Less: Disposals		(850)			
17	End of Year	65,559	38,414	56,539	60,892	73,264
18	Mid-Year General Plant	53,100	37,696	47,477	58,715	67,078
19	Total Beginning of Year Gross Plant in Service	420,827	381,509	418,819	440,012	453,532
20	Total End of Year Gross Plant in Service	458,576	418,819	440,012	453,532	492,533
21	Total Mid-Year Gross Plant in Service	439,702	400,164	429,416	446,772	473,033

#### Notes

<sup>1.</sup> Gross Plant in Service is net of Residual Heat.

<sup>2.</sup> Gross Plant in Service reflect exclusion of the disallowed amount of \$1.745 million for Baker Lake plant per the URRC directive from the Final Report on QEC's 2004/05 GRA as well as \$3.9 million for Grise Fiord plant replacement per URRC Report 2018-01 on QEC's 2018/19 GRA.

<sup>3.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs reflect exclusion of government and customer contributions.

Schedule 6.3: **Qulliq Energy Corporation 2025/26 General Rate Application Accumulated Amortization** (\$000)

		2022/23	2022/23	2023/24	2024/25	2025/26
Line No.	Accumulated Amortization by Major FERC Category	GRA Base Rate Amendment Forecast	Actual	Actual	Forecast	Forecast
1	Diesel Plant					
2	Beginning of Year	128,452	130,073	140,546	149,699	157,397
3	Add: Amortization	9,986	10,473	9,153	7,698	8,089
4	Less: Disposals and Adjustments	-	-	-		-
5	End of Year	138,438	140,546	149,699	157,397	165,486
	Mid-Year Diesel Plant	133,445	135,309	145,122	153,548	161,442
6	Distribution Plant					
7	Beginning of Year	14,910	15,022	15,983	17,020	18,092
8	Add: Amortization	1,123	961	1,037	1,072	1,219
9	Less: Disposals and Adjustments	-	-	-	-	-
10	End of Year	16,033	15,983	17,020	18,092	19,312
	Mid-Year Distribution Plant	15,471	15,503	16,502	17,556	18,702
11	General Plant					
12	Beginning of Year	17,313	16,485	18,034	19,954	21,639
13	Add: Amortization	2,389	2,400	1,919	1,685	2,039
14	Less: Disposals and Adjustments		(850)			
15	End of Year	19,703	18,034	19,954	21,639	23,677
	Mid-Year General Plant	18,508	17,259	18,994	20,796	22,658
16	Total Beginning of Year Accumulated Amortization	160,675	161,580	174,563	186,673	197,128
17	Total End of Year Accumulated Amortization	174,173	174,563	186,673	197,128	208,475
18	Total Mid-Year Accumulated Amortization	167,424	168,072	180,618	191,900	202,802

<sup>1.</sup> Accumulated amortization is net of Residual Heat.

<sup>2.</sup> Accumulated amortization and annual amortization reflect exclusion of the disallowed amount of \$1.745 million for Baker Lake plant per the URRC directive from the

Final Report on QEC's 2004/05 GRA as well as \$3.9 million for Grise Fiord plant replacement per URRC Report 2018-01 on QEC's 2018/19 GRA.

3. Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, accumulated amortization and annual amortization reflect exclusion of government and customer

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## Schedule 6.4: Qulliq Energy Corporation 2025/26 General Rate Application Working Capital Requirement (\$000)

		2022/23	2022/23	2023/24	2024/25	2025/26
Line No.		GRA Base Rate Amendment Forecast	Actual	Actual	Forecast	Forecast
1	Cash Working Capital	5,021	4,746	6,011	5,559	6,003
2	Less: Mid-Year Customer Deposits	-1,628	-1,766	-1,782	-1,814	-1,854
3	Add: Supplies Inventory					
4	Beginning of Year (note 1)	19,092	17,444	19,834	17,623	18,729
5	End of Year	19,092	19,834	17,623	18,729	18,729
6	Mid-Year Balance	19,092	18,639	18,729	18,176	18,729
7	Fuel Average Monthly Balance	8,190	9,446	12,255	12,458	12,542
8	Mid-Year Rent Prepayment	1,501	1,479	1,615	1,504	1,504
9	Mid-Year Insurance Prepayment	1,500	1,838	1,906	2,205	2,304
10	Total Mid-Year Working Capital Requirement	33,676	34,383	38,734	38,086	39,227

#### Note:

<sup>1.</sup> Actual and forecast years include spare parts, supplies and lubricants and other inventory. The significant spare parts, previously capitalized, were reclassified as "inventory for use" to comply with PSA Standards.

#### Schedule 6.5: Qulliq Energy Corporation 2025/26 General Rate Application 2022/23 Actual Cash Working Capital (\$000)

Line No.		Year End Balance	Daily Expense	Net Lag Days	Cash Working Capital
1	Salaries and Wages	34.916	95	14.63	1,396
2	Fuel and Lubricants	53.823	147	14.63	2,152
3	Supplies and Services	22.773	62	14.63	910
4	Travel and Accomodation	4,635	13	14.63	185
5	Total Expenses	116,148	317		4,643
6	GST Expenditure Lag	4,062	11	14.87	166
7	GST Remittance Lag	6,970	19	(3.30)	-63
8	Total GST	<u> </u>		,	103
9	Total Cash Working Capital				4,746

#### Schedule 6.6: Qulliq Energy Corporation 2025/26 General Rate Application 2023/24 Actual Cash Working Capital (\$000)

Line No.		Year End Balance	Daily Expense	Net Lag Days	Cash Working Capital
1	Salaries and Wages	38.364	105	14.63	1,534
2	Fuel and Lubricants	64.347	176	14.63	2,572
3	Supplies and Services	38,075	104	14.63	1,522
4	Travel and Accomodation	5,754	16	14.63	230
5	Total Expenses	146,540	400		5,858
6	GST Expenditure Lag	5,409	15	14.87	220
7	GST Remittance Lag	7,438	20	(3.30)	-67
8	Total GST	<u> </u>		,	153
9	Total Cash Working Capital				6,011

# Schedule 6.7: Qulliq Energy Corporation 2025/26 General Rate Application 2024/25 Forecast Cash Working Capital (\$000)

Line No.		Year End Balance	Daily Expense	Net Lag Days	Cash Working Capital
1	Salaries and Wages	36.459	100	14.63	1,457
2	Fuel and Lubricants	69.481	190	14.63	2.778
3	Supplies and Services	25.110	69	14.63	1,004
4	Travel and Accomodation	4,726	13	14.63	189
5	Total Expenses	135,776	371		5,428
6	GST Expenditure Lag	4,966	14	14.87	202
7	GST Remittance Lag	7,919	22	(3.30)	-72
8	Total GST	<u> </u>		,	131
9	Total Cash Working Capital				5,559

#### Schedule 6.8: Qulliq Energy Corporation 2025/26 General Rate Application 2025/26 Forecast Cash Working Capital (\$000)

Line No.		Year End Balance	Daily Expense	Net Lag Days	Cash Working Capital
1	Salaries and Wages	40,115	110	14.63	1,604
2	Fuel and Lubricants	70,014	191	14.63	2,799
3	Supplies and Services	31,374	86	14.63	1,254
4	Travel and Accomodation	5,039	14	14.63	201
5	Total Expenses	146,542	400		5,858
6	GST Expenditure Lag	5,321	15	14.87	217
7	GST Remittance Lag	7,983	22	(3.30)	-72
8	Total GST			, ,	145
9	Total Cash Working Capital				6,003

#### 7.0 COST OF SERVICE STUDY AND RESULTS

#### 7.1 INTRODUCTION

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- 3 This chapter presents the Corporation's cost-of-service study (COS study) results for the
- 4 2025/26 test year. A COS study is commonly used as an analytical tool in the ratemaking
- 5 process. A COS study can provide useful information such as unit costs to serve different
- 6 customers (such as \$/kWh, \$/customer month) and revenue to cost coverage ratios.
- 7 However, it must be recognized that any COS study involves estimation and a degree of
- 8 professional judgement and therefore the results cannot be considered exact.
- 9 The purpose of a COS study is to fairly allocate a utility's revenue requirement among the
- different customer classes. While there are many potential allocation methods, the core
- 11 objective is to allocate costs to the customer classes consistent with principles of cost
- 12 causation based on customer characteristics such as energy consumption and peak
- 13 demand.
- 14 There is no absolute right or wrong allocation method, as each utility's operating
- 15 circumstances and cost drivers are different. The objective for the utility is to select
- 16 methods which best represent cost causation and the equitable sharing of costs among
- 17 customers in a manner appropriate for the unique circumstances of the utility.
- 18 To provide services to its customers, the Corporation must receive sufficient revenues to
- 19 recover its costs. Adequate cost recovery is a necessary condition for maintaining reliable
- 20 service. The COS study methods used in this Application apply cost-of-service concepts

- 1 to embedded accounting costs to calculate the fair share of the Corporation's total
- 2 revenue requirement for each customer class.
- 3 QEC's COS study uses a territory-wide approach, consistent with the findings of URRC
- 4 Report 2012-01 which recommended accepting QEC's proposal to adopt a Nunavut wide
- 5 COS approach.<sup>23</sup> The Corporation filed its last COS study as part of its 2022/23 GRA.
- 6 URRC Report 2022-02 to the Minister recommended accepting QEC's 2022/23 COS
- 7 study.<sup>24</sup>
- 8 The Corporation's 2025/26 COS study is provided in Appendix D. All methods used in the
- 9 current COS study are consistent with previous URRC recommendations. The results of
- 10 the COS study are used as inputs in developing the Corporation's rate proposals.

#### 11 7.2 CLASS REVENUE TO COST COVERAGE RATIOS AND UNIT COSTS

- 12 Results of the Corporation's 2025/26 COS study are presented in Table 7.1. Detailed
- 13 COS study schedules are provided in Appendix E.
- 14 The following information is provided for each customer class:
- 2025/26 forecast revenue at equal percentage across-the-board rate increases;
- 2025/26 COS study class revenue requirements;
- Revenue cost coverage (RCC) ratio;

<sup>&</sup>lt;sup>23</sup> URRC Report 2012-01 from January 27, 2012 on QEC's 2010/11 Phase II GRA.

<sup>&</sup>lt;sup>24</sup> URRC Report 2022-02 from August 18, 2022

- Average COS unit costs for:
- 2 o Demand (\$/kW);
- o Energy (cents/kWh); and
- 4 o Customer (\$/month).

5 Table 7.1:
6 2025/26 Cost of Service Results and Average Unit Costs

Customer Class	Revenue at Equal Percentage Across-the- Board Rate Increases	COS Customer Class Revenue Requirement	Revenue Cost Coverage Ratio	COS Demand Charge	COS Customer Charge	COS Energy Charge
	\$000	\$000		\$/kW	\$/Cust./Month	cents/kWh
Domestic Commercial Streetlighting	76,418 102,745 1,375	77,973 101,178 1,386	98.0% 101.5% 99.2%	86.35	43.50 78.44 43.50	98.75 47.26 141.48
Total	180,537	180,537				

- 8 The results indicate that, if rate increases were applied on an equal-percentage-across-
- 9 the-board basis, the domestic and streetlighting rate classes RCC ratio would be slightly
- 10 below 100%, while the commercial rate class RCC ratio would be somewhat above 100%
- 11 however, all rate classes would have an RCC ratio within the 95% to 105% zone of
- 12 reasonableness.

- 13 The results also indicate that the existing demand and customer charges (\$8/kW for
- 14 commercial customers and \$18/month for residential customers, respectively) are low
- 15 compared to the COS study outputs.

- 1 Maintaining the existing demand and customer charges in the COS study results in higher
- 2 average energy unit costs as shown in Table 7.2.
  - Table 7.2: Cost of Service Results and Average Energy Unit Costs under Existing Demand and Customer Charges

COS Result with Revenue at Existing Customer/Demand Charge Equal COS Revenue Cost Customer Percentage Customer Coverage Existing Existing **Energy Charge** Class Across-the-Class Revenue Ratio Demand Customer at Existing **Board Rate** Requirement **Fixed Charges** Charge Charge Increases \$000 \$/kW \$/Cust./Month cents/kWh \$000 Domestic 76,418 77,973 98.0% 18.00 104.25 8.00 86.41 Commercial 102,745 101,178 101.5% Streetlighting 1,375 1,386 99.2% 144.25 **Total** 180,537 180,537

- 8 Maintaining demand and customer charges at the existing level results in 5.51 cents/kWh
- 9 higher energy rates for the domestic rate class, 39.15 cents/kWh higher energy rates for
- 10 the commercial rate class, and 2.77 cents/kWh higher energy rates for the streetlighting
- 11 rate class.

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#### 1 8.0 RATE DESIGN

#### 2 8.1 INTRODUCTION

- 3 This chapter reviews the Corporation's proposed rates and rate structures to be
- 4 implemented effective April 1, 2025.
- 5 Section 8.2 reviews the rate design criteria and objectives of the Corporation for this
- 6 application.
- 7 Section 8.3 summarises the Corporation's proposal for rates effective April 1, 2025.

#### 8 8.2 RATE DESIGN CRITERIA AND OBJECTIVES

- 9 Rate design is the process that determines the rates to be charged to each customer
- 10 class. The process requires balancing a number of different and sometimes competing
- 11 criteria. Cost causation, as measured by a cost-of-service (COS) study, is an important
- 12 input into the rate design analysis. However, the process also considers other economic,
- 13 policy and administrative objectives.
- 14 The Corporation's rate design objectives for the 2025/26 GRA are:
- 15 **1. Rates must be set to recover revenue requirement.** The proposed total 2025/26
- revenue to be recovered from rates is \$180.537 million.
- 2. Move toward 95-105% revenue-cost coverage ratios for each rate class.
- Based on QEC's Cost-of-service study, average rate increases would result in all
- rate classes (domestic, commercial and streetlighting) having RCC ratios within

- the 95% to 105% zone of reasonableness that is typically accepted in Canadian jurisdictions.
  - 3. Administrative efficiency. The rate structure must be administratively easy to manage within QEC's existing billing system and simple to understand for QEC's customers and staff.
    - 4. Move customer and demand charges closer to cost recovery: The Corporation notes that the existing customer and demand charges were initially approved by the Northwest Territories Public Utilities Board in Decision 12-97, dated June 16, 1997, and were inherited by QEC from the Northwest Territories Power Corporation (NTPC). All rate adjustments in Nunavut since the establishment of QEC have been made to the energy component of the rates. The COS study results presented in Tables 7.1 and 7.2 indicate that the existing fixed charges recovery ratio is approximately 42% of allocated costs for customer charges and 9% of allocated costs for demand charges, which reflects this fact. In the 2022/23 GRA, fixed charges recovery ratios were similarly low for customer charges and demand charges. This issue was reviewed by the URRC and in Report 2022-02 the URRC recommended that QEC move toward full cost recovery with respect to demand and customer charges noting the following advantages of the adjustment:
      - More stable monthly bill for customers throughout the year as there would be less volatility caused by changes in electricity consumption;
      - ii. Less volatility to QEC's revenue requirement recovery;

The URRC also noted that the fixed assets in place to serve any class of customers should be allocated to and recovered from each of those customers who benefit from having access to the system.

#### 8.3 2025/26 RATE PROPOSAL

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- 5 Consistent with the rate design objectives outlined in section 8.2, the Corporation's
- 6 proposed energy rates for the domestic and commercial rate classes effective April 1,
- 7 2025 were developed based on the following steps:
- Step 1: Set monthly fixed charges as follows:
- o customer charge at \$36/month; and
  - demand charge at \$16/kW (minimum monthly charge of \$80)
    - In the 2022/23 GRA the Corporation focused on energy rate adjustments considering that customer and demand charges were already levelized across the Territory. In the current application, QEC proposes to adjust customer and demand charges two-fold to improve cost recovery of these components of the rate. The proposed customer and demand charges are within the range of rates approved for peer utilities as discussed in detail in Chapter 9 response to the URRC's recommendation. The Corporation also notes that customer charges are included in the Nunavut Electricity Subsidy Program (NESP) and accordingly, adjustment of customer charges will not impact non-government residential customer bills.
    - Step 2: Determine revenue required from base energy rates by customer class after accounting for incremental revenue from higher customer and demand

increase and the proposed approach for QEC.

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- charges in Step 1. This results in an average rate increase of 9.5% for domestic
  and commercial customers and 12.9% for streetlighting over the existing base
  energy rates plus FSR rider to recover the full 2025/26 test year revenue
  requirement.
- 5 Table 8.1 compares RCC ratios for by cost component under the equal percentage rate

Table 8.1:
RCC Ratios at Equal Percentage Increase and Proposed 2025/26 Rates

Customer Class	COS Allocation	Revenue at Equal Percentage Increase and No Change in Fixed Charges	Revenue Cost Coverage Ratio	Revenue at Proposed Rates	Revenue Cost Coverage Ratio
	(000)	(000)		(000)	
Domestic					
Customer Charge	6,776	2,804	41.4%	5,608	82.8%
Energy Charge	71,197	73,614	103.4%	70,546	99.1%
Subotal	77,973	76,418	98.0%	76,153	97.7%
Commercial					
Demand Charge	44,733	4,144	9.3%	8,288	18.5%
Energy Charge	56,445	98,600	174.7%	94,721	167.8%
Subotal	101,178	102,745	101.5%	103,009	101.8%
Streetlighting Energy Charge	1,386	1,375	99.2%	1,375	99.2%
Total	180,537	180,537	100.0%	180,537	100.0%

Under the proposed approach fixed charge unit cost recovery improves from 41.4% to 82.8% for domestic class and from 9.3% to 18.5% to commercial class with reductions to the energy unit cost over-recovery as compared to the equal percentage across-the-board rate adjustment with no change to fixed charges, while overall RCC ratios by customer class remain similar between the two approaches.

- 1 Schedules 8.1 and 8.2 summarize the Corporation's rate proposal for 2025/26 by rate
- 2 class. Schedules 8.3.1-8.3.3 provide a proof of revenue calculation for 2025/26 based on
- 3 the proposed rates for each customer class.

#### 4 8.4 BILL IMPACT ESTIMATES UNDER THE 2025/26 RATE PROPOSAL

- 5 Bill impacts from the proposed rate adjustment were estimated assuming monthly
- 6 consumptions of 500 kWh for domestic customers and 2,000 kWh for commercial
- 7 customers.
- 8 Bill impacts from changing the existing rates to the proposed rate structure under the
- 9 assumed monthly consumptions are summarized in Table 8.2.

Table 8.2: 2025/26 Rate Proposal Bill Impacts Over the Existing Rates

	Average Bill Changes
Non-government Domestic - NESP Subsidized	Increase of 7.4% (\$13.6)
Municipal Tax-Based / Non-government Domestic - Unsubsidized	Increase of 14.0% (\$53.3)
Government Domestic	Increase of 12.6% (\$70.7)
Municipal Tax-Based / Non-government Commercial	Increase of 12.6% (\$155.9)
Government Commercial	Increase of 11.4% (\$235.3)

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#### Schedule 8.1: 2025/26 Rate Proposal

			Domestic Non-Government / Municipal Tax-Based Domestic Government Commercial Non-Government / Municipal Tax-Base											oal Tax-Based	Commercial Government				
					Required	Proposed			Required				Required				Required		
		Existing	Existing E	nergy Rates	Rate	Rates	Existing F	nergy Rates	Rate	Proposed	Existing E	nergy Rates	Rate	Proposed	Existing En	erav Rates	Rate	Proposed	
		FSR Rider		iio.gy itatoo	Increase to	Effective		lorgy runoc	Increase to	Rates			Increase to	Rates	_x.otg	orgy reacce	Increase to	Rates	
				Total Rate	Recover	April 1,		Total Rate	Recover	Effective		Total Rate	Recover	Effective		<b>Total Rate</b>	Recover	Effective	
			Base Rate	w/Rider	Rev. Req.	2025	Base Rate	w/Rider	Rev. Req.	April 1, 2025	Base Rate	w/Rider	Rev. Req.	April 1, 2025	Base Rate	w/Rider	Rev. Req.	April 1, 2025	
		cents/kWh	cents/kWh	cents/kWh		cents/kWh	cents/kWh	cents/kWh		cents/kWh	cents/kWh	cents/kWh		cents/kWh	cents/kWh	cents/kWh		cents/kWh	
		Α	В	C=A+B	D	E=Cx(1+D)	В	C=A+B	D	E=Cx(1+D)	В	C=A+B	D	E=Cx(1+D)	В	C=A+B	D	E=Cx(1+D)	
											,				,				
501	Cambridge Bay	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89	9.5%	62.31	95.18	96.53	9.5%	105.73	
502	Gjoa Haven	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89	9.5%	62.31	95.18	96.53	9.5%	105.73	
503	Taloyoak	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89	9.5%	62.31	95.18	96.53	9.5%	105.73	
504	Kugaaruk	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
505	Kugluktuk	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89	9.5%	62.31	95.18	96.53	9.5%	105.73	
601	Rankin Inlet	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
602	Baker Lake	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
603	Arviat	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
604	Coral Harbour	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
605		1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53		105.73	
606		1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
607	Naujaat	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
701	Iqaluit	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
702		1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
703		1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53		105.73	
704	,	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
705		1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
706		1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
707	Sanirajak	1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53		105.73	
708		1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
709		1.35	67.33	68.68		75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
710		1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
711	Clyde River	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53		105.73	
712		1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%		55.54	56.89		62.31	95.18	96.53	9.5%	105.73	
713	Sanigiluag	1.35	67.33	68.68	9.5%	75.23	102.21	103.56	9.5%	113.43	55.54	56.89	9.5%	62.31	95.18	96.53	9.5%	105.73	

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711 Clyde River

712 Grise Fiord

713 Sanikiluaq

Change from

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#### Schedule 8.2: 2025/26 Rate Proposal – Streetlights

	Evietina	Rates (\$/n	nonth)	2025/26 Pro	nnosed Rate	es (\$/month)	Existing Rates
	LXISTING	LED	ilonen,	2023/2011	LED	εσ (ψ/πιοπίπ)	All Types
	60W	90W	210W	60W	90W	210W	All Types
FSR Rider (\$/month)	0.27	0.41	0.95				
501 Cambridge Bay	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
502 Gjoa Haven	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
503 Taloyoak	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
504 Kugaaruk	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
505 Kugluktuk	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
601 Rankin Inlet	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
602 Baker Lake	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
603 Arviat	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
604 Coral Harbour	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
605 Chesterfield Inlet	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
606 Whale Cove	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
607 Naujaat	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
701 Iqaluit	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
702 Pangnirtung	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
703 Kinngait	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
704 Resolute Bay	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
705 Pond Inlet	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
706 Igloolik	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
707 Sanirajak	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
708 Qikiqtarjuaq	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
709 Kimmirut	25.08	37.61	87.75	28.62	42.92	100.16	12.9%
710 Arctic Bay	25.08	37.61	87.75	28.62	42.92	100.16	12.9%

28.62

28.62

28.62

42.92

42.92

42.92

87.75

87.75

87.75

25.08

25.08

25.08

37.61

37.61

37.61

12.9%

12.9%

12.9%

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Schedule 8.3.1:
Base Rate Change and Proof of Revenue: 2025/26 Forecast Electricity Sales (MWh)

			By Rate Class									
Line	Plant	Plant Name		Domestic			Commercial	Streetlights	Total Sales			
No.	No.	Traint Name	Non- Government	Government	Total	Non- Government	Government	Total				
			Α	В	C=A+B	D	Е	F=D+E	G	H=C+F+G		
1	501	Cambridge Bay	2,029	1,980	4,009	4,673	2,609	7,282	90	11,381		
2	502	Gjoa Haven	571	2,076	2,647	977	1,870	2,847	34	5,528		
3	503	Taloyoak	294	1,643	1,936	850	1,253	2,103	20	4,059		
4	504	Kugaaruk	377	1,341	1.717	953	949	1,903	13	3,633		
5	505	Kugluktuk	873	1,988	2,862	1.350	1.678	3,028	44	5,933		
6	601	Rankin Inlet	3.409	2,473	5,882	6,474	6,742	13,216	84	19,181		
7	602	Baker Lake	1,496	2,667	4,163	2,173	2,150	4,323	55	8,542		
8	603	Arviat	1.378	2,901	4,279	2,043	2,383	4,425	58	8,763		
9	604	Coral Harbour	507	1,146	1,653	818	1,103	1,921	26	3,600		
10	605	Chesterfield Inlet	221	603	824	514	645	1,159	14	1,997		
11	606	Whale Cove	183	590	773	479	682	1,160	18	1,951		
12	607	Naujaat	337	1,533	1,870	967	1,393	2,360	22	4,252		
13	701	Iqaluit	12.768	5,269	18,037	22,921	17,136	40,058	180	58,275		
14	702	Pangnirtung	765	2,125	2,890	1,386	1,920	3,306	67	6,263		
15	703	Kinngait	546	1,682	2,228	1,192	1,986	3,178	38	5,443		
16	704	Resolute Bay	253	362	615	1,119	2,240	3,359	20	3,994		
17	705	Pond Inlet	719	2,462	3,181	1,367	1,834	3,201	36	6,418		
18	706	Igloolik	847	2,380	3,227	1,217	2,015	3,232	29	6,489		
19	707	Sanirajak	244	1,287	1,531	857	913	1,770	18	3,318		
20	708	Qikiqtarjuaq	179	842	1,021	619	835	1,454	16	2,491		
21	709	Kimmirut	195	654	849	446	605	1,051	14	1,914		
22	710	Arctic Bay	390	1,152	1,542	502	1,059	1,561	23	3,126		
23	711	Clyde River	423	1,522	1,945	458	1,318	1,777	18	3,739		
24	712	Grise Fiord	122	245	367	247	566	813	10	1,190		
25	713	Saniqiluaq	298	1,756	2,054	698	1,110	1,807	16	3,876		
26		Total	29,425	42,677	72,102	55,300	56,993	112,293	961	185,356		

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Schedule 8.3.2:
Base Rate Change and Proof of Revenue: 2025/26 Proposed Base Rates (cents/KWh)

		Domes	stic	Comme	ercial	Streetlights (\$ per month per bulb)			
Plant No.	Plant Name	Non-Government / Municipal Tax- Based	Government	Non-Government / Municipal Tax- Based	Government	LED 60W	LED 90W	LED 210W	
		Α	В	С	D	E	F	G	
501	Cambridge Bay	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
502	Gjoa Haven	75.23	113.43		105.73	28.62	42.92	100.16	
503	Taloyoak	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
504	Kugaaruk	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
505	Kugluktuk	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
601	Rankin Inlet	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
602	Baker Lake	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
603	Arviat	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
604	Coral Harbour	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
605	Chesterfield Inlet	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
606	Whale Cove	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
607	Naujaat	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
701	lqaluit	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
702	Pangnirtung	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
703	Kinngait	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
704	Resolute Bay	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
705	Pond Inlet	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
706	lgloolik	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
707	Sanirajak	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
708	Qikiqtarjuaq	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
709	Kimmirut	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
710	Arctic Bay	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
711	Clyde River	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
712	Grise Fiord	75.23	113.43	62.31	105.73	28.62	42.92	100.16	
713	Saniqiluaq	75.23	113.43	62.31	105.73	28.62	42.92	100.16	

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Schedule 8.3.3:
Base Rate Change and Proof of Revenue: Revenue Forecast at 2025/26 Proposed Rates (\$000)

				By Rate Class								Customer Charges and Demand Revenue			
				Domestic			Commercial						_		
Line No.	Plant No.	Plant Name	Plant Name	Non- Government	Government	Total	Non- Government	Government	Total	Streetlights	Customer Charges	Demand Revenue	Total	Total	
			Α	В	C=A+B	D	E	F=D+E	G	Н	I	J=H+I	K=C+F+G+J		
1	501	Cambridge Bay	1,526	2,246	3,772	2,912	2,759	5,671	129	343	581	924	10,495		
2	502	Gioa Haven	430	2,354	2,784	609	1.977	2,586	48	184	218	401	5,820		
3	503	Taloyoak	221	1,864	2,784	530	1,325	1,854	29	125	289	414	4,381		
4	504	Kugaaruk	283	1,521	1,804	594	1.004	1,598	19	112	180	292	3,713		
5	505	Kugluktuk	657	2,255	2,913	841	1,774	2,615	62	223	257	480	6,070		
6	601	Rankin Inlet	2.565	2,805	5,370	4,034	7,129	11,163	119	467	830	1,297	17,949		
7	602	Baker Lake	1,126	3,025	4,151	1,354	2,274	3,628	79	310	550	860	8,718		
8	603	Arviat	1,720	3,290	4,737	1,273	2,520	3,792	83	332	326	658	8,861		
9	604	Coral Harbour	382	1,300	1,681	509	1,166	1,676	37	124	134	259	3,654		
10	605	Chesterfield Inlet	166	684	850	321	682	1.002	20	65	195	260	2,132		
11	606	Whale Cove	138	669	807	298	721	1,019	26	60	102	162	2,014		
12	607	Naujaat	253	1,739	1,992	603	1,473	2,076	32	128	152	280	4,380		
13	701	Igaluit	9.605	5.977	15,582	14,283	18.119	32,402	257	1,581	2,403	3,984	52,225		
14	702	Pangnirtung	576	2,410	2,986	864	2,030	2,893	96	219	182	401	6,376		
15	703	Kinngait	411	1.907	2,318	743	2,100	2,842	54	194	238	432	5,647		
16	704	Resolute Bay	190	411	601	697	2,369	3,066	28	44	236	280	3,976		
17	705	Pond Inlet	541	2,793	3,334	852	1,939	2,791	51	213	250	463	6,639		
18	706	Igloolik	637	2,700	3,337	758	2,131	2,889	42	222	253	475	6,743		
19	707	Sanirajak	183	1,460	1,643	534	965	1,499	26	103	148	251	3,419		
20	708	Qikiqtarjuaq	135	955	1,090	386	883	1,269	23	89	158	247	2,628		
21	709	Kimmirut	146	742	889	278	640	918	21	67	84	151	1,978		
22	710	Arctic Bay	294	1,307	1,600	313	1.119	1,432	32	114	157	272	3,336		
23	711	Clyde River	318	1.727	2,045	286	1.394	1,679	25	131	166	297	4,047		
24	712	Grise Fiord	92	278	370	154	598	752	14	32	59	91	1,227		
25	713	Saniqiluaq	224	1,991	2,216	435	1,173	1,608	22	124	140	264	4,110		
26		Total	22,136	48,410	70,546	34,460	60,261	94,721	1,375	5,608	8,288	13,896	180,537		

 27
 2025/26 GRA Revenue Requirement
 183,928

 28
 Less: 2025/26 GRA Non-electricity Revenue
 3,391

 29
 2025/26 GRA Firm Rate Revenue Requirement
 180,537

 30
 Shortfall/Surplus at Proposed Rates
 0

#### 1 9.0 RESPONSE TO URRC RECOMMENDATION

- 2 9.1 INTRODUCTION
- 3 This chapter sets out the Corporation's responses to the recommendations identified in
- 4 the following URRC Reports:
- 2022-02: 2022/23 GRA Report;
- 2021-02: MPPA Report for New Power Plants at Cambridge Bay, Gjoa Haven
   and Igloolik, And Genset Replacement at Igaluit;
- 2022-01: MPPA for New Power Plants at Chesterfield Inlet and Kugaaruk;
- 2022-03: Heat Rate Formular Revision;
- 2023-01: Net Metering Program Report; and
- 2024-01: MPPA Report for Genset Replacement in Kugaaruk, Coral Harbour,
- 12 Chesterfield Inlet, Whale Cove and Pond Inlet.
- 13 9.2 URRC REPORT 2022-02 ON QEC'S 2022/23 GRA
- 14 9.2.1 FACTORS INFLUENCING CUSTOMER FORECAST
- 15 The URRC notes that QEC's customer forecasting methods are relatively simple,
- 16 relying on actual customer data and Nunavut Bureau of Statistics population
- projections. So long as the communities and rate classes remain consistent, and
- 18 the forecasts remain relatively accurate, the URRC sees little reason to recommend

- 1 changes to the baseload customer forecast. The URRC recommends that in future
- 2 GRAs, QEC provide more information about the other factors it reviewed to
- 3 determine if adjustments were considered and/or made to the baseload customer
- 4 forecast for any communities.

#### QEC's Response:

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- 6 In addition to reviewing QEC's actual customer data and population growth projections
- 7 as a determinant for customer forecasts numbers, QEC reviews the Government of
- 8 Nunavut's capital plan, monitors news releases, and planning and licensing documents
- 9 for resource developments to determine whether further adjustments should be made to
- 10 the customer forecast for each community. Once expectations of additional customers
- 11 are established, QEC communicates with the appropriate entity to determine the load
- 12 capacity that would result from the project, timelines for implementation and impact on
- 13 QEC's customer forecast. These adjustments are only incorporated into the load forecast
  - when it is reasonably certain such new developments will proceed and are of material
- 15 size.

- 16 As noted in Chapter 3 of the current Application, QEC incorporated customer and load
- 17 adjustments relating to the Nunavut Housing Corporation NU3000 housing plan to
- develop 3000 new housing units across the territory by 2030. The estimated load arising
- 19 from the project is expected to significantly impact QEC's load forecast and as such was
- 20 included as an adjustment to the customer forecast based on the additional units
- 21 expected for each community.

#### 1 9.2.2 DRIVERS IMPACTING USAGE PER CUSTOMER

- 2 It is unclear to the URRC at this time what the drivers are for UPC and/or how to
- 3 quantify them. The URRC recommends that in the next GRA, QEC provide a more
- 4 detailed quantitative analysis or assessment of the factors affecting UPC.

- 6 The average annual usage per customer (UPC) is calculated for each rate class by
- 7 dividing actual total sales by average annual customer counts. This provides an indication
- 8 of customer electricity consumption and estimates the average weather-normalized
- 9 electricity use per customer in each community. The UPC can be influenced by a variety
- 10 of factors, including:
- 11 Weather
- Number of individuals in a household
- Appliances and devices used in the household
- Electricity price
- 15 In estimating the UPC for a forecast period, QEC uses a multi-year (3-year) historic
- 16 average annual UPC to normalize for variations due to weather conditions for each rate
- 17 class and this provides a sound basis for forecasting expected electricity consumption.
- 18 Figures 1 and 2 show the actual average UPC changes over the last 10-year period
- 19 (2014/15 2023/24) for QEC's domestic and commercial customers in three larger
- 20 communities. Domestic customers in all three communities show an overall downward

- 1 trend in average consumption. Commercial customers in Rankin Inlet and Cambridge Bay
- 2 also show a downward trend over this period while use per commercial customer in Iqaluit
- 3 has remained relatively flat.

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Figure 9.1: Domestic UPC Trend

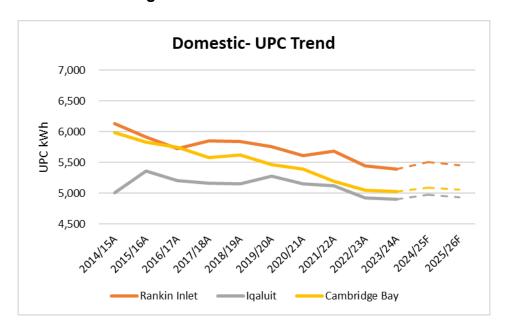
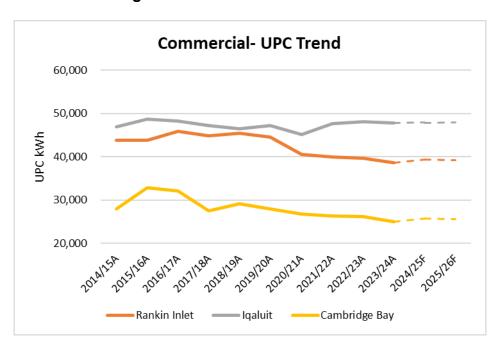


Figure 9.2: Commercial UPC Trend



- 1 QEC's sales information is based on consumption registered at the customer's meter.
- 2 QEC does not have visibility into the sources of consumption that drive total electricity
- 3 use for each customer so cannot provide additional quantitative information on drivers of
- 4 changes in the UPC over time.

#### 5 9.2.3 FORECAST OF PRODUCTION FUEL COST

- 6 The URRC understands the workings of the FSR fund and accepts that it will adjust
- 7 for differences in the cost of diesel, thereby keeping QEC and its customers
- 8 "whole" with respect to the cost of diesel. However, the URRC recommends that
- 9 QEC make efforts to forecast the cost of diesel in its GRA forecast so as to
- minimize the use of the FSR as much as possible and to be in a position to explain
- 11 to customers any changes that flow to them.

- 13 With respect to forecast cost of diesel, QEC is a price taker and relies on prices set by
- 14 the Petroleum Products Division (PPD) of the Government of Nunavut. QEC has no
- 15 access to fuel forecast data/information other than what is available from PPD.
- 16 In an effort to accurately estimate the cost of diesel over the test period, the Corporation
- 17 requested information from PPD on its pricing setting methodologies and forecasting
- 18 practices. In addition, a specific request was made for projected fuel prices for production
- 19 fuel (bulk and nominated) effective April 1, 2025 and throughout the fiscal year to enable
- 20 QEC accurately reflect true fuel cost in the revenue requirements. In response, PPD
- 21 noted that its pricing is heavily influenced by the price of oil and exchange rates and given

- 1 the inherent volatility in the market, making accurate long-term projections of fuel cost is
- 2 challenging.
- 3 Regarding the fuel price for April 1, 2025 and onwards, a preliminary and non-binding
- 4 guidance was provided by PPD suggesting that current prices might be maintained in the
- 5 fall due to reduced forecast landed costs for the 2024 resupply season. Based on this
- 6 information, the Corporation used the most recently available actual nominated and bulk
- 7 fuel prices in forecasting total diesel cost for the test period.
- 8 Further, in accordance with the Ministerial instruction dated May 30, 2014, QEC prepares
- 9 forecasts of the balances in the Fuel Stabilization Rate Fund (FSRF) and files an update
- 10 with the responsible Minister showing a comparison of actual vs GRA fuel prices and
- indicating if the balance in the FSRF is expected to exceed the threshold of plus or minus
- 12 \$1 million within six months, which would require a fuel rider to address the differences
- 13 between forecast and actual prices.

#### 14 9.2.4 ARO REPORTING REQUIREMENTS

- 15 The URRC recommends that in the next GRA, QEC provide details regarding its
- 16 reporting requirements of asset retirement obligations as a result of work on
- 17 **PS3280**.

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- 19 On April 1, 2022, the Corporation adopted Canadian Public Sector Accounting Standard
- 20 (PSAS) PS 3280 Asset Retirement Obligations (ARO). This standard requires public
- 21 sector entities to recognize liabilities for legal obligations to incur costs associated with

- 1 the retirement of tangible capital assets on their acquisition, construction, development,
- 2 or through their normal use and to expense those costs systematically over the life of the
- 3 asset. The Corporation recognized ARO relating to buildings owned by the Corporation
- 4 that contain asbestos, lead, mercury or polychlorinated biphenyls (PCBs) as explained in
- 5 the Corporation's 2022/23 annual report.<sup>25</sup> For 2025/26, QEC calculated ARO accretion
- of \$0.178 million, which has been added to the 2025/26 test year amortization expense.

#### 7 9.2.5 DEPRECIATION STUDY

- 8 The URRC recommends that QEC provide an updated depreciation study in its next
- 9 **GRA**.

#### 10 **QEC's Response**:

- 11 Please see Appendix F which provides an updated depreciation study addressing the
- 12 above recommendation.

#### 13 **9.2.6 LONG-TERM DEBT**

- 14 The URRC recommends that in the next GRA, QEC provide a long-term forecast of
- 15 its debt requirements and its plan for financing them.

- 17 In 2022, the Corporation entered into a loan agreement with the Government of Nunavut
- 18 (GN) for a total funding of \$75 million in addition to the \$20 million GN loan to the

<sup>&</sup>lt;sup>25</sup> QEC 2022/23 Annual Report, p. 51, Note 2 to the Financial Statements.

- 1 Corporation issued in the 2019/20 fiscal year. The \$75 million loan was issued to QEC in
- three tranches of \$25 million in each of 2022/23, 2023/24 and 2024/25. The Corporation
- 3 completed the payment of other capital loans with the exception of Facility H, a non-
- 4 revolving committed loan, which has a mid-year remaining balance of \$129.0 million in
- 5 the 2025/26 fiscal year.
- 6 Currently, the Corporation is in discussions with the GN regarding its debt requirements,
- 7 debt repayments and plans for financing its long-term debt.
- 8 The GN loans interest is based on the operating account's deposit paid by the GN's
- 9 banker plus 0.15 percent per annum. Facility H interest is calculated at a variable rate of
- 10 prime minus 0.5 percent per annum. Financing cost of QEC's long-term debt is included
- in the Corporation's revenue requirement as detailed in Chapter 4 of the Application.

#### 12 9.2.7 PLANT RETIREMENTS, REMOVAL AND REMEDIATION OF SITES/ASSETS

- 13 The URRC has requested information regarding plant retirements and
- 14 removal/disposal work in the context of recent MPPAs and found the responses
- 15 somewhat concerning regarding the apparent lack of details regarding the timing
- and scope of future removal and reclamation work. The URRC recommends that
- 17 QEC provide enhanced information in future GRAs, particularly in relation to major
- capital projects which will result in the retirement, removal, and remediation of old
- 19 sites and assets.

- 2 Future removal and site restoration work in relation to QEC's sites and assets will be
- 3 addressed under the Public Sector Accounting Standard (PSAS) PS 3280 related to ARO,
- 4 which the Corporation adopted on April 1, 2022 as explained in the Corporation's 2022/23
- 5 annual report.<sup>26</sup>
- 6 9.2.8 REVIEW OF LEAD-LAG STUDY AND DETERMINATION OF WORKING CAPITAL
- 7 The URRC considers the 2022/23 working capital requirement to be reasonable;
- 8 however, URRC recommends that QEC provide validation or review of the lead-lag
- 9 study and determination of working capital in its next GRA.
- 10 **QEC's Response**:
- 11 Considering the timelines and scope of the Application, QEC prioritized completion of a
- depreciation study for the purposes of the current filing. The Corporation intends to update
- the lead-lag study for purposes of its working capital calculation in the next GRA.
- 14 9.2.9 CUSTOMER AND DEMAND CHARGES
- 15 The URRC is not convinced that the potential bill impact on a very low consumption
- 16 customer, as portrayed in QEC's example, is sufficient reason for not beginning to
- move toward a higher RCC with respect to demand and customer charges. The
- 18 URRC also disagrees that it is a complex change for customers. Customers would

<sup>&</sup>lt;sup>26</sup> QEC 2022/23 Annual Report, p. 51, Note 2 to the Financial Statements.

- see one portion of their bill increase, while another portion would decrease. If
  anything, it should result in a more stable monthly bill for customers throughout
  the year as there would be less volatility caused by changes in electricity
  consumption. The URRC also notes that increasing the demand and customer
  charges would also reduce monthly revenue volatility for QEC. The URRC
  considers that the risk of volatility posed to QEC and/or the risk of over/under
  recovery of its revenue requirement would be reduced by increasing demand and
- 8 customer charges.
- 9 The URRC is also unclear why changing demand and customer charges, that are
- already levelized across the territory, is a significant undertaking for QEC. It would
- 11 be helpful if QEC could explain this further to the responsible Minister and to the
- 12 URRC in the next GRA.

- 14 In light of the URRC's recommendations regarding the customer and demand charges,
- 15 QEC has undertaken a review of these fixed charges and is proposing an upward revision
- 16 for the 2025/26 test year. The Corporation's rate proposal reflecting revised customer and
- 17 demand charges is discussed in Chapter 8 of the Application.
- 18 The proposed changes to fixed charges are within the range of rates approved for the
- 19 utilities in other Canadian jurisdictions, including:

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- Maritime Electric Company: the current customer service charge ranges from
   \$24.57 to \$37.50 per month; demand charge rate of \$13.43/kW approved for the
   2023 2025 test period.<sup>27</sup>
- SaskPower: basic monthly charge set at \$29.99 for residential customers; demand
   charge at \$20.82/kVA standard rate.<sup>28</sup>
  - Hydro One Networks: effective January 2024, monthly customer service charge
    for residential service classification ranges from \$40 to \$139.59 based on customer
    location urban density (\$40), medium density (\$68.30) and low density (\$138.59)
    areas. Demand charge set for general service customers at \$11.9310/kW for urban
    density zone and \$20.5366/kW for areas not within the urban zone.<sup>29</sup>
    - ENMAX Power Corporation RRO rates: residential customers service charge of \$1.08033 per day, or approximately \$30/month (comprising of admin charge at \$0.3166 per day plus a distribution access service charge of \$0.763730); small commercial customers service charge of \$2.026216 per day, or approximately \$61/month (comprising of admin charge at \$0.3042 per day plus a distribution access service charge of \$1.722016 per day).

<sup>&</sup>lt;sup>27</sup> Maritime Electric Company GRA, Decision Order UE23-04, Appendix A. Available at <u>order-ue23-04-gra-decision-order-april-24-2023.pdf (maritimeelectric.com)</u> (accessed November 13, 2024).

<sup>&</sup>lt;sup>28</sup> SaskPower Power Supply Rates. Available at <u>Power Supply Rates (saskpower.com)</u> (accessed November 13, 2024).
<sup>29</sup> Hydro One Networks Inc., OEB Partial Decision and Rate Order EB-2023-0039, Tariff of Rates and Charges pdf pg. 29-36. Available at <u>decision rate order HONI CIR (hydroone.com)</u> (accessed November 13, 2024).

<sup>&</sup>lt;sup>30</sup> ENMAX Power Corporation 2024 RRO Tariff and Rate Schedule. Available at <u>d9ff0be41eb44601aa4bd6cfd15fbea0</u> (enmax.com) ,<u>Distribution Tariff Rate Schedule</u> (accessed November 13, 2024).

#### 1 9.2.10 SUBDIVIDING EXISTING RATE CLASSES

- 2 Similarly, the URRC recommends that in future GRAs QEC consider subdividing
- 3 its existing rate classes if, for example, the discrepancy between low and high
- 4 consumption customers is a barrier to making changes to existing rates. The URRC
- 5 notes that QEC is reluctant to change demand and customer charges, in part due
- 6 to potential bill impacts on low consumption customers.

#### 7 QEC's Response:

- 8 The Corporation does not see a need for subdivision of its existing rate classes at this
- 9 time, considering the proposed changes to demand and customer charges. Subdividing
- 10 existing rate classes will add complexity to QEC's billing system and its administration,
- increasing a risk for potential billing errors with limited benefit to achieving other rate
- 12 design objectives. The Corporation notes that QEC's existing customer classes are
- 13 similar to those of NTPC's thermal rate zone.

#### 14 9.2.11 BILLING, CREDIT AND PAYMENT ISSUES

- 15 The URRC notes that some of the public submissions raised concerns about
- 16 billing, credit and/or payment issues. Without getting into the specifics of the
- 17 submissions, the URRC recommends that QEC consider improvements to its
- 18 billing and payment processing systems. The URRC also notes that QEC raised
- 19 concerns about administrative efficiency and customer reaction to rate and billing
- 20 impacts.

## 1 QEC's Response:

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QEC continues to work with its customers regarding concerns raised about billing and payment issues. QEC's billing system flags any customer consumption that is abnormally higher or lower than the customer's usual usage, which is reviewed by the billing clerk and included in the list of accounts to be re-read by the plant operators. Further, bills already provide explanation of the monthly charges by component to assist customers with better understanding their bills and to be able to make an informed adjustments to

their power consumption patterns. As well, QEC is currently in the process of upgrading

- 9 its billing system to improve its billing and payment process.

## 10 9.2.12 ENERGY LITERACY AND USER-FRIENDLY LANGUAGE

- The URRC recommends that QEC engage customers to improve energy literacy and to improve its billing/invoicing so that it is more readable and user friendly.

  Compared to other jurisdictions, the QEC rate structure is already quite straightforward but perhaps the introduction of user-friendly language, non-technical easy-to-translate presentation of energy usage, impacts and explanation
- of monthly charges would be beneficial to both QEC and its customers.

# 17 **QEC's Response**:

QEC customer bills already provide explanations of the monthly charges by component to assist customer with better understanding their bills and to be able to make informed adjustments to their power consumption patterns. Further, QEC works with the Climate Change Secretariat of the GN for the Energy Wise campaign, including periodically

- 1 distributing pamphlets when bills are sent out to customers. More information on the
- 2 Energy Wise campaign is available at https://www.gov.nu.ca/en/newsroom/be-energy-
- 3 wise-sustainable-future-2024-04-12

#### 4 9.2.13 MONITORING CUSTOMERS CONSUMPTION PATTERNS

- 5 The URRC also recommends that QEC increase its monitoring to help identify
- 6 customer consumption usage/patterns that are noticeably different than the norm
- 7 for a particular customer or compared to other customers or average energy
- 8 consumers. The URRC notes that this type of monitoring is done to flag/identify
- 9 metering issues or other types of usage matters.

## 10 **QEC's Response**:

- 11 QEC's billing system already has a function where it flags any customer consumption that
- 12 is abnormally higher or lower than the customer's usual usage, which is reviewed by the
- billing clerk and included in the list of accounts to be re-read by the plant operators.

## 14 **9.2.14 DATA PRIVACY**

- 15 The URRC is also aware of some potential payment processing and data privacy
- 16 concerns. The URRC recommends that QEC explore methods to avoid having
- 17 customers provide credit card information over the telephone, email or on an
- unsecure form for automatic billing. The URRC understands that this may pose a
- 19 challenge for QEC and certain customers, however it would reduce exposing QEC
- and its customers to unnecessary financial, data and privacy risks.

## 1 QEC's Response:

- QEC continues to work with its customers regarding concerns raised about billing and payment issues and is currently in the process of upgrading its billing system to improve its billing and payment process. Further, the Corporation notes that the current process already provides several easy options for customers to pay their bills other than providing the credit card information over the telephone or any unsecure form of billing. This includes paying in person at a local payment agent (Northern, Co-op, or bank) available
- 8 in all communities, through online banking and at the local Customer Care offices as
- 9 published on the Corporation's website at <a href="https://www.qec.nu.ca/customer-">https://www.qec.nu.ca/customer-</a>
- 10 <u>care/accounts-and-billing/ways-to-pay-your-bill.</u>

### 9.2.15 MECHANISM FOR LODGING COMPLAINTS ON CUSTOMER BILLING ISSUES

- 12 The URRC also notes that a GRA seems to be the only mechanism to voice
- customer billing issues, which is not the intended purpose of a GRA. The URRC
- 14 recommends that the responsible Minister and QEC develop a mechanism for
- 15 these types of concerns/complaints to be voiced and administered, outside of GRA
- 16 proceedings.

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- 18 The Corporation does not agree that a GRA is the only mechanism available to customers
- 19 to voice concerns about their bills. Customers have a number of options available to them
- 20 for asking questions or raising concerns about their bills:

- QEC publishes contact information via media releases so that customers can
   submit their concerns and complaints to QEC.
- 2. Customers are provided with a customer care contact number on their monthlybills
- 5 3. QEC's website provides support and contact information for customers.
- 6 The Corporation agrees with the URRC that the intended purpose of the GRA
- 7 consultations could be better focused on the GRA. Telephone and email contact
- 8 information for customers to address other types of questions could be provided as part
- 9 of advertising for the GRA consultations.

## 10 9.2.16 MECHANISM FOR CIPP/IPP MATTERS

- 11 The URRC notes that some public submissions raised concerns about the CIPP
- 12 and the yet-to-be released/proposed IPP programs. The URRC appreciates the
- 13 submissions from the public and the responses from QEC, however these matters
- 14 are not under consideration in the GRA....
- 15 The URRC recommends that, until such time that CIPP/IPP applications are filed,
- 16 the responsible Minister and QEC develop a mechanism for these types of
- 17 concerns to be voiced and administered, outside of a GRA.

- 19 The Corporation notes that Cabinet approved the final IPP policy in December 2023 with
- 20 a program period until December 2026 as discussed in Chapter 2 of the Application. As

- 1 a means to assist parties interested in the CIPP/IPP programs, QEC manages renewable
- 2 energy information and support requests through the email box
- 3 RenewableEnergy@qec.nu.ca.
- 4 QEC also publishes information on the CIPP/IPP programs, including answers to
- 5 frequently asked questions and program application forms on its website. Contact
- 6 information is also provided on the website.

## 7 9.2.17 ANNUAL REPORTING OF FINANCES AND OPERATIONS

- 8 The URRC directs that annual reporting, including regulatory schedules (similar to
- 9 what was submitted as GRA schedules 3.1 through 6.4), SAIDI/SAIFI information,
- and staffing levels (FTE complement and vacancies) and other information of
- 11 regulatory significance should commence after the end of the 2022/23 fiscal year.
- 12 The URRC directs that reporting be submitted within 180 days of the end of the
- 13 fiscal year for information purposes in accordance with URRC Rules of Procedure
- and Practice and Rate Setting Guidelines (March 2007, page 16).

- 16 On March 7, 2024, QEC filed correspondence with the URRC entitled "2022/23 QEC
- 17 Annual Reporting of Finances and Operations" for information purposes as committed by
- 18 the Corporation following the 2022/23 GRA review. QEC intends to continue with this
- annual reporting filing within 180 days of the end of the fiscal year, however this may also

- 1 take longer time depending on the availability of the actual information and QEC's
- 2 resources.
- 3 9.3 URRC REPORT 2021-02 ON QEC'S MPPA FOR NEW POWER PLANTS AT
- 4 CAMBRIDGE BAY, GJOA HAVEN AND IGLOOLIK, AND GENSET REPLACEMENT
- 5 **AT IQALUIT**
- 6 9.3.1 ASSET REMOVAL AND RETIREMENT
- 7 The URRC recommended that at the time of the next applicable GRA, QEC provide
- 8 details about the removal of assets, related to the four MPPAs, that are no longer
- 9 used and required to be used (e.g. gensets, buildings and ancillary equipment).
- 10 This should include the retirement of the assets and associated dismantling and
- 11 clean-up costs.
- 12 **QEC's Response**:
- 13 Future removal and site restoration work in relation to QEC's sites and assets will be
- 14 addressed under the PSAS PS 3280 related to ARO, which the Corporation adopted on
- April 1, 2022 as explained in the Corporation's 2022/23 annual report.<sup>31</sup>
- 16 9.3.2 CLEAN UP COSTS AND ASSESSMENT OF RESIDUAL LIABILITY
- 17 The URRC recommended that QEC provide information to the URRC about the
- detailed plans, cost and status of the cleanup at the existing power plants, an

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<sup>&</sup>lt;sup>31</sup> QEC 2022/23 Annual Report, p. 51, Note 2 to the Financial Statements.

- 1 assessment of residual liability for the sites that have unacceptable structural
- 2 issues after removal from service, and any plans for redeployment/reutilization of
- 3 the gensets in the next GRA.
- 4 QEC's Response:
- 5 Future removal and site restoration work in relation to QEC's sites and assets will be
- 6 addressed under the PSAS PS 3280 related to ARO, which the Corporation adopted on
- 7 April 1, 2022 as explained in the Corporation's 2022/23 annual report.<sup>32</sup>
- 8 9.3.3 AEF FUNDS AND RELATED PROJECTS
- 9 The URRC recommended that information regarding the AEF funds used,
- proposed/applied for, as well as plans for potential projects that would make use
- of the remaining funds should be part of QEC's corporate strategic planning
- 12 process and made available to the Minister Responsible and in the next GRA.
- 13 **QEC's Response**:
- 14 The Corporation notes that this process is already in place. In particular, the Minister
- responsible for QEC is provided with quarterly briefing notes and any revisions related to
- 16 the budget and scope of projects are channeled to the FMB through the Minister
- 17 responsible for QEC. Accordingly, the responsible Minister is always kept informed about
- 18 activities related to AEF funded projects.

<sup>&</sup>lt;sup>32</sup> QEC 2022/23 Annual Report, p. 51, Note 2 to the Financial Statements.

#### 1 9.3.4 POWER PLANTS ASSESSMENT AND REPLACEMENT

- 2 The URRC recommended that QEC advise the Minister of its plans and timing to
- 3 improve or replace the power plants at the remaining communities that have power
- 4 plants more than 40 years old in order that redeployment opportunities can be
- 5 properly assessed. This information should also be provided in the next GRA as
- 6 supplemental information stemming from those plans and assessments.

- 8 Aged power plant replacement plans and schedule are maintained within the QEC's 10-
- 9 year capital plan, which is communicated to the responsible Minister on a regular basis.
- 10 It is noted however, that the timing of the projects included in the 10-year capital plan are
- subject to change based on the ability to fund these projects.
- 12 9.4 URRC REPORT 2022-01 ON QEC'S MPPA FOR NEW POWER PLANTS AT
- 13 CHESTERFIELD INLET AND KUGAARUK
- 14 9.4.1 STATUS AND COST OF CLEANUP FOR EXISTING POWER PLANTS
- 15 The URRC recommended that QEC provide information about the detailed plans,
- 16 cost and status of the cleanup at the existing power plants, an assessment of
- 17 residual liability for the sites that have unacceptable structural issues after removal
- 18 from service, and any plans for redeployment/reutilization of the gensets in the
- 19 next applicable GRA.

## 1 QEC's Response:

- 2 The proposed new power plants project for Chesterfield Inlet and Kugaaruk were placed
- 3 on hold due to insufficient funding to cover project costs under the AEF funding program.
- 4 Hence, the existing plants have not been removed from service.
- 5 However, a genset replacement project is currently being undertaken for these
- 6 communities.

## 7 9.4.2 EXISTING POWER PLANTS REPLACEMENT AND IMPROVEMENT

- 8 The URRC recommended that QEC advise the Minister of its plans and timing to
- 9 improve or replace the power plants at the remaining communities that have power
- 10 plants more than 40 years old or have structural damage to the building site in
- order that redeployment opportunities can be properly assessed. This information
- 12 should also be provided in the next GRA as supplemental information stemming
- 13 from those plans and assessments.

## 14 **QEC's Response**:

- 15 Aged power plant replacement plans and schedule are maintained within the QEC's 10-
- 16 year capital plan, which is communicated to the responsible Minister on a regular basis.
- 17 It is noted however, that the timing of the projects included in the 10-year capital plan are
- subject to change based on the ability to fund these projects.

## 19 9.5 URRC REPORT 2022-03 ON QEC'S HEAT RATE FORMULAR APPLICATION

#### 1 9.5.1 DHS REVENUE AND OPERATING EXPENSES

- 2 The URRC notes that rate base amounts in the GRA expressly state that DHS
- 3 amounts have been excluded. The URRC notes that QEC has been excluding
- 4 revenue and expenses related to DHS, however it would be helpful if QEC provided
- 5 the amount of DHS O&M and 'shared O&M expenses' it has deducted from its gross
- 6 O&M amounts in future GRAs. The URRC recommends that QEC identify DHS
- 7 amounts excluded/deducted from its revenue requirement in future GRAs.
- 8 QEC's Response:
- 9 The 2025/26 forecast non-fuel operating and maintenance expenses exclude residual
- heat related expenses in the amount of \$0.928 million as noted in Chapter 4.
- 11 9.6 URRC REPORT 2023-01 ON QEC'S NET METERING REPORT
- 12 9.6.1 STANDARD OF SERVICE FOR NMP PROJECTS
- 13 Similarly, the URRC is interested in ensuring cost accountability regarding NMP
- 14 investments is based on a standard level of service. The URRC notes that Section
- 4.1 of the T&Cs address cost responsibility in a general way, however, it is not clear
- 16 to the URRC how the general language in Section 4.1 is sufficient to address
- 17 circumstances where an NMP customer chooses to install capacity that greatly
- 18 exceeds its own needs. The URRC considers that non-NMP customers should not
- be burdened with facility costs that are solely for the benefit of NMP customers.
- 20 Alternatively, NMP customers should not be discouraged from making investments
- 21 by having to bear more cost than is required for service. The URRC recommends

- 1 that QEC provide more information about a standard level of service related to the
- 2 connection of NMP projects in its next GRA or NMP application.
- 3 **QEC's Response**:
- 4 Under QEC's net metering program (NMP), the size of the connected renewable
- 5 generation system cannot exceed 15 kW. Interested customers are responsible for all the
- 6 expenses of utilizing this program, including purchasing, installing, and maintaining their
- 7 renewable generation systems. Any installed capacity above 15 kW by an NMP customer
- 8 would be a behind-the-meter installation by the customer and would not be eligible to
- 9 receive a credit from QEC for the surplus energy generated into a community's shared
- 10 power distribution system. Accordingly, there is no burden on non-NMP customers from
- 11 facility costs that are solely for the benefit of NMP customers.
- 12 9.7 URRC REPORT 2024-01 ON QEC'S MPPA FOR GENSET REPLACEMENT
- 13 9.7.1 STATUS OF GENSET REPLACEMENT PROJECTS
- 14 The URRC recommended that QEC provide information about the statuses of the
- 15 five genset replacements in the next applicable general rate application (GRA).
- 16 **QEC's Response**:
- 17 The capital projects implementation progress information is provided below.
- Kugaaruk Genset Replacement Project: The contract has been awarded and
- 19 genset has been purchased. The installation is scheduled for summer 2025 with
- commissioning in December 2025 and project close out by March 2026.

- Coral Harbour Genset Replacement Project: The contract has been awarded and
   genset has been purchased. The installation is scheduled for summer 2027 with
   commissioning in December 2027 and project close out by March 2028.
- Chesterfield Inlet Genset Replacement Project: The tender process is ongoing.
   The installation is scheduled for summer 2027 with commissioning in December
   2027 and project close out by March 2028.
- Whale Cove Genset Replacement Project: The tender process is ongoing. The
   installation is scheduled for summer 2026 with commissioning in December 2026
   and project close out by March 2027.
- Pond Inlet Genset Replacement Project: The tender evaluation process is in
   progress. The installation is scheduled for summer 2026 with commissioning in
   December 2026 and project close out by March 2027.

# APPENDIX A SUMMARY OF GENERATION SALES AND REVENUE

Schedule A-1

## Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

500 Total of Kitikmeot Area

							2025/26
Line		2022/23	2022/23	2022/23	2023/24	2024/25	Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	12,977	12,977	12,452	12,258	13,008	13,171
2	Customers	2,140	2,140	2,152	2,160	2,242	2,284
3	Av. MWh Sales/Cust.	6.06	6.06	5.79	5.67	5.80	5.77
4	Revenue (000s)	11,207	12,222	11,254	11,209	12,349	12,510
5	Cents/kWh	86.35	94.18	90.38	91.44	94.93	94.98
	Commercial						
6	Sales (MWh)	17,591	17,591	17,208	16,808	17,221	17,163
7	Customers	688	688	686	689	690	692
8	Av. MWh Sales/Cust.	25.55	25.55	25.07	24.39	24.94	24.81
9	Revenue (000s)	12,636	13,764	13,422	13,013	13,652	13,608
10	Cents /kWh	71.83	78.24	78.00	77.42	79.27	79.29
	Streetlights						
11	Sales (MWh)	291	291	201	201	201	201
12	Revenue (000s)	316	346	220	241	251	251
13	Cents /kWh	108.76	119.03	109.72	120.35	125.37	125.37
	Total						
14	Sales (MWh)	30,859	30,859	29,860	29,267	30,430	30,534
15	Customers	2,829	2,829	2,839	2,850	2,933	2,976
16	Revenue (000s)	24,159	26,331	24,896	24,463	26,252	26,370
17	Cents /kWh	78.29	85.33	83.37	83.59	86.27	86.36
	ENERATION (MWh)						
18	Total Station Service	599	599	741	663	646	646
19	Station Service - % of Gen.	1.8%	1.8%	2.3%	2.1%	2.0%	2.0%
20	Total Losses	1,712	1,712	1,648	2,110	1,781	1,845
21	Losses - % of Gen.	5.2%	5.2%	5.1%	6.6%	5.4%	5.6%
22	Total Generation	33,171	33,171	32,249	32,039	32,856	33,025
	Source						
23	Diesel Generation (MWh)	33,171	33,171	32,249	32,039	32,856	33,025
24	Diesel Efficiency (KWh/L)	3.65	3.65	3.57	3.59	3.62	3.62
25	Liters (000s)	9,077	9,077	9,039	8,918	9,071	9,116
	Peak						
26	Peak Load (KW)	6,020	6,020	5,543	5,505	5,759	5,749
27	Load Factor	63%	63%	66%	66%	65%	66%

Schedule A-1.1

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

501 Cambridge Bay

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	4,120	4,120	3,812	3,849	4,022	4,009
2	Customers	757	757	755	766	791	794
3	Av. MWh Sales/Cust.	5.45	5.45	5.05	5.02	5.08	5.05
4	Revenue (000s)	3,341	3,641	2,951	3,353	3,571	3,561
5	Cents/kWh	81.08	88.37	77.43	87.12	88.81	88.83
	Commercial						
6	Sales (MWh)	7,776	7,776	7,343	7,059	7,322	7,282
7	Customers	284	284	281	283	284	284
8	Av. MWh Sales/Cust.	27.38	27.38	26.16	24.94	25.82	25.63
9	Revenue (000s)	5,178	5,642	4,851	4,982	5,396	5,369
10	Cents /kWh	66.59	72.56	66.05	70.58	73.70	73.73
	Streetlights						
11	Sales (MWh)	90	90	90	90	90	90
12	Revenue (000s)	98	107	96	108	113	113
13	Cents /kWh	108.76	119.03	107.17	119.95	125.36	125.36
	Total						
14	Sales (MWh)	11,986	11,986	11,245	10,998	11,434	11,381
15	Customers	1,041	1,041	1,036	1,049	1,075	1,078
16	Revenue (000s)	8,617	9,391	7,898	8,444	9,081	9,043
17	Cents /kWh	71.89	78.34	70.24	76.77	79.42	79.46
C	SENERATION (MWh)						
18	Total Station Service	134	134	100	98	107	105
19	Station Service - % of Gen.	1.1%	1.1%	0.8%	0.8%	0.9%	0.9%
20	Losses	496	496	458	643	461	495
21	Losses - % of Gen.	3.9%	3.9%	3.9%	5.5%	3.8%	4.1%
22	Total Generation	12,617	12,617	11,803	11,738	12,002	11,981
	Source						
23	Diesel Generation (MWh)	12,617	12,617	11,803	11,738	12,002	11,981
24	Diesel Efficiency (KWh/L)	3.69	3.69	3.56	3.59	3.59	3.59
25	Liters (000s)	3,419	3,419	3,311	3,271	3,343	3,337
	Peak						
26	Peak Load (KW)	2,223	2,223	1,800	1,800	1,966	1,920
27	Load Factor	65%	65%	75%	74%	70%	71%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

502 Gjoa Haven

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,538	2,538	2,429	2,380	2,683	2,647
2	Customers	380	380	391	391	424	425
3	Av. MWh Sales/Cust.	6.67	6.67	6.21	6.08	6.33	6.23
4	Revenue (000s)	2,264	2,470	2,271	2,189	2,632	2,598
5	Cents/kWh	89.19	97.31	93.48	91.97	98.09	98.15
	Commercial						
6	Sales (MWh)	2,953	2,953	2,840	2,860	2,899	2,847
7	Customers	119	119	122	119	119	119
8	Av. MWh Sales/Cust.	24.80	24.80	23.31	24.12	24.41	23.94
9	Revenue (000s)	2,321	2,530	2,392	2,556	2,474	2,432
10	Cents /kWh	78.61	85.69	84.23	89.35	85.32	85.40
	Streetlights						
11	Sales (MWh)	77	77	34	34	34	34
12	Revenue (000s)	83	91	38	40	42	42
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	5,567	5,567	5,303	5,274	5,616	5,528
15	Customers	499	499	513	510	542	544
16	Revenue (000s)	4,668	5,091	4,701	4,785	5,148	5,072
17	Cents /kWh	83.84	91.44	88.64	90.73	91.66	91.75
	GENERATION (MWh)						
18	Total Station Service	134	134	313	203	208	215
19	Station Service - % of Gen.	2.2%	2.2%	5.1%	3.5%	3.3%	
20	Losses	416	416	473	397	476	461
21	Losses - % of Gen.	6.8%	6.8%	7.8%	6.8%	7.5%	
22	Total Generation	6,118	6,118	6,089	5,874	6,300	6,204
	Source						
23	Diesel Generation (MWh)	6,118	6,118	6,089	5,874	6,300	6,204
24	Diesel Efficiency (KWh/L)	3.59	3.59	3.47	3.54	3.57	3.57
25	Liters (000s)	1,704	1,704	1,754	1,659	1,765	1,738
	Peak						
26	Peak Load (KW)	1,066	1,066	1,080	1,100	1,112	1,102
27	Load Factor	66%	66%	64%	61%	65%	64%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

503 Taloyoak

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
	SALES AND REVENUE		72				
	Domestic						
1	Sales (MWh)	1,918	1,918	1,808	1,754	1,934	1,936
2	Customers	272	272	267	266	289	289
3	Av. MWh Sales/Cust.	7.06	7.06	6.78	6.60	6.70	6.69
4	Revenue (000s)	1,747	1,906	1,756	1,704	1,937	1,939
5	Cents/kWh	91.05	99.36	97.14	97.15	100.15	100.15
	Commercial						
6	Sales (MWh)	1,994	1,994	2,077	2,023	2,114	2,103
7	Customers	78	78	78	80	80	80
8	Av. MWh Sales/Cust.	25.58	25.58	26.63	25.26	26.35	26.18
9	Revenue (000s)	1,553	1,689	1,909	1,714	1,817	1,809
10	Cents /kWh	77.91	84.71	91.92	84.73	85.98	86.03
	Streetlights						
11	Sales (MWh)	50	50	20	20	20	20
12	Revenue (000s)	54	60	22	24	25	25
13	Cents /kWh	108.76	119.03	111.80	119.97	125.38	125.38
	Total						
14	Sales (MWh)	3,962	3,962	3,905	3,797	4,067	4,059
15	Customers	350	350	345	346	369	370
16	Revenue (000s)	3,354	3,655	3,688	3,442	3,779	3,773
17	Cents /kWh	84.66	92.24	94.44	90.65	92.91	92.96
	GENERATION (MWh)						
18	Total Station Service	101	101	98	95	102	102
19	Station Service - % of Gen.	2.3%	2.3%	2.4%	2.3%	2.4%	
20	Losses	234	234	60	276	164	165
21	Losses - % of Gen.	5.5%	5.5%	1.5%	6.6%	3.8%	
22	Total Generation	4,297	4,297	4,062	4,167	4,333	4,325
	Source						
23	Diesel Generation (MWh)	4,297	4,297	4,062	4,167	4,333	4,325
24	Diesel Efficiency (KWh/L)	3.63	3.63	3.61	3.63	3.65	3.65
25	Liters (000s)	1,184	1,184	1,124	1,149	1,187	1,185
	Peak						
26	Peak Load (KW)	800	800	800	750	798	798
27	Load Factor	61%	61%	58%	63%	62%	62%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

504 Kugaaruk

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
5	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,586	1,586	1,668	1,521	1,605	1,717
2	Customers	231	231	241	241	242	259
3	Av. MWh Sales/Cust.	6.87	6.87	6.93	6.31	6.63	6.63
4	Revenue (000s)	1,405	1,533	1,747	1,417	1,570	1,680
5	Cents/kWh	88.62	96.69	104.71	93.14	97.82	97.82
	Commercial						
6	Sales (MWh)	1,864	1,864	1,880	1,866	1,876	1,903
7	Customers	82	82	79	82	82	82
8	Av. MWh Sales/Cust.	22.74	22.74	23.82	22.90	22.98	23.27
9	Revenue (000s)	1,322	1,439	1,686	1,437	1,503	1,523
10	Cents /kWh	70.90	77.17	89.70	77.01	80.12	80.06
	Streetlights						
11	Sales (MWh)	31	31	13	13	13	13
12	Revenue (000s)	34	37	15	17	17	17
13	Cents /kWh	108.76	119.03	111.80	125.79	125.38	125.38
	Total						
14	Sales (MWh)	3,481	3,481	3,561	3,401	3,495	3,633
15	Customers	313	313	320	323	324	341
16	Revenue (000s)	2,761	3,009	3,448	2,871	3,090	3,220
17	Cents /kWh	79.31	86.44	96.81	84.42	88.42	88.62
(	GENERATION (MWh)						
18	Total Station Service	85	85	78	82	83	86
19	Station Service - % of Gen.	2.2%	2.2%	1.9%	2.1%	2.1%	2.1%
20	Losses	281	281	365	475	384	424
21	Losses - % of Gen.	7.3%	7.3%	9.1%	12.0%	9.7%	10.2%
22	Total Generation	3,848	3,848	4,004	3,957	3,961	4,144
	Source						
23	Diesel Generation (MWh)	3,848	3,848	4,004	3,957	3,961	4,144
24	Diesel Efficiency (KWh/L)	3.71	3.71	3.58	3.70	3.70	3.70
25	Liters (000s)	1,037	1,037	1,119	1,069	1,071	1,120
	Peak						
26	Peak Load (KW)	790	790	764	780	771	807
27	Load Factor	56%	56%	60%	58%	59%	59%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

505 Kugluktuk

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,815	2,815	2,735	2,754	2,764	2,862
2	Customers	501	501	499	496	497	517
3	Av. MWh Sales/Cust.	5.62	5.62	5.49	5.56	5.56	5.53
4	Revenue (000s)	2,450	2,671	2,529	2,546	2,638	2,732
5	Cents/kWh	87.04	94.90	92.45	92.47	95.45	95.47
	Commercial						
6	Sales (MWh)	3,005	3,005	3,068	3,000	3,010	3,028
7	Customers	126	126	127	126	126	126
8	Av. MWh Sales/Cust.	23.94	23.94	24.17	23.80	23.83	23.94
9	Revenue (000s)	2,262	2,464	2,584	2,324	2,461	2,475
10	Cents /kWh	75.28	81.99	84.23	77.45	81.77	81.75
	Streetlights						
11	Sales (MWh)	43	43	44	44	44	44
12	Revenue (000s)	47	51	49	52	55	55
13	Cents /kWh	108.76	119.03	111.78	119.95	125.36	125.36
	Total						
14	Sales (MWh)	5,862	5,862	5,847	5,797	5,818	5,933
15	Customers	626	626	626	622	623	644
16	Revenue (000s)	4,759	5,186	5,162	4,922	5,154	5,262
17	Cents /kWh	81.18	88.46	88.28	84.91	88.59	88.69
	SENERATION (MWh)						
18	Total Station Service	144	144	152	185	147	138
19	Station Service - % of Gen.	2.3%	2.3%	2.4%	2.9%	2.3%	
20	Losses	284	284	292	320	296	300
21	Losses - % of Gen.	4.5%	4.5%	4.6%	5.1%	4.7%	
22	Total Generation	6,291	6,291	6,291	6,302	6,260	6,371
	Source						
23	Diesel Generation (MWh)	6,291	6,291	6,291	6,302	6,260	6,371
24	Diesel Efficiency (KWh/L)	3.63	3.63	3.63	3.56	3.67	3.67
25	Liters (000s)	1,733	1,733	1,731	1,772	1,706	1,736
	Peak						
26	Peak Load (KW)	1,141	1,141	1,099	1,075	1,111	1,122
27	Load Factor	63%	63%	65%	67%	64%	65%

Schedule A-2

## Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

600 Total of Kivalliq Area

							2025/26
Line	Line		2022/23	2022/23	2023/24	2024/25	Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	19,120	19,120	18,248	18,134	19,222	19,444
2	Customers	3,259	3,259	3,210	3,252	3,373	3,441
3	Av. MWh Sales/Cust.	5.87	5.87	5.68	5.58	5.70	5.65
4	Revenue (000s)	16,127	17,584	15,007	16,082	17,764	17,990
5	Cents/kWh	84.35	91.97	82.24	88.68	92.41	92.52
	Commercial						
6	Sales (MWh)	27,687	27,687	28,092	28,140	28,683	28,565
7	Customers	890	890	932	949	950	952
8	Av. MWh Sales/Cust.	31.10	31.10	30.15	29.66	30.18	30.01
9	Revenue (000s)	20,591	22,428	20,511	21,811	23,085	22,995
10	Cents /kWh	74.37	81.01	73.01	77.51	80.48	80.50
	Streetlights						
11	Sales (MWh)	498	498	365	277	277	277
12	Revenue (000s)	542	593	423	423	346	346
13	Cents /kWh	108.76	119.03	115.85	152.82	125.00	125.00
	Total						
14	Sales (MWh)	47,305	47,305	46,706	46,551	48,183	48,286
15	Customers	4,149	4,149	4,142	4,200	4,323	4,393
16	Revenue (000s)	37,260	40,605	35,941	38,316	41,195	41,331
17	Cents /kWh	78.77	85.84	76.95	82.31	85.50	85.60
G	SENERATION (MWh)						
18	Total Station Service	1,575	1,575	1,698	1,646	1,707	1,732
19	Station Service - % of Gen.	3.1%	3.1%	3.4%	3.2%	3.3%	3.3%
20	Total Losses	2,029	2,029	2,177	3,241	2,365	2,420
21	Losses - % of Gen.	4.0%	4.0%	4.3%	6.3%	4.5%	4.6%
22	Total Generation	50,909	50,909	50,581	51,438	52,254	52,438
	Source						
23	Diesel Generation (MWh)	50,909	50,909	50,581	51,438	52,254	52,438
24	Diesel Efficiency (KWh/L)	3.72	3.72	3.64	3.78	3.74	3.74
25	Liters (000s)	13,700	13,700	13,892	13,602	13,953	14,005
	Peak						
26	Peak Load (KW)	9,950	9,950	9,526	9,597	10,043	10,102
27	Load Factor	58%	58%	61%	61%	59%	59%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

601 Rankin Inlet

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	5,822	5,822	5,503	5,552	5,912	5,882
2	Customers	1,027	1,027	1,010	1,029	1,075	1,081
3	Av. MWh Sales/Cust.	5.67	5.67	5.45	5.39	5.50	5.44
4	Revenue (000s)	4,565	4,975	4,024	4,493	5,080	5,056
5	Cents/kWh	78.41	85.46	73.12	80.93	85.92	85.96
	Commercial						
6	Sales (MWh)	12,264	12,264	12,811	12,993	13,226	13,216
7	Customers	294	294	323	336	336	337
8	Av. MWh Sales/Cust.	41.76	41.76	39.71	38.69	39.30	39.20
9	Revenue (000s)	9,073	9,882	8,476	9,724	10,434	10,428
10	Cents /kWh	73.98	80.58	66.16	74.84	78.90	78.90
	Streetlights						
11	Sales (MWh)	101	101	84	84	84	84
12	Revenue (000s)	110	120	93	100	105	105
13	Cents /kWh	108.76	119.03	111.78	119.95	125.36	125.36
	Total						
14	Sales (MWh)	18,187	18,187	18,397	18,628	19,221	19,181
15	Customers	1,321	1,321	1,333	1,365	1,411	1,418
16	Revenue (000s)	13,748	14,978	12,593	14,317	15,619	15,589
17	Cents /kWh	75.59	82.36	68.45	76.86	81.26	81.27
(	GENERATION (MWh)						
18	Total Station Service	668	668	683	766	734	735
19	Station Service - % of Gen.	3.4%	3.4%	3.4%	3.6%	3.5%	
20	Losses	741	741	741	1.847	908	951
21	Losses - % of Gen.	3.8%	3.8%	3.7%	8.7%	4.4%	
22	Total Generation	19,595	19,595	19,821	21,241	20,863	20,868
	Source						
23	Diesel Generation (MWh)	19,595	19,595	19,821	21,241	20,863	20,868
24	Diesel Efficiency (KWh/L)	3.68	3.68	3.72	3.92	3.82	3.82
25	Liters (000s)	5,325	5,325	5,325	5,417	5,462	5,463
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#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

602 Baker Lake

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
-	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	4,144	4,144	4,009	3,864	4,177	4,163
2	Customers	700	700	683	677	716	718
3	Av. MWh Sales/Cust.	5.92	5.92	5.87	5.70	5.84	5.80
4	Revenue (000s)	3,539	3,859	3,202	3,423	3,900	3,888
5	Cents/kWh	85.40	93.12	79.88	88.61	93.37	93.40
	Commercial						
6	Sales (MWh)	4,278	4,278	4,321	4,221	4,300	4,323
7	Customers	175	175	176	179	179	179
8	Av. MWh Sales/Cust.	24.40	24.40	24.61	23.64	24.04	24.13
9	Revenue (000s)	3,217	3,498	3,140	3,280	3,511	3,529
10	Cents /kWh	75.20	81.77	72.66	77.69	81.65	81.62
	Streetlights						
11	Sales (MWh)	113	113	113	55	55	55
12	Revenue (000s)	123	134	100	107	70	70
13	Cents /kWh	108.76	119.03	88.64	193.74	125.38	125.38
	Total						
14	Sales (MWh)	8,535	8,535	8,443	8,140	8,532	8,542
15	Customers	875	875	859	856	895	897
16	Revenue (000s)	6,879	7,491	6,442	6,811	7,481	7,487
17	Cents /kWh	80.60	87.77	76.30	83.66	87.67	87.65
C	GENERATION (MWh)						
18	Total Station Service	235	235	245	242	245	247
19	Station Service - % of Gen.	2.5%	2.5%	2.7%	2.7%	2.6%	2.7%
20	Losses	513	513	357	455	473	447
21	Losses - % of Gen.	5.5%	5.5%	3.9%	5.2%	5.1%	4.8%
22	Total Generation	9,282	9,282	9,044	8,837	9,250	9,235
	Source						
23	Diesel Generation (MWh)	9,282	9,282	9,044	8,837	9,250	9,235
24	Diesel Efficiency (KWh/L)	3.87	3.87	3.81	3.83	3.82	3.82
25	Liters (000s)	2,399	2,399	2,375	2,304	2,422	2,418
	Peak						
26	Peak Load (KW)	2,108	2,108	1,720	1,803	1,948	1,931
27	Load Factor	50%	50%	60%	56%	54%	55%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

603 Arviat

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	4,305	4,305	4,019	4,054	4,298	4,279
2	Customers	729	729	723	731	766	769
3	Av. MWh Sales/Cust.	5.91	5.91	5.56	5.54	5.61	5.57
4	Revenue (000s)	3,710	4,045	3,428	3,714	4,075	4,059
5	Cents/kWh	86.18	93.98	85.29	91.62	94.82	94.85
	Commercial						
6	Sales (MWh)	4,499	4,499	4,272	4,271	4,568	4,425
7	Customers	152	152	162	166	166	167
8	Av. MWh Sales/Cust.	29.59	29.59	26.37	25.72	27.46	26.56
9	Revenue (000s)	3,323	3,622	3,279	3,421	3,675	3,566
10	Cents /kWh	73.87	80.52	76.77	80.09	80.45	80.57
	Streetlights						
11	Sales (MWh)	115	115	58	58	58	58
12	Revenue (000s)	125	137	92	68	71	71
13	Cents /kWh	108.76	119.03	159.91	118.11	123.43	123.43
	Total						
14	Sales (MWh)	8,919	8,919	8,349	8,383	8,924	8,763
15	Customers	881	881	885	897	932	935
16	Revenue (000s)	7,158	7,805	6,800	7,203	7,822	7,696
17	Cents /kWh	80.26	87.51	81.45	85.93	87.65	87.83
C	SENERATION (MWh)						
18	Total Station Service	209	209	284	203	250	257
19	Station Service - % of Gen.	2.2%	2.2%	3.1%	2.3%	2.6%	
20	Losses	239	239	385	403	347	369
21	Losses - % of Gen.	2.6%	2.6%	4.3%	4.5%	3.6%	
22	Total Generation	9,367	9,367	9,018	8,989	9,522	9,389
	Source						
23	Diesel Generation (MWh)	9,367	9,367	9,018	8,989	9,522	9,389
24	Diesel Efficiency (KWh/L)	3.77	3.77	3.35	3.70	3.68	3.68
25	Liters (000s)	2,485	2,485	2,688	2,432	2,587	2,551
	Peak						
26	Peak Load (KW)	1,766	1,766	1,630	1,767	1,779	1,767
27	Load Factor	61%	61%	63%	58%	61%	61%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

604 Coral Harbour

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,561	1,561	1,524	1,500	1,536	1,653
2	Customers	274	274	264	265	266	288
3	Av. MWh Sales/Cust.	5.70	5.70	5.78	5.67	5.79	5.74
4	Revenue (000s)	1,366	1,490	1,411	1,385	1,463	1,575
5	Cents/kWh	87.51	95.42	92.54	92.34	95.24	95.26
	Commercial						
6	Sales (MWh)	1,892	1,892	1,896	1,980	1,917	1,921
7	Customers	81	81	82	82	82	82
8	Av. MWh Sales/Cust.	23.34	23.34	23.07	24.30	23.49	23.50
9	Revenue (000s)	1,420	1,548	1,563	1,571	1,569	1,571
10	Cents /kWh	75.03	81.78	82.47	79.33	81.81	81.81
	Streetlights						
11	Sales (MWh)	55	55	26	26	26	26
12	Revenue (000s)	60	66	29	31	33	33
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	3,509	3,509	3,446	3,507	3,480	3,600
15	Customers	355	355	346	346	347	370
16	Revenue (000s)	2,846	3,103	3,003	2,988	3,065	3,179
17	Cents /kWh	81.11	88.44	87.15	85.20	88.06	88.30
	SENERATION (MWh)						
18	Total Station Service	138	138	112	118	129	129
19	Station Service - % of Gen.	3.7%	3.7%	3.0%	3.2%	3.4%	
20	Losses	118	118	172	53	141	142
21	Losses - % of Gen.	3.1%	3.1%	4.6%	1.4%	3.8%	
22	Total Generation	3,765	3,765	3,731	3,678	3,751	3,871
	Source						
23	Diesel Generation (MWh)	3,765	3,765	3,731	3,678	3,751	3,871
24	Diesel Efficiency (KWh/L)	3.56	3.56	3.58	3.67	3.62	3.62
25	Liters (000s)	1,057	1,057	1,043	1,002	1,036	1,069
	Peak						
26	Peak Load (KW)	846	846	859	780	833	857
27	Load Factor	51%	51%	50%	54%	51%	52%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

605 Chesterfield Inlet

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
s	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	791	791	770	718	764	824
2	Customers	138	138	136	138	138	151
3	Av. MWh Sales/Cust.	5.72	5.72	5.66	5.22	5.54	5.46
4	Revenue (000s)	700	763	727	694	739	798
5	Cents/kWh	88.48	96.48	94.45	96.59	96.74	96.80
	Commercial						
6	Sales (MWh)	1,242	1,242	1,188	1,151	1,144	1,159
7	Customers	63	63	60	59	59	59
8	Av. MWh Sales/Cust.	19.76	19.76	19.91	19.49	19.34	19.56
9	Revenue (000s)	900	980	1,022	984	985	997
10	Cents /kWh	72.48	78.93	86.04	85.45	86.08	85.98
	Streetlights						
11	Sales (MWh)	26	26	26	14	14	14
12	Revenue (000s)	29	31	37	40	17	17
13	Cents /kWh	108.76	119.03	139.74	289.36	125.38	125.38
	Total						
14	Sales (MWh)	2,059	2,059	1,984	1,883	1,922	1,997
15	Customers	201	201	196	197	197	210
16	Revenue (000s)	1,628	1,775	1,786	1,717	1,742	1,811
17	Cents /kWh	79.09	86.19	90.01	91.18	90.60	90.71
	ENERATION (MWh)						
18	Total Station Service	88	88	137	101	105	116
19	Station Service - % of Gen.	3.9%	3.9%	6.3%	4.9%	5.0%	
20	Losses	72	72	55	50	59	64
21	Losses - % of Gen.	3.2%	3.2%	2.5%	2.4%	2.8%	
22	Total Generation	2,219	2,219	2,175	2,034	2,086	2,177
	Source						
23	Diesel Generation (MWh)	2,219	2,219	2,175	2,034	2,086	2,177
24	Diesel Efficiency (KWh/L)	3.72	3.72	3.74	3.42	3.68	3.68
25	Liters (000s)	596	596	582	595	567	592
	Peak						
26	Peak Load (KW)	447	447	440	480	465	499
27	Load Factor	57%	57%	56%	48%	51%	50%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

606 Whale Cove

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	764	764	713	714	726	773
2	Customers	132	132	127	130	130	139
3	Av. MWh Sales/Cust.	5.78	5.78	5.60	5.49	5.57	5.55
4	Revenue (000s)	677	738	679	678	711	756
5	Cents/kWh	88.62	96.64	95.25	94.98	97.83	97.84
	Commercial						
6	Sales (MWh)	1,077	1,077	1,055	1,210	1,141	1,160
7	Customers	55	55	54	56	56	56
8	Av. MWh Sales/Cust.	19.44	19.44	19.56	21.67	20.40	20.72
9	Revenue (000s)	835	910	1,061	982	950	966
10	Cents /kWh	77.57	84.47	100.61	81.14	83.30	83.23
	Streetlights						
11	Sales (MWh)	43	43	18	18	18	18
12	Revenue (000s)	47	51	20	22	23	23
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	1,883	1,883	1,786	1,942	1,885	1,951
15	Customers	187	187	181	186	186	195
16	Revenue (000s)	1,559	1,699	1,761	1,682	1,684	1,745
17	Cents /kWh	82.76	90.19	98.58	86.59	89.30	89.41
	ENERATION (MWh)						
18	Total Station Service	141	141	132	118	128	133
19	Station Service - % of Gen.	6.7%	6.7%	6.3%	5.3%	6.0%	6.0%
20	Losses	84	84	163	171	126	142
21	Losses - % of Gen.	4.0%	4.0%	7.9%	7.7%	5.9%	6.4%
22	Total Generation	2,108	2,108	2,081	2,231	2,139	2,226
	Source						
23	Diesel Generation (MWh)	2,108	2,108	2,081	2,231	2,139	2,226
24	Diesel Efficiency (KWh/L)	3.58	3.58	3.50	3.48	3.48	3.48
25	Liters (000s)	589	589	595	640	615	640
	Peak						
26	Peak Load (KW)	400	400	385	451	407	427
27	Load Factor	60%	60%	62%	56%	60%	59%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

607 Naujaat

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,734	1,734	1,711	1,732	1,808	1,870
2	Customers	259	259	266	282	283	296
3	Av. MWh Sales/Cust.	6.70	6.70	6.43	6.15	6.40	6.33
4	Revenue (000s)	1,571	1,714	1,537	1,694	1,796	1,857
5	Cents/kWh	90.60	98.86	89.81	97.78	99.30	99.34
	Commercial						
6	Sales (MWh)	2,435	2,435	2,550	2,313	2,387	2,360
7	Customers	70	70	76	72	72	72
8	Av. MWh Sales/Cust.	34.80	34.80	33.70	32.24	33.21	32.80
9	Revenue (000s)	1,823	1,988	1,969	1,850	1,960	1,939
10	Cents /kWh	74.86	81.65	77.23	79.98	82.12	82.16
	Streetlights						
11	Sales (MWh)	45	45	41	22	22	22
12	Revenue (000s)	49	54	51	55	28	28
13	Cents /kWh	108.76	119.03	126.02	245.28	125.75	125.75
	Total						
14	Sales (MWh)	4,213	4,213	4,302	4,068	4,217	4,252
15	Customers	329	329	342	354	354	367
16	Revenue (000s)	3,442	3,755	3,557	3,599	3,784	3,825
17	Cents /kWh	81.70	89.13	82.69	88.47	89.72	89.94
(	GENERATION (MWh)						
18	Total Station Service	97	97	105	99	115	115
19	Station Service - % of Gen.	2.1%	2.1%	2.2%	2.2%	2.5%	2.5%
20	Losses	263	263	304	262	311	304
21	Losses - % of Gen.	5.8%	5.8%	6.4%	5.9%	6.7%	6.5%
22	Total Generation	4,573	4,573	4,711	4,428	4,644	4,671
	Source						
23	Diesel Generation (MWh)	4,573	4,573	4,711	4,428	4,644	4,671
24	Diesel Efficiency (KWh/L)	3.66	3.66	3.67	3.66	3.67	3.67
25	Liters (000s)	1,249	1,249	1,284	1,211	1,265	1,273
	Peak						
26	Peak Load (KW)	830	830	816	814	845	851
27	Load Factor	63%	63%	66%	62%	63%	63%

Schedule A-3

## Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

700 Total of Qikiqtaaluk area

							2025/26
Line		2022/23	2022/23	2022/23	2023/24	2024/25	Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	SALES AND REVENUE						_
	Domestic						
1	Sales (MWh)	39,038	39,038	37,503	37,649	38,385	39,487
2	Customers	6,956	6,956	6,943	6,941	7,020	7,255
3	Av. MWh Sales/Cust.	5.61	5.61	5.40	5.42	5.47	5.44
4	Revenue (000s)	32,138	35,032	29,379	32,791	34,666	35,736
5	Cents/kWh	82.32	89.74	78.34	87.10	90.31	90.50
	Commercial						
6	Sales (MWh)	65,030	65,030	66,178	66,013	66,699	66,566
7	Customers	1,922	1,922	1,940	1,940	1,943	1,947
8	Av. MWh Sales/Cust.	33.83	33.83	34.12	34.03	34.32	34.19
9	Revenue (000s)	46,846	51,058	44,831	47,698	52,598	52,503
10	Cents /kWh	72.04	78.51	67.74	72.26	78.86	78.87
	Streetlights						
11	Sales (MWh)	902	902	536	483	483	483
12	Revenue (000s)	981	1,074	659	624	587	587
13	Cents /kWh	108.76	119.03	122.98	129.05	121.45	121.45
	Total						
14	Sales (MWh)	104,970	104,970	104,217	104,145	105,567	106,536
15	Customers	8,878	8,878	8,883	8,881	8,964	9,202
16	Revenue (000s)	79,965	87,164	74,869	81,113	87,851	88,825
17	Cents /kWh	76.18	83.04	71.84	77.88	83.22	83.38
G	SENERATION (MWh)						
18	<b>Total Station Service</b>	4,018	4,018	3,801	3,994	3,800	3,816
19	Station Service - % of Gen.	3.5%	3.5%	3.4%	3.5%	3.3%	3.3%
20	Total Losses	5,321	5,321	5,374	5,213	5,628	5,658
21	Losses - % of Gen.	4.7%	4.7%	4.7%	4.6%	4.9%	4.9%
22	Total Generation	114,310	114,310	113,391	113,353	114,995	116,009
	Source						
23	Diesel Generation (MWh)	114,310	114,310	113,391	113,353	114,995	116,009
24	Diesel Efficiency (KWh/L)	3.83	3.83	3.76	3.76	3.79	3.79
25	Liters (000s)	29,884	29,884	30,119	30,163	30,348	30,634
	Peak						
26	Peak Load (KW)	20,434	20,434	20,388	20,803	20,735	20,902
27	Load Factor	64%	-, -	63%	62%	63%	•

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

701 Iqaluit

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	18,411	18,411	17,653	17,473	17,954	18,037
2	Customers	3,572	3,572	3,587	3,568	3,609	3,660
3	Av. MWh Sales/Cust.	5.15	5.15	4.92	4.90	4.98	4.93
4	Revenue (000s)	13,721	14,944	12,285	13,736	14,698	14,773
5	Cents/kWh	74.52	81.17	69.59	78.61	81.86	81.90
	Commercial						
6	Sales (MWh)	37,042	37,042	39,332	39,686	40,120	40,058
7	Customers	814	814	816	830	832	834
8	Av. MWh Sales/Cust.	45.51	45.51	48.19	47.82	48.24	48.06
9	Revenue (000s)	25,016	27,278	23,522	27,875	30,286	30,243
10	Cents /kWh	67.54	73.64	59.80	70.24	75.49	75.50
	Streetlights						
11	Sales (MWh)	178	178	180	180	180	180
12	Revenue (000s)	194	212	201	216	226	226
13	Cents /kWh	108.76	119.03	111.78	119.95	125.36	125.36
	Total						
14	Sales (MWh)	55,631	55,631	57,165	57,339	58,255	58,275
15	Customers	4,386	4,386	4,403	4,398	4,440	4,494
16	Revenue (000s)	38,931	42,435	36,008	41,826	45,209	45,241
17	Cents /kWh	69.98	76.28	62.99	72.95	77.61	77.63
	SENERATION (MWh)						
18	Total Station Service	2,152	2,152	2,088	2,222	2,096	2,073
19	Station Service - % of Gen.	3.6%	3.6%	3.4%	3.7%	3.3%	
20	Losses	2,398	2,398	1,798	1,315	2,370	2,227
21	Losses - % of Gen.	4.0%	4.0%	2.9%	2.2%	3.8%	3.6%
22	Total Generation	60,181	60,181	61,051	60,876	62,721	62,575
	Source						
23	Diesel Generation (MWh)	60,181	60,181	61,051	60,876	62,721	62,575
24	Diesel Efficiency (KWh/L)	3.99	3.99	3.99	3.90	3.93	3.93
25	Liters (000s)	15,083	15,083	15,299	15,608	15,959	15,922
	Peak						
26	Peak Load (KW)	9,940	9,940	9,947	10,300	10,635	10,594
27	Load Factor	69%	69%	70%	67%	67%	67%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

702 Pangnirtung

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,645	2,645	2,721	2,755	2,747	2,890
2	Customers	485	485	478	481	483	506
3	Av. MWh Sales/Cust.	5.46	5.46	5.70	5.73	5.68	5.71
4	Revenue (000s)	2,349	2,561	2,174	2,532	2,658	2,796
5	Cents/kWh	88.80	96.81	79.90	91.93	96.78	96.76
	Commercial						
6	Sales (MWh)	3,935	3,935	3,181	3,404	3,301	3,306
7	Customers	124	124	123	123	124	124
8	Av. MWh Sales/Cust.	31.66	31.66	25.90	27.60	26.72	26.72
9	Revenue (000s)	3,112	3,385	2,336	1,232	2,684	2,688
10	Cents /kWh	79.07	86.02	73.43	36.19	81.31	81.32
	Streetlights						
11	Sales (MWh)	143	143	65	67	67	67
12	Revenue (000s)	156	170	105	62	65	65
13	Cents /kWh	108.76	119.03	161.89	92.66	96.84	96.84
	Total						
14	Sales (MWh)	6,723	6,723	5,966	6,226	6,115	6,263
15	Customers	609	609	600	604	607	630
16	Revenue (000s)	5,616	6,116	4,614	3,826	5,407	5,549
17	Cents /kWh	83.53	90.97	77.34	61.46	88.43	88.61
	SENERATION (MWh)						
18	Total Station Service	293	293	242	196	226	240
19	Station Service - % of Gen.	4.0%	4.0%	3.6%	2.9%	3.4%	
20	Losses	217	217	551	320	332	380
21	Losses - % of Gen.	3.0%	3.0%	8.1%	4.8%	5.0%	
22	Total Generation	7,233	7,233	6,759	6,742	6,673	6,882
	Source						
23	Diesel Generation (MWh)	7,233	7,233	6,759	6,742	6,673	6,882
24	Diesel Efficiency (KWh/L)	3.66	3.66	3.17	3.29	3.43	3.43
25	Liters (000s)	1,976	1,976	2,130	2,049	1,945	2,006
	Peak						
26	Peak Load (KW)	1,222	1,222	1,310	1,270	1,211	1,268
27	Load Factor	68%	68%	59%	61%	63%	62%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

703 Kinngait

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,220	2,220	2,092	2,065	2,114	2,228
2	Customers	433	433	422	422	424	450
3	Av. MWh Sales/Cust.	5.12	5.12	4.96	4.89	4.98	4.95
4	Revenue (000s)	1,987	2,166	1,711	1,942	2,072	2,184
5	Cents/kWh	89.52	97.57	81.81	94.05	97.99	98.02
	Commercial						
6	Sales (MWh)	3,257	3,257	3,292	3,045	3,168	3,178
7	Customers	132	132	131	131	131	131
8	Av. MWh Sales/Cust.	24.77	24.77	25.18	23.28	24.19	24.23
9	Revenue (000s)	2,487	2,710	2,488	2,451	2,663	2,671
10	Cents /kWh	76.36	83.19	75.59	80.49	84.06	84.05
	Streetlights						
11	Sales (MWh)	75	75	75	38	38	38
12	Revenue (000s)	82	89	82	88	48	48
13	Cents /kWh	108.76	119.03	108.93	231.43	125.38	125.38
	Total						
14	Sales (MWh)	5,552	5,552	5,458	5,147	5,320	5,443
15	Customers	565	565	552	553	555	581
16	Revenue (000s)	4,556	4,965	4,281	4,480	4,782	4,902
17	Cents /kWh	82.06	89.43	78.43	87.04	89.89	90.06
G	SENERATION (MWh)						
18	Total Station Service	175	175	107	130	138	136
19	Station Service - % of Gen.	2.9%	2.9%	1.8%	2.3%	2.4%	2.3%
20	Losses	358	358	373	430	393	423
21	Losses - % of Gen.	5.9%	5.9%	6.3%	7.5%	6.7%	7.1%
22	Total Generation	6,086	6,086	5,938	5,707	5,851	6,002
	Source						
23	Diesel Generation (MWh)	6,086	6,086	5,938	5,707	5,851	6,002
24	Diesel Efficiency (KWh/L)	3.57	3.57	3.63	3.59	3.61	3.61
25	Liters (000s)	1,705	1,705	1,634	1,590	1,621	1,663
	Peak						
26	Peak Load (KW)	1,290	1,290	1,081	1,060	1,066	1,093
27	Load Factor	54%	54%	63%	61%	63%	63%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

704 Resolute Bay

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	530	530	523	583	543	615
2	Customers	96	96	92	92	92	103
3	Av. MWh Sales/Cust.	5.54	5.54	5.67	6.37	5.92	5.99
4	Revenue (000s)	438	477	488	575	497	563
5	Cents/kWh	82.59	90.03	93.30	98.75	91.53	91.49
	Commercial						
6	Sales (MWh)	3,393	3,393	3,316	3,452	3,346	3,359
7	Customers	104	104	107	105	105	105
8	Av. MWh Sales/Cust.	32.57	32.57	30.99	32.95	31.87	31.91
9	Revenue (000s)	2,722	2,964	2,967	2,855	2,861	2,872
10	Cents /kWh	80.24	87.35	89.47	82.73	85.49	85.49
	Streetlights						
11	Sales (MWh)	48	48	20	20	20	20
12	Revenue (000s)	53	58	22	24	25	25
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	3,972	3,972	3,858	4,054	3,909	3,994
15	Customers	200	200	199	196	197	208
16	Revenue (000s)	3,213	3,499	3,477	3,454	3,383	3,459
17	Cents /kWh	80.90	88.10	90.10	85.21	86.53	86.61
C	GENERATION (MWh)						
18	Total Station Service	325	325	254	237	261	253
19	Station Service - % of Gen.	7.1%	7.1%	5.7%	5.2%	5.9%	5.6%
20	Losses	291	291	313	245	247	229
21	Losses - % of Gen.	6.3%	6.3%	7.1%	5.4%	5.6%	5.1%
22	Total Generation	4,588	4,588	4,426	4,536	4,417	4,476
	Source						
23	Diesel Generation (MWh)	4,588	4,588	4,426	4,536	4,417	4,476
24	Diesel Efficiency (KWh/L)	3.69	3.69	3.70	3.72	3.69	3.69
25	Liters (000s)	1,243	1,243	1,196	1,218	1,197	1,213
	Peak						
26	Peak Load (KW)	830	830	899	908	833	849
27	Load Factor	63%	63%	56%	57%	61%	60%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

705 Pond Inlet

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,983	2,983	2,940	3,043	3,079	3,181
2	Customers	450	450	462	474	476	494
3	Av. MWh Sales/Cust.	6.63	6.63	6.36	6.42	6.48	6.44
4	Revenue (000s)	2,646	2,887	2,695	2,942	3,007	3,107
5	Cents/kWh	88.69	96.76	91.66	96.67	97.66	97.68
	Commercial						
6	Sales (MWh)	3,523	3,523	3,491	3,104	3,262	3,201
7	Customers	127	127	135	127	128	128
8	Av. MWh Sales/Cust.	27.73	27.73	25.94	24.36	25.56	25.04
9	Revenue (000s)	2,671	2,912	2,829	2,479	2,677	2,630
10	Cents /kWh	75.81	82.65	81.04	79.88	82.07	82.16
	Streetlights						
11	Sales (MWh)	137	137	36	36	36	36
12	Revenue (000s)	149	164	40	43	45	45
13	Cents /kWh	108.76	119.03	111.83	119.98	125.38	125.38
	Total						
14	Sales (MWh)	6,644	6,644	6,466	6,182	6,377	6,418
15	Customers	577	577	597	602	603	622
16	Revenue (000s)	5,466	5,962	5,564	5,464	5,729	5,782
17	Cents /kWh	82.28	89.74	86.04	88.38	89.84	90.09
(	GENERATION (MWh)						
18	Total Station Service	224	224	177	156	187	187
19	Station Service - % of Gen.	3.2%	3.2%	2.5%	2.3%	2.7%	2.7%
20	Losses	238	238	484	319	329	372
21	Losses - % of Gen.	3.4%	3.4%	6.8%	4.8%	4.8%	5.3%
22	Total Generation	7,106	7,106	7,128	6,658	6,893	6,976
	Source						
23	Diesel Generation (MWh)	7,106	7,106	7,128	6,658	6,893	6,976
24	Diesel Efficiency (KWh/L)	3.67	3.67	3.68	3.61	3.70	3.70
25	Liters (000s)	1,936	1,936	1,938	1,843	1,863	1,885
	Peak						
26	Peak Load (KW)	1,375	1,375	1,321	1,284	1,288	1,295
27	Load Factor	59%	59%	62%	59%	61%	61%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

706 Igloolik

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	3,034	3,034	3,010	2,997	3,036	3,227
2	Customers	479	479	480	478	480	513
3	Av. MWh Sales/Cust.	6.33	6.33	6.27	6.27	6.33	6.29
4	Revenue (000s)	2,665	2,907	2,358	2,775	2,929	3,114
5	Cents/kWh	87.84	95.81	78.35	92.61	96.47	96.49
	Commercial						
6	Sales (MWh)	3,528	3,528	3,144	3,250	3,217	3,232
7	Customers	136	136	134	136	136	136
8	Av. MWh Sales/Cust.	25.91	25.91	23.39	23.94	23.66	23.74
9	Revenue (000s)	2,712	2,957	2,232	2,621	2,708	2,721
10	Cents /kWh	76.87	83.82	71.00	80.63	84.18	84.17
	Streetlights						
11	Sales (MWh)	95	95	29	29	29	29
12	Revenue (000s)	103	113	33	35	37	37
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	6,658	6,658	6,183	6,276	6,283	6,489
15	Customers	615	615	615	614	616	649
16	Revenue (000s)	5,481	5,978	4,623	5,431	5,674	5,871
17	Cents /kWh	82.32	89.79	74.77	86.53	90.31	90.48
	GENERATION (MWh)						
18	Total Station Service	132	132	120	103	122	122
19	Station Service - % of Gen.	1.9%	1.9%	1.8%	1.5%	1.8%	
20	Losses	269	269	278	304	273	288
21	Losses - % of Gen.	3.8%	3.8%	4.2%	4.5%	4.1%	
22	Total Generation	7,059	7,059	6,581	6,683	6,678	6,899
	Source						
23	Diesel Generation (MWh)	7,059	7,059	6,581	6,683	6,678	6,899
24	Diesel Efficiency (KWh/L)	3.83	3.83	3.70	3.81	3.75	3.75
25	Liters (000s)	1,843	1,843	1,779	1,754	1,781	1,840
	Peak						
26	Peak Load (KW)	1,401	1,401	1,353	1,320	1,327	1,378
27	Load Factor	58%	58%	56%	58%	57%	57%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

707 Sanirajak

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,467	1,467	1,412	1,469	1,486	1,531
2	Customers	214	214	222	228	230	238
3	Av. MWh Sales/Cust.	6.85	6.85	6.36	6.44	6.47	6.42
4	Revenue (000s)	1,343	1,465	1,298	1,410	1,486	1,531
5	Cents/kWh	91.56	99.91	91.92	95.94	100.00	100.02
	Commercial						
6	Sales (MWh)	1,791	1,791	1,888	1,725	1,799	1,770
7	Customers	71	71	76	73	73	73
8	Av. MWh Sales/Cust.	25.10	25.10	24.98	23.60	24.57	24.14
9	Revenue (000s)	1,318	1,436	1,569	1,380	1,440	1,418
10	Cents /kWh	73.59	80.18	83.12	79.99	80.08	80.16
	Streetlights						
11	Sales (MWh)	37	37	18	18	18	18
12	Revenue (000s)	40	44	20	22	23	23
13	Cents /kWh	108.76	119.03	111.79	119.97	125.37	125.37
	Total						
14	Sales (MWh)	3,295	3,295	3,317	3,212	3,303	3,318
15	Customers	286	286	298	301	303	312
16	Revenue (000s)	2,701	2,945	2,887	2,811	2,949	2,972
17	Cents /kWh	81.98	89.39	87.02	87.51	89.29	89.57
G	ENERATION (MWh)						
18	Total Station Service	261	261	238	211	244	248
19	Station Service - % of Gen.	7.1%	7.1%	6.4%	5.5%	6.5%	6.6%
20	Losses	104	104	142	439	176	188
21	Losses - % of Gen.	2.8%	2.8%	3.8%	11.4%	4.7%	
22	Total Generation	3,659	3,659	3,698	3,862	3,722	3,754
	Source						
23	Diesel Generation (MWh)	3,659	3,659	3,698	3,862	3,722	3,754
24	Diesel Efficiency (KWh/L)	3.62	3.62	3.56	4.09	4.01	4.01
25	Liters (000s)	1,011	1,011	1,038	943	928	936
	Peak						
26	Peak Load (KW)	782	782	700	967	804	788
27	Load Factor	53%	53%	60%	46%	53%	54%

#### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

708 Qikiqtarjuaq

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,014	1,014	979	988	972	1,021
2	Customers	204	204	201	196	197	206
3	Av. MWh Sales/Cust.	4.96	4.96	4.87	5.04	4.94	4.96
4	Revenue (000s)	933	1,017	840	956	976	1,026
5	Cents/kWh	91.99	100.27	85.77	96.77	100.46	100.45
	Commercial						
6	Sales (MWh)	1,401	1,401	1,487	1,448	1,445	1,454
7	Customers	82	82	82	80	81	81
8	Av. MWh Sales/Cust.	17.07	17.07	18.13	18.01	17.94	18.03
9	Revenue (000s)	1,070	1,165	1,196	1,160	1,210	1,218
10	Cents /kWh	76.36	83.12	80.45	80.10	83.75	83.73
	Streetlights						
11	Sales (MWh)	32	32	16	16	16	16
12	Revenue (000s)	35	38	18	19	20	20
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	2,448	2,448	2,482	2,452	2,433	2,491
15	Customers	287	287	283	277	277	287
16	Revenue (000s)	2,038	2,220	2,054	2,135	2,206	2,263
17	Cents /kWh	83.26	90.70	82.75	87.07	90.70	90.85
	SENERATION (MWh)						
18	Total Station Service	76	76	55	79	60	63
19	Station Service - % of Gen.	2.8%	2.8%	2.1%	3.0%	2.2%	
20	Losses	209	209	155	129	183	174
21	Losses - % of Gen.	7.7%	7.7%	5.7%	4.9%	6.8%	
22	Total Generation	2,734	2,734	2,692	2,660	2,675	2,728
	Source						
23	Diesel Generation (MWh)	2,734	2,734	2,692	2,660	2,675	2,728
24	Diesel Efficiency (KWh/L)	3.57	3.57	3.55	3.54	3.62	3.62
25	Liters (000s)	766	766	757	753	739	754
	Peak						
26	Peak Load (KW)	498	498	468	472	488	493
27	Load Factor	63%	63%	66%	64%	63%	63%

### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

709 Kimmirut

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
5	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	868	868	822	775	799	849
2	Customers	143	143	148	145	145	155
3	Av. MWh Sales/Cust.	6.06	6.06	5.55	5.34	5.50	5.46
4	Revenue (000s)	776	847	805	738	785	833
5	Cents/kWh	89.43	97.55	97.92	95.23	98.14	98.17
	Commercial						
6	Sales (MWh)	1,048	1,048	1,027	1,038	1,052	1,051
7	Customers	57	57	59	60	60	61
8	Av. MWh Sales/Cust.	18.43	18.43	17.33	17.20	17.42	17.37
9	Revenue (000s)	814	885	845	836	867	866
10	Cents /kWh	77.64	84.42	82.26	80.57	82.36	82.38
	Streetlights						
11	Sales (MWh)	32	32	14	14	14	14
12	Revenue (000s)	35	39	46	17	18	18
13	Cents /kWh	108.76	119.03	321.66	119.98	125.38	125.38
	Total						
14	Sales (MWh)	1,948	1,948	1,863	1,827	1,866	1,914
15	Customers	200	200	208	205	206	216
16	Revenue (000s)	1,625	1,770	1,696	1,591	1,669	1,717
17	Cents /kWh	83.41	90.84	91.03	87.10	89.45	89.70
C	SENERATION (MWh)						
18	Total Station Service	64	64	67	74	64	67
19	Station Service - % of Gen.	2.9%	2.9%	3.4%	3.7%	3.2%	3.2%
20	Losses	164	164	65	87	107	102
21	Losses - % of Gen.	7.5%	7.5%	3.3%	4.4%	5.2%	4.9%
22	Total Generation	2,176	2,176	1,996	1,988	2,037	2,083
	Source						
23	Diesel Generation (MWh)	2,176	2,176	1,996	1,988	2,037	2,083
24	Diesel Efficiency (KWh/L)	3.67	3.67	3.45	3.39	3.43	3.43
25	Liters (000s)	593	593	578	587	594	607
	Peak						
26	Peak Load (KW)	406	406	424	389	395	406
27	Load Factor	61%	61%	54%	58%	59%	58%

### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

710 Arctic Bay

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,504	1,504	1,390	1,409	1,553	1,542
2	Customers	248	248	241	241	263	264
3	Av. MWh Sales/Cust.	6.06	6.06	5.78	5.86	5.89	5.84
4	Revenue (000s)	1,345	1,467	1,244	1,316	1,507	1,497
5	Cents/kWh	89.38	97.49	89.53	93.44	97.05	97.09
	Commercial						
6	Sales (MWh)	1,618	1,618	1,520	1,553	1,578	1,561
7	Customers	69	69	71	72	72	72
8	Av. MWh Sales/Cust.	23.40	23.40	21.31	21.56	21.89	21.61
9	Revenue (000s)	1,290	1,406	1,225	1,261	1,380	1,365
10	Cents /kWh	79.73	86.90	80.62	81.23	87.41	87.47
	Streetlights						
11	Sales (MWh)	34	34	23	23	23	23
12	Revenue (000s)	37	40	25	27	28	28
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	3,156	3,156	2,932	2,984	3,154	3,126
15	Customers	317	317	312	313	336	336
16	Revenue (000s)	2,672	2,913	2,495	2,605	2,915	2,891
17	Cents /kWh	84.64	92.29	85.08	87.29	92.43	92.49
C	GENERATION (MWh)						
18	Total Station Service	88	88	205	233	153	164
19	Station Service - % of Gen.	2.5%	2.5%	6.1%	6.9%	4.3%	4.7%
20	Losses	256	256	212	167	233	232
21	Losses - % of Gen.	7.3%	7.3%	6.3%	4.9%	6.6%	6.6%
22	Total Generation	3,500	3,500	3,348	3,384	3,540	3,522
	Source						
23	Diesel Generation (MWh)	3,500	3,500	3,348	3,384	3,540	3,522
24	Diesel Efficiency (KWh/L)	3.34	3.34	3.46	3.58	3.61	3.61
25	Liters (000s)	1,048	1,048	968	946	980	976
	Peak						
26	Peak Load (KW)	708	708	897	993	789	797
27	Load Factor	56%	56%	43%	39%	51%	50%

### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

711 Clyde River

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	1,987	1,987	1,765	1,858	1,815	1,945
2	Customers	291	291	282	282	283	303
3	Av. MWh Sales/Cust.	6.83	6.83	6.25	6.59	6.42	6.41
4	Revenue (000s)	1,783	1,946	1,492	1,730	1,779	1,906
5	Cents/kWh	89.77	97.95	84.52	93.10	98.00	98.00
	Commercial						
6	Sales (MWh)	1,793	1,793	1,828	1,753	1,770	1,777
7	Customers	70	70	72	70	70	71
8	Av. MWh Sales/Cust.	25.64	25.64	25.45	24.92	25.13	25.18
9	Revenue (000s)	1,476	1,609	1,414	1,541	1,587	1,593
10	Cents /kWh	82.30	89.75	77.32	87.92	89.65	89.64
	Streetlights						
11	Sales (MWh)	19	19	18	18	18	18
12	Revenue (000s)	20	22	20	21	22	22
13	Cents /kWh	108.76	119.03	114.97	121.10	126.55	126.55
	Total						
14	Sales (MWh)	3,798	3,798	3,611	3,628	3,603	3,739
15	Customers	361	361	354	353	353	374
16	Revenue (000s)	3,279	3,578	2,926	3,292	3,388	3,521
17	Cents /kWh	86.34	94.18	81.02	90.73	94.04	94.16
C	GENERATION (MWh)						
18	Total Station Service	90	90	82	77	75	79
19	Station Service - % of Gen.	2.1%	2.1%	1.9%	1.7%	1.8%	1.8%
20	Losses	404	404	541	823	489	522
21	Losses - % of Gen.	9.4%	9.4%	12.8%	18.2%	11.7%	12.0%
22	Total Generation	4,293	4,293	4,234	4,528	4,168	4,340
	Source						
23	Diesel Generation (MWh)	4,293	4,293	4,234	4,528	4,168	4,340
24	Diesel Efficiency (KWh/L)	3.81	3.81	3.27	3.58	3.50	3.50
25	Liters (000s)	1,127	1,127	1,293	1,264	1,191	1,240
	Peak						
26	Peak Load (KW)	857	857	861	811	806	831
27	Load Factor	57%	57%	56%	64%	59%	60%

### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

712 Grise Fiord

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
S	ALES AND REVENUE						
	Domestic						
1	Sales (MWh)	328	328	302	331	321	367
2	Customers	65	65	63	64	64	74
3	Av. MWh Sales/Cust.	5.02	5.02	4.78	5.15	4.98	4.95
4	Revenue (000s)	288	314	293	307	305	349
5	Cents/kWh	87.80	95.69	97.01	92.64	94.98	95.01
	Commercial						
6	Sales (MWh)	788	788	866	806	798	813
7	Customers	48	48	48	46	46	46
8	Av. MWh Sales/Cust.	16.31	16.31	18.21	17.64	17.45	17.74
9	Revenue (000s)	640	697	777	652	693	705
10	Cents /kWh	81.18	88.43	89.68	80.92	86.84	86.79
	Streetlights						
11	Sales (MWh)	23	23	10	10	10	10
12	Revenue (000s)	25	28	11	12	12	12
13	Cents /kWh	108.76	119.03	111.80	119.98	125.38	125.38
	Total						
14	Sales (MWh)	1,140	1,140	1,178	1,147	1,129	1,190
15	Customers	114	114	111	110	110	120
16	Revenue (000s)	953	1,039	1,081	970	1,010	1,066
17	Cents /kWh	83.65	91.14	91.74	84.64	89.49	89.64
G	SENERATION (MWh)						
18	Total Station Service	58	58	60	112	79	83
19	Station Service - % of Gen.	4.3%	4.3%	4.6%	8.1%	6.0%	
20	Losses	148	148	62	121	103	97
21	Losses - % of Gen.	11.0%	11.0%	4.8%	8.8%	7.9%	7.1%
22	Total Generation	1,347	1,347	1,300	1,380	1,311	1,369
	Source						
23	Diesel Generation (MWh)	1,347	1,347	1,300	1,380	1,311	1,369
24	Diesel Efficiency (KWh/L)	3.27	3.27	3.41	3.19	3.33	3.33
25	Liters (000s)	412	412	381	432	394	411
	Peak						
26	Peak Load (KW)	248	248	250	255	254	264
27	Load Factor	62%	62%	59%	62%	59%	59%

### Qulliq Energy Corporation 2025/26 General Rate Application Summary of Generation, Sales, and Revenue

713 Saniqiluaq

Line		2022/23	2022/23	2022/23	2023/24	2024/25	2025/26 Forecast @
no.	Description	GRA Forecast	Base Rate Amendment	Actual	Actual	Forecast	Existing Rates
- 5	SALES AND REVENUE						
	Domestic						
1	Sales (MWh)	2,046	2,046	1,894	1,905	1,964	2,054
2	Customers	275	275	265	270	274	288
3	Av. MWh Sales/Cust.	7.44	7.44	7.15	7.05	7.17	7.14
4	Revenue (000s)	1,864	2,034	1,697	1,832	1,967	2,057
5	Cents/kWh	91.09	99.43	89.56	96.19	100.16	100.17
	Commercial						
6	Sales (MWh)	1,911	1,911	1,807	1,750	1,843	1,807
7	Customers	87	87	86	86	86	86
8	Av. MWh Sales/Cust.	21.85	21.85	20.91	20.37	21.42	20.97
9	Revenue (000s)	1,518	1,653	1,431	1,356	1,542	1,514
10	Cents /kWh	79.39	86.49	79.22	77.44	83.67	83.75
	Streetlights						
11	Sales (MWh)	48	48	33	16	16	16
12	Revenue (000s)	52	57	36	38	20	20
13	Cents /kWh	108.76	119.03	108.17	246.70	125.38	125.38
	Total						
14	Sales (MWh)	4,005	4,005	3,734	3,671	3,822	3,876
15	Customers	362	362	351	356	360	374
16	Revenue (000s)	3,434	3,745	3,164	3,226	3,528	3,590
17	Cents /kWh	85.72	93.49	84.72	87.89	92.31	92.62
	GENERATION (MWh)						
18	Total Station Service	79	79	106	165	95	102
19	Station Service - % of Gen.	1.8%	1.8%	2.5%	3.8%	2.2%	
20	Losses	263	263	400	515	393	423
21	Losses - % of Gen.	6.1%	6.1%	9.4%	11.8%	9.1%	
22	Total Generation	4,348	4,348	4,241	4,350	4,310	4,401
	Source						
23	Diesel Generation (MWh)	4,348	4,348	4,241	4,350	4,310	4,401
24	Diesel Efficiency (KWh/L)	3.81	3.81	3.76	3.69	3.73	3.73
25	Liters (000s)	1,141	1,141	1,128	1,177	1,156	1,180
	Peak						
26	Peak Load (KW)	877	877	877	774	838	843
27	Load Factor	57%	57%	55%	64%	59%	60%

# APPENDIX B CORRESPONDENCE FROM DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES



בת ב״ס ל פנילסרים האכילקיי הישל Department of Community and Government Services Nunalingni Kavamatkunnilu Pivikhaqautikkut Ministère des Services Communautaires et gouvernementaux

June 6, 2024
Ernest Douglas
President and CEO
Qulliq Energy Corporation
P.O. Box 580
Iqaluit, Nunavut X0A 0H0

RE: Fuel Stabilization Rate Fund – Application for Rider

Dear Ernest,

Thank you for your letter seeking information on PPD's pricing and forecasting practices in support of QEC's Fuel Stabilization Rate Application submitted to the URRC.

As you know, PPD's pricing is heavily influenced by the price of oil and exchange rates. Given the inherent volatility in these markets, making accurate long-term projections is challenging. Historically, PPD charges QEC the landed cost (product plus freight) for bulk fuel delivered directly to QEC tankage during resupply. The price for nominated product, delivered to QEC over the course of the year from GN tankage, includes product cost, freight, delivery fees, and overhead expenses, and is approved by the Financial Management Board (FMB).

Traditionally, PPD makes pricing recommendations to the FMB in the fall, following the annual bulk fuel resupply. At this time, PPD determines the weighted average and forecasts its Cost of Goods Sold (COGS), which enables us to make informed pricing recommendations. Our goal is to set retail prices at a level that ensures the long-term break-even financial performance of the Petroleum Products Revolving Fund (PPRF). For more detailed information on our pricing practices, you can refer to our annual reports.

Over the past two years, PPD has implemented base price increases totaling approximately \$0.40 per liter. These adjustments reflect higher product costs due to global events, including the Russian invasion of Ukraine and the post COVID-19 world economic recovery which had surged oil demand, following historic crude oil low prices observed during the pandemic. This caused a more than 80% spike in the landed cost of our product for resupply 2022 vs the previous year. Half of this increase, or \$0.20 per liter, was deferred as late as possible until fall 2023, with a \$0.05 per liter increase in October

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Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

2023 and a subsequent \$0.15 per liter increase in January 2024, both impacting QEC's pricing on nominated product.

The fiscal year 2023-24 was unusual, with two base price adjustments within a single fiscal year, whereas typically we adjust base prices only once annually, excluding non-base price tax adjustments like the carbon tax, which does not apply to QEC. Delays in preparing PPD financial statements due to key vacancies postponed the 2022-23 audit process until early 2024, prompting a provisional price increase in October 2023. As the audit progressed, and the 2023 resupply landed costs per liter appeared not substantially lower than 2022, it became evident that PPD accumulated deficit, cumulated under the Petroleum Products Stabilization Fund, would fall below the lower authorized limit. This necessitated another price increase in January 2024 to recoup the full extent of the spike in product costs which had been deferred as long as possible.

We recognize that this deviation from normal practice may have caused confusion or unpredictability in pricing decisions for QEC through the URCC. Moving forward, we plan to return to our standard practice of making pricing recommendations to the FMB in the fall, with subsequent rate adjustments shortly thereafter. To improve communication and predictability, we can provide QEC with our pricing recommendations at the time of preparation and inform you of the FMB's decision in advance of any rate adjustments.

Regarding pricing for April 1, 2025, we can only provide preliminary and non-binding guidance at this stage. Our forecast indicates that the landed costs for the 2024 resupply will be 3.3% lower than in 2023, although 14% of our orders are still pending. This favorable outlook suggests that we might maintain current prices in the fall. However, the ongoing 2023-24 financial audit could impact our pricing recommendations if the results deviate from our expectations.

We understand you may have further questions. Our team here at CGS and at PPD would welcome a discussion with you, your team, and the URRC to provide additional insight if needed. Please let me know, and we will plan accordingly.

Sincerely,

Kyle Seeley Deputy Minister

Department of Community and Government Services



באר״ה לאב"ט האכירה הליך Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

Cc: Nathaniel Hutchinson, Director, Petroleum Products Division Brad McFaul, Director, Policy and Consumer Affairs

# APPENDIX C CAPITAL ADDITIONS

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### 1 C1.0 INTRODUCTION

- 2 Appendix C summarizes actual capital spending for 2022/23-2023/24 and forecast
- 3 spending for 2024/25-2025/26. This appendix also provides details for projects over
- 4 \$400,000 including those projects with major project permits approved by the Minister.

# 5 C2.0 ACTUAL CAPITAL PROJECTS OVER \$400,000 IN 2022/23

- 6 The following section summarizes actual capital additions over \$400,000 for 2022/23.
- 7 Schedule C-1 shows the total capital additions in 2022/23 for projects greater than
- 8 \$100,000.

### 9 Gjoa Haven

### **Quonset Garage**

\$501,000

- 10 This project was undertaken to purchase and construct an insulated Quonset Garage to
- 11 house the RBD Line Truck in Gjoa Haven. Without the said storage, repairs and
- maintenance is unmanageable in harsh conditions. The RBD line truck is an essential
- 13 and critical component in power line maintenance and emergency repair. These vehicles
- 14 need to be stored in a secure and controlled environment. The Quonset Garage will add
- 15 years to the life of this very critical piece of equipment and will ensure the RBD will be
- ready and available for all distribution line maintenance and emergency services.

# 17 Taloyoak

# **Quonset Garage**

\$511,000

- 18 This project was undertaken to purchase and construct an insulated Quonset Garage to
- 19 house the RBD Line Truck in Taloyoak. Without this garage, repairs and maintenance
- 20 was unmanageable, especially in harsh weather conditions. The RBD line truck is an

1 essential and critical component in power line maintenance and emergency repair. These

2 vehicles need to be stored in a secure and controlled environment. A controlled

3 environment for storage and maintenance will add years to the life of this very critical

piece of equipment and will ensure the RBD will be ready and available for all distribution

5 line maintenance and emergency services.

6 Whale Cove

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**Genset Replacement G2** 

\$2,070,000

**AEF Contribution: \$709,000** 7

8 Net Capital Addition: \$1,361,000

9 This project was undertaken to replace the 300 kW Genset G2 unit which was installed

in 1991 and has exceeded its expected operational life. The G2 unit was replaced with a

Genset, which has the same rating of 300 kW. QEC has secured AEF funding for this

12 project.

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13 Pond Inlet **Genset Replacement G4** 

\$2,874,000

14 AEF Contribution: \$1,655,000

15 **Net Capital Addition: \$1,219,000** 

16 This project was undertaken to replace the 550 kW Genset G4 unit which consisted of a

Guascor SF360TA engine. The unit was installed in 2009 and while it only has 30.000

hours, it has proven to be very unreliable and QEC had major issue getting parts for

servicing. The Guascor SF360TA was replaced with a Cat. 3508C which has the same

20 rating of 550 kW. QEC has secured AEF funding for this project. 1 **Arctic Bay New Power Plant** \$30,138,000

2 This project was undertaken to improve reliability and quality of service in the community

3 of Arctic Bay.

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4 The existing power plant was constructed in 1974 and had exceeded its design life. The

plant systems were inadequate and outdated and did not meet current and future energy

requirements and regulations. The switch gear was not Arc resistant and could not be

modified, which increased fire and safety risk. Also, the building structure itself was in

poor condition and there is no room for expansion. The new plant consists of a four genset

lineup with a total installed capacity of 1680 kWs. The plant is equipped with modern

systems than generate much less sound and air pollution. This new plant with its new

gensets and advanced controls is expected to improve the fuel efficiency and reliability.

Its design will allow the integration of renewable energy sources.

13 Clyde River **Genset Replacement G3** 

\$2,905,000

14 AEF Contribution: \$2,062,000

**Net Capital Addition: \$843,000** 

16 This project was undertaken to replace the 330 kW Genset G3 unit which consisted of a

Detroit Series 60 engine. The unit was installed in 2006 and has approximately 17,000 of

operational hours. The Series 60 engine is being replace with a Cat. 3508C with a ranging

of 550kW. The replacement is required to address the need to meet the community power

needs. The Series 60 will be reconditioned and placed in inventory to be ready for use for

21 future genset replacements. QEC has secured AEF funding for this project.

# 1 Grise Fiord Quonset Garage \$565,000

- 2 This project was undertaken to purchase and construct an insulated Quonset Garage to
- 3 house the RBD Line Truck in Grise Fiord. Without this garage, repairs and maintenance
- 4 was unmanageable, especially in harsh weather conditions. The RBD line truck is an
- 5 essential and critical component in power line maintenance and emergency repair. These
- 6 vehicles need to be stored in a secure and controlled environment. A controlled
- 7 environment for storage and maintenance will add years to the life of this very critical
- 8 piece of equipment and will ensure the RBD will be ready and available for all distribution
- 9 line maintenance and emergency services.

# 10 C3.0 ACTUAL CAPITAL PROJECTS OVER \$400,000 IN 2023/24

- 11 The following section summarizes actual capital additions over \$400,000 for 2023/24.
- 12 Schedule C-2 shows the total capital additions in 2023/24 for projects greater than
- 13 \$100,000.

# 14 Baker Lake Head Office Building

\$16,456,000

- 15 This project was undertaken to construct a new 13,000 square foot commercial office
- 16 building in Baker Lake. The Corporation's business activities are conducted out of the
- 17 head office located in Baker Lake and the corporate office in Iqaluit. In Baker Lake the
- 18 corporate office is spread out over three leased buildings. The largest of the three is
- 19 leased from the Government of Nunavut and QDEC was informed that this lease is to be
- 20 cancelled in the near future as they needed to take possession of the office space for
- 21 their own requirements. This left QEC without approximately 50% of the office space

1 required in the community. Furthermore, that situation did not allow for an efficient, unified

2 and organized work environment. One of the leased units was a three-bedroom house,

3 modified to work as an office space. Also, QEC was facing the dilemma of Baker Lake

4 lacking available office space. This project resolved the office space issues, and the new

building has increased QEC's operational efficiency as now all Baker Lake staff are

6 accommodated in one building.

## Cape Dorset

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### **New Power Plant**

\$1,030,000

This project was undertaken to replaced Cape Dorset power plant which was constructed in the early 1970's. The plant was inadequate due to aging equipment's and the plant did not meet current and future energy requirements and regulations. The switch gear was not Arc resistant and could not be modified which increased fire and safety risk. The new plant has a total installed capacity of 3,575 kWs, comprising of four gensets and a fuel storage system consisting of two 90 litre fuel tanks. This plant went into service in the spring of 2019 at which time there was a partial closeout with \$27.3 million being posted to capital additions. This is the final closeout to cover expenses for miscellaneous outstanding work that was delayed due to material/contractor delays, seasonal alignment and COVID.

### 18 **Resolute Bay**

### Feeder 4 Upgrade

\$629,000

19 This project was undertaken to replace the existing feeder four with a new three phase

distribution line between the plant and the hamlet. There were continuous power

21 interruptions to the community, often for long periods, due to having to wait for

- 1 maintenance teams to be flown into Resolute Bay from the service hubs. This project was
- 2 required to address the issues of the aged existing feeder that was at the end of its useful
- 3 life.
- 4 Clyde River

**Genset Replacement G2** 

\$3,437,000

AEF Contribution: \$2,526,000 5

6 **Net Capital Addition: \$911,000** 

- 7 This project was undertaken to replace the 480 kW Genset G2 unit which consisted of a
- 8 Cat. D 3508 engine. The unit was installed in 1994 and has exceeded its expected
- 9 operational life. The Cat. D3508 was replace with a Cat. 3508C which has the rating of
- 10 550 kW. QEC has secured AEF funding for this project.

### 11 C4.0 FORECAST CAPITAL PROJECTS OVER \$400,000 FOR 2024/25

- 12 The following section summarizes forecasted capital additions over \$400,000 for 2024/25.
- 13 Schedule C-3 shows the total capital additions in 2024/25 for projects greater than
- 14 \$100,000.

### 15 Nunavut SAN Storage, Server Hardware and Instructure Replacement \$413,000

- 16 This project is being undertaken to replace the aged SAN storage, servers and backbone
- 17 infrastructure that have reached the end of their lifecycle. The project allows QEC to keep
- 18 current on the key systems, applications and provide minimal outages for technical
- 19 support.

# 1 Rankin Inlet Station PLC & DC Upgrade

\$455,000

- 2 This project is being undertaken to replace the plant PLC system, complete with required
- 3 inputs and output modules. It includes the replace of the existing battery bank and charger
- 4 with a new system that allows maintenance to be performed on the batteries while the
- 5 plant is in operation. The current station PLC system and battery bank system has
- 6 become obsolete with parts harder to find, and the system is expensive to maintain.
- 7 Replacing this system with new up-to-date technology will ensure less interruptions and
- 8 improved power plant operation.

# 9 Coral Harbour Emergency Unit Connection

\$535,000

- 10 The Emergency Generator set is required to provide back-up power to the main power
- 11 plant in case of engine failure or any major issues in the plant that would prevent the
- 12 supply of power to the community. The community of Coral harbour has a short runway
- 13 and can not accommodate large airplane to bring in a back up unit if needed.

# Coral Harbour Protection Relays and DC Upgrade

\$746,000

- 15 This project is being undertaken to upgrade the protection system with relays which has
- 16 multifunction features and offers more reliability in operation and flexibility in settings
- 17 range. QEC is aiming at standardizing all systems including the protection. This project
- will bring consistency in functionality of plant operations. The proper maintenance of the
- old protection relays is near impossible as the replacement parts are now obsolete.

# 20 Naujaat

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### **Fuel Load Station**

\$679,000

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1 In the Naujaat Power Plant, fuel is direct/gravity supplied to the QEC bulk fuel tanks

2 through the PPD pipeline. Mobile fuel trucks are used during times when the PPD Storage

3 tank's low-level conditions. Usually, during August and September, the fuel filling takes

place using the QEC bulk tank's top nozzle. This method does not have spill control

mechanisms and there is a risk of static charge and fire hazard. This project will provide

a safe and spill-free fuel transfer mechanism between the PPD mobile fuel truck and

7 QEC's bulk fuel tanks that eliminate environmental and operational safety risks.

8 Iqaluit Fleet Purchases \$431,000

9 This project is being undertaken to purchase three full size crew cab trucks and two mid-

size SUV's to replace aging vehicles in the Iqaluit vehicle fleet. The fleet of vehicles in

Igaluit is aging past their typical life span. Many of the vehicles are over 10 years old. In

order to minimize costs associated with repairs and potential downtime for vehicles some

13 of these vehicles had to be replaced.

14 Iqaluit G4 Genset Replacement

\$9,993,000

15 **AEF Contribution Estimate: \$6,056,000** 

Net Capital Addition: \$3,937,000

17 This project will replace the existing Genset G4 (3300 KW) unit with a new Genset with

same capacity in the Iqaluit Power Plant. The current Genset G4 as installed in 1992 and

the operating hours is over 140,000 hrs, which exceeds it's recommended operating life

of 100,000 hours. QEC has secured AEF funding for this project currently estimated at

21 \$6.056 million.

# 1 Cape Dorset Transient House Upgrade

\$655.000

2 QEC owns and maintains a property which contains a 3-bedroom detached house

3 currently being utilized as a transient. This house is approximately 35 years old, and while

the structure is solid, the cost to renovate is not reasonable. Therefore, it is more cost

effective to purchase a modular unit to be placed in the community. This will allow for

suitable accommodations for QEC staff. The 3-bedroom house will be placed up for

7 disposal at a later date.

# 8 Resolute Bay

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### **Quonset Garage**

\$666,000

9 This project is to be undertaken to purchase and construct an insulated Quonset Garage

to house the RBD Line Truck in Resolute Bay. Without this garage, repairs and

maintenance was unmanageable, especially in harsh weather conditions. The RBD line

truck is an essential and critical component in power line maintenance and emergency

repair. These vehicles need to be stored in a secure and controlled environment. A

controlled environment for storage and maintenance will add years to the life of this very

critical piece of equipment and will ensure the RBD will be ready and available for all

distribution line maintenance and emergency services.

### 17 **Grise Fiord**

### **New Power Plant**

\$122,000

18 This project was undertaken to improve reliability and quality of service in the community.

The old Grise Fiord power plant was constructed in 1963 and had numerous problems in

regard to its civil, mechanical, and electrical systems. It suffered from several deficiencies,

including failing building foundation, unreliable superstructure and aging systems and

- 1 equipment. The Grise Fiord facility was pass its service life and requires replacement.
- 2 The plant was substantial completed in 2018-19 at which time \$18.8 million was the
- 3 expenses were capitalized. There were still some minor outstanding work that has been
- 4 delayed due to seasonal timing and contractor /material delays. This work has now been
- 5 completed and this represents the remainder of the cost to be capitalized to finalize the
- 6 project.

### 7 Grise Fiord

# **Emergency Unit Connection**

\$501,000

- 8 The Emergency Generator set is required to provide back-up power to the main power
- 9 plant in case of engine failure or any major issues in the plant that would prevent the
- 10 supply of power to the community. The community of Grise Fiord has a short runway and
- 11 can not accommodate large airplane to bring in a back up unit if needed.

### 12 Sanikiluag

# **Emergency Unit Connection**

\$567,000

- 13 The Emergency Generator set is required to provide back-up power to the main power
- 14 plant in case of engine failure or any major issues in the plant that would prevent the
- 15 supply of power to the community. The community of Sanikiluaq has a short runway and
- can not accommodate large airplane to bring in a back up unit if needed.

## 17 Sanikiluaq

# **Transformer Replacement**

\$1,440,000

- 18 This project was undertaken to install new step-up transformers within the distribution
- 19 system in Sanikiluaq. Presently, there are two step-up transformer banks maintaining the
- 20 feeders in the community. One of these transformer banks has become problematic, it is
- of substandard design and in the past year there has been several powers outage related

- 1 to this issue. This project intends to replace this problematic transformer bank with a new
- 2 pad mounted transformer bank that meets current standards. This upgrade will increase
- 3 reliability, reduce outages and increase safety to the line crew.

## 4 C5.0 FORECAST CAPITAL PROJECTS OVER \$400,000 FOR 2025/26

- 5 The following section summarizes forecasted capital additions over \$400,000 for 2025/26.
- 6 Schedule C-4 shows the total capital additions in 2025/26 for projects greater than
- 7 \$100,000.

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# 8 Nunavut Automated Meter Infrastructure (AMI)

\$1,000,000

This project originally was to upgrade and automate its meter reading systems in Baker Lake. The upgraded system would be capable of remotely reading meters without necessitating direct access to the meters by meter readers, but still be capable of taking local manual reads. QEC current revenue meters in Baker Lake are manually read which is labour intensive and prone to inaccuracies. However, it was discovered the cost were much higher than the approved budget. It was later decided it would be more cost effective to switch to an Automated Meter Infrastructure system that involves the replacement of existing revenue meters with smart meters equipped with cellular communication capabilities. By changing to this system QEC can convert 5 communities instead of just one with the approved budget amount. This system will allow meter readers to obtain meter reads from the remotely using a handheld device improving meter reading efficiency and accuracy.

### 21 Nunavut

# **Automated Meter Infrastructure (AMI)**

\$700,000

This project originally was to upgrade and automate its meter reading systems in Baker Lake. The upgraded system would be capable of remotely reading meters without necessitating direct access to the meters by meter readers, but still be capable of taking local manual reads. QEC current revenue meters in Arviat are manually read which is labour intensive and prone to inaccuracies. However, it was discovered the cost were much higher than the approved budget. It was later decided it would be more cost effective to switch to an Automated Meter Infrastructure system that involves the replacement of existing revenue meters with smart meters equipped with cellular communication capabilities. By changing to this system QEC can convert 4 communities instead of just one with the approved budget amount. This system will allow meter readers to obtain meter reads from the remotely using a handheld device improving meter reading efficiency and accuracy.

# Nunavut Portable Standby Emergency Units

\$3,204,000

This project will involve the procurement of 3 portable emergency Gensets that can be deployed to any community that has a requirement to address capacity issues. Some of the QEC power plants in Nunavut do not have emergency backup gensets to supply emergency power in the event of a catastrophic failure. This project will ensure that power plants will be able to supply power to the communities' critical loads in the event of a catastrophic failure of the power plant. This will also reduce the chances of community evacuations in the event of extended total power failure in the community during cold winter months. This will increase the reliability of the power supply to the community and reduce the risk of any power shortage or blackout.

# Nunavut Upgrade GP to Microsoft Dynamics D365

\$3,182,000

- 2 This project is to replace Finance Great Plain (GP) software with Microsoft Dynamics
- 3 D365 Finance and Operations. Microsoft Dynamics is the evolution product from
- 4 Microsoft for GP and is cloud-based. Our current Microsoft GP system is no longer
- 5 supported after July 14, 2026. The previous CFOs determined that the best system
- 6 replacement for our GP system is Microsoft Dynamics D365 Finance and Operations.
- 7 Microsoft Dynamics D365 Finance and Operations will become the core for QEC
- 8 Financial systems. It is built to integrate into our Microsoft environment (O365, M365,
- 9 Teams, SharePoint, OneDrive) and our other systems (HRIS, WorkPlace) are Microsoft
- 10 Dynamics approved for easy integration. Not to proceed with this project puts QEC at
- 11 high risk that their key financial system will be unsupported and hence unavailable after
- 12 July 14, 2026.

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# 13 Gjoa Haven

# Feeder 2 upgrade

\$859,000

- 14 This project will replace a section of Feeder 2 that is supplying power to the northern part
- of the Hamlet. The infrastructure is outdated and this area has longer line spans that
- 16 exceeds current standards. By upgrading this section, it will greatly reduce service
- 17 disruptions to this area and the airport.

### 18 Kugaaruk

# G1 Genset (550 kW) Replacement

\$5,413,000

- 19 This project is undertaken to replace the old Detroit Diesel 320 kW genset with a new 550
- 20 kW Genset. The 550KW Genset is much heavier than the existing one, therefore
- 21 reinforcement of the foundation and support structures, upgrade the fuel system and

- 1 some modifications of PLC will be required. Replacement of the genset will increase
- 2 reliability of power supply and by increasing the capacity will allow the plant to cover the
- 3 communities load in any conditions.

### Kugluktuk

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### **Transient Unit Replacement**

\$599,000

- 5 QEC owns and maintains a property which contains a 3-bedroom detached house
- 6 currently being utilized as a transient. This house is approximately 40 years old, and the
- 7 structure is solid, but it has not had any significant maintenance or upgrades in over 20
- 8 years. The house urgently requires renovations. The project will upgrade this house to be
- 9 more energy efficient and current to building standards and codes, returning it to an
- 10 acceptable and secure living condition.

### 11 Rankin Inlet

# Iglu Street Staff Housing

\$3,012,000

- 12 This project was undertaken to construct, deliver, assemble 4 new 3-Bedroom Staff
- 13 Houses on QEC owned building lots. QEC owns 3 houses on 4 Lots (180-183) at Iglu
- 14 Street in Rankin Inlet. All are in extremely poor condition. A 4th house was demolished in
- 15 December of 2020 after massive rot was discovered throughout the insulated roof system.
- 16 All are of identical design and close to 50 years old. Because of their condition these units
- are unsafe and unsanitary. It is critical that alternative accommodations be acquired for
- 18 the QEC employee's family. A successful bidder will provide 4 modular 3-bedroom
- 19 housing units and deliver them to Rankin Inlet to be assembled on QEC's property lots.
- 20 QEC's needs for additional staff housing are urgent and Rankin Inlet's as the housing
- 21 leasing market continues to be both marginal and expensive.

### 1 Baker Lake

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# **Head Office Building**

\$1,058,000

This project was undertaken to construct a new 13,000 square foot commercial office building in Baker Lake. The Corporation's business activities are conducted out of the head office located in Baker Lake and the corporate office in Igaluit. In Baker Lake the corporate office is spread out over three leased buildings. The largest of the three was leased from the Government of Nunavut and QEC was informed that this lease was to be cancelled in the near future, as they needed to take possession of the office space for their own requirements. This left QEC without approximately 50% of the office space required in the community. Furthermore, that situation did not allow for an efficient, unified and organized work environment. One of the leased units was a three-bedroom house, modified to work as an office space. Also, QEC was facing the dilemma of Baker Lake lacking available office space. This project resolved the office space issues, and the new building has increased QEC's operational efficiency as now all Baker Lake staff are accommodated in one building. A partial close was completed in FYE2024 for the amount of \$16.456 million as the building was put into operation. However, there was some minor items that required addressing resulting in an addition cost of \$1.058 million.

### 17 Baker Lake

# **5-Plex Renovations**

\$2,972,000

Building unit number 2145 is a 2 storey, multi-unit residential building facility, consisting of 3 x 2 bedroom and 2 x 1bedroom apartment units and owned and operated by QEC. The apartments are rented by QEC staff who work in the Baker Lake offices. The building has experienced a number of water leaks over the past number of year, resulting in mold

growth in both interior and exterior wall, and ceilings. Mold is currently 'trapped' in the

walls and ceilings and does not pose an immediate danger to residents. Ventilation systems within the suites do not exist, and those basic exhaust systems (washrooms, range, and dryers) were poorly installed and woefully inadequate. Windows do not have a good energy efficient rating. There is no secure tenant storage for larger items, with some being stored in the Mechanical Room. This project will complete interior and exterior renovations and enhancements to the residential building and remediate the mold issues found within the building. The project with address all the deficiencies and bring the building up to a safe and more energy efficient building.

# Baker Lake G4 Genset (1100 kW) Replacement

\$5,754,000

This project is to replace the existing 550kW Genset (G4) unit at Baker Lake as it is reaching the end of its life cycle. In addition, the load forecast for Baker Lake indicates that the current lineup of generators will be under the required capacity within a few years. To ensure a reliable and sustainable electricity supply to the community, the existing G4 will be replaced with a 1,100KW Genset.

# Whale Cove

# **Substation Upgrade**

\$1,576,000

This project is to replace the substation platform mounted transformer banks in Whale Cove with pad mount transformers on each of the feeders. The existing substation transformer banks are outdated and not in compliance with current standards. The substation transformers are a critical part of the distribution system in any community. When a failure occurs at this point an entire feeder will be lost. Such issues typically occur near peak loads or during bad weather which adds urgency to response times and/or

1 prevents immediate emergency response. Upgrading and modernizing the system will

2 increase reliability, reduce outages and increase safety to the line crew.

# Resolute Bay Transient House Upgrade

\$606,000

4 QEC owns and maintains a property which contains a 3-bedroom detached house

5 currently being utilized as a transient. This house is approximately 40 years old and while

the structure is solid, the cost to renovate is not reasonable. Therefore, it is more cost

effective to purchase a modular unit to be placed in the community. This will allow for

suitable accommodations for QEC staff. The 3-bedroom house will be placed up for

9 disposal at a later date.

# 10 **Sanirajak**

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# Feeder Upgrade

\$1,375,000

11 This project is to upgrade the distribution feeder system in Sanirajak. Most of the system

is outdated and beyond its useful life. It is estimated that 70% of the conductors, wires

and poles need replacing. The old conductors and #2 wire are no longer up to standard

and many of the poles are old and dilapidated. This project will improve the reliability of

power to the community by reducing outages which equates to less emergency

maintenance for the line crew. Also, safety to the public and QEC line crew is greatly

improved.

### Sanirajak

# **Substation Upgrade**

\$1,531,000

19 This project is to replace the substation platform mounted transformer banks in Sanirajak

with pad mount transformers on each of the feeders. The existing substation transformer

21 banks are outdated and not in compliance with current standards. The substation

1 transformers are a critical part of the distribution system in any community. When a failure

2 occurs at this point an entire feeder will be lost. Such issues typically occur near peak

loads or during bad weather which adds urgency to response times and/or prevents

immediate emergency response. Upgrading and modernizing the system will increase

5 reliability, reduce outages and increase safety to the line crew.

### **Arctic Bay**

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### **Transient Unit Replacement**

\$850,000

7 This project is being undertaken to purchase and install a new transient unit at the new

power plant in Arctic Bay. A transient unit is required to ensure QEC staff and other

contractors have suitable accommodations when staying at Arctic Bay to conduct repairs

and/or maintenance to QEC infrastructures. The new transient, will be a self-contained

modular unit, manufactured remotely and shipped and installed next to the new power

plant in Arctic Bay. The unit will have all facilities necessary for day to day living The old

Transient unit was purchased in early 1970 and does not comply to current standards,

and has deteriorated to a level which precludes salvage. It will be flagged for

decommissioning and disposal when the new unit is commissioned.

### 16 **Sanikiluaq**

### **G3 Genset Replacement**

\$4,857,000

17 This project is to replace the existing 330kW (G3) Genset unit at Sanikiluag as it is

reaching the end of its life cycle. As the load forecast for Sanikiluag indicates the

communities demand for power is growing, the existing G3 Genset unit will be replaced

with a 720KW Genset.

### QULLIQ ENERGY CORPORATION 2025/26 GENERAL RATE APPLICATION ACTUAL CAPITAL ADDITIONS FOR 2022/23

(in thousands of dollars)

			2022/23 Additions (\$000)						
Plant #	Plant Name	Description	Diesel	Distribution	General Plant	Total Project	Total for Plant	Government Contributions	Net Cost
400	Nunavut	LED Streetlight		250,209		250,209		250,209	0
		-					250,209	•	
502	Gjoa Haven	Quonset Garage		435,425	65,453	500,878		_	
							500,878		
503	Taloyoak	Quonset Garage		454,750	56,329	511,079		-	
							511,079		
606	Whale Cove	Genset Replacement G2	2,070,275			2,070,275		708,559	1,361,716
							2,070,275		
601	Rankin Inlet	Transformers, Lights and Poles		200,685		200,685			
							200,685		
602	Baker Lake	Transformers, Lights and Poles		173,528		173,528	472 520	=	
							173,528		
701	Iqaluit	Transformers, Lights and Poles		215,695		215,695	215,695	•	
							213,093		
705	Pond Inlet	Municipal Breakwater FL/SL Genset Replacement G4	2,874,438	135,784		135,784 2,874,438		1,654,847	1,219,591
		denset replacement d4	2,074,430			2,074,430	3,010,222	•	1,213,331
710	Arctic Bay	New Power Plant	29,373,044	764,981		30,138,025			
	,						30,138,025	•	
711	Clyde River	Genset Replacement G3	2,904,543			2,904,543		2,062,286	842,256
							2,904,543	•	
712	Grise Fiord	Vehicles			256,254	256,254			
		Quonset Garage			565,205	565,205			
							821,459		
	Projects with cost less	than \$100,000	1,166,000	415,691	1,343,784	2,925,475			
							2,925,475	-	
		Total for QEC	38,388,300	3,046,747	2,287,025	43,722,072	43,722,072		
		Government Contributions	4,425,693	250,209		4,675,902			
		Customer Contributions Net Costs for Schedule 6.2	33,962,608	886,108 <b>1,910,430</b>	2,287,025	886,108 <b>38,160,063</b>			
		Net Costs for scriedule 6.2	33,302,008	1,310,430	2,201,025	30,100,003			

### Notes

<sup>1.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs in Schedule 6.2 of the GRA reflect exclusion of government and customer contributions.

### QULLIQ ENERGY CORPORATION 2025/26 GENERAL RATE APPLICATION ACTUAL CAPITAL ADDITIONS FOR 2023/24

(in thousands of dollars)

	2023/24 Additions (\$000)  Government								
Plant #	Plant Name	Description	Diesel	Distribution	General Plant	Total Project	Total for Plant	Contributions	Net Cost
400	Nunavut	LED Streetlight		391,468		391,468		374,468	17,000
		Housing Asset Work Order Software			238,765	238,765			
		HRIS Software Time & Attendance			359,045	359,045			
							989,278		
702	Pangnirtung	RBD Line Truck			397,995	397,995			
							397,995	-	
606	Whale Cove	Protection System Upgrade	300,660			300,660			
							300,660	=	
504	Kugaaruk	RBD Line Truck			393,891	393,891			
					,	,	393,891	-	
602	Baker Lake	Head Office Building		87,182	16,368,499	16,455,681			
				0.,202			16,455,681	-	
605	Chesterfield Inlet	RBD Line Truck			399,067	399,067			
					,	,	399,067	-	
703	Cape Dorset	New Power Plant	105,386	924,616		1,030,002			
700	cape Boiset	Tem Force Flanc	203,500	32 1,020		2,000,002	1,030,002		
704	Resolute Bay	Feeder Upgrade		628,702		628,702			
704	Resolute bay	reeder opgrade		020,702		028,702	628,702	-	
744	Charles Birman	Connect Boules over C2	2 426 660			2 426 660	020,702		040.470
711	Clyde River	Genset Replacement G2	3,436,669			3,436,669	3,436,669	2,526,490	910,178
							3,430,003		
	Projects with cost less than \$100,000			62,160		62,160	62,160	-	
-								-	
		Total for QEC	3,842,714	2,094,129	18,157,262	24,094,105	24,094,105	-	
		Government Contributions	2,526,490	374,468		2,900,959			
		Customer Contributions				0			
		Net Costs for Schedule 6.2	1,316,224	1,719,661	18,157,262	21,193,146			

### Notes

<sup>1.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs in Schedule 6.2 of the GRA reflect exclusion of government and customer contributions.

### QULLIQ ENERGY CORPORATION 2025/26 GENERAL RATE APPLICATION FORECAST CAPITAL ADDITIONS FOR 2024/25

(in thousands of dollars)

			2024/25 Additions (\$000)						
Plant #	Plant Name	Description	Diesel	Distribution	General Plant	Total Project	Total for Plant	Government Contributions	Net Cost
400	Nunavut	LED Streetlight	•	469,269		469,269		469,269	0
		IT Hardware Replacement			233,000			,	
		Inventory/Asset Tracking Software			120,000	120,000			
		SAN Storage, Server Hardware and Ins	tructure Repla	cement	413,000	413,000			
		New Computers and Program Upgrade			113,214	113,214			
					/		1,348,483	-	
502	Gjoa Haven	RBD Line Truck			374,400	374,400			
302	Gjoa Haveli	RBB Line Truck			374,400	374,400	374,400	<del>-</del> I	
							37 1,100		
601	Rankin Inlet	Station PLC & DC Upgrade		455,000		455,000		-	
							455,000		
604	Coral Harbour	Emergency Unit Connection	535,000	)		535,000			
		Protection Relays and DC Upgrade	746,000	)		746,000		_	
							1,281,000		
607	Naujaat	Fuel Load Station	679,000	)		679,000			
007	raajaat	Plant Truck Replacement	0.5,000		112,000	112,000			
					,	,	791,000	-	
701	I m m l v i h	Fleet Purchase			424.200	424 260			
701	Iqaluit	G4 Genset Replacement	9,993,000		431,268	431,268 9,993,000		6,056,640	3,936,360
		04 denset kepiacement	9,993,000	<u>'</u>		3,333,000	10,424,268	-	3,330,300
							10,424,200		
702	Pangnirtung	Plant Truck Replacement			112,000	112,000		_	
							112,000		
703	Cape Dorset	Transient House Upgrade			655,000	655,000			
							655,000	Ī	
704	Resolute Bay	Quonset Garage			666,000	666,000			
704	nesolute buy	Quonset durage	-		000,000	000,000	666,000	<del>-</del>	
							,		
706	Igloolik	Plant Truck Replacement			112,000				
		RBD Line Truck	-		374,000	374,000	486,000	-	
							460,000		
708	Qikiqtarjuaq	Plant Yard Fencing			180,960	180,960		_	
							180,960		
713	Sanikiluaq	Emergency Unit Connection	567,000	)		567,000			
		Transformer Replacement		1,440,000		1,440,000			
							2,007,000	Ī	
712	Grise Fiord	New Power Plant	122,374			122,374			
712	Grise Flora	Substation Upgrade	122,374	186,000		186,000			
		Plant Truck Replacement		100,000	112,000	112,000			
		Emergency Unit Connection	501,000	)	,	501,000			
						012,000	921,374	-	
	Drojosta with part I	es than \$100,000			242 440	242 440	•		
	Projects with cost le	255 (11411 \$100,000			343,410	343,410	343,410	-	
								-	
		Total for QEC	13,143,374	2,550,269	4,352,251	20,045,894	20,045,894	- -	
		<b>Government Contributions</b>	6,056,640	469,269		6,525,909			
		Customer Contributions				0			
		Net Costs for Schedule 6.2	7,086,734	2,081,000	4,352,251	13,519,985			

### Notes:

<sup>1.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs in Schedule 6.2 of the GRA reflect exclusion of government and customer contributions.

### QULLIQ ENERGY CORPORATION 2025/26 GENERAL RATE APPLICATION FORECAST CAPITAL ADDITIONS FOR 2025/26

(in thousands of dollars)

			2025/26 Additions (\$000)						
Plant #	Plant Name	Description	Diesel	Distribution	General Plant	Total Project	Total for Plant	Government Contributions	Net Cost
400	Nunavut	Automated Meter Infrastructure (AMI)		1,000,000	,	1,000,000			
		Automated Meter Infrastructure (AMI)		700,000		700,000			
		Portable Standby Emergency Units	3,204,000			3,204,000			
		Upgrade GP to Microsoft Dynamics D365	5		3,182,000	3,182,000		_	
							8,086,000		
502	Gjoa Haven	Feeder 2 upgrade		859,000		859,000			
	.,	_		,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	859,000	-	
504	Kugaaruk	G1 Genset Replacement	5,413,000			5,413,000			
304	Kugaaruk	di denset kepiacement	3,413,000			3,413,000	5,413,000	-	
	w 11.1				500.000	500.000	., .,		
505	Kugluktuk	Transient Unit Replacement			599,000	599,000	599,000	-	
							599,000		
601	Rankin Inlet	Iglu Street Staff Housing			3,012,000	3,012,000			
							3,012,000		
602	Baker Lake	Head Office Building			1,058,000	1,058,000			
		5-Plex Renovation			2,972,000	2,972,000			
		G4 Genset Replacement	5,754,000			5,754,000		_	
							9,784,000		
606	Whale Cove	Substation Upgrade		1,576,000		1,576,000			
		_					1,576,000	-	
704	Resolute Bay	Transient Staff House Renovation			606.000	606,000			
704	Resolute bay	Transient Stan House Renovation			000,000	000,000	606,000	-	
							000,000		
707	Sanirajak	Feeder Upgrade		1,375,000		1,375,000			
		Substation Upgrade		1,531,000		1,531,000	2 000 000	-	
							2,906,000		
710	Arctic Bay	Transient Unit Replacement			850,000	850,000		_	
							850,000		
713	Sanikiluaq	G3 Genset ReplacementEmergency Uni	4,857,000			4,857,000			
							4,857,000	=	
	Projects with cost les	s than \$100 000		360,000	93,000	453,000			
	Projects with cost less than \$100,000			300,000	33,000	433,000	453,000	-	
		Total for QEC	19,228,000	7,401,000	12,372,000	39,001,000	39,001,000	_	
			_5,5,500	.,.02,000	,_,_,		-5,002,000	•	
		Government Contributions				0			
		Customer Contributions	10 220 000	7 404 000	12 272 000	20 001 000			
		Net Costs for Schedule 6.2	19,228,000	7,401,000	12,372,000	39,001,000			

### Notes:

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<sup>1.</sup> Government and customer contributions towards tangible capital assets are recognized by QEC as revenue in the year received. For the GRA purposes the contributions are added as an offset to the capital cost. Therefore, net costs in Schedule 6.2 of the GRA reflect exclusion of government and customer contributions.

# APPENDIX D COST OF SERVICE STUDY METHODS

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### D1.0 OVERVIEW

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## 2 D1.1 PURPOSE OF THE COST OF SERVICE

- 3 A cost-of-service (COS) study is an analytical tool that supports the ratemaking process.
- 4 The purpose of a COS study is to develop a method to fairly allocate the revenue
- 5 requirement among the different customer classes served by the utility. While there are
- 6 many potential allocation methods, the core objective is to allocate costs to customers
- 7 consistent with principles of cost causation based on customer characteristics such as
- 8 energy consumption and peak demand.
- 9 There is no absolute right or wrong allocation method, as each utility's operating
- 10 circumstances and cost drivers are different. The objective for the utility is to select
- 11 methods which best represent cost causation and the equitable sharing of costs among
- 12 customers in a manner appropriate for the unique circumstances of the utility. This
- document describes the COS study methods based on a territory-wide approach.
- 14 A COS study can provide useful information such as unit costs to serve different
- 15 customers (such as \$/kWh, \$/customer month) and revenue to cost coverage ratios,
- which are used in the ratemaking process. However, it must be recognized that any COS
- 17 study involves estimation and a degree of professional judgement and therefore the
- 18 results cannot be considered exact. Further, the appropriate allocation methods for a
- 19 COS study can change over time as the utility's operating environment and cost drivers
- 20 change.
- 21 To provide services to its customers, the Corporation must receive sufficient revenues to
- 22 recover its costs. The COS study used in this Application applies cost-of-service concepts

- 1 to embedded accounting costs in order to calculate the fair share of the Corporation's
- 2 total revenue requirement for each customer class.
- 3 D1.2 STEPS OF THE COST OF SERVICE PROCESS
- 4 The steps involved in a COS study are the following:
- 5 1. Determining a test period;
- 6 2. Determining revenue requirement;
- Selecting customer classes;
- 8 4. Functionalization of plant and expenses;
- 9 5. Classification of plant and expenses; and
- 10 6. Allocation of plant and expenses.
- 11 <u>Step 1: Determining a Test Period</u>: The test period refers to the time period over which
- revenues and expenses are analyzed to determine the surplus or deficiency in rates. This
- 13 COS study is for the test period of April 1, 2025 to March 31, 2026.
- 14 Step 2: Determination of Revenue Requirement: This COS study uses the proposed
- revenue requirement for the 2025/26 test year as described in the application.
- 16 <u>Step 3: Selection of Customer Classes</u>: A customer class is a group of customers with
- 17 similar load characteristics. The classes used in this COS study are:1

Appendix D: Cost of Service Study Methods

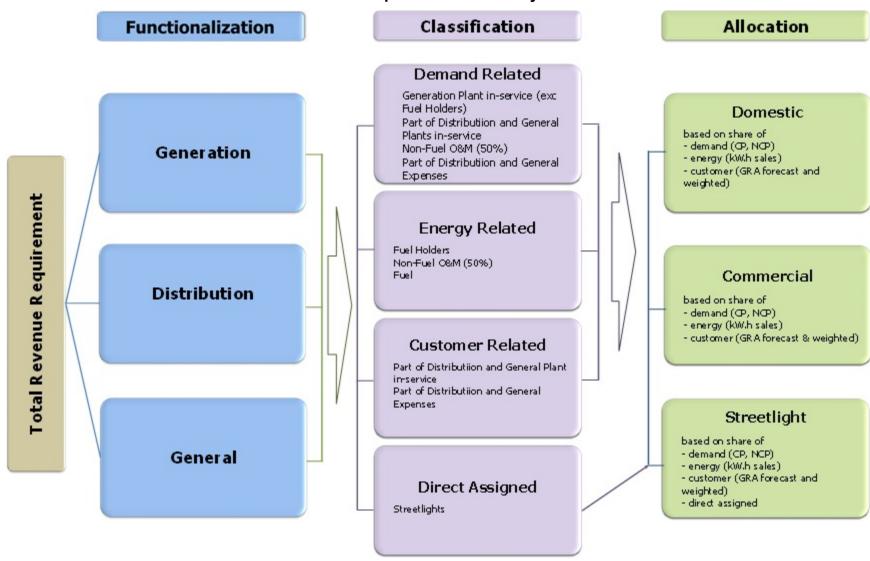
<sup>&</sup>lt;sup>1</sup> Definitions of the customer classes are provided in QEC Terms & Conditions of Service.

- 1 i). Domestic;
- 2 ii). Commercial; and
- 3 iii). Streetlighting.
- 4 Plant investment and expenses that serve only a particular customer or class of
- 5 customers are directly assigned. For example, the plant investment and expenses
- 6 associated with streetlights are directly assigned to the streetlighting class.
- 7 Once the revenue requirement and customer classes have been determined, the COS
- 8 study is undertaken in a three-step process described below.
- 9 <u>Functionalization</u>: Once the revenue requirement and customer classes have been
- 10 determined, plant investment and expenses are separated according to function. The
- 11 functions used in QEC's COS study are:
- i). Generation;
- ii). Distribution; and
- 14 iii). General.
- 15 The assignment of plant investment and expenses to each function generally follows the
- 16 utility's standard set of accounts. In the case of the Corporation, assets are coded to a
- 17 series of functional categories based on Federal Energy Regulatory Commission
- 18 ("FERC") codes. Functionalization is discussed further in Chapter 2.

- 1 Classification: This step in the COS process separates the functionalized costs into
- 2 classifications based on the type of service provided. The three principal cost
- 3 classifications for electric utilities are demand costs (costs that vary with the kW demand
- 4 imposed by the customer), energy costs (costs that vary with the kWh of energy that the
- 5 utility provides) and customer costs (costs that vary in relation to the number of customers
- 6 served). Classification methods are discussed in greater detail in Chapter 3.
- 7 Allocation: The final step in the COS analysis is the allocation of classified costs to
- 8 customer classes. For example, energy related costs have been allocated to customer
- 9 classes based on energy usage in kilowatt-hours. The allocation factors developed for
- 10 the COS study were derived using billing records, load records and the Corporation's
- proposed load forecast. Allocation is discussed in greater detail in Chapter 4.
- 12 Figure D1.1 provides an illustration of the steps involved in the Corporation's COS study.



Figure D1.1: Illustrative Steps of the COS Study Process



### 1 D2.0 FUNCTIONALIZATION

- 2 The Corporation relies on diesel generation for electricity production. Each community's
- 3 electricity system generally consists of a powerhouse for production facilities, distribution
- 4 bus, distribution feeder system and general facilities. Currently, the Corporation does not
- 5 have any transmission related assets. As such, the cost functions used in this COS study
- 6 include:
- 7 <u>Generation Function:</u> The generation function consists of assets and expenses
- 8 associated with power generation. The generation function includes power production
- 9 facilities, operation and maintenance costs directly related to these facilities and
- 10 production fuel expense.
- 11 Distribution Function: The distribution function includes assets and expenses that connect
- 12 customers to the generation plant.
- 13 General Function: The general function includes management, administrative and other
- 14 costs that cannot be assigned to the other major cost functions.

#### 15 **D2.1 FUNCTIONALIZATION OF PLANT**

- 16 Functionalization of gross plant and accumulated amortization was carried out according
- to the FERC codes set out in Table D2.1, which is consistent with the approach previously
- 18 reviewed by the URRC in the 2022/23 GRA.

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**Table D2.1: Plant Functionalization** 

FERC	
Account Number	DESCRIPTION
DIESEL Plant	
340	Land and Land Rights
341	Structures & Improvements
342	·
	Fuel Holders, Prod., & Access.
343	Prime Movers
344	Generators
345	Accessory Electric Equipment
346	Miscellaneous Power Plant Equipment
DISTRIBUTION Pla	
360	Land and Land Rights
361	Structures & Improvements
362	Station Equipment
363	Storage Battery Equipment
364	Poles & Fixtures
365	Overhead Conductors & Devices
366	Underground Conduit
367	Underground Conductors & Devices
368	Line Transformers
369	Services
370	Meters
371	Installation on Cust. Premises
372	Leased Property on Customer Premises
373	Street Lighting
<b>GENERAL Plant</b>	
383	Computer Software
389	Land and Land Rights
390	Structures & Improvements
391	Office Furniture & Equipment, Computers
392	Transportation Equipment
393	Stores Equipment
394	Tools, Shop, & Garage Equipment
395	Laboratory Equipment
396	Power Operated Equipment
397	Communication Equipment
398	Miscellaneous Equipment
399	Other Tangible Property

- 1 Fuel inventory amounts in working capital were functionalized to generation (consistent
- 2 with the functionalization of fuel expense). Other working capital amounts were
- 3 functionalized to general plant.

## 4 D2.2 FUNCTIONALIZATION OF EXPENSES

- 5 The Corporation's expense budget for the test year is prepared by each department and
- 6 plant according to the budget codes set out in Tables D2.2 and D2.3.

7 Table D2.2: QEC Departments

Budget Codes	DESCRIPTION						
Head Office Department Codes							
1000/1100	Board & Iqaluit Executive						
1200	Finance						
1300	Corporate Affairs						
1500	Human Resources						
1600	Business Services						
1700	Facilities Management						
2000	Territorial Operations						
2250	Energy Management						
2400	Health, Safety and Environment						
2600	Information Technology						
2700	Engineering						
3000	Fleet Service						
<b>Regional Office</b>	Department Codes						
2100	Regional Operations						
2500	Lines/Distribution						
Communities							
2200	Plant Operations						

- 1 The Corporation reviewed each of the budget expense items and determined an
- 2 appropriate functionalization of each expense as illustrated in Table D2.3.

**Table D2.3: Functionalization of QEC's Expenses** 

Expenses	Other head office departments	2000 - Territorial Operations	2100 - Regional Operations	2200 - Plant Operations	2500 - Line	2700 - Engineering
Salaries and Wages	100% General Plant	62% Generation, 35% Distribution and 3% General Plant (based on positions)	94% Generation, 5% Distribution and 1% General Plant (based on positions for each region)	70% Generation and 30% Distribution	100% Distribution	75% Generation and 25% Distribution (based on positions)
Supplies and Services	100% General Plant	62% Generation, 35% Distribution and 3% General and 1% General		70% Generation and 30% Distribution	100% Distribution	75% Generation and 25% Distribution (based on Salaries and Wages)
Travel and Accommodations	100% General Plant	62% Generation, 35% Distribution and 3% General Plant (based on Salaries and Wages)	94% Generation, 5% Distribution and 1% General Plant (based on Salaries and Wages)	70% Generation and 30% Distribution	100% Distribution	75% Generation and 25% Distribution (based on Salaries and Wages)

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- 5 For some financial information, the Corporation's existing accounting systems do not
- 6 allow the ideal level of information for a COS study to be tracked. In such circumstances,
- 7 the Corporation consults with its operations staff to develop estimates of the proportion
- 8 of expenses spent on generation and distribution related activities. The Corporation
- 9 believes the estimates are reasonable and can be relied upon for ratemaking purposes.
- 10 The Corporation used the following methods to functionalize operating expenses:

## • Salaries and Wages:

- o In order to functionalize salaries and wages for community-based
- employees, the Corporation reviewed the responsibilities for Plant
- Operations (2200) employees. Most communities (23 out of total 25) have

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only one Plant Superintendent and one Assistant Operator. The responsibilities of these employees mainly relate to the generation function. However, they are also responsible for some distribution related tasks such as meter reading and customer connection/disconnection. For the 2024/25 test year, the Corporation functionalized plant operator's time 30% to distribution and 70% to generation, consistent with the past COS study approaches.

- All head office departments, with the exception of Territorial Operations (2000) and Engineering (2700), provide general services including administration, general finance and human resources. Salaries and wages expenses for these departments were functionalized 100% to the general function.
- The Line Department (2500) provides services directly related to distribution in the Qikiqtaaluk region, and all expenses of this department were functionalized 100% to distribution.
- For the regional office departments (2100 Regional Operations), the
   Corporation reviewed each employee position and estimated a breakdown
   of the employee's responsibilities by each function by regional level.
- For the remaining head office departments (2000 Territorial Operations,
   2700 Engineering), the Corporation reviewed each employee position and
   estimated a breakdown of the employee's responsibilities by each function.

- Supplies and Services, and Travel and Accommodations: The expense
   elements under these categories were functionalized following the salaries and
   wages functionalization ratio for each plant or department.
- Production Fuel Expense: Production fuel expense was functionalized 100% to
   generation, as it is directly used for power generation.
- Amortization Expense: Amortization expenses were functionalized based on
   FERC Codes as outlined in Table D2.1.

## D3.0 CLASSIFICATION

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- 2 Once costs are functionalized, they are classified based on cost drivers between demand,
- 3 energy, customer and revenue. Revenue related costs include other revenue, which was
- 4 treated as an offset to the revenue requirement. Where costs can be identified as being
- 5 specifically incurred by a single customer class, such costs are direct assigned to that
- 6 customer class. A summary of the classification categories used in the COS study is
- 7 provided in Table D3.1.

Table D3.1: QEC COS Study Classification Categories

Description	Category
Coincident Peak Demand	Demand related
Non-Coincident Peak Demand	Demand related
Energy	Energy related
Customer	Customer related
Weighted Customers	Customer related
Revenue Related	Revenue requirement offset
Direct Assignments	Directly assigned

- 10 A description of the four main cost classification categories is provided below. Classification
- 11 methods used for each of the functions in the COS study is provided in the following sections.

## 12 <u>Demand-Related</u>

- 13 Costs that are driven by the kilowatts of demand each customer imposes on the system are said
- 14 to be demand-related. Demand-related costs can be considered in at least two sub-categories:
- 15 system peak demand-related (coincident peak) and customer maximum-demand related (non-
- 16 coincident peak).

## 1 Energy-Related

- 2 Energy-related costs are those determined to vary in proportion to the kilowatt-hours consumed
- 3 by the customer. The principal costs in this category are fuel, and variable operation and
- 4 maintenance expenses.

### 5 Customer-Related

- 6 Costs classified as customer-related are those which tend to vary in proportion to the number of
- 7 customers served. At least two subcategories are generally considered; average number of
- 8 customers and weighted number of customers. The latter category, weighted customers, is used
- 9 when the primary cost causation is number of customers, but where certain classes of customers
- 10 impose proportionately greater costs on the system. One example is meter investment. Every
- 11 customer has a meter, but general service and industrial meters cost more than residential
- 12 meters.

## 13 Direct Assignment

- 14 Costs that can be identified as being incurred to serve a specific customer or class of customers
- are direct assigned to that customer (for example, streetlighting costs).

## 16 D3.1 CLASSIFICATION OF PLANT

## 17 Generation Plant

- 18 The determination of appropriate generation classification factors takes into account the
- relationship between capacity (peak demand) and energy requirements of the customers.
- 20 The cost of capacity relates to the cost to accommodate peak loads at the time of the

- 1 highest system load in the community. The cost profile of a pure energy use is that of a
- 2 sustained consumption of kilowatt-hours throughout the year.
- 3 When planning generation facilities, the Corporation is primarily concerned with ensuring
- 4 sufficient capacity is available to meet the community's peak. Therefore, demand is the
- 5 primary cost driver for generation assets. Consistent with this cost driver, generation plant
- 6 assets were classified as 100% demand related with the exception of fuel holders, which
- 7 were classified as 100% energy related.
- 8 This classification method is consistent with Corporation's 2022/23 GRA approach, and
- 9 most other utilities in Canada that operate isolated diesel plants. Yukon Energy
- 10 Corporation, ATCO Electric Yukon, Northwest Territories Power Corporation and
- 11 Northland Utilities (NWT) Ltd all classify the majority of diesel generation plant 100% to
- 12 demand.

### 13 Distribution Plant

- 14 Investment in distribution plant is driven by the number and location of customers and the
- peak demand imposed by those customers. Investment in distribution plant does not vary
- with the consumption of energy. Therefore, distribution plant is classified to demand and
- 17 customer. This is consistent with the practice followed by other Canadian northern
- utilities, as well as the classification of distribution plant in the National Association of
- 19 Regulatory Utility Commissioners (NARUC) Manual.
- 20 The classification factors for poles, towers and fixtures, overhead conductors and
- 21 underground conduits, and line transformers are based on the classification factors used

- 1 by the Northwest Territories Power Corporation (NTPC) in their most recent general rate
- 2 application (2024-26 GRA).

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- 3 The Corporation's distribution plant facilities include the following assets:
- Land and Land Rights, Structures & Improvements, Station Equipment,
   Storage Battery Equipment: These assets are sized and built to meet system
   demand requirements and their size is not affected by the number of customers to
   be served. Therefore these assets have been classified as 100% demand-related.
  - Services, Meters and Metering Equipment: These assets are designed to meet
    the needs of specific customers and their costs are dependent on the number and
    type of customers to be served. Therefore these assets were classified as 100%
    customer-related.
  - **Street Lights:** These assets were directly assigned to the streetlight customer class.
  - Poles, Towers and Fixtures: Investment in these assets is driven partly by the demand placed on the system and partly by the number of customers to be served.
     These assets were classified as 46% demand related and 54% customer related based on NTPC's 2024-26 Phase II rate application.
  - Overhead Conductors / Underground Conduits: Investment in these assets is
    primarily driven by the number of customers to be served, but the investment must
    also consider the demand of the customer. These assets were classified as 48%

- demand related and 52% customer related based on NTPC's 2024-26 Phase II rate application.
  - Line Transformers: Investment in these assets is primarily driven by the demand imposed on the system. However some consideration is also given to the number of customers to be served. These assets were classified as 69% demand related and 31% customer related based on NTPC's 2024-26 Phase II rate application.
- 8 Classification of distribution plant facilities is summarized in Table D3.2.

**Table D3.2: Classification of Distribution Plant** 

	Cus	tomer	De	Demand		Demand I As		Basis
	Actual	Weighted	CP	NCP				
Distribution Plant								
Land & Rights, Sub Equipments (FERC 360-363)	0%			100%		Reviewed by URRC in Report 2012-01		
Poles, Towers and Fixtures (FERC 364)	54%			46%		Based on NTPC's 2024-26 GRA		
O/H Conductors (FERC 365)	52%			48%		Based on NTPC's 2024-26 GRA		
Underground Conduits (FERC 366-367)	52%			48%		Based on NTPC's 2024-26 GRA		
Transformers (FERC 368) - Weighted		31%		69%		Based on NTPC's 2024-26 GRA		
Services and Meters (FERC 369-372) - Weighted		100%				Based on NTPC's 2024-26 GRA		
Street Lights (FERC 373) - Direct Assigned					100%	Reviewed by URRC in Report 2012-01		
Contributions - Weighted	21.8%	10.9%		67.2%		Weighted (FERC 360-372)		

## General Plant

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General plant consists of a variety of facilities used to administer generation, distribution and customer service functions of the utility. General plant costs do not vary materially with increases in the number of customer, community demand or energy consumed, but are required to provide all services to customers. Therefore, the Corporation classified general plant assets into customer, demand, and energy related costs based on the proportion of total generation and distribution assets classified to demand, energy and customer categories.

- 1 Other rate base cost categories were classified to customer, demand, and energy related
- 2 cost as follows:

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## Accumulated Amortization:

- Generation plant related based on the proportion of total generation assets classified to customer, demand, and energy categories.
  - Distribution plant related based on the proportion of total distribution assets classified to customer, demand, and energy categories.
    - General plant related based on the proportion of total general assets classified to customer, demand, and energy categories.

## Working Capital:

- Cash based on the proportion of total general plant assets classified to customer, demand, and energy categories.
- Materials and Supplies based on the proportion of total general plant assets classified to customer, demand, and energy categories.
- o Fuel − 100% to energy.

#### D3.2 CLASSIFICATION OF EXPENSES

### 17 Generation Plant

- 18 Generation plant expenses include production fuel and non-fuel related operating and
- 19 maintenance expenses.

- 1 Production fuel is a variable cost that is incurred in direct proportion to the amount of
- 2 energy consumed by each customer class. Therefore fuel expenses were classified as
- 3 100% energy-related.
- 4 Non-fuel operating and maintenance expenses include both variable costs that are
- 5 incurred in relation to the consumption of energy and non-variable cost that are related to
- 6 maintaining assets in safe, reliable working order to meet the community's capacity
- 7 requirements. Therefore the Corporation classified non-fuel operating and maintenance
- 8 expenses 50% to demand and 50% to energy. This classification is consistent with
- 9 Corporation's 2022/23 GRA and the current practice in other Northern utilities in Canada.

## 10 Distribution Plant

- 11 In order to classify distribution plant expenses, the Corporation calculated a classification
- 12 ratio based on the total gross distribution plant classified to demand related and customer
- 13 related costs. This ratio was used to classify distribution plant expenses, except the billing
- 14 and customer accounting related expenses which were classified to the weighted
- 15 customer category based on the URRC's recommendations in its Report 2012-01<sup>2</sup> to the
- 16 Minister.

<sup>&</sup>lt;sup>2</sup> In its Report 2012-01, the URRC recommended that QEC classify meter reading, billing and customer accounting related expenses to the customer category. The Billing and Revenue department was merged with the General Finance department following the 2010/11 GRA. As a separate expense code for billing and customer accounting related expenses is no longer available, the Corporation prorated these costs based on the information available from the 2010/11 GRA (URRC-QEC-1-7c from November 4, 2011, Attachment 1).

## 1 General Plant

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- 2 General plant expenses were classified using the same classification ratios calculated for
- 3 the classification of general plant assets, i.e. based on the proportion of total generation
- 4 and distribution assets classified to demand, energy and customer categories.
- 5 Table D3.3 provides summary of classification of expenses by function.

6 Table D3.3: Classification of Expenses by Function

	Cus	tomer	Den	Energy	Direct Assigned	
	Actual	Weighted	СР	NCP		
Production Fuel	0%		0%		100%	
Non-Fuel O&M	0%		50%	50%		
Distribution	Based	on Total Distrib	oution Plant	Customer / I	Demand	
General Plant		Based or	n Classifica	al Plant		

- 1 Other expense categories were classified into customer, demand, and energy related as
- 2 follows:

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## Amortization Expense:

- Generation plant related based on the proportion of total generation assets classified to customer, demand, and energy categories.
  - Distribution plant related based on the proportion of total distribution assets classified to customer, demand, and energy categories.
  - General plant related based on the proportion of total general assets classified to customer, demand, and energy categories.
- Other Revenue: Other revenue was classified as 100% revenue related consistent with the URRC's recommendations in its Report 2012-01<sup>3</sup> to the Minister.

<sup>&</sup>lt;sup>3</sup> See Section 10.4.4 of the Application.

### D4.0 ALLOCATION

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- 2 This chapter describes the methods used to develop the allocation factors used in the
- 3 Corporation's COS study. The allocation factors were developed based on information
- 4 from customer billing records, the Corporation's load forecast, and information from
- 5 electric utilities with similar types of customer classes and operating environments.

### 6 D4.1 DEMAND ALLOCATION FACTORS

- 7 In the development of demand allocation factors for each customer group, two steps are
- 8 required.
- 9 1. Determining the most appropriate method for allocation of demand-related costs;
- 10 and
- 11 2. Development of the appropriate demand data.
- 12 The COS study uses two demand allocators:
- Coincident peak: is the peak for a customer class at the time of the system peak.
- Non-coincident peak: is the annual peak for a customer class in the year.
- 15 Generation demand-related costs are generally considered to be related to coincident
- demands (i.e., customer group peaks at the time of a system peak), since sufficient
- 17 capacity must be provided to meet the demands of all customers at the time of the system
- 18 peak. Therefore the Corporation allocated generation demand-related costs based on the

- 1 class's share of the total plant coincident peak (CP). This method is consistent with
- 2 2022/23 GRA and industry practice for other utilities in Northern Canada.
- 3 In contrast, line transformers, poles and fixtures and other distribution system
- 4 components are sized to meet the maximum demands of customers regardless of time
- 5 of occurrence. For this reason, distribution and general plant demand-related costs were
- 6 allocated on the basis of non-coincident demands utilizing the class non-coincident peak
- 7 (NCP).
- 8 Coincident peak and non-coincident peaks are not metered at the class level. Therefore
- 9 the Corporation requires estimates of the customer class load factor and coincidence
- 10 factor in order to estimate the coincident and non-coincident peaks for each class. The
- 11 Corporation did not undertake load research on individual customer classes across
- 12 communities in Nunavut because it is not economically feasible. In developing estimates
- 13 of customer class load factor and coincidence factors for the 2010/11 GRA, the
- 14 Corporation reviewed the data developed by other utilities. These factors were accepted
- by the URRC in the Report 2012-01.4 For the current COS study the Corporation similarly
- 16 used customer class load factor and coincidence factors from NTPC's 2024-26 Phase II
- 17 rate application.
- 18 A summary of the load factors and coincidence factors used by the Corporation in the
- 19 COS analysis is provided in Table D4.1.

<sup>&</sup>lt;sup>4</sup> URRC's report on QEC's 2010/11 Phase II GRA, 2012-01 dated from January 27, 2012, p.23.

Table D4.1:
2 QEC's Recommended Load Parameters

Customer Class	NCP Load Factor	Coincidence Factor
Domestic	43.8%	86.8%
Commercial	55.0%	83.2%
Streetlights	47.3%	100.0%

#### D4.1.1 ENERGY ALLOCATION FACTORS

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- 5 Energy-related costs were allocated to customer classes based on the total kilowatt-hour
- 6 sales to each customer class. The allocation ratios were developed based on the 2025/26
- 7 test year load forecast by customer class.

#### 8 D4.1.2 CUSTOMER ALLOCATION FACTORS

- 9 Customer-related costs were allocated to customer classes based on number of 10 customers and weighted number of customers.
- 11 Common industry practice is to allocate customer-related costs that do not vary with the
- 12 type of customers or its consumption of electricity on the basis of actual number of
- 13 customers in each class (e.g., poles and fixtures).
- 14 A weighted number of customers is typically used for costs that vary with the type of
- 15 customer or its consumption of electricity. For example, metering device costs are
- 16 different for commercial customers than domestic customers. The Corporation used
- 17 weighted number of customers to allocate services, meters and line transformer assets,

- 1 billing and customer accounting related expenses. In the 2010/11 GRA the Corporation
- 2 assumed a customer weighting of 1.0 for domestic and 3.0 for commercial customers.
- 3 In its Report 2012-01 the URRC recommended to the Minister that QEC conduct a study
- 4 of the appropriate customer weighting factors for domestic, commercial, street and yard
- 5 lighting customers at the time of the next COS study.<sup>5</sup>
- 6 At the time of the 2014/15 GRA preparation, the Corporation performed a review of the
- 7 customer weighting factors in accordance with the above recommendation. The analysis
- 8 of transformer costs, which account for approximately 40% of the distribution plant
- 9 allocated on weighted customer basis, suggest that, in general one transformer is used
- 10 to serve six domestic customers, or two commercial customers. With respect to the meter
- 11 costs, which account for approximately 7% of the distribution plant allocated on weighted
- 12 customer basis, the review suggests that, in general, QEC's commercial meter devices
- are approximately 7 times more expensive than residential meter devices.
- 14 The Corporation also reviewed the service weighting analysis performed by NUL-NWT
- as part of its 2011-2013 GRA, and notes that on average service cost is approximately
- 16 twice as much for commercial customer as compared to residential customers, which was
- 17 reviewed and accepted by the Northwest Territories PUB in Decision 5-2012.6 Taking into
- 18 account the similarity of QEC's and NUL-NWT's customer base the Corporation considers
- 19 it is reasonable to rely on service cost weighting factors determined by NUL-NWT. Service

<sup>&</sup>lt;sup>5</sup> URRC's report on QEC's 2010/11 Phase II GRA, 2012-01 dated from January 27, 2012, p.20.

<sup>&</sup>lt;sup>6</sup> NWT PUB Decision 5-2012, p. 38-41.

- 1 costs account for approximately 53% of the distribution plant allocated on weighted
- 2 customer basis.
- 3 Based on the above review, the Corporation determined the updated weighting factors
- 4 for domestic and commercial customers as shown in Table D4.2 which is consistent with
- 5 the 2022/23 GRA COS.

Table D4.2:
 Calculation of Customer Weighting Factor

	Cost Ratio	Weighted		
	Transformer	Meter	Services	Average
Domestic	1	1	1	1
Commercial	3	7	2	3
Share in Allocated Distr. Plant	40%	7%	53%	

- 9 The weighting factor suggests that the weighting factor of 3 for commercial and 1 for
- 10 domestic is still appropriate and the Corporation used these weighting factors in its
- 11 2025/26 GRA COS.

- 12 The Corporation considers customer related costs associated with streetlighting
- 13 customers to be similar to those of domestic customers, and as such streetlighting
- 14 customers were assigned a customer weighting factor of 1 relative to domestic
- 15 customers.

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#### D4.1.3 REVENUE OFFSET ALLOCATION FACTORS

- 17 The Corporation applied other revenue (revenue from non-electrical sales) as an offset
- 18 to the Corporation's revenue requirement. Other revenue was allocated to customer
- 19 classes proportionate to their share of total 2025/26 test year forecast revenue at existing
- 20 or pre-2025/26 GRA rates.

# APPENDIX E COST-OF-SERVICE STUDY SCHEDULES

2025/26 General Rate Application
Territory-Wide Cost of Service

Appendix E

Exhibit 1 - Functionalization and Classification of Rate Base

		<u>_</u>	Demand F		Energy	Customer		Revenue	Direct
		\$000	Coin. Peak	NC Peak	Related	Actual	Weighted	Related	Assign.
	Plant Description	Total	CP	NCP	Е	CUST-1	CUST-2	RR	DA
G	Generation Plant								
340	Land and Land Rights	\$1,827	\$1,827	\$	\$	\$	\$	\$	\$
341	Structures & Improvements	\$117,778	\$117,778	\$	\$	\$	\$	\$	\$
342	Fuel Holders, Prod., & Access.	\$24,402	\$	\$	\$24,402	\$	\$	\$	\$
343	Prime Movers	\$66,449	\$66,449	\$	\$	\$	\$	\$	\$
344	Generators	\$61,478	\$61,478	\$	\$	\$	\$	\$	\$
345	Accessory Electric Equip.	\$40,967	\$40,967	\$	\$	\$	\$	\$	\$
346	Misc. Power Plant Equip.	\$39,651	\$39,651	\$	\$	\$	\$	\$	\$
121	Wind Energy Production	\$	\$	\$	\$	\$	\$	\$	\$
131	Heat Recovery Systems	\$176	\$176	\$	\$	\$	\$	\$	\$
	Insurance Proceeds	-\$2,971	-\$2,766	\$	-\$206	\$	\$	\$	\$
	Disallowed	\$	\$	\$	\$	\$	\$	\$	\$
	Contributions	\$	\$	\$	\$	\$	\$	\$	\$
	Total Generation Plant	\$349,757	\$325,560	\$	\$24,197	\$	\$	\$	\$
D	Distribution Plant								
360	Land and Land Rights	\$	\$	\$	\$	\$	\$	\$	\$
361	Structures & Improvements	\$10,090	\$	\$10,090	\$	\$	\$	\$	\$
362	Station Equipment	\$9,547	\$	\$9,547	\$	\$	\$	\$	\$
363	Storage Battery Equip.	\$10	\$	\$10	\$	\$	\$	\$	\$
364	Poles & Fixtures	\$15,958	\$	\$7,341	\$	\$8,617	\$	\$	\$
365	OH Conductors & Devices	\$6,245	\$	\$2,998	\$	\$3,248	\$	\$	\$
366	Underground Conduit	\$260	\$	\$125	\$	\$135	\$	\$	\$
367	Underground Conduct. & Devices	\$128	\$	\$62	\$	\$67	\$	\$	\$
368	Line Transformers	\$10,130	\$	\$6,990	\$	\$	\$3,140	\$	\$
369	Services	\$2,045	\$	\$	\$	\$	\$2,045	\$	\$
370	Meters	\$856	\$	\$	\$	\$	\$856	\$	\$
371	Install. on Cust. Premises	\$5	\$	\$	\$	\$	\$5	\$	\$
372	Leased Prop. on Cust. Prem.	\$	\$	\$	\$	\$	\$	\$	\$
373	Street Lighting	\$923	\$	\$	\$	\$	\$	\$	\$923
	Contributions	\$	\$	\$	\$	\$	\$	\$	\$
	Total Distribution Plant	\$56,198	\$	\$37,162	\$	\$12,067	\$6,047	\$	\$923
Т	otal Plant before General Plant	\$405,955	\$325,560	\$37,162	\$24,197	\$12,067	\$6,047	\$	\$923

2025/26 General Rate Application
Territory-Wide Cost of Service
Exhibit 1 - Functionalization and Classification of Rate Base

						<u>Ba</u>	sis of Class	ification	
	Plant Description	CP	NCP	Е	CUST-1	CUST-2	RR	DA	
_	Generation Plant								
340	Land and Land Rights	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
341	Structures & Improvements	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
342	Fuel Holders, Prod., & Access.	0.000	0.000	1.000	0.000	0.000	0.000	0.000	100% energy
343	Prime Movers	1.000	0.000	0.000	0.000	0.000	0.000		100% demand (CP)
344	Generators	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
345	Accessory Electric Equip.	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
346	Misc. Power Plant Equip.	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
121	Wind Energy Production	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
131	Heat Recovery Systems	1.000	0.000	0.000	0.000	0.000	0.000	0.000	100% demand (CP)
	Insurance Proceeds	0.931	0.000	0.069	0.000	0.000	0.000	0.000	Weighted 340-346
	Disallowed	0.931	0.000	0.069	0.000	0.000	0.000	0.000	Weighted 340-346
	Contributions	0.931	0.000	0.069	0.000	0.000	0.000	0.000	Weighted 340-346
	Total Generation Plant	0.931	0.000	0.069	0.000	0.000	0.000	0.000	
	Distribution Plant								
360	Land and Land Rights	0.000	1.000	0.000	0.000	0.000	0.000	0.000	100% demand (NCP)
361	Structures & Improvements	0.000	1.000	0.000	0.000	0.000	0.000		100% demand (NCP)
362	Station Equipment	0.000	1.000	0.000	0.000	0.000	0.000	0.000	100% demand (NCP)
363	Storage Battery Equip.	0.000	1.000	0.000	0.000	0.000	0.000		100% demand (NCP)
364	Poles & Fixtures	0.000	0.460	0.000	0.540	0.000	0.000	0.000	46% demand and 54% customer
365	OH Conductors & Devices	0.000	0.480	0.000	0.520	0.000	0.000		48% demand and 52% customer
366	Underground Conduit	0.000	0.480	0.000	0.520	0.000	0.000	0.000	48% demand and 52% customer
367	Undergrd Conduct. & Devices	0.000	0.480	0.000	0.520	0.000	0.000	0.000	48% demand and 52% customer
368	Line Transformers	0.000	0.690	0.000	0.000	0.310	0.000	0.000	69% demand and 31% customer (weighted)
369	Services	0.000	0.000	0.000	0.000	1.000	0.000	0.000	100% customer (weighted)
370	Meters	0.000	0.000	0.000	0.000	1.000	0.000		100% customer (weighted)
371	Install. on Cust. Premises	0.000	0.000	0.000	0.000	1.000	0.000		100% customer (weighted)
372	Leased Prop. on Cust. Prem.	0.000	0.000	0.000	0.000	1.000	0.000		100% customer (weighted)
373	Street Lighting	0.000	0.000	0.000	0.000	0.000	0.000	1.000	100% direct assigned
	Contributions	0.000	0.672	0.000	0.218	0.109	0.000	0.000	Weighted 360-372
		0.000	0.661	0.000	0.215	0.108	0.000	0.016	

2025/26 General Rate Application
Territory-Wide Cost of Service

Appendix E

Exhibit 1 - Functionalization and Classification of Rate Base

			Demand F	Related	Energy	Customer	Related	Revenue	Direct
		\$000	Coin. Peak	NC Peak	Related	Actual	Weighted	Related	Assign.
_	Plant Description	Total	CP	NCP	Ε	CUST-1	CUST-2	RR	DA
G	eneral Plant								
383	Computer Software	\$3,477	\$2,788	\$318	\$207	\$103	\$52	\$	\$8
389	Land and Land Rights	\$7	\$6	\$1	\$	\$	\$	\$	\$
390	Structures & Improvements	\$43,423	\$34,823	\$3,975	\$2,588	\$1,291	\$647	\$	\$99
391	Office Furniture & Equip.	\$1,352	\$1,084	\$124	\$81	\$40	\$20	\$	\$3
392	Transportation Equip.	\$11,391	\$9,135	\$1,043	\$679	\$339	\$170	\$	\$26
393	Stores Equip.	\$	\$	\$	\$	\$	\$	\$	\$
394	Tools, Shop, & Garage Equip.	\$3,139	\$2,518	\$287	\$18 <b>7</b>	\$93	\$47	\$	\$7
395	Laboratory Equip.	\$	\$	\$	\$	\$	\$	\$	\$
396	Power Operated Equip.	\$234	\$187	\$21	\$14	\$7	\$3	\$	\$1
397	Communication Equip.	\$1,279	\$1,026	\$117	\$76	\$38	\$19	\$	\$3
398	Misc. Equip.	\$1,519	\$1,218	\$139	\$91	\$45	\$23	\$	\$3
399	Other Tangible Property	\$1,257	\$1,008	\$115	\$75	\$37	\$19	\$	\$3
	Total General Plant	\$67,078	\$53,794	\$6,140	\$3,998	\$1,994	\$999	\$	\$153
T	otal Plant in Service	\$473,033	\$379,354	\$43,302	\$28,195	\$14,061	\$7,046	\$	\$1,075
L	ess: Accum. Amortization								
	Generation Plant	\$161,442	\$150,273	\$	\$11,169	\$	\$	\$	\$
	Distribution Plant	\$18,702	\$	\$12,367	\$	\$4,016	\$2,012	\$	\$307
	General Plant	\$22,658	\$18,171	\$2,074	\$1,351	\$673	\$337	\$	\$52
	Total Accum. Amortization	\$202,802	\$168,444	\$14,441	\$12,519	\$4,689	\$2,350	\$	\$359
Α	dd: Working Capital								
	Cash	\$6,003	\$4,814	\$550	\$358	\$178	\$89	\$	\$14
	Materials & Supplies	\$20,683	\$16,587	\$1,893	\$1,233	\$615	\$308	\$	\$47
	Fuel	\$12,542	\$	\$	\$12,542	\$	\$	\$	\$
	Total Working Capital	\$39,227	\$21,401	\$2,443	\$14,132	\$793	\$397	\$	\$61
To	otal Rate Base	\$309,459	\$232,311	\$31,304	\$29,808	\$10,165	\$5,094	\$	\$777

2025/26 General Rate Application
Territory-Wide Cost of Service
Exhibit 1 - Functionalization and Classification of Rate Base

Appendix E

		Basis of Classification							
	F	CP	NCP	Е	CUST-1	CUST-2	RR	DA	
c	General Plant								
389	Land and Land Rights	0.802	0.092	0.060	0.030	0.015	0.000	0.002	As Generation and Distribution Plants
390	Structures & Improvements	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
390	Structures & Improvements	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
391	Office Furniture & Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
392	Transportation Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
393	Stores Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
394	Tools, Shop, & Garage Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
395	Laboratory Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
396	Power Operated Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
397	Communication Equip.	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
398	Misc. Equip.	0.802	0.092	0.060	0.030	0.015	0.000	0.002	As Generation and Distribution Plants
399	Other Tangible Property	0.802	0.092	0.060	0.030	0.015	0.000		As Generation and Distribution Plants
	Total General Plant	0.802	0.092	0.060	0.030	0.015	0.000	0.002	
L	ess: Accum. Amortization								
	Generation Plant	0.931	0.000	0.069	0.000		0.000		As Generation Plant
	Distribution Plant	0.000	0.661	0.000	0.215	0.108	0.000		As Distribution Plant
	General Plant	0.802	0.092	0.060	0.030	0.015	0.000	0.002	As General Plant
A	dd: Working Capital								
	Cash	0.802	0.092	0.060	0.030	0.015	0.000	0.002	As General Plant
	Materials & Supplies	0.802	0.092	0.060	0.030	0.015	0.000	0.002	As General Plant
	Fuel	0.000	0.000	1.000	0.000	0.000	0.000	0.000	100% Energy
	Total Working Capital								
	1								ı

2025/26 General Rate Application
Territory-Wide Cost of Service
Exhibit 2 - Funct. & Classification of Net Revenue Requirements

		Demand F	Related	Energy	Customer Related		Revenue	Direct
;	\$000	Coin. Peak	NC Peak	Related	Actual	Weighted	Related	Assign.
Expense Description	Total	CP	NCP	Е	CUST-1	CUST-2	RR	DA
Generation Expense								
Non-Fuel Generation O&M	\$32,559	\$16,280	\$	\$16.280	\$	\$	\$	9
Production Fuel	\$70,014	\$	\$	\$70,014	\$	\$	\$	
Total Generation Expense	\$102,573	\$16,280	\$	\$86,294	\$	\$	\$	Ç
Distribution Expense								
Distribution O&M	\$15,180	\$	\$10,038	\$	\$3,259	\$1,633	\$	\$249
Total Distribution	\$15,180	\$	\$10,038	\$	\$3,259	\$1,633	\$	\$249
Total O&M before Admin & Gen.	\$117,753	\$16,280	\$10,038	\$86,294	\$3,259	\$1,633	\$	\$249
Admin. & General Expense								
General Plant O&M [excl. billing and cust	\$33,837	\$27,136	\$3,097	\$2,017	\$1,006	\$504	\$	\$77
Billing and Customer Accounting Related	\$2,387	\$	\$	\$	\$	\$2,387	\$	9
Total A&G Expense	\$36,224	\$27,136	\$3,097	\$2,017	\$1,006	\$2,891	\$	\$77
Total Oper. & Maint. Expense	\$153,977	\$43,415	\$13,135	\$88,310	\$4,265	\$4,524	\$	\$326
Net Amortization Expense:								
Generation Amortization	\$8,267	\$7,695	\$	\$572	\$	\$	\$	9
Distribution Amortization	\$1,219	\$	\$806	\$	\$262	\$131	\$	\$20
General Amortization	\$2,039	\$1,635	\$187	\$122	\$61	\$30	\$	\$5
Total Amort. Expense	\$11,525	\$9,330	\$993	\$693	\$322	\$162	\$	\$25
Total Rev. Requirement before Return	\$165,502	\$52,745	\$14,128	\$89,004	\$4,588	\$4,686	\$	\$351
Less: Other Revenue	\$3,391	\$	\$	\$	\$	\$	\$3,391	9
Net Rev. Requirement before Return	\$162,111	\$52,745	\$14,128	\$89,004	\$4,588	\$4,686	-\$3,391	\$351
Return on Rate Base	\$18,426	\$13,832	\$1,864	\$1,775	\$605	\$303	\$	\$46
Total Net Rev. Requirement	\$180,537	\$66,578	\$15,992	\$90,779	\$5,193	\$4,989	-\$3,391	\$397

2025/26 General Rate Application
Territory-Wide Cost of Service
Exhibit 2 - Funct. & Classification of Net Revenue Requirements

	Basis for Classification							
_	CP	NCP	Ε	CUST-1	CUST-2	RR	DA	
Generation Expense								
Non-Fuel O&M Production Fuel	0.500 0.000	0.000 0.000	0.500 1.000	0.000 0.000	0.000 0.000	0.000 0.000		50% demand and 50% energy 100% energy
Total Generation Expense								
Distribution Expense Distribution O&M	0.000	0.661	0.000	0.215	0.108	0.000	0.016	As Distribution Plant
Total Distribution								
Total O&M before Admin & Gen.								
Admin. & General Expense General Plant O&M [excl. billing a Billing and Customer Accounting F	0.802 0.000	0.092 0.000	0.060 0.000	0.030 0.000	0.015 1.000	0.000 0.000		As General Plant 100% to weighted customer
Total A&G Expense								
Total Oper. & Maint. Expense								
Net Amortization Expense: Generation Amortization Distribution Amortization General Amortization	0.931 0.000 0.802	0.000 0.661 0.092	0.069 0.000 0.060	0.000 0.215 0.030	0.000 0.108 0.015	0.000 0.000 0.000	0.016	As Generation Plant As Distribution Plant As General Plant
Total Amort. Expense	0.810	0.086	0.060	0.028	0.014	0.000	0.002	
Total Rev. Requirement before Retu	ırn							
Total Other Revenue	0.000	0.000	0.000	0.000	0.000	1.000	0.000	
Net Rev. Req. before Return	0.325	0.087	0.549	0.028	0.029	(0.021)	0.002	
Return on Rate Base	0.751	0.101	0.096	0.033	0.016	0.000	0.003	
Total Net Rev. Requirement	0.369	0.089	0.503	0.029	0.028	(0.019)	0.002	

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 3 - Analysis of Load Data

Hours in Year	8,760				
	Total				
Domestic		Commercial		Street Lighting	
kWh Sales at the Meter	72,101,771	kWh Sales at the Meter	112,293,418	kWh Sales at the Meter	960,760
Load Factor	44%	Load Factor	55%	Load Factor	47%
Individ. Noncoincident Peak (NCP)(kW)	18,792	Individ. Noncoincident Peak (NCP)(kW)	23,307	Individ. Noncoincident Peak (NCP)(kW)	232
Group Coincidence Factor	100%	Group Coincidence Factor	100%	Group Coincidence Factor	100%
NCP at the Meter for the Group (kW)	18,792	NCP at the Meter for the Group (kW)	23,307	NCP at the Meter for the Group (kW)	232
System Coincidence Factor	87%	System Coincidence Factor	83%	System Coincidence Factor	100%
Coincident Peak (CP) at Meter (kW)	16,311	Coincident Peak (CP) at Meter (kW)	19,391	Coincident Peak (CP) at Meter (kW)	232

#### 2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 4 - Demand Allocation Factor

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 5 - Energy Allocation Factor Appendix E

	Coincident Peak Alloc. Factor	% of Total	Noncoincident Peak Alloc. Factor	% of Total		Energy Alloc. Factor (kWh)	% of Total
Domestic	16,311	45.4%	18,792	44.4%	Domestic	72,101,771	38.9%
Commercial	19,391	54.0%	23,307	55.1%	Commercial	112,293,418	60.6%
Street Lighting	232	0.6%	232	0.5%	Street Lighting	960,760	0.5%
Total	35,935	100%	42,331	100%	Total	185,355,949	100%
Allocation Factor		CP		NCP	Allocation Factor		E

CUST-2

Method of CP demand allocation: the peak responsibility method

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 6 - Customer Allocation Factor

Allocation Factor

Actual Customers Total % of Weighting Weighted % of Customers Factor Customers Total Total Domestic 12,980 12,980 54.5% 78.1% 1.0 Commercial 3,590 45.3% 21.6% 3.0 10,771 Street Lighting 51 0.3% 1.0 51 0.2% Total 16,622 100% 23,803 100%

CUST-1

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 7 - Revenue Allocation Factor

\$000	Existing Rate Revenues	% of Total
Domestic Commercial Street Lighting	\$66,235.5 \$89,106.0 \$1,184.5	42.3% 56.9% 0.8%
Total	\$156,526.0	100%
Allocation Factor		RR

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 8 - Allocation of Plant in Service (Rate Base)

\$000	Total Plant	Domestic	Commercial	Street Lighting	Basis of Allocation
DEMAND RELATED					
Coincident Peak	\$232,311	\$105,449	\$125,362	\$1,499	CP
Noncoincident Peak	\$31,304	\$13,897	\$17,236	\$171	NCP
Total Demand	\$263,615	\$119,346	\$142,598	\$1,670	
ENERGY RELATED	\$29,808	\$11,595	\$18,058	\$155	E
CUSTOMER RELATED					
Actual	\$10,165	\$7,938	\$2,196	\$31	CUS-1
Weighted	\$5,094	\$2,778	\$2,305	\$11	CUS-2
Total Customer	\$15,258	\$10,715	\$4,501	\$42	
REVENUE RELATED	\$	\$	\$	\$	RR
DIRECT ASSIGNMENT	\$777	\$	\$	\$777	DA
Total Plant in Service	\$309,459	<u>\$141,657</u>	<u>\$165,157</u>	<u>\$2,645</u>	

#### 2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 9 - Allocation of Net Revenue Requirements

\$000	Total Net Rev. Reg.	Domestic	Commercial	Street Lighting	Basis of Allocation
DEMAND RELATED					
Coincident Peak	\$52,745	\$23,942	\$28,463	\$340	СР
Noncoincident Peak	\$14,128	\$6,272	\$7,779	\$77	NCP
Total Demand	\$66,874	\$30,214	\$36,242	\$418	
ENERGY RELATED	\$89,004	\$34,622	\$53,921	\$461	E
CUSTOMER RELATED					
Actual	\$4,588	\$3,583	\$991	\$14	CUS-1
Weighted	\$4,686	\$2,555	\$2,121	\$10	CUS-2
Total Customer	\$9,274	\$6,138	\$3,111	\$24	
REVENUE RELATED	-\$3,391	-\$1,435	-\$1,930	-\$26	RR
DIRECT ASSIGNMENT	\$351	\$	\$	\$351	DA
Total Net Rev. Req.	<u>\$162,111</u>	<u>\$69,539</u>	<u>\$91,344</u>	\$1,228	

#### 2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 10 - Summary

Appendix E

\$000	Total	Domestic	Commercial	Street Lighting
Present Rate Revenues	\$156,526	\$66,236	\$89,106	\$1,185
Allocated Rev. Req.	\$162,111	\$69,539	\$91,344	\$1,228
Rate Base	\$309,459	\$141,657	\$165,157	\$2,645
Allowed Rate of Return	\$	\$	\$	\$
Allowed Return	\$18,426	\$8,435	\$9,834	\$157
Required Rate Revenues	\$180,537	\$77,973	\$101,178	\$1,386
Balance	-\$24,011	-\$11,738	-\$12,072	-\$201
RCC ratio		\$	\$	\$

2025/26 General Rate Application Territory-Wide Cost of Service Exhibit 11 - Average Unit Costs Appendix E

		Domestic	Commercial	Street Lighting
DEMAND - \$/kW		\$0.00	\$86.35	\$0.00
ENERGY - cents/kWh		98.75	47.26	141.48
CUSTOMER - \$/Cust/Month		\$43.50	\$78.44	\$43.50
Basic Data: Annual kW Annual kWh Number of Customers		72,101,771 12,980	518,028 112,293,418 3,590	960,760 51
Revenue Check (\$000): Demand Energy Customer	\$44,733 \$125,622 \$10,182	\$ \$71,197 \$6,776	\$44,733 \$53,066 \$3,379	\$ \$1,359 \$27
Total	\$180,537	\$77,973	\$101,178	\$1,386

2025/26 General Rate Application
Territory-Wide Cost of Service
Exhibit 12 - Average Unit Costs at \$18/month customer charge and \$8/kW demand charge

Appendix E

	-	Domestic	Commercial	Street Lighting
DEMAND - \$/kW		\$0.00	\$8.00	\$0.00
ENERGY - cents/kWh		104.25	86.41	144.25
CUSTOMER - \$/Cust/Month		\$18.00	\$0.00	\$0.00
Revenue Check (\$000):				
Demand Energy Customer Total	\$4,144 \$173,589 \$2,804 \$180,537	\$ \$75,170 \$2,804 \$77,973	\$4,144 \$97,034 \$ \$101,178	\$ \$1,386 \$ \$1,386

# APPENDIX F DEPRECIATION STUDY

## **Qulliq Energy Corporation**

2024 Depreciation Study



Prepared for Qulliq Energy Corporation

October 2024

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## **EXECUTIVE SUMMARY**

InterGroup Consultants (InterGroup) was retained by Qulliq Energy Corporation (QEC) to conduct a depreciation study for Generation, Distribution and General Plant property of QEC as or March 31, 2024 and develop applicable depreciation rates for accounting and regulatory ratemaking purposes.

The study analyzed QEC's assets, existing life parameters, accumulated reserve and developed depreciation rates based on the straight line allocation using average service life (ASL) procedure and remaining life adjustment technique. Non-depreciable assets were excluded from the analysis.

The study involved the following tasks to complete the depreciation analysis:

- 1. **Data Collection:** Gather utility fixed asset records detailing historical installation, depreciation, and retirement transactions.
- 2. **Data Review and Analysis:** Analyze and organize the collected data for accuracy and consistency.
- 3. Estimation of Asset Service Life and Net Salvage:
  - o Conduct actuarial analysis for asset life and salvage value.
  - o Perform reviews and interviews with management and operations personnel.
  - Apply informed professional judgment, incorporating actuarial findings, staff insights, technological developments, and data from peer companies when available.
- 4. Preliminary Calculations: Calculate annual accruals and depreciation rates.
- 5. Management Review: Present the study results to management for feedback.
- 6. **Finalization and Reporting:** Complete the depreciation study and prepare the final report.

The study recommends annual depreciation accrual rates for plant asset accounts across Residual Heat, Generation, Distribution and General Plant functions, presented in Table 6.1 of the study. The calculated depreciation rates result in approximately \$2.8 million reduction in annual depreciation accrual based on the gross plant in-service as of March 31, 2024, as summarized in the table below.

		2024
		Depreciation
Depreciation Expense	2023/24 Actual	Study
Residual Heat	1,058	793
Generation	11,311	9,164
Distribution	1,804	1,804
General Plant	1,919	1,552
Total	16,092	13,313
Change		-2,779

### 1.0 INTRODUCTION

InterGroup Consultants (InterGroup) was retained by Qulliq Energy Corporation (QEC) to conduct a depreciation study for Generation, Distribution and General Plant property of QEC as or March 31, 2024 and develop applicable depreciation rates for accounting and regulatory ratemaking purposes.

QEC is the only generator, transmitter and distributor of electrical energy for retail supply in Nunavut and has approximately 15,500 electrical customers across the Territory. The Corporation generates and distributes electricity to Nunavummiut through the operation of stand-alone diesel plants in 25 communities meeting community peak demands ranging from approximately 200 kW at Grise Fiord to 10 MW at Iqaluit. The Corporation provides mechanical, electrical and line maintenance from three regional centers and administers the Corporation's business activities from a headquarters in Baker Lake and executive offices in Iqaluit.

The study analyzed QEC's assets, existing life parameters, accumulated reserve and developed depreciation rates based on the straight-line allocation using average service life (ASL) procedure and remaining life adjustment technique. Non-depreciable assets were excluded from the analysis.

The life parameter recommendations presented in this study result in approximately \$2.8 million reduction in annual depreciation accrual based on the gross plant in-service as of March 31, 2024 as summarized in the table below.

		2024
		Depreciation
Depreciation Expense	2023/24 Actual	Study
Residual Heat	1,058	793
Generation	11,311	9,164
Distribution	1,804	1,804
General Plant	1,919	1,552
Total	16,092	13,313
Change		-2,779

The report presents the findings of the study organized as follows:

- Section 2 discusses a depreciation concept, methods and procedures employed to conduct the depreciation study.
- Section 3 discusses data collection and review.
- Section 4 presents evaluation of plant information specific to QEC and development of life parameters for asset categories based on the data analysis and consideration of additional factors.
- Section 5 discusses calculation of annual and accrued depreciation and recommended depreciation rates for QEC.

- Section 6 presents results of the study, including annual accruals based on the plant balances as of March 31, 2024, composite remaining lives and recommended depreciation rates by asset account.
- Section 7 presents actuarial analysis of retirement data and resulting service life estimates.
- Section 8 provides detailed calculation of annual accrual rates and amounts by asset account.

# 2.0 DEPRECIATION ACCOUNTING AND FOUNDATION OF THE STUDY

In general, utility depreciation represents the decline in service value of an asset and depreciation accounting is defined as a process of allocating in a systematic and rational manner the cost of depreciable capital assets over the estimated useful life of the unit (which may be a group of assets), providing for the systematic recovery of capital.<sup>1</sup>

Depreciation accounting is not a process of valuation. In other words, depreciation accounting does not determine the difference between the original cost of installation and its current market value.<sup>2</sup>

In the utility industry, depreciation is an annual expense which permits the systematic recovery of capital, which is added to the utility's revenue requirement. Depreciation calculations are based on accounting records, and therefore affected by the accuracy and detail of accounting data.

Depreciation analysis is based on a set of methods, procedures and models, which include:

- 1. Methods of depreciation cost allocation: (i) a straight-line method, (ii) an accelerated method, or (iii) a decelerated method.
- 2. Models of a depreciation analysis: (i) the broad group model, or (ii) the vintage group model
- 3. Procedures for applying the allocation methods: (i) the average service life procedure (ASL), (ii) the equal life group procedure (ELG), or (iii) the probable life procedure.
- 4. Accumulated depreciation reserve variance adjustment using (i) whole life technique, or (ii) remaining life technique.

Common depreciation analyses in the utility industry are based on the broad group model, straightline method using either the ASL or ELG procedure and one of the remaining life or whole life adjustment techniques.

Depreciation rates in this study were calculated based on the straight-line methods using the ASL procedure and remaining life adjustment technique.

A depreciation study generally involves completion of the following tasks:

- 1. **Data Collection:** Gather utility fixed asset records detailing historical installation, depreciation, and retirement transactions.
- 2. **Data Review and Analysis:** Analyze and organize the collected data for accuracy and consistency.

<sup>&</sup>lt;sup>1</sup> J. C. Bonbright (1960), Principles of Public Utility Rates, Columbia University Press, p. 201.

<sup>&</sup>lt;sup>2</sup> F. K. Wolf and W. Chester Fitch (1994), Depreciation Systems, Iowa State University Press, p. 72.

#### 3. Estimation of Asset Service Life and Net Salvage:

- o Conduct actuarial analysis for asset life and salvage value.
- o Perform reviews and interviews with management and operations personnel.
- Apply informed professional judgment, incorporating actuarial findings, staff insights, technological developments, and data from peer companies when available.
- 4. **Preliminary Calculations:** Calculate annual accruals and depreciation rates.
- 5. **Management Review:** Present the study results to management for feedback.
- 6. **Finalization and Reporting:** Complete the depreciation study and prepare the final report.

QEC does not accrue for asset salvage and removal costs through its depreciation rates. Accordingly, the current study does not analyze net salvage and required rate estimates.

## 3.0 DATA COLLECTION, REVIEW, AND ANALYSIS

The analysis in this study is based on the accounting records by asset account as of March 31, 2024, provided by QEC. The information includes:

- Plant balances by asset, including vintages, as of March 31, 2024.
- Closing plant balance by account for each year-end from 1957 to 2024.
- Retirement transactions by asset account and year, detailing original amounts, installation years, and retirement years.
- Accumulated depreciation balances by vintage and asset account as of March 31, 2024.

InterGroup reviewed and cross-checked QEC's data against its fixed asset records to ensure accuracy and reliability. The review process included:

- Reconciling gross plant and accumulated depreciation by asset account with QEC's fixed asset ledgers.
- Cross-checking and reconciling asset retirement and adjustment records by year for each asset account.
- Verifying each asset entry to identify any data entry inaccuracies in aged data.

QEC's retirement history records data only for the period since 2010. As a result, the data does not support survival ratio analysis (retirement exposure) for assets installed before 2009 for the age interval of 0 to 1 year. Similarly, assets installed before 2008 lack data for survival ratio analysis in the 1 to 2-year age interval, and so forth.

To address this, InterGroup re-organized the aged data to accurately reflect asset exposures subject to retirement by age interval for each account. For instance, in asset account 343 (Prime Movers), total asset exposures from installations dating back to 1957 amount to \$107.5 million. However, exposures subject to retirement history for the 0 to 1-year age interval (2009-2024) are only \$59.7 million. For the 1 to 2-year age interval (2008-2023), exposures total \$57.9 million, and for the 2 to 3-year age interval (2007-2022), they are \$59.1 million.

Asset balances and retirement transactions were similarly organized by age group for each account, establishing a foundation for the depreciation analysis.

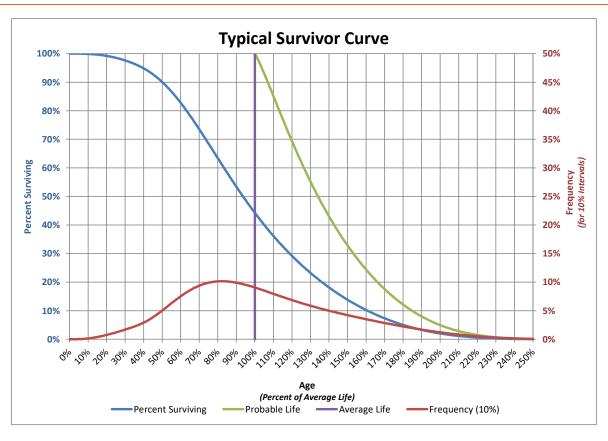
## 4.0 ASSET SERVICE LIFE ESTIMATES

#### **4.1 SURVIVOR CURVES**

In the depreciation analysis, the survivor curve is a mathematical function that describes life characteristics of property units within a group.<sup>3</sup> In a large group of property units some units will retire soon after installation while some will be functional and in use for many years. A survivor curve for the property units in this group can then indicate average service life of the units in the group based on their retirement patterns and percentage of units remaining in service at each age interval. The survivor curve graphically depicts percentage of units remaining in service at each age interval for a group of property units.

Figure 4-1 below illustrates a typical survivor curve, probable life curve, and asset retirement frequency at each age interval for a group of property units.





<sup>&</sup>lt;sup>3</sup> F. K. Wolf and W. Chester Fitch (1994), Depreciation Systems, Iowa State University Press, p. 21.

A widely accepted survivor curve model used in depreciation studies is the set of generalized survivor curves originally developed over several years of research by R. Winfrey and E. Kurtz at the Iowa Engineering Experiment Station, which was published by the Engineering Research Institute at Iowa State University in 1931 and later expanded by further work of R. Winfrey and other researchers to include additional series of generalized survivor curves.<sup>4</sup> This set of curves, referred to as Iowa Curves, is based on the empirical approach of gathering, analysis and generalization of data related to life characteristics of industrial property.

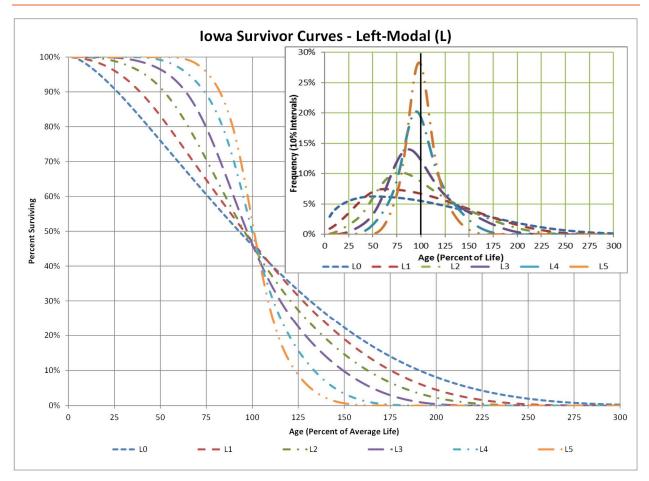
The Iowa Curves are classified by three variables: the average life, the location of the mode (the highest point on the retirement frequency curve), and the variation of the life (from the average life). There are left modal, right modal, symmetrical and origin modal type survivor curves with different variations of the life.

In order to know if an asset group is performing according to the projected life estimates, the depreciation study will provide both an average life (i.e., 40 years), and a dispersion. The dispersion addresses the characteristics as to how the asset is expected to perform in relation to its average life. For example, a symmetrical dispersion of high mode will portray that for the same average 40-year life the asset group will see many retirements between years 35 and 45, while a low mode may portray that the assets will see more retirements at 20 and 60 years (i.e., the retirement probability curve would have larger shoulders). Depreciation practice assigns these dispersions a value to indicate the degree of modality (or tightness) exhibited, typically from 0 to 5. Asymmetrical dispersions are also possible, skewed either to the right or left. Thus, a life estimate could be 40-S4, indicating a 40-year average service life, with a symmetrical dispersion and a relatively high mode.

The set of generalized Iowa Curves with the location of the mode to the left of the average life are denoted as the L type curves with the variations ranging from L0 to L5. The family of L type curves is illustrated in the graph below.

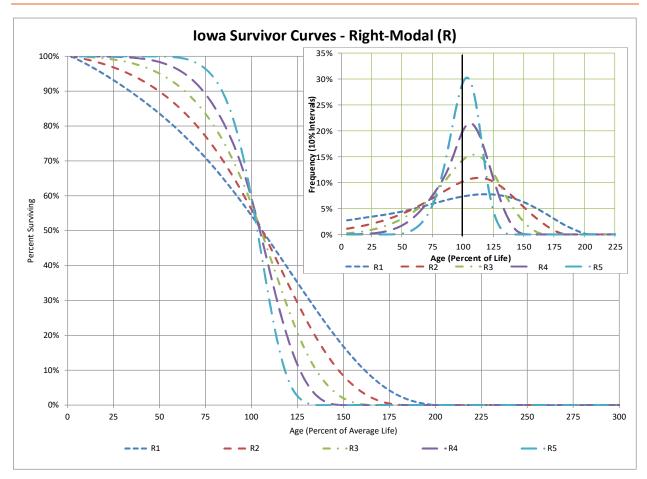
<sup>&</sup>lt;sup>4</sup> See R. Winfrey and E. Kurtz (1931), Life Characteristics of Physical Property, Bulletin 103, Engineering Research Institute, Iowa State University; R. Winfrey (1935), Statistical Analysis of industrial Property Retirements, Bulletin 125, Engineering Research Institute, Iowa State University; R. Winfrey (1942), Depreciation of Group Properties, Bulletin 155, Engineering Research Institute, Iowa State University.

Figure 4-2: Iowa Survivor Curves – Left-Modal (L)



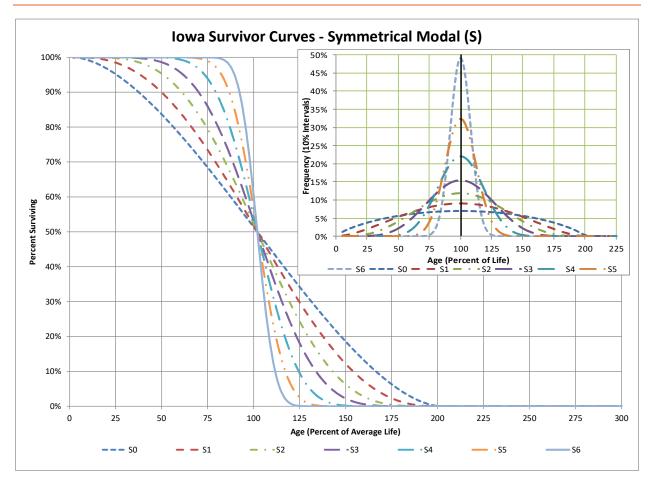
The graph below shows the family of R type curves, where the location of the mode is to the right of the average life. The R type curves have the variations ranging from R1 to R5.

Figure 4-3: Iowa Survivor Curves – Right-Modal (R)



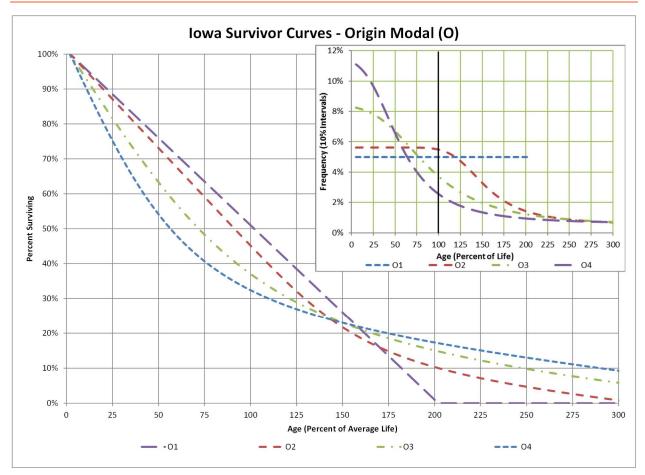
Symmetrical type curves indicate survivor curves where the retirement frequency peaks at the average life of the group of property units. This family of survivor curves is denoted as the S type curves and their variations range from S0 to S6 as shown in the graph below.

Figure 4-4: Iowa Survivor Curves – Symmetrical Modal (S)



The last set of generalized Iowa Curves is the origin modal curves, or the O type curves, where the retirement frequency peaks at age zero. The variation of the O type curves range from O1 to O4 as shown in the graph below.

Figure 4-5: Iowa Survivor Curves – Origin Modal (O)



As shown in the Iowa Curve graphs, in all types of survivor curves other than O type, the variations from the average life are lower with higher mode designation. For example, S6 type curve shows variation of approximately 75% to 125% from the average life, whereas for S0 type curve the variation is approximately 0% to 200% from the average life. For the O type curves the variations are smaller for lower mode designation.

#### 4.2 LIFE ANALYSIS

Using historical data from QEC's asset base, which details asset distribution, additions, and retirements by age group, InterGroup developed life tables through an actuarial analysis. These life tables for each asset account were then compared with Iowa Survivor Curves to estimate a preliminary service life for each account. This analysis was compared to peer utilities and reviewed in collaboration with operations personnel to integrate any insights that could influence the future performance of the assets. This section summarizes the life analysis and the resulting recommendations for major asset accounts examined, where the investment amount accounts for

1% or more of the total depreciable plant. The life parameter estimates for other accounts not covered in this section were derived from similar analysis. Retirement analysis details, including life tables and proposed survivor curves for each account using the aged data are provided in Chapter 7.

#### Account 131 - Alternative Energy Group - Residual Heat Systems

This account encompasses assets related to district and space heating. The total investment in this account is approximately \$28.7 million, accounting for about 5% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1998. Currently, the approved life parameter for this account is an average service life of 40 years, using the R3 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 30-S4 life parameter for this account.

#### Account 341 - Diesel Plant - Structures and Improvements

This account encompasses assets related to powerhouse building. The total investment in this account is approximately \$133.3 million, accounting for about 23% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1964. Currently, the approved life parameter for this account is an average service life of 40 years, using the R2.5 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 43-R2.5 life parameter for this account.

#### Account 342 - Diesel Plant - Fuel Holders, Producers and Accessories

This account comprises fuel storage tanks, pumps, coolers, supply lines and other related assets. The total investment in this account is approximately \$23.6 million, accounting for about 4% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1966. Currently, the approved life parameter for this account is an average service life of 20 years, using the R2 retirement dispersion. The actuarial analysis supports a survivor curve of Iowa 40-R1. The average service life used by peer utilities ranges 27 to 40 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 40-R1 life parameter for this account.

#### Account 343 - Diesel Plant - Prime Movers

The total investment in this account is approximately \$83.6 million, accounting for about 15% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1957. Currently, the approved life parameter for this account is an average service life of 25 years, using the R1.5 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 25-R2 life parameter for this account.

<sup>&</sup>lt;sup>5</sup> YEC uses Iowa 40-R2, NTPC uses Iowa 27-R2, ATCO Electric Yukon uses Iowa 40-R3 life estimates.

#### Account 344 - Diesel Plant - Generators

The total investment in this account is approximately \$83.6 million, accounting for about 15% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1972. Currently, the approved life parameter for this account is an average service life of 26 years, using the R2.5 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 28-R2.5 life parameter for this account.

#### Account 345 - Diesel Plant - Accessory Electric Equipment

This account includes switchgears, control panels, fire alarm systems, and other accessory electric equipment. The total investment in this account is approximately \$40.4 million, accounting for about 7% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1966. Currently, the approved life parameter for this account is an average service life of 25 years, using the R2 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 33-R2.5 life parameter for this account.

#### Account 346 - Diesel Plant - Miscellaneous Power Plant Equipment

The total investment in this account is approximately \$38.0 million, accounting for about 7% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1976. Currently, the approved life parameter for this account is an average service life of 25 years, using the R2.5 retirement dispersion. The actuarial analysis supports a survivor curve of Iowa 38-R4. The average service life used by peer utilities ranges 23 to 40 years.<sup>6</sup> Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 38-R4 life parameter for this account.

#### Account 361 - Distribution Plant - Structures and Improvements

The total investment in this account is approximately \$10.1 million, accounting for about 2% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1994. Currently, the approved life parameter for this account is an average service life of 40 years, using the R2 retirement dispersion. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 40-S4 life parameter for this account.

#### Account 362 - Distribution Plant - Station Equipment

The total investment in this account is approximately \$7.4 million, accounting for about 1% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1988. Currently, the approved life parameter for this account is an average service life of 35 years, using the S3 retirement dispersion. The average service life

<sup>&</sup>lt;sup>6</sup> YEC uses Iowa 30-R2, NTPC uses Iowa 23-R2, ATCO Electric Yukon uses Iowa 40-R3 life estimates.

estimate used by peer utilities ranges 25 to 55 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 40-S4 life parameter for this account.

#### Account 364 - Distribution Plant - Poles, Towers and Fixtures

The total investment in this account is approximately \$37.6 million, accounting for about 7% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1987. Currently, the approved life parameter for this account is an average service life of 45 years, using the R3 retirement dispersion. The average service life estimate used by peer utilities ranges 40 to 65 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 45-S4 life parameter for this account.

#### Account 365 - Distribution Plant - Overhead Conductors and Devices

The total investment in this account is approximately \$18.0 million, accounting for about 3% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1986. Currently, the approved life parameter for this account is an average service life of 45 years, using the R3 retirement dispersion. The average service life estimate used by peer utilities ranges 35 to 60 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 45-S4 life parameter for this account.

#### Account 368 - Distribution Plant - Line Transformers

The total investment in this account is approximately \$8.7 million, accounting for about 2% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1987. Currently, the approved life parameter for this account is an average service life of 40 years, using the R2 retirement dispersion. The average service life estimate used by peer utilities ranges 30 to 65 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 48-R4 life parameter for this account.

#### Account 390 - General Plant - Structures and Improvements

This account encompasses corporate buildings, transient units, warehouses and other related assets. The total investment in this account is approximately \$37.2 million, accounting for about 7% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1966. Currently, the approved life parameter for this account is an average service life of 45 years, using the R3 retirement dispersion. The actuarial analysis supports a survivor curve of Iowa 75-R4. The average service life estimate used by peer utilities ranges 35 to 65 years. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 55-R4 life parameter for this account.

#### Account 392 - General Plant - Transportation Equipment

The total investment in this account is approximately \$9.3 million, accounting for about 2% of the total depreciable plant analyzed. The asset life analysis examined additions and retirements of installations dating back to 1974. Currently, the approved life parameter for this account is an

<sup>&</sup>lt;sup>7</sup> YEC uses Iowa 50-R2, NTPC uses Iowa 65-R1.5, ATCO Electric Yukon uses Iowa 40-R3 life estimates.

average service life of 12 years, using the L1.5 retirement dispersion. The actuarial analysis supports a survivor curve of Iowa 19-L3. The average service life estimate used by peer utilities ranges 8 to 19 years, with QEC's northern peer utilities at lower end of the range<sup>8</sup>. Based on actuarial analysis and professional judgment, InterGroup recommends adopting the Iowa 15-L3 life parameter for this account.

#### **Amortized Accounts**

QEC currently uses amortization accounting for several accounts, including intangible assets, which consist of many property units, yet account for only a small fraction of the depreciable plant in service. For these asset groups, the service life estimates are based on various amortization periods as follows.

Account	Description	Amortization Period (Years)
383	Computer Software	10
391	Office Furniture and Equipment	10
394	Tools, Shop and Garage Equipment	15
401	Cranes Not Affixed to Building	20

<sup>&</sup>lt;sup>8</sup> YEC uses Iowa 8-L2, NTPC uses Iowa 9-R2, ATCO Electric Yukon uses Iowa 12-L3 and 15-L3 life estimates.

# 5.0 ANNUAL ACCRUALS AND DEPRECIATION RATES CALCULATION

Asset annual accruals and depreciation rates in this study were calculated based on the broad group, straight-line cost allocation method using ASL procedure and remaining life adjustment technique.

The ASL procedure applies a set of mathematics that is intuitively aligned with the expectations of a group of assets having a clearly estimated average service life. In its simplest form, the ASL annual accrual for an asset will be calculated under the following general formula:

$$Annual\ Accrual = \frac{Original\ Cost}{Service\ Life}$$

In the ASL procedure using the remaining life adjustment technique, the annual accrual for each vintage is calculated by dividing the future book accruals (original cost minus the book depreciation reserve) by the average remaining life of that vintage, as shown below:

$$Annual\ Accrual = \frac{(Vintage\ Cost - Vintage\ Book\ Reserve)}{Vintage\ Average\ Remaining\ Life}$$

Accordingly, remaining life annual accruals calculation requires records or allocation of booked depreciation reserve at vintage level and remaining life estimates reflecting the selected average life and survivor curve parameters.

In the next step, annual accruals for each vintage are summed up and divided by the total original cost to derive a composite depreciation rate for this group of assets as illustrated in the following formula:

$$Depreciation \ Rate = \frac{Total \ Annual \ Accrual}{Total \ Original \ Cost}$$

For the amortized accounts, annual accrual is calculated by dividing the original cost by the amortization period as shown below:

$$Annual\ Accrual = \frac{Total\ Original\ Cost}{Amortization\ Period}$$

The respective depreciation rate is then calculated by the following formula:

$$Depreciation \ Rate = \frac{Annual \ Accrual}{Total \ Original \ Cost}$$

The detailed calculations of annual accruals and depreciation rates by account, based on the broad group, straight-line cost allocation using ASL procedure and remaining life adjustment technique are shown in Chapter 8.

## 6.0 STUDY RESULTS

Table 6.1 presents estimated survivor curves, annual accruals and depreciation (accrual) rates by account calculated for the assets in service as of March 31, 2024.

It is recommended that annual accruals based on the proposed depreciation rates are monitored on an annual basis and the depreciation rates are revised on a regular basis to ensure reasonableness of the assumed asset life parameters for the actual retirement experience going forward. This is especially important for depreciation rates based on remaining life adjustment technique because they incorporate theoretical reserve variance from book reserve and leaving depreciation rates unchanged for an extended period will create a risk of significant undercollection or over-collection of depreciation accruals relative to changed variability and composition of asset characteristics.

Table 6.1: Estimated Survivor Curve, Original Cost and Calculated Annual Depreciation Accruals Related to Plant in Service on March 31, 2024

Account		Estimated Survivor Curve	Surviving Original Cost at March 31, 2024	Book Accumulated Depreciation	Future Accruals	Composite Remaining Life	Annual Accrual Amount	Annual Accrual Rate
A	В	С	D	E	F	G	Н	I
AI TERNA	ATIVE ENERGY GROUP							
131	RESIDUAL HEAT SYSTEMS	30-S4	28,669,722	13,814,993	14,854,729	18.74	792,730	2.77%
TOTAL A	LTERNATIVE ENERG GROUP		28,669,722	13,814,993	14,854,729		792,730	
DIEGEL B	N ANT							
DIESEL P 341	STRUCTURES AND IMPROVEMENTS	43-R2.5	131,333,852	36,090,233	95,243,619	34.55	2,757,037	2.10%
342	FUEL HOLDERS, PRODUCERS AND ACCESSORIES	40-R1	23.608.835	15,781,676	7,827,159	31.76	246,472	1.04%
343	PRIME MOVERS	25-R2	83,565,091	47,030,521	36,534,570	15.70	2,326,321	2.78%
344	GENERATORS	28-R2.5	72,876,617	26,956,715	45,919,901	19.65	2,337,207	3.21%
345	ACCESSORY ELECTRIC EQUIPMENT	33-R2.5	40,396,594	17,557,666	22,838,929	25.98	879,090	2.18%
346	MISCELLANEOUS POWER PLANT EQUIPMENT	38-R4	38,048,223	19,767,196	18,281,027	29.59	617,829	1.62%
	IESEL PLANT		389,829,213	163,184,007	226,645,205		9,163,956	
DICTRIRI	JTION PLANT							
361	STRUCTURES AND IMPROVEMENTS	40-S4	10,090,247	2,433,161	7,657,086	29.12	262,908	2.61%
362	STATION EQUIPMENT	40-S4	7.352.555	2,341,806	5,010,749	27.04	185.279	2.52%
363	STORAGE BATTERY EQUIPMENT	15-R3	9.973	9,973	5,010,749	27.04	105,279	6.67%
364	POLES, TOWERS, AND FIXTURES	45-S4	37.637.189	12,576,303	25.060.885	35.31	709.820	1.89%
365	OVERHEAD CONDUCTORS AND DEVICES	45-S4	18,004,472	9,322,761	8,681,711	28.54	304,168	1.69%
366	UNDERGROUND CONDUIT	40-S4	259,860	36,888	222,972	36.28	6,146	2.37%
367	UNDERGROUND CONDUCTORS AND DEVICES	40-S4	128,367	75,654	52,714	24.81	2,124	1.65%
368	LINE TRANSFORMERS	48-R4	8,690,343	2,973,300	5,717,042	37.32	153,171	1.76%
369	SERVICES	40-S4	2,045,207	1,007,211	1,037,997	29.26	35,477	1.73%
370	METERS	16-S2	1,269,470	424,915	844,555	9.05	93,288	7.35%
371	INSTALLATIONS ON CUSTOMER PREMISES	16-S2	5,080	187	4,893	13.51	362	7.13%
373	STREET LIGHTING AND SIGNAL SYSTEMS	40-S5	2,060,700	269.225	1,791,475	34.70	51,622	2.51%
	ISTRIBUTION PLANT		87,553,463	31,471,384	56,082,079		1,804,366	
GENERAI 383	COMPUTER SOFTWARE	10-SQ	1,765,595	1,365,480	400,115		176,560	10.00%
390	STRUCTURES AND IMPROVEMENTS	10-SQ 55-R4	37,175,160	8,013,822	29,161,338	46.72	624,135	1.68%
390	OFFICE FURNITURE AND EQUIPMENT	10-SQ	449,958	305,803	29, 161,336 144,156	40.72	44,996	10.00%
392	TRANSPORTATION EQUIPMENT	15-L3	9,296,440	6.819.612	2,476,828	7.21	343,376	3.69%
394	TOOLS, SHOP AND GARAGE EQUIPMENT	15-L3 15-SQ	2,403,966	525,444	1,878,522	7.21	160,264	6.67%
396	POWER OPERATED EQUIPMENT	30-L5	233,691	170,156	63,535	17.35	3.661	1.57%
397	COMMUNICATION EQUIPMENT	14-R2	1,279,168	464.331	814.836	8.91	91.421	7.15%
398	MISCELLANOUS EQUIPMENT	15-S1	1,519,296	921,338	597,958	8.55	69,919	4.60%
399	OTHER TANGIBLE PLANT	20-R3	1,121,461	866,433	255,027	8.94	28,521	2.54%
401	CRANES NOT AFFIXED TO BUILDINGS	20-K3 20-SQ	174,043	84,954	89,089	0.34	8,702	5.00%
	ENERAL PLANT	20-04	55,418,777	19,537,373	35,881,404		1,551,555	
I OTAL E	LECTRIC PLANT STUDIED		561,471,175	228,007,757	333,463,418		13,312,608	
	PRECIABLE PLANT							
330	DIESEL LAND AND LAND RIGHTS		1,134,897	271,629	863,268			
340	DIESEL LAND AND LAND RIGHTS		806,792	432,969	373,823			
389	GENERAL PLANT LAND AND LAND RIGHTS		7,108	7,108	0			
TOTAL N	ON-DEPRECIABLE PLANT		1,948,796	711,706	1,237,090			
TOTAL PI	LANT IN SERVICE		563,419,971	228,719,463	334,700,508			

QULLIQ ENERGY CORPORATION 2024 DEPRECIATION STUDY

OCTOBER 2024

# LIFE TABLES AND SURVIVOR CURVE ANALYSIS

Qulliq Energy Corporation

Account 131 – Alternative Energy Group – Residual Heat Systems

Actual and Survivor Curve Retirement Patterns



#### Qulliq Energy Corporation

# Account 131 – Alternative Energy Group – Residual Heat Systems Original Life Table

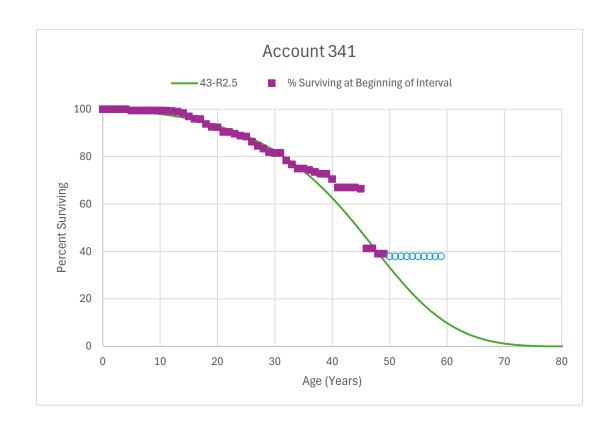
Placement Band 1998-2024

Age at	Exposures at	Retirements	Detiment	0	% Surviving at
Beginning of Interval	Beginning of Age Interval	During Age Interval	Retirement Ratio	Survivor Ratio	Beginning of Interval
0	13,153,773	mitor var	0.0000	1.0000	100.00
1	13,285,441		0.0000	1.0000	100.00
2	21,809,363		0.0000	1.0000	100.00
3	19,016,343		0.0000	1.0000	100.00
4	19,016,343		0.0000	1.0000	100.00
5	19,016,343		0.0000	1.0000	100.00
6	17,108,474		0.0000	1.0000	100.00
7	18,075,846		0.0000	1.0000	100.00
8	18,688,173		0.0000	1.0000	100.00
9	18,815,468		0.0000	1.0000	100.00
10	19,622,032		0.0000	1.0000	100.00
11	19,763,962		0.0000	1.0000	100.00
12	19,763,962		0.0000	1.0000	100.00
13	19,763,962		0.0000	1.0000	100.00
14	19,763,962		0.0000	1.0000	100.00
15	15,534,005	18,055	0.0012	0.9988	100.00
16	15,515,949		0.0000	1.0000	99.88
17	15,384,281		0.0000	1.0000	99.88
18	2,956,922		0.0000	1.0000	99.88
19	2,956,922		0.0000	1.0000	99.88
20	2,956,922		0.0000	1.0000	99.88
21	2,956,922		0.0000	1.0000	99.88
22	2,833,295		0.0000	1.0000	99.88
23	1,865,923		0.0000	1.0000	99.88
24	1,271,652		0.0000	1.0000	99.88
25	987,131		0.0000	1.0000	99.88
26	180,567		0.0000	1.0000	99.88

Qulliq Energy Corporation

Account 341 – Diesel Plant – Structures and Improvements

Actual and Survivor Curve Retirement Patterns



#### Qulliq Energy Corporation

## Account 341 – Diesel Plant – Structures and Improvements

#### Original Life Table

Placement Band 1964-2024

Ago of	Evnouvros of	Retirements	·		0/ Cumrissing of
Age at Beginning of	Exposures at Beginning of	During Age	Retirement	Survivor	% Surviving at Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	101,121,135	iiitoi vai	0.0000	1.0000	100.00
1	101,117,970		0.0000	1.0000	100.00
2	101,913,722		0.0000	1.0000	100.00
3	86,606,181		0.0000	1.0000	100.00
4	86,606,181	490,702	0.0057	0.9943	100.00
5	86,115,479		0.0000	1.0000	99.43
6	57,062,247		0.0000	1.0000	99.43
7	58,481,321		0.0000	1.0000	99.43
8	53,398,804		0.0000	1.0000	99.43
9	33,483,357	6,528	0.0002	0.9998	99.43
10	34,922,398	4,617	0.0001	0.9999	99.41
11	35,377,727	67,581	0.0019	0.9981	99.40
12	18,703,269	49,835	0.0027	0.9973	99.21
13	19,792,859	122,655	0.0062	0.9938	98.95
14	20,957,001	292,839	0.0140	0.9860	98.33
15	20,866,137	224,916	0.0108	0.9892	96.96
16	20,887,305	20,911	0.0010	0.9990	95.91
17	23,441,699	508,167	0.0217	0.9783	95.82
18	26,431,308	345,808	0.0131	0.9869	93.74
19	20,354,316	23,843	0.0012	0.9988	92.51
20	20,630,899	454,749	0.0220	0.9780	92.41
21	20,404,923		0.0000	1.0000	90.37
22	21,234,654	173,510	0.0082	0.9918	90.37
23	19,555,400	178,043	0.0091	0.9909	89.63
24	16,251,472	72,118	0.0044	0.9956	88.82
25	13,359,619	329,610	0.0247	0.9753	88.42
26	11,837,675	237,802	0.0201	0.9799	86.24
27	11,391,086	153,017	0.0134	0.9866	84.51
28	11,238,070	203,401	0.0181	0.9819	83.37
29	10,997,833	44,184	0.0040	0.9960	81.86
30	10,205,431	000.647	0.0000	1.0000	81.53
31	10,212,518	392,947	0.0385	0.9615	81.53
32	10,013,571	217,330	0.0217	0.9783	78.40
33	7,570,133	171,277	0.0226	0.9774	76.70
34	3,662,523		0.0000	1.0000	74.96

# Qulliq Energy Corporation Account 341 – Diesel Plant – Structures and Improvements Original Life Table

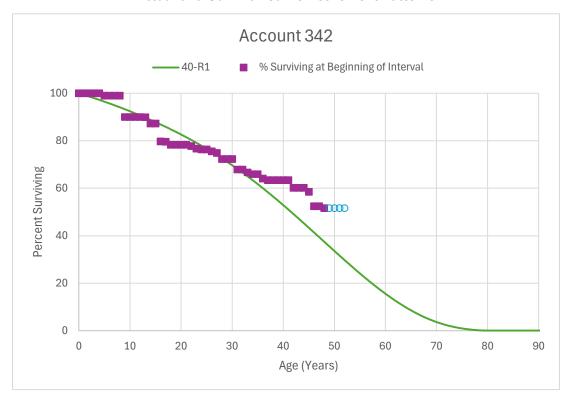
Placement Band 1964-2024

Age at	Exposures at	Retirements	<b>5</b> (1)		% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
35	3,526,776	29,685	0.0084	0.9916	74.96
36	3,333,320	34,336	0.0103	0.9897	74.33
37	3,672,442	36,345	0.0099	0.9901	73.56
38	2,732,845	3,965	0.0015	0.9985	72.84
39	3,099,903	95,000	0.0306	0.9694	72.73
40	2,866,794	143,134	0.0499	0.9501	70.50
41	4,149,342		0.0000	1.0000	66.98
42	4,194,342		0.0000	1.0000	66.98
43	3,776,843		0.0000	1.0000	66.98
44	3,776,843	32,300	0.0086	0.9914	66.98
45	3,652,492	1,383,682	0.3788	0.6212	66.41
46	2,224,251		0.0000	1.0000	41.25
47	2,217,165	119,109	0.0537	0.9463	41.25
48	2,001,055		0.0000	1.0000	39.03
49	1,680,387	45,000	0.0268	0.9732	39.03
50	1,099,822		0.0000	1.0000	37.99
51	797,774		0.0000	1.0000	37.99
52	701,429		0.0000	1.0000	37.99
53	413,024		0.0000	1.0000	37.99
54	413,024		0.0000	1.0000	37.99
55	413,024		0.0000	1.0000	37.99
56	413,024		0.0000	1.0000	37.99
57	42,000		0.0000	1.0000	37.99
58	42,000		0.0000	1.0000	37.99

Qulliq Energy Corporation

Account 342 – Diesel Plant – Fuel Holders, Producers and Accessories

Actual and Survivor Curve Retirement Patterns



#### Qulliq Energy Corporation

# Account 342 – Diesel Plant – Fuel Holders, Producers and Accessories Original Life Table

Placement Band 1966-2024

Age at	Exposures at	Retirements	•		% Surviving at
Age at Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	11,692,291	iiitoi vai	0.0000	1.0000	100.00
1	12,701,152		0.0000	1.0000	100.00
2	13,011,678		0.0000	1.0000	100.00
3	12,493,068		0.0000	1.0000	100.00
4	12,493,068	120,191	0.0096	0.9904	100.00
5	9,399,091	,	0.0000	1.0000	99.04
6	9,363,007		0.0000	1.0000	99.04
7	8,252,206		0.0000	1.0000	99.04
8	3,627,575	329,993	0.0910	0.9090	99.04
9	3,094,891		0.0000	1.0000	90.03
10	3,061,487	188	0.0001	0.9999	90.03
11	3,179,754		0.0000	1.0000	90.02
12	3,102,164	3,103	0.0010	0.9990	90.02
13	3,725,868	111,300	0.0299	0.9701	89.93
14	7,267,884		0.0000	1.0000	87.25
15	7,615,163	656,389	0.0862	0.9138	87.25
16	6,848,966	14,614	0.0021	0.9979	79.73
17	6,439,050	102,342	0.0159	0.9841	79.56
18	8,786,347		0.0000	1.0000	78.29
19	10,404,064		0.0000	1.0000	78.29
20	10,693,076		0.0000	1.0000	78.29
21	10,150,524	63,242	0.0062	0.9938	78.29
22	10,153,580	148,512	0.0146	0.9854	77.80
23	10,005,068	38,084	0.0038	0.9962	76.67
24	9,837,705		0.0000	1.0000	76.37
25	9,900,933	105,189	0.0106	0.9894	76.37
26	9,475,935	83,521	0.0088	0.9912	75.56
27	9,385,259	320,359	0.0341	0.9659	74.90
28	9,059,259		0.0000	1.0000	72.34
29	8,785,671		0.0000	1.0000	72.34
30	5,785,443	358,117	0.0619	0.9381	72.34
31	5,131,625		0.0000	1.0000	67.86
32	5,418,077	97,058	0.0179	0.9821	67.86
33	5,304,304	56,926	0.0107	0.9893	66.65
34	2,993,871		0.0000	1.0000	65.93

#### Qulliq Energy Corporation

# Account 342 – Diesel Plant – Fuel Holders, Producers and Accessories Original Life Table

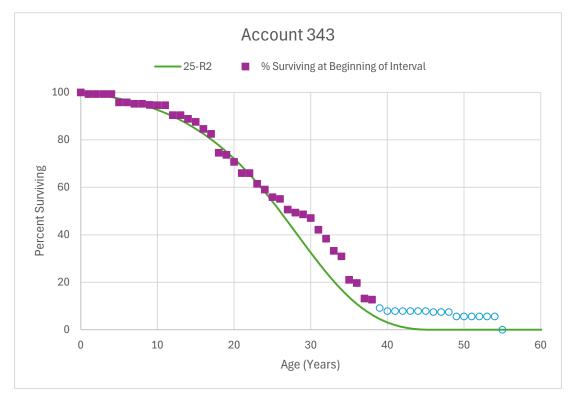
Placement Band 1966-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	1,509,182	42,158	0.0279	0.9721	65.93
36	1,291,995	14,057	0.0109	0.9891	64.09
37	1,115,798		0.0000	1.0000	63.39
38	1,070,648		0.0000	1.0000	63.39
39	1,070,648		0.0000	1.0000	63.39
40	1,070,648		0.0000	1.0000	63.39
41	1,100,648	56,250	0.0511	0.9489	63.39
42	1,044,397		0.0000	1.0000	60.15
43	1,044,397		0.0000	1.0000	60.15
44	1,044,397	29,221	0.0280	0.9720	60.15
45	714,529	73,685	0.1031	0.8969	58.47
46	640,844		0.0000	1.0000	52.44
47	620,196	10,000	0.0161	0.9839	52.44
48	409,214		0.0000	1.0000	51.59
49	204,484		0.0000	1.0000	51.59
50	90,000		0.0000	1.0000	51.59
51	30,000		0.0000	1.0000	51.59

Qulliq Energy Corporation

Account 343 – Diesel Plant – Prime Movers

Actual and Survivor Curve Retirement Patterns



# Qulliq Energy Corporation Account 343 – Diesel Plant – Prime Movers Original Life Table

Placement Band 1957-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	59,725,730	393,428	0.0066	0.9934	100.00
1	57,891,028	•	0.0000	1.0000	99.34
2	59,091,028		0.0000	1.0000	99.34
3	61,858,412		0.0000	1.0000	99.34
4	63,105,419	2,222,498	0.0352	0.9648	99.34
5	59,788,877		0.0000	1.0000	95.84
6	57,912,975	358,310	0.0062	0.9938	95.84
7	49,823,116		0.0000	1.0000	95.25
8	47,875,250	244,348	0.0051	0.9949	95.25
9	42,435,332	57,618	0.0014	0.9986	94.76
10	38,924,583		0.0000	1.0000	94.63
11	35,663,938	1,567,445	0.0440	0.9560	94.63
12	34,307,582		0.0000	1.0000	90.48
13	37,696,941	643,648	0.0171	0.9829	90.48
14	34,798,201	498,211	0.0143	0.9857	88.93
15	31,463,937	1,084,797	0.0345	0.9655	87.66
16	28,635,550	692,177	0.0242	0.9758	84.64
17	30,726,352	2,992,125	0.0974	0.9026	82.59
18	27,088,539	301,577	0.0111	0.9889	74.55
19	22,453,626	907,010	0.0404	0.9596	73.72
20	22,326,791	1,483,252	0.0664	0.9336	70.74
21	21,349,928		0.0000	1.0000	66.04
22	20,602,433	1,404,632	0.0682	0.9318	66.04
23	19,134,510	749,249	0.0392	0.9608	61.54
24	14,057,078	770,072	0.0548	0.9452	59.13
25	12,649,864	174,495	0.0138	0.9862	55.89
26	12,870,735	1,041,331	0.0809	0.9191	55.12
27	12,080,728	300,854	0.0249	0.9751	50.66
28	11,935,380	184,712	0.0155	0.9845	49.40
29	11,245,808	363,106	0.0323	0.9677	48.63
30	8,649,025	902,673	0.1044	0.8956	47.06
31	7,170,640	636,707	0.0888	0.9112	42.15
32	6,800,407	906,471	0.1333	0.8667	38.41
33	3,235,724	231,356	0.0715	0.9285	33.29
34	3,156,699	1,006,211	0.3188	0.6812	30.91

# Qulliq Energy Corporation Account 343 – Diesel Plant – Prime Movers Original Life Table

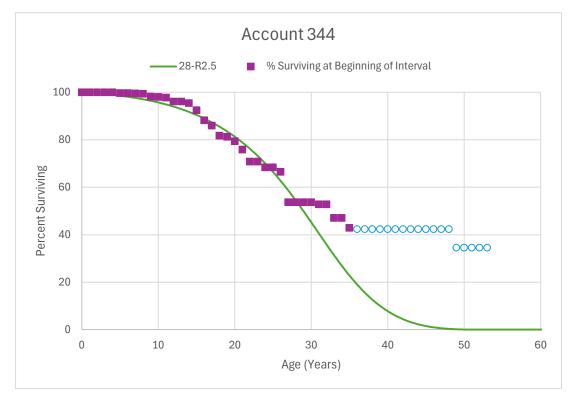
Placement Band 1957-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	2,213,049	138,173	0.0624	0.9376	21.06
36	2,119,727	706,645	0.3334	0.6666	19.74
37	1,836,741	62,560	0.0341	0.9659	13.16
38	1,774,181	494,852	0.2789	0.7211	12.71
39	988,738	142,272	0.1439	0.8561	9.17
40	846,465		0.0000	1.0000	7.85
41	846,465		0.0000	1.0000	7.85
42	846,465		0.0000	1.0000	7.85
43	846,465		0.0000	1.0000	7.85
44	876,465		0.0000	1.0000	7.85
45	876,465	38,652	0.0441	0.9559	7.85
46	837,814		0.0000	1.0000	7.50
47	786,273		0.0000	1.0000	7.50
48	786,273	200,000	0.2544	0.7456	7.50
49	486,273		0.0000	1.0000	5.59
50	486,273		0.0000	1.0000	5.59
51	486,273		0.0000	1.0000	5.59
52	486,273		0.0000	1.0000	5.59
53	30,000		0.0000	1.0000	5.59
54	30,000	30,000	1.0000	0.0000	5.59

Qulliq Energy Corporation

Account 344 – Diesel Plant – Generators

Actual and Survivor Curve Retirement Patterns



# Qulliq Energy Corporation Account 344 – Diesel Plant – Generators Original Life Table

Placement Band 1972-2024

Age at	Exposures at	Retirements	· 		% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	62,814,408		0.0000	1.0000	100.00
1	62,712,269		0.0000	1.0000	100.00
2	63,615,327		0.0000	1.0000	100.00
3	60,473,740		0.0000	1.0000	100.00
4	56,032,017	189,000	0.0034	0.9966	100.00
5	45,832,447		0.0000	1.0000	99.66
6	45,900,079	44,107	0.0010	0.9990	99.66
7	43,082,623	61,057	0.0014	0.9986	99.57
8	41,999,321	508,472	0.0121	0.9879	99.43
9	39,276,938	57,445	0.0015	0.9985	98.22
10	36,745,653	107,683	0.0029	0.9971	98.08
11	36,160,751	622,745	0.0172	0.9828	97.79
12	14,663,969		0.0000	1.0000	96.11
13	16,040,128	105,967	0.0066	0.9934	96.11
14	13,575,863	438,246	0.0323	0.9677	95.47
15	10,598,142	480,386	0.0453	0.9547	92.39
16	9,913,122	252,898	0.0255	0.9745	88.20
17	10,748,125	530,286	0.0493	0.9507	85.95
18	9,679,406	53,983	0.0056	0.9944	81.71
19	8,495,257	200,000	0.0235	0.9765	81.26
20	8,825,937	388,315	0.0440	0.9560	79.34
21	8,252,894	553,822	0.0671	0.9329	75.85
22	7,238,915		0.0000	1.0000	70.76
23	6,969,000	241,247	0.0346	0.9654	70.76
24	5,827,904		0.0000	1.0000	68.31
25	5,812,694	155,404	0.0267	0.9733	68.31
26	5,229,871	1,004,509	0.1921	0.8079	66.49
27	4,225,362		0.0000	1.0000	53.72
28	3,994,043		0.0000	1.0000	53.72
29	3,304,581		0.0000	1.0000	53.72
30	2,991,924	50,000	0.0167	0.9833	53.72
31	2,569,468		0.0000	1.0000	52.82
32	2,569,468	281,846	0.1097	0.8903	52.82
33	951,134		0.0000	1.0000	47.02
34	844,329	75,000	0.0888	0.9112	47.02

# Qulliq Energy Corporation Account 344 – Diesel Plant – Generators Original Life Table

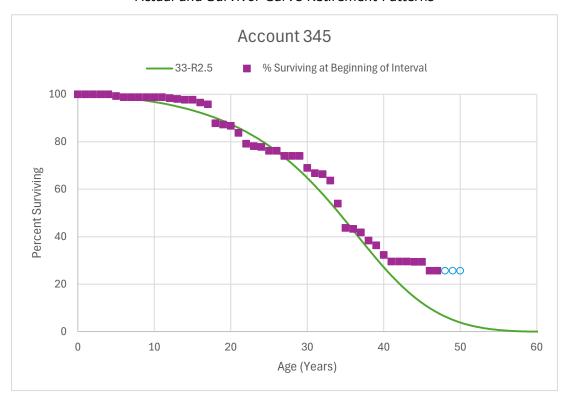
Placement Band 1972-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	769,329	8,861	0.0115	0.9885	42.85
36	265,398		0.0000	1.0000	42.35
37	465,398		0.0000	1.0000	42.35
38	465,398		0.0000	1.0000	42.35
39	444,064		0.0000	1.0000	42.35
40	309,302		0.0000	1.0000	42.35
41	304,302		0.0000	1.0000	42.35
42	245,144		0.0000	1.0000	42.35
43	245,144		0.0000	1.0000	42.35
44	245,144		0.0000	1.0000	42.35
45	245,144		0.0000	1.0000	42.35
46	245,144		0.0000	1.0000	42.35
47	245,144		0.0000	1.0000	42.35
48	245,144	45,144	0.1842	0.8158	42.35
49	200,000		0.0000	1.0000	34.55
50	200,000		0.0000	1.0000	34.55
51	200,000		0.0000	1.0000	34.55
52	200,000		0.0000	1.0000	34.55

Qulliq Energy Corporation

Account 345 – Diesel Plant – Accessory Electric Equipment

Actual and Survivor Curve Retirement Patterns



# Qulliq Energy Corporation Account 345 – Diesel Plant – Accessory Electric Equipment Original Life Table

Placement Band 1966-2024

Age at	Exposures at	Retirements	· 		% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	27,247,947		0.0000	1.0000	100.00
1	27,284,475	430	0.0000	1.0000	100.00
2	28,512,846		0.0000	1.0000	100.00
3	21,013,976		0.0000	1.0000	100.00
4	20,917,696	149,828	0.0072	0.9928	100.00
5	20,524,588	93,098	0.0045	0.9955	99.28
6	15,173,648		0.0000	1.0000	98.83
7	15,116,147		0.0000	1.0000	98.83
8	11,315,375		0.0000	1.0000	98.83
9	8,847,306		0.0000	1.0000	98.83
10	9,963,890	3,869	0.0004	0.9996	98.83
11	10,012,910	37,771	0.0038	0.9962	98.79
12	9,128,598	33,977	0.0037	0.9963	98.42
13	9,885,987	30,297	0.0031	0.9969	98.05
14	10,806,587		0.0000	1.0000	97.75
15	12,457,216	155,701	0.0125	0.9875	97.75
16	12,780,664	98,972	0.0077	0.9923	96.53
17	13,993,277	1,171,670	0.0837	0.9163	95.78
18	11,592,807	68,371	0.0059	0.9941	87.76
19	10,558,417	69,817	0.0066	0.9934	87.25
20	10,584,615	361,167	0.0341	0.9659	86.67
21	10,458,306	565,624	0.0541	0.9459	83.71
22	9,959,479	128,096	0.0129	0.9871	79.19
23	9,701,692	43,990	0.0045	0.9955	78.17
24	7,959,432	166,388	0.0209	0.9791	77.81
25	6,642,604		0.0000	1.0000	76.19
26	5,585,650	158,121	0.0283	0.9717	76.19
27	5,639,229		0.0000	1.0000	74.03
28	5,054,837		0.0000	1.0000	74.03
29	4,689,588	320,888	0.0684	0.9316	74.03
30	3,495,719	113,721	0.0325	0.9675	68.96
31	2,741,075	16,438	0.0060	0.9940	66.72
32	2,854,519	114,263	0.0400	0.9600	66.32
33	1,647,687	251,977	0.1529	0.8471	63.67
34	1,720,565	328,412	0.1909	0.8091	53.93

## Account 345 - Diesel Plant - Accessory Electric Equipment Original Life Table

Placement Band 1966-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	1,255,955	11,277	0.0090	0.9910	43.64
36	1,268,123	43,322	0.0342	0.9658	43.24
37	1,285,416	104,798	0.0815	0.9185	41.77
38	1,271,098	67,611	0.0532	0.9468	38.36
39	1,209,893	134,273	0.1110	0.8890	36.32
40	1,075,620	90,480	0.0841	0.9159	32.29
41	1,081,440		0.0000	1.0000	29.57
42	1,034,061		0.0000	1.0000	29.57
43	1,034,061	6,406	0.0062	0.9938	29.57
44	973,737		0.0000	1.0000	29.39
45	964,085	122,103	0.1267	0.8733	29.39
46	743,983		0.0000	1.0000	25.67
47	678,983		0.0000	1.0000	25.67
48	423,657		0.0000	1.0000	25.67
49	281,533		0.0000	1.0000	25.67

Qulliq Energy Corporation

Account 346 – Diesel Plant – Miscellaneous Power Plant Equipment

Actual and Survivor Curve Retirement Patterns



## Account 346 - Diesel Plant - Miscellaneous Power Plant Equipment Original Life Table

Placement Band 1976-2024

Age at	Exposures at	Retirements	•		% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	23,855,936	mitor var	0.0000	1.0000	100.00
1	23,871,895		0.0000	1.0000	100.00
2	25,346,750		0.0000	1.0000	100.00
3	21,229,335		0.0000	1.0000	100.00
4	21,229,335		0.0000	1.0000	100.00
5	21,647,015		0.0000	1.0000	100.00
6	18,648,600		0.0000	1.0000	100.00
7	20,196,768	147,349	0.0073	0.9927	100.00
8	18,272,665		0.0000	1.0000	99.27
9	17,246,925	209,987	0.0122	0.9878	99.27
10	17,024,753	2,572	0.0002	0.9998	98.06
11	16,546,089	1,305	0.0001	0.9999	98.05
12	16,060,435	24,719	0.0015	0.9985	98.04
13	16,156,907	204,967	0.0127	0.9873	97.89
14	11,219,371		0.0000	1.0000	96.65
15	11,031,665	42,344	0.0038	0.9962	96.65
16	10,989,321	994	0.0001	0.9999	96.28
17	14,542,234		0.0000	1.0000	96.27
18	12,995,778	43,063	0.0033	0.9967	96.27
19	12,260,252	10,111	0.0008	0.9992	95.95
20	12,386,113	50,462	0.0041	0.9959	95.87
21	11,981,797		0.0000	1.0000	95.48
22	8,044,851	135,973	0.0169	0.9831	95.48
23	6,464,846		0.0000	1.0000	93.86
24	5,412,708		0.0000	1.0000	93.86
25	5,683,905	127,717	0.0225	0.9775	93.86
26	5,549,184		0.0000	1.0000	91.76
27	5,529,657	281,066	0.0508	0.9492	91.76
28	5,171,363		0.0000	1.0000	87.09
29	5,100,633		0.0000	1.0000	87.09
30	3,623,582		0.0000	1.0000	87.09
31	3,623,582		0.0000	1.0000	87.09
32	3,623,582		0.0000	1.0000	87.09
33	67,940		0.0000	1.0000	87.09
34	67,940		0.0000	1.0000	87.09

#### Account 346 - Diesel Plant - Miscellaneous Power Plant Equipment

#### Original Life Table

Placement Band 1976-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	<b>During Age</b>	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
34	67,940		0.0000	1.0000	87.09
35	67,940	4,114	0.0605	0.9395	87.09
36	63,826		0.0000	1.0000	81.82

Qulliq Energy Corporation

Account 361 – Distribution Plant – Structures and Improvements

Actual and Survivor Curve Retirement Patterns



### Account 361 – Distribution Plant – Structures and Improvements Original Life Table

Placement Band 1994-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	9,549,753		0.0000	1.0000	100.00
1	9,549,753		0.0000	1.0000	100.00
2	8,771,145		0.0000	1.0000	100.00
3	8,304,420		0.0000	1.0000	100.00
4	8,008,306		0.0000	1.0000	100.00
5	8,007,984		0.0000	1.0000	100.00
6	7,924,634		0.0000	1.0000	100.00
7	7,932,134		0.0000	1.0000	100.00
8	8,050,360		0.0000	1.0000	100.00
9	8,072,223		0.0000	1.0000	100.00
10	8,088,424	1,073	0.0001	0.9999	100.00
11	8,090,443	2,778	0.0003	0.9997	99.99
12	391,456	30	0.0001	0.9999	99.95
13	243,272		0.0000	1.0000	99.94
14	544,205		0.0000	1.0000	99.94
15	549,055	8,561	0.0156	0.9844	99.94
16	540,494		0.0000	1.0000	98.39
17	540,494		0.0000	1.0000	98.39
18	540,494		0.0000	1.0000	98.39
19	540,494		0.0000	1.0000	98.39
20	540,494		0.0000	1.0000	98.39
21	540,494		0.0000	1.0000	98.39
22	540,494		0.0000	1.0000	98.39
23	532,994		0.0000	1.0000	98.39
24	415,842		0.0000	1.0000	98.39
25	396,757		0.0000	1.0000	98.39
26	380,585		0.0000	1.0000	98.39
27	377,493		0.0000	1.0000	98.39
28	348,251		0.0000	1.0000	98.39
29	297,223		0.0000	1.0000	98.39
30	4,850		0.0000	1.0000	98.39

Qulliq Energy Corporation

Account 362 – Distribution Plant – Station Equipment

Actual and Survivor Curve Retirement Patterns



#### Account 362 – Distribution Plant – Station Equipment

#### Original Life Table

Placement Band 1988-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	7,274,077		0.0000	1.0000	100.00
1	7,274,077		0.0000	1.0000	100.00
2	7,305,110		0.0000	1.0000	100.00
3	7,239,688		0.0000	1.0000	100.00
4	7,239,688		0.0000	1.0000	100.00
5	7,239,688		0.0000	1.0000	100.00
6	7,239,688		0.0000	1.0000	100.00
7	7,239,688		0.0000	1.0000	100.00
8	6,722,733		0.0000	1.0000	100.00
9	6,729,101		0.0000	1.0000	100.00
10	6,753,756	1,129	0.0002	0.9998	100.00
11	6,736,836		0.0000	1.0000	99.98
12	6,628,327	697	0.0001	0.9999	99.98
13	6,627,631		0.0000	1.0000	99.97
14	76,677		0.0000	1.0000	99.97
15	76,677		0.0000	1.0000	99.97
16	76,677		0.0000	1.0000	99.97
17	76,677		0.0000	1.0000	99.97
18	45,643		0.0000	1.0000	99.97
19	36,902		0.0000	1.0000	99.97
20	36,902		0.0000	1.0000	99.97
21	38,704		0.0000	1.0000	99.97
22	38,704		0.0000	1.0000	99.97
23	38,704		0.0000	1.0000	99.97
24	37,721		0.0000	1.0000	99.97
25	31,353		0.0000	1.0000	99.97
26	6,698		0.0000	1.0000	99.97
27	1,801		0.0000	1.0000	99.97
28	1,801		0.0000	1.0000	99.97
29	1,801		0.0000	1.0000	99.97
30	1,801		0.0000	1.0000	99.97
31	1,801		0.0000	1.0000	99.97
32	1,801		0.0000	1.0000	99.97
33	1,801		0.0000	1.0000	99.97
34	1,801		0.0000	1.0000	99.97

#### Account 362 - Distribution Plant - Station Equipment

#### Original Life Table

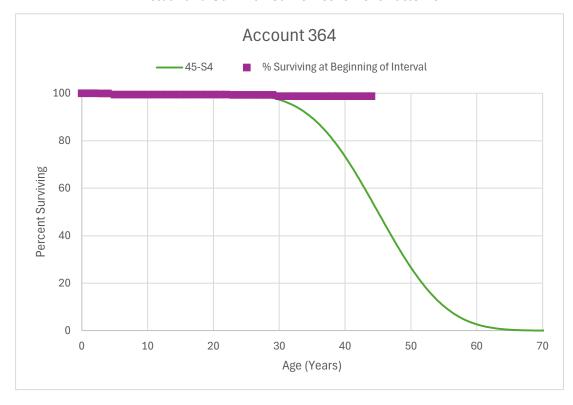
Placement Band 1988-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	1,801		0.0000	1.0000	99.97
36	1,801		0.0000	1.0000	99.97

Qulliq Energy Corporation

Account 364 – Distribution Plant – Poles, Towers and Fixtures

Actual and Survivor Curve Retirement Patterns



## Account 364 – Distribution Plant – Poles, Towers and Fixtures Original Life Table

Placement Band 1987-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	28,680,889		0.0000	1.0000	100.00
1	28,680,889		0.0000	1.0000	100.00
2	28,148,021	7,177	0.0003	0.9997	100.00
3	24,592,716		0.0000	1.0000	99.97
4	23,237,632	123,213	0.0053	0.9947	99.97
5	23,082,633		0.0000	1.0000	99.44
6	20,426,958		0.0000	1.0000	99.44
7	18,341,577		0.0000	1.0000	99.44
8	16,986,736		0.0000	1.0000	99.44
9	15,563,636		0.0000	1.0000	99.44
10	10,538,550		0.0000	1.0000	99.44
11	10,232,272		0.0000	1.0000	99.44
12	5,475,529		0.0000	1.0000	99.44
13	4,811,623		0.0000	1.0000	99.44
14	3,953,447		0.0000	1.0000	99.44
15	4,116,364		0.0000	1.0000	99.44
16	4,633,529		0.0000	1.0000	99.44
17	4,957,393		0.0000	1.0000	99.44
18	5,586,297		0.0000	1.0000	99.44
19	5,713,670		0.0000	1.0000	99.44
20	8,567,328		0.0000	1.0000	99.44
21	9,002,946		0.0000	1.0000	99.44
22	9,189,520	10,298	0.0011	0.9989	99.44
23	9,179,222		0.0000	1.0000	99.33
24	9,026,620		0.0000	1.0000	99.33
25	8,600,068		0.0000	1.0000	99.33
26	7,640,522		0.0000	1.0000	99.33
27	7,170,331		0.0000	1.0000	99.33
28	6,823,420		0.0000	1.0000	99.33
29	6,125,150	31,006	0.0051	0.9949	99.33
30	5,371,512		0.0000	1.0000	98.83
31	5,103,675		0.0000	1.0000	98.83
32	4,586,510		0.0000	1.0000	98.83
33	4,262,646		0.0000	1.0000	98.83
34	3,633,742		0.0000	1.0000	98.83

### Account 364 – Distribution Plant – Poles, Towers and Fixtures

Original Life Table

Placement Band 1987-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
35	3,506,369		0.0000	1.0000	98.83
36	683,718		0.0000	1.0000	98.83
37	248,099		0.0000	1.0000	98.83
38	61,526		0.0000	1.0000	98.83

Qulliq Energy Corporation

Account 365 – Distribution Plant – Overhead Conductor Devices

Actual and Survivor Curve Retirement Patterns



## Account 365 – Distribution Plant – Overhead Conductor Devices Original Life Table

Placement Band 1986-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	8,046,932		0.0000	1.0000	100.00
1	8,457,250		0.0000	1.0000	100.00
2	9,742,640		0.0000	1.0000	100.00
3	10,818,376		0.0000	1.0000	100.00
4	11,405,957		0.0000	1.0000	100.00
5	11,680,595		0.0000	1.0000	100.00
6	12,293,557		0.0000	1.0000	100.00
7	12,206,228		0.0000	1.0000	100.00
8	12,033,095		0.0000	1.0000	100.00
9	12,119,970		0.0000	1.0000	100.00
10	12,260,366		0.0000	1.0000	100.00
11	12,374,902		0.0000	1.0000	100.00
12	9,599,787		0.0000	1.0000	100.00
13	9,533,743		0.0000	1.0000	100.00
14	8,335,953		0.0000	1.0000	100.00
15	6,914,324		0.0000	1.0000	100.00
16	5,873,551		0.0000	1.0000	100.00
17	5,554,346	9,985	0.0018	0.9982	100.00
18	4,707,555		0.0000	1.0000	99.82
19	3,557,314		0.0000	1.0000	99.82
20	6,025,581		0.0000	1.0000	99.82
21	6,106,071		0.0000	1.0000	99.82
22	5,551,078	1,342	0.0002	0.9998	99.82
23	5,678,552		0.0000	1.0000	99.80
24	5,641,012		0.0000	1.0000	99.80
25	5,554,000		0.0000	1.0000	99.80
26	5,381,167		0.0000	1.0000	99.80
27	5,221,277		0.0000	1.0000	99.80
28	5,046,293		0.0000	1.0000	99.80
29	4,884,124	159,330	0.0326	0.9674	99.80
30	4,556,429		0.0000	1.0000	96.54
31	4,536,643		0.0000	1.0000	96.54
32	4,100,714		0.0000	1.0000	96.54
33	4,009,601		0.0000	1.0000	96.54
34	3,552,613		0.0000	1.0000	96.54

### Account 365 – Distribution Plant – Overhead Conductor Devices

#### Original Life Table

Placement Band 1986-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	3,512,966		0.0000	1.0000	96.54
36	603,270		0.0000	1.0000	96.54
37	246,100		0.0000	1.0000	96.54
38	131,516		0.0000	1.0000	96.54
39	2,699		0.0000	1.0000	96.54

Qulliq Energy Corporation

Account 366 – Distribution Plant – Underground Conduit

Actual and Survivor Curve Retirement Patterns



#### Account 366 – Distribution Plant – Underground Conduit

#### Original Life Table

Placement Band 1995-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	232,552		0.0000	1.0000	100.00
1	232,552		0.0000	1.0000	100.00
2	232,552		0.0000	1.0000	100.00
3	13,872		0.0000	1.0000	100.00
4	13,872		0.0000	1.0000	100.00
5	13,872		0.0000	1.0000	100.00
6	13,216		0.0000	1.0000	100.00
7	13,216		0.0000	1.0000	100.00
8	32,043		0.0000	1.0000	100.00
9	32,043		0.0000	1.0000	100.00
10	32,043		0.0000	1.0000	100.00
11	32,043		0.0000	1.0000	100.00
12	32,043		0.0000	1.0000	100.00
13	18,827		0.0000	1.0000	100.00
14	27,308		0.0000	1.0000	100.00
15	27,308		0.0000	1.0000	100.00
16	27,308		0.0000	1.0000	100.00
17	27,308		0.0000	1.0000	100.00
18	27,308		0.0000	1.0000	100.00
19	27,308		0.0000	1.0000	100.00
20	27,308		0.0000	1.0000	100.00
21	27,308		0.0000	1.0000	100.00
22	27,308		0.0000	1.0000	100.00
23	27,308		0.0000	1.0000	100.00
24	8,481		0.0000	1.0000	100.00
25	8,481		0.0000	1.0000	100.00
26	8,481		0.0000	1.0000	100.00
27	8,481		0.0000	1.0000	100.00
28	8,481		0.0000	1.0000	100.00
29	8,481		0.0000	1.0000	100.00

Qulliq Energy Corporation

Account 367 – Distribution Plant – Underground Conductors and Devices

Actual and Survivor Curve Retirement Patterns



### Account 367 – Distribution Plant – Underground Conductors and Devices Original Life Table

Placement Band 1995-2024

Age at Beginning of	Exposures at Beginning of	Retirements During Age	Retirement	Survivor	% Surviving at Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	69,601		0.0000	1.0000	100.00
1	69,601		0.0000	1.0000	100.00
2	69,601		0.0000	1.0000	100.00
3	67,101		0.0000	1.0000	100.00
4	67,101		0.0000	1.0000	100.00
5	67,101		0.0000	1.0000	100.00
6	67,101		0.0000	1.0000	100.00
7	67,101		0.0000	1.0000	100.00
8	67,101		0.0000	1.0000	100.00
9	67,101		0.0000	1.0000	100.00
10	83,327		0.0000	1.0000	100.00
11	83,327		0.0000	1.0000	100.00
12	66,466		0.0000	1.0000	100.00
13	59,550		0.0000	1.0000	100.00
14	62,359		0.0000	1.0000	100.00
15	58,864		0.0000	1.0000	100.00
16	58,864	98	0.0017	0.9983	100.00
17	58,766		0.0000	1.0000	99.83
18	58,766		0.0000	1.0000	99.83
19	58,766		0.0000	1.0000	99.83
20	58,766		0.0000	1.0000	99.83
21	58,766		0.0000	1.0000	99.83
22	58,766		0.0000	1.0000	99.83
23	58,766		0.0000	1.0000	99.83
24	58,766		0.0000	1.0000	99.83
25	58,766		0.0000	1.0000	99.83
26	42,540		0.0000	1.0000	99.83
27	42,540		0.0000	1.0000	99.83
28	42,540		0.0000	1.0000	99.83
29	42,540		0.0000	1.0000	99.83

Qulliq Energy Corporation

Account 368 – Distribution Plant – Line Transformers

Actual and Survivor Curve Retirement Patterns



### Account 368 – Distribution Plant – Line Transformers

#### Original Life Table

Placement Band 1987-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	6,715,727		0.0000	1.0000	100.00
1	6,715,727	0.047	0.0000	1.0000	100.00
2	6,382,114	2,247	0.0004	0.9996	100.00
3	5,729,461	447.000	0.0000	1.0000	99.96
4	5,573,641	147,882	0.0265	0.9735	99.96
5	5,376,027		0.0000	1.0000	97.31
6	5,072,625		0.0000	1.0000	97.31
7	4,862,144		0.0000	1.0000	97.31
8	4,504,500		0.0000	1.0000	97.31
9	4,431,095		0.0000	1.0000	97.31
10	4,347,342		0.0000	1.0000	97.31
11	4,272,664		0.0000	1.0000	97.31
12	2,078,087		0.0000	1.0000	97.31
13	2,004,050		0.0000	1.0000	97.31
14	1,931,519		0.0000	1.0000	97.31
15	1,767,177		0.0000	1.0000	97.31
16	1,961,890		0.0000	1.0000	97.31
17	1,972,123		0.0000	1.0000	97.31
18	2,067,665		0.0000	1.0000	97.31
19	1,688,632	3,169	0.0019	0.9981	97.31
20	1,750,522		0.0000	1.0000	97.13
21	1,750,522		0.0000	1.0000	97.13
22	1,781,617	15,631	0.0088	0.9912	97.13
23	1,765,986		0.0000	1.0000	96.28
24	1,726,598		0.0000	1.0000	96.28
25	1,561,138		0.0000	1.0000	96.28
26	1,299,850		0.0000	1.0000	96.28
27	1,172,523		0.0000	1.0000	96.28
28	1,007,938		0.0000	1.0000	96.28
29	778,471	7,022	0.0090	0.9910	96.28
30	531,400		0.0000	1.0000	95.41
31	422,282		0.0000	1.0000	95.41
32	227,569		0.0000	1.0000	95.41
33	217,337		0.0000	1.0000	95.41
34	121,794		0.0000	1.0000	95.41

#### Account 368 – Distribution Plant – Line Transformers

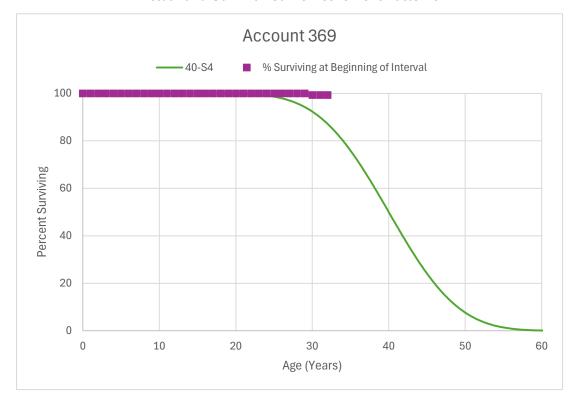
#### Original Life Table

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	<b>During Age</b>	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
35	112,089		0.0000	1.0000	95.41
36	54,053		0.0000	1.0000	95.41
37	54,053		0.0000	1.0000	95.41
38	22,957		0.0000	1.0000	95.41

Qulliq Energy Corporation

Account 369 – Distribution Plant – Services

Actual and Survivor Curve Retirement Patterns



# Qulliq Energy Corporation Account 369 – Distribution Plant – Services Original Life Table

Placement Band 1987-2024

Age at Beginning of	Exposures at Beginning of	Retirements During Age	Retirement	Survivor	% Surviving at Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	1,204,131		0.0000	1.0000	100.00
1	1,204,131		0.0000	1.0000	100.00
2	1,204,131		0.0000	1.0000	100.00
3	1,211,688		0.0000	1.0000	100.00
4	1,211,688		0.0000	1.0000	100.00
5	1,211,688		0.0000	1.0000	100.00
6	1,211,688		0.0000	1.0000	100.00
7	1,211,688		0.0000	1.0000	100.00
8	298,211		0.0000	1.0000	100.00
9	305,802		0.0000	1.0000	100.00
10	305,802		0.0000	1.0000	100.00
11	305,802		0.0000	1.0000	100.00
12	127,899		0.0000	1.0000	100.00
13	116,749		0.0000	1.0000	100.00
14	79,679		0.0000	1.0000	100.00
15	79,679		0.0000	1.0000	100.00
16	79,679		0.0000	1.0000	100.00
17	111,389		0.0000	1.0000	100.00
18	182,704		0.0000	1.0000	100.00
19	175,148		0.0000	1.0000	100.00
20	774,080		0.0000	1.0000	100.00
21	774,080		0.0000	1.0000	100.00
22	838,687		0.0000	1.0000	100.00
23	838,687		0.0000	1.0000	100.00
24	784,261		0.0000	1.0000	100.00
25	776,671		0.0000	1.0000	100.00
26	776,671		0.0000	1.0000	100.00
27	776,671		0.0000	1.0000	100.00
28	766,565		0.0000	1.0000	100.00
29	766,565	5,168		0.9933	100.00
30	761,398		0.0000	1.0000	99.33
31	761,398		0.0000	1.0000	99.33
32	761,398		0.0000	1.0000	99.33
33	729,687		0.0000	1.0000	99.33
34	658,372		0.0000	1.0000	99.33

#### Account 369 – Distribution Plant – Services

#### Original Life Table

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	658,372		0.0000	1.0000	99.33
36	64,607		0.0000	1.0000	99.33
37	64,607		0.0000	1.0000	99.33

Qulliq Energy Corporation

Account 370 – Distribution Plant – Meters

Actual and Survivor Curve Retirement Patterns



# Qulliq Energy Corporation Account 370 – Distribution Plant – Meters Original Life Table

Placement Band 1967-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	1,213,877		0.0000	1.0000	100.00
1	1,213,877		0.0000	1.0000	100.00
2	1,213,877		0.0000	1.0000	100.00
3	1,213,877		0.0000	1.0000	100.00
4	1,213,877		0.0000	1.0000	100.00
5	1,213,877		0.0000	1.0000	100.00
6	1,213,877		0.0000	1.0000	100.00
7	1,204,758		0.0000	1.0000	100.00
8	105,204		0.0000	1.0000	100.00
9	111,852		0.0000	1.0000	100.00
10	317,433	62,979	0.1984	0.8016	100.00
11	308,122	6,648	0.0216	0.9784	80.16
12	312,388	121,234	0.3881	0.6119	78.43
13	201,285	54,978	0.2731	0.7269	47.99
14	150,966	10,915	0.0723	0.9277	34.88
15	140,051	11,346	0.0810	0.9190	32.36
16	128,705	4,659	0.0362	0.9638	29.74
17	124,046		0.0000	1.0000	28.66
18	124,046		0.0000	1.0000	28.66
19	124,046	68,453	0.5518	0.4482	28.66
20	55,593		0.0000	1.0000	12.85
21	55,593		0.0000	1.0000	12.85
22	55,593		0.0000	1.0000	12.85
23	55,593		0.0000	1.0000	12.85
24	15,894		0.0000	1.0000	12.85
25	15,894		0.0000	1.0000	12.85
26	11,983		0.0000	1.0000	12.85
27	11,983		0.0000	1.0000	12.85
28	107,312	11,983	0.1117	0.8883	12.85
29	212,911		0.0000	1.0000	11.41
30	235,228	95,330	0.4053	0.5947	11.41
31	324,583	117,581	0.3623	0.6377	6.79
32	214,185	22,317	0.1042	0.8958	4.33
33	243,209	184,685	0.7594	0.2406	3.88

#### Account 370 - Distribution Plant - Meters

#### Original Life Table

Placement Band 1967-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	68,207	51,341	0.7527	0.2473	0.84
36	16,866	9,966	0.5909	0.4091	0.21
37	6,900	6,900	1.0000	0.0000	0.08

Qulliq Energy Corporation

Account 373 – Distribution Plant – Streetlighting and Signal Systems

Actual and Survivor Curve Retirement Patterns



## Account 373 – Distribution Plant – Streetlighting and Signal Systems Original Life Table

Placement Band 1989-2024

Age at	Exposures at	Retirements			% Surviving at
Beginning of Interval	Beginning of Age Interval	During Age Interval	Retirement Ratio	Survivor Ratio	Beginning of Interval
0	1,898,672		0.0000	1.0000	100.00
1	1,898,672		0.0000	1.0000	100.00
2	1,507,203		0.0000	1.0000	100.00
3	743,946		0.0000	1.0000	100.00
4	743,946		0.0000	1.0000	100.00
5	743,946		0.0000	1.0000	100.00
6	743,946		0.0000	1.0000	100.00
7	69,731		0.0000	1.0000	100.00
8	99,602		0.0000	1.0000	100.00
9	106,688		0.0000	1.0000	100.00
10	126,535		0.0000	1.0000	100.00
11	149,870		0.0000	1.0000	100.00
12	119,619		0.0000	1.0000	100.00
13	129,042		0.0000	1.0000	100.00
14	129,042		0.0000	1.0000	100.00
15	129,042		0.0000	1.0000	100.00
16	129,042		0.0000	1.0000	100.00
17	129,042		0.0000	1.0000	100.00
18	139,615		0.0000	1.0000	100.00
19	139,615		0.0000	1.0000	100.00
20	162,029		0.0000	1.0000	100.00
21	162,029		0.0000	1.0000	100.00
22	162,029		0.0000	1.0000	100.00
23	162,029		0.0000	1.0000	100.00
24	132,158		0.0000	1.0000	100.00
25	125,071		0.0000	1.0000	100.00
26	105,225		0.0000	1.0000	100.00
27	81,889		0.0000	1.0000	100.00
28	63,907		0.0000	1.0000	100.00
29	32,987		0.0000	1.0000	100.00
30	32,987		0.0000	1.0000	100.00
31	32,987		0.0000	1.0000	100.00
32	32,987		0.0000	1.0000	100.00
33	32,987		0.0000	1.0000	100.00
34	22,414		0.0000	1.0000	100.00

Qulliq Energy Corporation

Account 390 – General Plant – Structures and Improvements

Actual and Survivor Curve Retirement Patterns



## Account 390 – General Plant – Structures and Improvements Original Life Table

Placement Band 1966-2024

Age at	Exposures at	Retirements	•		% Surviving at
Age at Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	32,615,547		0.0000	1.0000	100.00
1	32,956,806		0.0000	1.0000	100.00
2	32,956,806		0.0000	1.0000	100.00
3	32,264,301		0.0000	1.0000	100.00
4	32,264,301		0.0000	1.0000	100.00
5	31,380,380		0.0000	1.0000	100.00
6	30,905,083		0.0000	1.0000	100.00
7	28,593,680		0.0000	1.0000	100.00
8	28,024,551		0.0000	1.0000	100.00
9	27,072,098	70,105	0.0026	0.9974	100.00
10	26,909,645		0.0000	1.0000	99.74
11	27,728,671		0.0000	1.0000	99.74
12	27,482,285	3,863	0.0001	0.9999	99.74
13	27,209,692		0.0000	1.0000	99.73
14	20,515,383	17,572	0.0009	0.9991	99.73
15	20,413,309		0.0000	1.0000	99.64
16	18,553,590	53,483	0.0029	0.9971	99.64
17	18,158,849		0.0000	1.0000	99.35
18	18,168,142		0.0000	1.0000	99.35
19	18,168,142		0.0000	1.0000	99.35
20	18,708,178		0.0000	1.0000	99.35
21	19,452,972		0.0000	1.0000	99.35
22	19,268,963		0.0000	1.0000	99.35
23	19,292,942		0.0000	1.0000	99.35
24	19,683,875		0.0000	1.0000	99.35
25	19,683,876	54,482	0.0028	0.9972	99.35
26	19,586,966	37,108	0.0019	0.9981	99.08
27	18,301,323	1	0.0000	1.0000	98.89
28	18,354,743		0.0000	1.0000	98.89
29	18,323,644		0.0000	1.0000	98.89
30	18,106,370	24,740	0.0014	0.9986	98.89
31	18,090,782		0.0000	1.0000	98.76
32	18,429,866	450 ***	0.0000	1.0000	98.76
33	18,803,670	158,110	0.0084	0.9916	98.76
34	19,006,082	20,224	0.0011	0.9989	97.93

## Account 390 – General Plant – Structures and Improvements Original Life Table

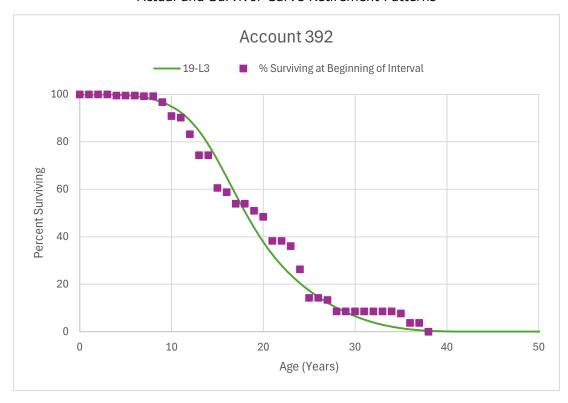
Placement Band 1966-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	19,098,578	7,062	0.0004	0.9996	97.82
36	19,037,066	77,875	0.0041	0.9959	97.79
37	18,443,354	11,231	0.0006	0.9994	97.39
38	18,495,248	294,044	0.0159	0.9841	97.33
39	18,466,163	234,044	0.0000	1.0000	95.78
40	18,304,098	3,635	0.0002	0.9998	95.78
41	18,303,345	0,000	0.0002	1.0000	95.76
42	18,303,345		0.0000	1.0000	95.76
43	18,303,345	3,052	0.0002	0.9998	95.76
44	18,271,612	26,671	0.0015	0.9985	95.74
45	18,244,941	2,883	0.0002	0.9998	95.60
46	18,242,058	103,859	0.0057	0.9943	95.59
47	18,138,199	103,859	0.0057	0.9943	95.05
48	17,742,152	,	0.0000	1.0000	94.50
49	17,583,127	135,921	0.0077	0.9923	94.50
50	17,155,267	135,921	0.0079	0.9921	93.77
51	16,917,857	40,000	0.0024	0.9976	93.03
52	16,703,398	•	0.0000	1.0000	92.81
53	16,703,398		0.0000	1.0000	92.81
54	16,643,908	137,704	0.0083	0.9917	92.81
55	16,506,203	137,704	0.0083	0.9917	92.04
56	16,368,499		0.0000	1.0000	91.27
57	16,368,499		0.0000	1.0000	91.27
58	16,368,499		0.0000	1.0000	91.27

Qulliq Energy Corporation

Account 392 – General Plant – Transportation Equipment

Actual and Survivor Curve Retirement Patterns



### Account 392 - General Plant - Transportation Equipment

### Original Life Table

Placement Band 1974-2024

Age at	Exposures at	Retirements	· 		% Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	8,641,950		0.0000	1.0000	100.00
1	8,881,353		0.0000	1.0000	100.00
2	8,281,101		0.0000	1.0000	100.00
3	7,842,590	36,296	0.0046	0.9954	100.00
4	7,631,263		0.0000	1.0000	99.54
5	7,609,522		0.0000	1.0000	99.54
6	7,697,194	23,996	0.0031	0.9969	99.54
7	8,053,750		0.0000	1.0000	99.23
8	7,298,845	182,542	0.0250	0.9750	99.23
9	6,575,440	397,083	0.0604	0.9396	96.75
10	6,013,056	44,779	0.0074	0.9926	90.90
11	5,306,246	411,174	0.0775	0.9225	90.23
12	4,422,737	472,474	0.1068	0.8932	83.23
13	3,307,159		0.0000	1.0000	74.34
14	2,038,624	377,356	0.1851	0.8149	74.34
15	1,067,154	32,298	0.0303	0.9697	60.58
16	924,170	76,105	0.0823	0.9177	58.75
17	824,504		0.0000	1.0000	53.91
18	460,184	25,129	0.0546	0.9454	53.91
19	537,026	27,280	0.0508	0.9492	50.97
20	490,959	102,628	0.2090	0.7910	48.38
21	309,524		0.0000	1.0000	38.26
22	461,315	26,659	0.0578	0.9422	38.26
23	429,557	116,239	0.2706	0.7294	36.05
24	331,076	151,792	0.4585	0.5415	26.30
25	282,545		0.0000	1.0000	14.24
26	282,545	17,759	0.0629	0.9371	14.24
27	284,620	103,261	0.3628	0.6372	13.35
28	181,360		0.0000	1.0000	8.50
29	181,360		0.0000	1.0000	8.50
30	181,360		0.0000	1.0000	8.50
31	181,360		0.0000	1.0000	8.50
32	195,313		0.0000	1.0000	8.50
33	195,313		0.0000	1.0000	8.50
34	135,758	13,953	0.1028	0.8972	8.50

### Account 392 – General Plant – Transportation Equipment

### Original Life Table

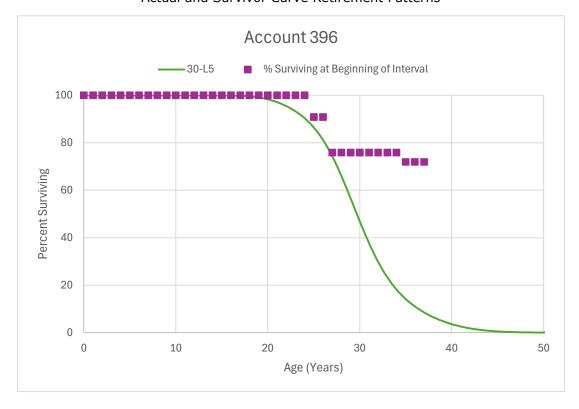
Placement Band 1974-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	38,176	19,834	0.5195	0.4805	7.63
36	18,342		0.0000	1.0000	3.67
37	18,342	18,342	1.0000	0.0000	3.67

Qulliq Energy Corporation

Account 396 – General Plant – Power Operated Equipment

Actual and Survivor Curve Retirement Patterns



## Qulliq Energy Corporation Account 396 – General Plant – Power Operated Equipment Original Life Table

Placement Band 1977-2024

Age at Beginning of	Exposures at Beginning of	Retirements During Age	Retirement	Survivor	% Surviving at Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	127,982		0.0000	1.0000	100.00
1	127,982		0.0000	1.0000	100.00
2	127,982		0.0000	1.0000	100.00
3	127,982		0.0000	1.0000	100.00
4	127,982		0.0000	1.0000	100.00
5	127,982		0.0000	1.0000	100.00
6	127,982		0.0000	1.0000	100.00
7	123,674		0.0000	1.0000	100.00
8	123,674		0.0000	1.0000	100.00
9	123,675		0.0000	1.0000	100.00
10	130,897		0.0000	1.0000	100.00
11	130,897	1	0.0000	1.0000	100.00
12	93,490		0.0000	1.0000	100.00
13	93,490		0.0000	1.0000	100.00
14	7,221		0.0000	1.0000	100.00
15	7,221		0.0000	1.0000	100.00
16	7,221		0.0000	1.0000	100.00
17	7,221		0.0000	1.0000	100.00
18	7,221		0.0000	1.0000	100.00
19	7,221		0.0000	1.0000	100.00
20	7,221		0.0000	1.0000	100.00
21	105,709		0.0000	1.0000	100.00
22	118,406		0.0000	1.0000	100.00
23	118,406		0.0000	1.0000	100.00
24	137,746	12,697	0.0922	0.9078	100.00
25	125,049		0.0000	1.0000	90.78
26	117,827	19,339	0.1641	0.8359	90.78
27	98,488		0.0000	1.0000	75.88
28	98,488		0.0000	1.0000	75.88
29	98,488		0.0000	1.0000	75.88
30	98,488		0.0000	1.0000	75.88
31	98,488		0.0000	1.0000	75.88
32	103,888		0.0000	1.0000	75.88
33	103,888		0.0000	1.0000	75.88
34	103,888	5,400	0.0520	0.9480	75.88

### Account 396 – General Plant – Power Operated Equipment

### Original Life Table

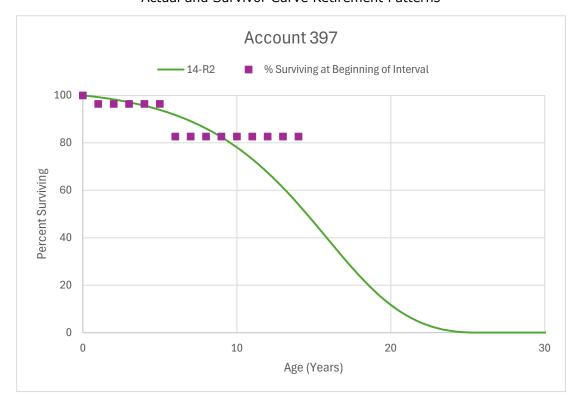
Placement Band 1977-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
35	98,488		0.0000	1.0000	71.94
36	98,488		0.0000	1.0000	71.94

Qulliq Energy Corporation

Account 397 – General Plant – Communication Equipment

Actual and Survivor Curve Retirement Patterns



### Account 397 – General Plant – Communication Equipment

### Original Life Table

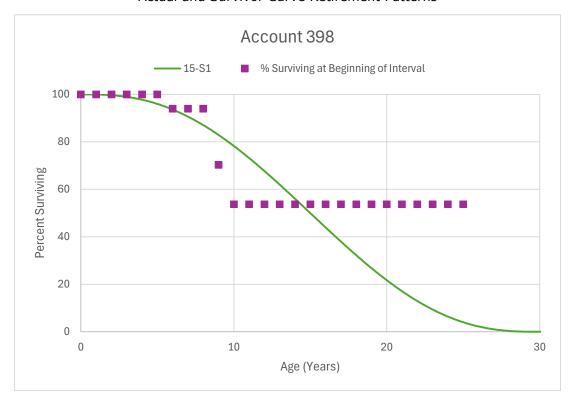
Placement Band 1982-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	1,317,836	47,600	0.0361	0.9639	100.00
1	1,270,236		0.0000	1.0000	96.39
2	1,270,236		0.0000	1.0000	96.39
3	1,481,313		0.0000	1.0000	96.39
4	1,481,313		0.0000	1.0000	96.39
5	1,481,313	211,077	0.1425	0.8575	96.39
6	662,755		0.0000	1.0000	82.65
7	325,414		0.0000	1.0000	82.65
8	254,925		0.0000	1.0000	82.65
9	254,925		0.0000	1.0000	82.65
10	237,857		0.0000	1.0000	82.65
11	166,735		0.0000	1.0000	82.65
12	156,035		0.0000	1.0000	82.65
13	156,035		0.0000	1.0000	82.65

Qulliq Energy Corporation

Account 398 – General Plant – Miscellaneous Equipment

Actual and Survivor Curve Retirement Patterns



### Account 398 – General Plant – Miscellaneous Equipment

### Original Life Table

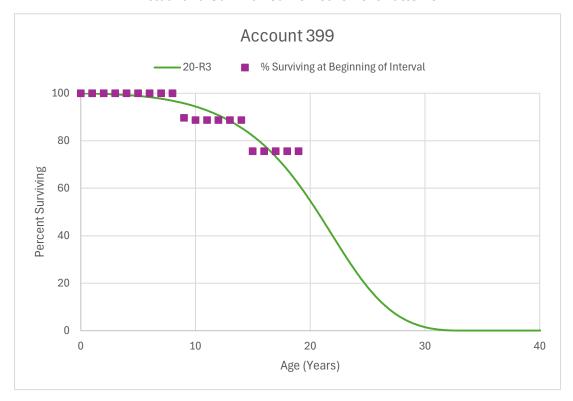
Placement Band 1986-2024

Age at Beginning of	Exposures at Beginning of	Retirements During Age	Retirement	Survivor	% Surviving at Beginning of
Interval	Age Interval	Interval	Ratio	Ratio	Interval
0	1,554,722		0.0000	1.0000	100.00
1	1,554,722		0.0000	1.0000	100.00
2	1,452,478		0.0000	1.0000	100.00
3	1,295,413		0.0000	1.0000	100.00
4	1,318,965		0.0000	1.0000	100.00
5	1,318,965	78,623	0.0596	0.9404	100.00
6	1,715,303		0.0000	1.0000	94.04
7	1,886,063		0.0000	1.0000	94.04
8	1,886,063	474,962	0.2518	0.7482	94.04
9	1,217,796	287,581	0.2361	0.7639	70.36
10	930,214		0.0000	1.0000	53.74
11	930,214		0.0000	1.0000	53.74
12	846,432		0.0000	1.0000	53.74
13	658,678		0.0000	1.0000	53.74
14	498,634		0.0000	1.0000	53.74
15	43,198		0.0000	1.0000	53.74
16	43,198		0.0000	1.0000	53.74
17	43,198		0.0000	1.0000	53.74
18	43,198		0.0000	1.0000	53.74
19	43,198		0.0000	1.0000	53.74
20	19,646		0.0000	1.0000	53.74
21	19,646		0.0000	1.0000	53.74
22	19,646		0.0000	1.0000	53.74
23	3,119		0.0000	1.0000	53.74
24	3,119		0.0000	1.0000	53.74
25	3,119	3,119	1.0000	0.0000	53.74

Qulliq Energy Corporation

Account 399 – General Plant – Other Tangible Plant

Actual and Survivor Curve Retirement Patterns



### Account 399 – General Plant – Other Tangible Plant Original Life Table

Placement Band 2002-2024

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	% Surviving at Beginning of Interval
0	1,008,207		0.0000	1.0000	100.00
1	1,008,207		0.0000	1.0000	100.00
2	1,027,778		0.0000	1.0000	100.00
3	1,141,032		0.0000	1.0000	100.00
4	1,141,032		0.0000	1.0000	100.00
5	1,141,032		0.0000	1.0000	100.00
6	1,273,883		0.0000	1.0000	100.00
7	1,286,124		0.0000	1.0000	100.00
8	1,286,124	132,851	0.1033	0.8967	100.00
9	1,153,272	12,241	0.0106	0.9894	89.67
10	986,487		0.0000	1.0000	88.72
11	986,487		0.0000	1.0000	88.72
12	986,487		0.0000	1.0000	88.72
13	986,487		0.0000	1.0000	88.72
14	132,825	19,571	0.1473	0.8527	88.72
15	113,253		0.0000	1.0000	75.65
16	113,253		0.0000	1.0000	75.65
17	113,253		0.0000	1.0000	75.65
18	113,253		0.0000	1.0000	75.65

QULLIQ ENERGY CORPORATION 2024 DEPRECIATION STUDY

OCTOBER 2024

### **DEPRECIATION RATES CALCULATION**

## Qulliq Energy Corporation Account 131 – Alternative Energy Group – Residual Heat Systems Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1998	180,567	180,567	-	6.01	
1999	806,564	806,564	-	6.54	
2000	284,521	283,066	1,455	7.12	204
2001	594,271	585,219	9,052	7.75	1,168
2002	967,372	817,251	150,121	8.44	17,792
2003	123,627	106,563	17,065	9.18	1,859
2007	12,427,359	8,450,372	3,976,987	12.62	315,091
2008	131,668	82,726	48,942	13.57	3,607
2010	4,229,958	2,039,351	2,190,607	15.52	141,171
2014	38,636	13,978	24,659	19.50	1,265
2016	157,226	39,974	117,252	21.50	5,454
2019	2,031,496	332,020	1,699,476	24.50	69,366
2022	2,793,020	46,647	2,746,373	27.50	99,868
2023	3,903,437	30,696	3,872,741	28.50	135,886
Total	28,669,722	13,814,993	14,854,729		792,730
Composite Ann	ual Accrual Rate				2.77%
Probable Rema	ining Life				18.74

## Qulliq Energy Corporation Account 341 – Diesel Plant – Structures and Improvements Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
Assets Year			Remaining to be	_	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1966	42,000	42,000	-	5.61	
1968	371,024	371,024	-	6.09	
1972	288,406	333,406	- 45,000	7.14	
1973	96,345	96,345	-	7.43	
1974	302,048	376,157	- 74,109	7.73	
1975	535,564	535,564	-	8.05	
1976	320,669	320,669	-	8.38	
1977	97,000	97,000	-	8.73	
1978	7,087	7,087	-	9.10	
1979	44,559	44,559	-	9.49	
1980	92,050	92,050	-	9.90	
1982	417,499	417,499	-	10.78	
1985	138,110	210,256	- 72,146	12.24	
1987	1,086,386	1,028,445	57,941	13.32	4,350
1988	47,248	43,716	3,532	13.89	254
1989	300,426	281,650	18,776	14.47	1,298
1990	511,904	450,858	61,047	15.07	4,050
1991	4,331,234	3,667,065	664,169	15.69	42,326
1992	2,551,462	2,117,707	433,755	16.33	26,567
1995	1,010,106	1,008,873	1,233	18.32	67
1996	521,833	897,083	- 375,250	19.01	
1998	670,469	463,300	207,169	20.44	10,136
1999	1,395,734	942,150	453,585	21.17	21,426
2000	2,951,558	1,845,293	1,106,265	21.91	50,485
2001	3,338,271	1,981,255	1,357,016	22.67	59,866
2002	1,537,104	870,409	666,695	23.43	28,451
2003	338,210	207,084	131,126	24.21	5,416
2006	6,243,088	2,950,297	3,292,791	26.60	123,767
2007	1,183,608	518,866	664,742	27.42	24,240
2009	99,724	38,176	61,548	29.09	2,116
2010	327,385	183,787	143,598	29.93	4,797
2011	206,939	67,332	139,608	30.79	4,534

## Qulliq Energy Corporation Account 341 – Diesel Plant – Structures and Improvements Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	ASL Remaining	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	Annual Factor
2013	16,845,565	4,319,983	12,525,583	32.52	385,107
2014	333,178	77,397	255,781	33.40	7,657
2016	22,867,005	4,255,835	18,611,170	35.19	528,946
2017	8,425,406	1,263,437	7,161,968	36.09	198,468
2018	124,558	16,020	108,539	36.99	2,934
2019	29,391,442	3,002,619	26,388,823	37.91	696,144
2022	21,550,628	646,370	20,904,259	40.68	513,853
2023	387,856	1,594	386,262	41.62	9,281
2024	3,165	18	3,147	42.56	74
Total	131,333,852	36,090,233	95,243,619		2,756,611
Composite Ann	nual Accrual Rate	)			2.10%
Probable Rema	nining Life				34.55

## Qulliq Energy Corporation Account 342 – Diesel Plant – Fuel Holders, Producers and Accessories Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

				Amount		Annual
Assets Year			R	•	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve		Depreciated	Life (years)	Annual Factor
1973	30,000	30,000		-	9.93	
1974	60,000	70,000	-	10,000	10.33	
1975	114,484	114,484		-	10.73	
1976	204,730	248,415		43,685	11.15	
1977	200,981	286,453	-	85,471	11.56	
1978	20,649	20,649		-	11.99	
1980	300,647	300,647		-	12.86	
1987	45,150	45,150		-	16.18	
1988	162,140	219,067	-	56,926	16.69	
1989	205,029	278,087	-	73,058	17.20	
1990	1,554,689	1,554,689		0	17.73	0
1991	2,402,048	2,760,165	-	358,117	18.26	
1992	287,288	287,288		-	18.80	
1994	316,350	515,940	-	199,590	19.91	
1995	3,024,229	3,107,750	-	83,521	20.48	
1996	574,235	574,235		-	21.06	
1997	5,642	5,642		-	21.65	
1998	7,155	7,155		-	22.24	
1999	319,809	319,809		-	22.84	
2000	57,540	57,540		-	23.45	
2001	129,279	129,279		-	24.07	
2004	1,021,330	973,546		47,784	25.96	1,840
2007	310,526	288,132		22,394	27.92	802
2008	682,804	510,730		172,074	28.58	6,021
2009	109,808	76,455		33,353	29.24	1,140
2010	271,003	265,321		5,682	29.92	190
2011	72,865	42,814		30,051	30.59	982
2013	83,231	40,532		42,699	31.96	1,336
2015	356,316	259,766		96,550	33.33	2,896
2016	260,231	85,096		175,135	34.03	5,147
2017	4,754,099	1,375,817		3,378,283	34.73	97,278
2018	1,110,801	289,527		821,274	35.43	23,179

## Qulliq Energy Corporation Account 342 – Diesel Plant – Fuel Holders, Producers and Accessories Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	Annual Factor
2019	40,020	8,177	31,843	36.14	881
2020	3,995,117	616,085	3,379,032	36.85	91,687
2022	518,610	17,234	501,376	38.30	13,092
Total	23,608,835	15,781,676	7,827,159		246,472
Composite Ann	nual Accrual Rate	9			1.04%
Composite Rer	maining Life				31.76

# Qulliq Energy Corporation Account 343 – Diesel Plant – Prime Movers Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

				Amount		Annual
Assets Year		Allocated Book	R	Remaining to be	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve		Depreciated	Life (years)	Annual Factor
1972	456,273	656,273	-	200,000	1.00	
1976	100,000	138,652	-	38,652	1.00	
1978	51,540	51,540		-	1.00	
1986	290,591	521,387	-	230,796	2.54	
1988	152,615	152,615		-	3.12	
1989	650,000	850,000	-	200,000	3.41	
1991	554,313	554,313		-	4.01	
1992	3,482,724	4,101,229	-	618,505	4.32	
1994	842,135	842,135		-	4.98	
1995	2,740,148	3,162,975	-	422,827	5.33	
1996	1,141,566	1,906,108	-	764,542	5.70	
1997	113,984	122,970	-	8,987	6.10	
1998	134,054	134,054		-	6.52	
2000	1,346,520	1,434,626	-	88,106	7.42	
2001	4,328,183	3,829,423		498,760	7.91	63,093
2002	1,485,668	1,975,405	-	489,737	8.42	
2003	933,735	760,539		173,197	8.95	19,350
2004	395,475	290,143		105,332	9.51	11,077
2005	750,000	755,522	-	5,522	10.09	
2006	4,333,336	3,210,583		1,122,753	10.69	104,991
2007	1,200,000	1,051,420		148,580	11.32	13,127
2008	1,477,205	878,301		598,904	11.97	50,054
2009	2,010,998	1,130,653		880,346	12.63	69,694
2010	6,565,714	4,208,953		2,356,761	13.32	176,969
2011	6,444,218	2,929,990		3,514,229	14.02	250,622
2013	410,093	159,632		250,461	15.48	16,175
2014	3,806,845	1,314,004		2,492,841	16.24	153,485
2015	3,477,527	3,369,602		107,925	17.01	6,343
2016	7,598,907	2,021,865		5,577,042	17.80	313,266
2017	7,026,872	1,654,364		5,372,507	18.61	288,750
2018	10,022,891	2,062,741		7,960,150	19.42	409,817
2019	2,907,516	475,892		2,431,625	20.25	120,051

# Qulliq Energy Corporation Account 343 – Diesel Plant – Prime Movers Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>
2020	1,489,520	183,764	1,305,756	21.10	61,886
2021	359,495	29,700	329,795	21.96	15,020
2022	1,565,951	83,262	1,482,689	22.83	64,957
2024	2,918,478	25,887	2,892,592	24.60	117,595
Total	83,565,091	47,030,521	36,534,570		2,326,321
Composite Ann	nual Accrual Rate	e			2.78%
Probable Rema	ining Life				15.70

# Qulliq Energy Corporation Account 344 – Diesel Plant – Generators Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 28-R2.5

				Amount		Annual
Assets Year			R	-	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve		Depreciated	Life (years)	Annual Factor
1972	200,000	245,144	-	45,144	1.00	
1983	59,158	59,158		-	3.03	
1984	5,000	80,000	-	75,000	3.25	
1985	134,762	134,762		-	3.47	
1986	21,334	21,334		-	3.70	
1989	540,214	722,060	-	181,846	4.43	
1991	106,805	106,805		-	4.98	
1992	1,345,349	1,500,789	-	155,440	5.28	
1994	372,456	372,456		-	5.96	
1995	312,657	1,014,598	-	701,941	6.34	
1996	689,462	689,462	-	0	6.75	
1997	231,319	231,319		-	7.19	
1999	536,577	536,577		-	8.17	
2000	195,210	182,467		12,742	8.71	1,463
2001	1,302,532	1,136,033		166,499	9.27	17,959
2002	325,860	458,917	-	133,057	9.86	
2003	460,157	351,257		108,900	10.48	10,391
2004	184,728	134,236		50,492	11.12	4,540
2005	191,379	232,500	-	41,120	11.79	
2006	1,789,123	1,262,936		526,187	12.47	42,182
2007	645,238	475,046		170,192	13.18	12,912
2008	412,888	240,333		172,554	13.91	12,407
2009	277,600	153,625		123,975	14.65	8,461
2010	3,423,233	1,868,011		1,555,221	15.42	100,889
2011	3,575,157	1,617,673		1,957,483	16.19	120,871
2013	21,474,783	8,066,196		13,408,587	17.80	753,208
2014	483,186	162,051		321,135	18.63	17,239
2015	3,010,417	928,539		2,081,878	19.47	106,933
2016	2,825,331	720,605		2,104,726	20.32	103,562
2017	2,801,214	638,924		2,162,290	21.19	102,040
2018	3,356,654	664,392		2,692,262	22.07	121,988
2019	900,997	141,596		759,402	22.96	33,074

# Qulliq Energy Corporation Account 344 – Diesel Plant – Generators Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life

Survivor Curve: 28-R2.5

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
2020	10,256,356	1,216,700	9,039,656	23.86	378,835
2021	4,983,743	391,320	4,592,423	24.77	185,382
2022	4,930,711	194,499	4,736,212	25.69	184,340
2024	515,026	4,393	510,633	27.56	18,530
Total	72,876,617	26,956,715	45,919,901		2,337,207
Composite Ann	nual Accrual Rate	e			3.21%
Probable Rema	aining Life				19.65

## Qulliq Energy Corporation Account 345 – Diesel Plant – Accessory Electric Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 33-R2.5

Assets Year		Allocated Book	R	Amount temaining to be	ASL Remaining	Annual Depreciation at
of Installation	Original Cost	Reserve		Depreciated	Life (years)	Annual Factor
1975	281,533	281,533		-	3.37	
1976	142,124	167,926	-	25,802	3.58	
1977	255,325	255,325		-	3.80	
1978	65,000	65,000		-	4.03	
1979	98,000	98,000		-	4.26	
1980	9,652	9,652		-	4.49	
1981	53,918	53,918		-	4.73	
1983	47,380	47,380		-	5.24	
1988	73,658	190,868	-	117,210	6.76	
1989	44,166	60,968		16,802	7.13	
1990	240,997	257,435	-	16,438	7.52	
1992	1,271,773	1,271,773		-	8.39	
1993	588,621	588,621		-	8.86	
1994	705,924	705,924		-	9.36	
1995	1,068,441	1,201,953	-	133,512	9.88	
1996	422,397	515,447	-	93,049	10.43	
1997	704,534	756,503	-	51,969	11.00	
1998	109,189	194,500	-	85,311	11.60	
1999	1,104,334	1,096,093		8,241	12.22	675
2000	1,175,048	1,098,409		76,639	12.86	5,961
2001	1,698,271	1,536,836		161,435	13.52	11,945
2002	188,364	166,567		21,797	14.19	1,536
2006	1,778,026	1,230,016		548,010	17.07	32,099
2007	1,228,801	796,393		432,408	17.83	24,249
2008	36,528	22,280		14,249	18.61	766
2009	251,113	143,600		107,512	19.39	5,544
2010	79,803	79,803		-	20.19	
2011	505,666	239,067		266,599	21.01	12,690
2013	1,649,965	654,478		995,487	22.68	43,902
2014	146,038	52,028		94,010	23.53	3,996
2015	21,726	156,852	-	135,127	24.39	
2016	3,680,889	962,468		2,718,421	25.26	107,615
2017	5,549,229	1,350,756		4,198,473	26.14	160,594
2018	245,865	47,108		198,758	27.04	7,352

## Qulliq Energy Corporation Account 345 – Diesel Plant – Accessory Electric Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 33-R2.5

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>
2019	5,257,843	859,988	4,397,855	27.94	157,423
2020	243,279	31,023	212,256	28.85	7,358
2021	96,281	8,030	88,251	29.76	2,965
2022	9,276,895	303,147	8,973,748	30.69	292,421
Total	40,396,594	17,557,666	22,838,929		879,090
Composite Ann	nual Accrual Rate	9			2.18%
Probable Rema	aining Life				25.98

## Qulliq Energy Corporation Account 346 – Diesel Plant – Miscellaneous Power Plant Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1988	63,826	63,826	-	6.55	
1992	3,559,755	3,559,755	-	8.90	
1995	1,477,051	1,477,051	-	10.96	
1996	70,730	70,730	-	11.68	
1997	77,228	77,228	-	12.42	
1998	19,527	19,527	-	13.19	
1999	7,004	6,920	84	13.97	6
2000	9,870	9,535	335	14.77	23
2001	1,052,138	975,339	76,799	15.59	4,926
2002	1,571,749	1,552,348	19,401	16.43	1,181
2003	3,936,946	3,452,596	484,350	17.29	28,018
2004	417,680	374,200	43,481	18.16	2,394
2006	692,464	532,541	159,923	19.96	8,014
2007	1,546,456	1,088,412	458,043	20.87	21,943
2008	15,959	10,844	5,115	21.80	235
2010	187,706	187,706	-	23.70	
2011	6,252,958	3,511,052	2,741,906	24.65	111,211
2013	561,577	240,485	321,092	26.59	12,074
2014	725,306	278,892	446,414	27.57	16,191
2015	19,188	6,487	12,701	28.55	445
2016	1,036,915	275,065	761,850	29.54	25,790
2017	2,831,463	684,691	2,146,772	30.53	70,318
2018	54,821	10,786	44,035	31.52	1,397
2019	6,978,425	1,140,553	5,837,871	32.52	179,543
2022	4,809,879	157,740	4,652,139	35.50	131,030
2023	71,602	2,885	68,716	36.50	1,883
Total	38,048,223	19,767,196	18,281,027		616,620
Composite Ann	nual Accrual Rate	)			1.62%
Probable Rema	nining Life				29.65

## Qulliq Energy Corporation Account 361 – Distribution Plant – Structures and Improvements Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
Assets Year			Remaining to be		Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1994	4,850	3,462	1,388	10.85	128
1995	292,373	205,250	87,122	11.57	7,530
1996	51,028	35,160	15,868	12.33	1,287
1997	29,242	19,086	10,156	13.13	773
1998	3,092	3,092	-	13.97	
1999	16,172	10,115	6,057	14.84	408
2000	19,085	11,002	8,082	15.74	514
2001	117,153	63,365	53,788	16.66	3,228
2002	7,500	4,044	3,456	17.61	196
2012	199,183	52,397	146,786	27.50	5,338
2013	7,725,451	1,984,790	5,740,661	28.50	201,427
2019	83,350	8,515	74,835	34.50	2,169
2020	322	25	297	35.50	8
2021	296,114	15,454	280,660	36.50	7,689
2022	466,726	5,495	461,230	37.50	12,299
2023	778,608	11,908	766,700	38.50	19,914
Total	10,090,247	2,433,161	7,657,086		262,908
Composite Ann	ual Accrual Rate				2.61%
Probable Rema	ining Life				29.12

## Qulliq Energy Corporation Account 362 – Distribution Plant – Station Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
<b>Assets Year</b>		Allocated Book	Remaining to be	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1988	1,801	1,801	-	7.36	
1998	4,896	3,610	1,286	13.97	92
1999	24,656	22,621	2,034	14.84	137
2000	6,367	4,360	2,008	15.74	128
2001	983	641	342	16.66	21
2006	8,741	4,554	4,187	21.51	195
2007	31,033	14,911	16,122	22.51	716
2011	6,550,954	2,168,753	4,382,201	26.50	165,365
2013	108,508	31,864	76,644	28.50	2,689
2014	21,384	5,549	15,835	29.50	537
2017	519,067	80,841	438,226	32.50	13,484
2022	74,163	2,300	71,863	37.50	1,916
Total	7,352,555	2,341,806	5,010,749		185,279
Composite Ann	ual Accrual Rate				2.52%
Probable Rema	ining Life				27.04

## Qulliq Energy Corporation Account 364 – Distribution Plant – Poles, Towers and Fixtures Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

Assets Year		Allocated Book	Amount Remaining to be	ASL Remaining	Annual Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	Annual Factor
1987	186,573	186,573	-	10.12	
1988	435,619	435,619	-	10.73	
1989	2,822,651	2,853,657	- 31,006	11.37	
1990	127,373	126,119	1,254	12.05	104
1991	628,905	604,839	24,065	12.77	1,884
1992	323,864	301,392	22,472	13.52	1,662
1993	517,165	485,484	31,681	14.31	2,214
1994	267,837	235,756	32,081	15.13	2,121
1995	722,632	611,151	111,481	15.98	6,977
1996	698,269	593,002	105,267	16.86	6,245
1997	346,911	269,690	77,221	17.76	4,348
1998	470,191	349,524	120,667	18.68	6,458
1999	959,547	685,508	274,039	19.63	13,963
2000	426,552	282,185	144,367	20.58	7,013
2001	152,601	97,368	55,233	21.55	2,562
2010	104,920	31,420	73,500	30.50	2,410
2011	1,580,808	427,288	1,153,520	31.50	36,620
2012	1,362,175	349,816	1,012,359	32.50	31,150
2013	5,103,653	1,178,582	3,925,072	33.50	117,166
2014	776,470	161,400	615,069	34.50	17,828
2015	5,994,930	1,191,082	4,803,848	35.50	135,320
2016	1,849,653	283,563	1,566,089	36.50	42,907
2017	1,507,442	206,190	1,301,252	37.50	34,700
2018	2,085,381	229,365	1,856,016	38.50	48,208
2019	2,655,675	236,268	2,419,407	39.50	61,251
2020	31,787	2,179	29,609	40.50	731

## Qulliq Energy Corporation Account 364 – Distribution Plant – Poles, Towers and Fixtures Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	ASL Remaining	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
2021	1,355,084	62,091	1,292,992	41.50	31,156
2022	3,548,128	89,045	3,459,083	42.50	81,390
2023	594,393	10,147	584,247	43.50	13,431
Total	37,637,189	12,576,303	25,060,885		709,820
Composite Annual Accrual Rate 1.89%					
Probable Remaining Life 35.31					

## Qulliq Energy Corporation Account 365 – Distribution Plant – Overhead Conductors and Devices Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

		AU ( 15 1	Amount	401 D	Annual
Assets Year of Installation	Original Cost	Reserve	Remaining to be Depreciated	ASL Remaining Life (years)	Depreciation at Annual Factor
1986	128,816	128,816	-	9.55	
1987	114,584	114,584	-	10.12	
1988	357,171	357,171	_	10.73	
1989	2,909,695	3,047,507	- 137,812	11.37	
1990	39,647	36,566	3,081	12.05	256
1991	456,988	424,259	32,729	12.77	2,563
1992	91,113	79,721	11,391	13.52	842
1993	435,929	308,314	127,615	14.31	8,919
1994	19,786	16,300	3,486	15.13	230
1995	168,365	133,195	35,170	15.98	2,201
1996	162,169	123,404	38,766	16.86	2,300
1997	174,984	127,755	47,228	17.76	2,659
1998	159,890	111,780	48,110	18.68	2,575
1999	172,833	116,580	56,253	19.63	2,866
2000	87,012	57,305	29,707	20.58	1,443
2001	37,540	22,721	14,819	21.55	688
2003	669,576	364,920	304,656	23.52	12,953
2004	276,681	142,540	134,141	24.51	5,473
2005	600,758	289,031	311,728	25.51	12,222
2006	1,189,888	520,402	669,486	26.50	25,261
2007	1,293,794	527,417	766,377	27.50	27,867
2008	410,318	153,011	257,307	28.50	9,028
2009	1,476,702	496,729	979,973	29.50	33,219
2010	1,441,415	433,012	1,008,403	30.50	33,062
2011	1,366,155	370,795	995,360	31.50	31,599
2012	228,213	58,875	169,339	32.50	5,210
2013	2,950,098	696,861	2,253,237	33.50	67,261
2014	45,354	9,399	35,955	34.50	1,042
2015	33,780	6,336	27,443	35.50	773
2016	138	20	117	36.50	3

## Qulliq Energy Corporation Account 365 – Distribution Plant – Overhead Conductors and Devices Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

			Amount		Annual
<b>Assets Year</b>		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
2017	220,658	29,874	190,785	37.50	5,088
2018	87,329	9,322	78,007	38.50	2,026
2019	56,615	4,898	51,716	39.50	1,309
2020	2,043	137	1,906	40.50	47
2021	13,177	574	12,603	41.50	304
2022	114,153	2,482	111,671	42.50	2,628
2023	11,104	149	10,955	43.50	252
Total	18,004,472	9,322,761	8,681,711		304,168
Composite Annual Accrual Rate					1.69%
Probable Rema	Probable Remaining Life 28.54				

## Qulliq Energy Corporation Account 366 – Distribution Plant – Underground Conduit Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

Assets Year of Installation	Original Cost	Allocated Book Reserve	Amount Remaining to be Depreciated	ASL Remaining Life (years)	Annual Depreciation at Annual Factor
1995	8,481	8,349	132	11.57	11
2001	18,827	15,453	3,374	16.66	202
2012	13,216	5,083	8,134	27.50	296
2019	656	91	565	34.50	16
2022	218,680	7,913	210,767	37.50	5,620
Total	259,860	36,888	222,972		6,146
Composite Annual Accrual Rate					
Probable Rema	36.28				

# Qulliq Energy Corporation Account 367 – Distribution Plant – Underground Conductors and Devices Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 40-S4

			Amount		Annual	
Assets Year		<b>Allocated Book</b>	Remaining to be	ASL Remaining	Depreciation at	
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor	
1995	42,540	40,201	2,338	11.57	202	
1999	16,226	13,434	2,793	14.84	188	
2010	3,495	1,286	2,209	25.50	87	
2011	39,829	13,432	26,397	26.50	996	
2012	6,916	2,219	4,697	27.50	171	
2013	16,861	5,014	11,847	28.50	416	
2022	2,500	68	2,432	37.50	65	
Total	128,367	75,654	52,714		2,124	
Composite Ann	ual Accrual Rate				1.65%	
Probable Remaining Life 24						

# Qulliq Energy Corporation Account 368 – Distribution Plant – Line Transformers Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 48-R4

			Amount		Annual	
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	<b>ASL Remaining</b>	Depreciation at	
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor	
1987	31,096	30,793	303	13.64	22	
1989	58,037	57,588	448	15.09	30	
1990	9,705	9,153	552	15.84	35	
1991	95,542	90,406	5,136	16.61	309	
1992	10,232	9,125	1,108	17.39	64	
1993	194,713	175,648	19,065	18.18	1,048	
1994	109,118	92,705	16,413	19.00	864	
1995	240,049	198,172	41,877	19.82	2,112	
1996	229,467	182,803	46,664	20.67	2,258	
1997	164,585	126,344	38,240	21.52	1,777	
1998	127,327	93,806	33,521	22.39	1,497	
1999	261,288	198,500	62,788	23.28	2,698	
2000	165,461	120,117	45,344	24.17	1,876	
2001	39,387	25,247	14,141	25.08	564	
2006	388,738	188,986	199,752	29.75	6,714	
2010	273,459	90,660	182,800	33.61	5,438	
2011	312,581	94,369	218,212	34.59	6,308	
2012	303,503	87,199	216,305	35.57	6,080	
2013	2,359,162	625,309	1,733,853	36.56	47,426	
2014	202,004	46,774	155,230	37.55	4,134	
2015	363,841	220,654	143,187	38.54	3,716	
2016	238,865	42,095	196,770	39.53	4,978	
2017	397,031	58,458	338,574	40.52	8,355	
2018	210,481	26,388	184,093	41.52	4,434	
2019	303,402	29,598	273,804	42.51	6,441	
2020	49,733	3,835	45,898	43.51	1,055	
2021	155,820	7,801	148,019	44.51	3,326	
2022	1,039,144	31,791	1,007,353	45.50	22,138	
2023	356,569	8,978	347,591	46.50	7,475	
Total	8,690,343	2,973,300	5,717,042		153,171	
Composite Ann	nual Accrual Rate	)			1.76%	
Probable Remaining Life						

# Qulliq Energy Corporation Account 369 – Distribution Plant – Services Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 40-S4

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor
1987	64,607	63,488	1,119	6.91	162
1989	593,764	583,658	10,107	7.84	1,289
1991	71,315	61,698	9,617	8.92	1,078
1992	31,711	26,355	5,355	9.53	562
1997	10,106	6,959	3,147	13.13	240
2000	7,590	4,556	3,034	15.74	193
2001	54,426	51,091	3,335	16.66	200
2006	7,557	3,235	4,321	21.51	201
2011	37,070	10,592	26,478	26.50	999
2012	11,150	3,026	8,124	27.50	295
2013	188,008	45,181	142,828	28.50	5,012
2017	967,902	147,372	820,531	32.50	25,247
Total	2,045,207	1,007,211	1,037,997		35,477
Composite Ann	ual Accrual Rate				1.73%
Probable Remaining Life 29					

## Qulliq Energy Corporation Account 370 – Distribution Plant – Meters Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 16-S2

			Amount		Annual	
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	ASL Remaining	Depreciation at	
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	Annual Factor	
1999	15,894	15,894	-	1.71		
2001	39,699	39,699	-	2.15		
2012	1,216	626	590	5.90	100	
2014	1,310	574	736	7.01	105	
2017	1,202,232	366,032	836,200	9.05	92,369	
2018	9,119	2,090	7,029	9.85	714	
Total	1,269,470	424,915	844,555		93,288	
Composite Ann	ual Accrual Rate				7.35%	
Probable Remaining Life 9.05						

# Qulliq Energy Corporation Account 371 – Distribution Plant – Installations on Customer Premises Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 16-S2

			Amount		Annual	
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	<b>ASL Remaining</b>	Depreciation at	
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor	
2022	5,080	187	4,893	13.51	362	
Total	5,080	187	4,893		362	
Composite Annual Accrual Rate 7.13						
Probable Remaining Life						

# Qulliq Energy Corporation Account 373 – Distribution Plant – Streetlighting and Signal Systems Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 40-S5

Accete Veen		Allocated Dools	Amount	ACI Demaining	Annual
Assets Year of Installation	Original Cost	Reserve	Remaining to be Depreciated	Life (years)	Depreciation at Annual Factor
1989	22,414	21,752	662	6.17	107
1991	10,573	9,674	899	7.45	121
1996	30,920	24,131	6,789	11.61	585
1997	17,982	13,160	4,821	12.56	384
1998	23,336	16,760	6,576	13.53	486
1999	19,846	13,500	6,346	14.52	437
2000	7,087	4,607	2,480	15.51	160
2001	29,871	19,990	9,881	16.50	599
2012	21,497	6,745	14,753	27.50	536
2013	48,233	14,133	34,100	28.50	1,196
2018	674,215	97,949	576,266	33.50	17,202
2022	763,258	23,066	740,192	37.50	19,738
2023	391,468	3,758	387,710	38.50	10,070
Total	2,060,700	269,225	1,791,475		51,622
Composite Ann	ual Accrual Rate				2.51%
Probable Remaining Life					

# Qulliq Energy Corporation Account 390 – Distribution Plant – Structures and Improvements Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 55-R4

				Amount		Annual
<b>Assets Year</b>		<b>Allocated Book</b>	R	emaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve		Depreciated	Life (years)	<b>Annual Factor</b>
1971	59,490	59,490		-	9.03	
1973	174,459	561,084	-	386,625	10.08	
1974	101,489	155,216	-	53,727	10.65	
1975	291,939	291,939		-	11.24	
1976	159,025	262,884	-	103,859	11.86	
1977	292,189	318,860	-	26,671	12.51	
1981	28,681	27,541		1,140	15.23	75
1985	162,065	358,021	-	195,956	18.16	
1986	13,502	11,650		1,852	18.92	98
1988	595,836	632,805	-	36,969	20.50	
1989	540,036	424,110		115,926	21.30	5,442
1991	9,293	6,970		2,323	22.96	101
1995	217,275	131,432		85,843	26.41	3,250
1996	31,099	19,475		11,623	27.30	426
1998	1,248,535	903,634		344,901	29.12	11,845
1999	42,428	23,507		18,921	30.04	630
2001	23,000	10,276		12,724	31.90	399
2002	44,005	28,418		15,587	32.85	475
2003	184,009	93,135		90,874	33.80	2,689
2008	341,258	115,001		226,257	38.63	5,857
2009	1,859,719	578,052		1,281,667	39.61	32,361
2010	84,501	24,188		60,313	40.59	1,486
2011	6,965,067	1,739,108		5,225,959	41.57	125,710
2012	299,828	69,226		230,602	42.56	5,418
2013	263,959	55,722		208,237	43.55	4,782
2014	429,508	85,108		344,400	44.54	7,733
2015	138,639	25,172		113,467	45.53	2,492
2016	952,453	146,908		805,545	46.52	17,315
2017	592,128	75,881		516,248	47.52	10,864
2018	2,425,514	274,197		2,151,316	48.51	44,344

# Qulliq Energy Corporation Account 390 – Distribution Plant – Structures and Improvements Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 55-R4

			Amount		Annual	
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	<b>ASL Remaining</b>	Depreciation at	
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>	
2019	659,305	61,839	597,466	49.51	12,067	
2020	883,921	61,847	822,074	50.51	16,276	
2022	692,505	16,651	675,854	52.50	12,873	
2023	16,368,499	364,475	16,004,024	53.50	299,128	
Total	37,175,160	8,013,822	29,161,338		624,135	
Composite Ann	nual Accrual Rate	9			1.68%	
Probable Remaining Life 46.7						

# Qulliq Energy Corporation Account 392 – Distribution Plant – Transportation Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 15-L3

				Amount		Annual
<b>Assets Year</b>		<b>Allocated Book</b>	R	emaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	Original Cost	Reserve		Depreciated	Life (years)	Annual Factor
1990	101,970	121,805	-	19,834	1.00	
1991	59,555	59,555		-	1.03	
2002	5,100	160,072	-	154,972	3.21	
2004	195,047	258,495	-	63,448	3.72	
2005	45,445	84,729	-	39,284	3.98	
2007	500,587	500,587		-	4.46	
2008	76,757	171,692	-	94,935	4.67	
2009	135,815	135,815		-	4.85	
2010	594,113	696,719	-	102,606	5.02	
2011	1,344,641	1,695,930	-	351,289	5.19	
2012	675,402	638,553		36,849	5.41	6,814
2013	782,691	620,281		162,410	5.70	28,490
2014	662,031	485,238		176,793	6.10	29,001
2015	260,707	163,901		96,806	6.61	14,643
2016	807,410	440,732		366,678	7.25	50,601
2017	754,906	351,163		403,743	7.99	50,546
2018	53,849	22,809		31,041	8.81	3,524
2019	39,519	13,457		26,062	9.68	2,692
2020	216,788	58,686		158,102	10.59	14,925
2021	220,477	33,685		186,791	11.54	16,191
2022	572,678	37,541		535,137	12.51	42,781
2023	1,190,953	68,167		1,122,785	13.50	83,168
Total	9,296,440	6,819,612		2,476,828		343,376
Composite Ann	nual Accrual Rate	)				3.69%
Probable Remaining Life						

# Qulliq Energy Corporation Account 396 – Distribution Plant – Power Operated Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 30-L5

			Amount		Annual	
Assets Year		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at	
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>	
1988	98,488	98,488	-	3.64		
1999	7,221	7,221	-	6.03		
2011	86,269	46,069	40,200	16.50	2,436	
2013	37,405	17,264	20,141	18.50	1,089	
2018	4,308	1,114	3,194	23.50	136	
Total	233,691	170,156	63,535		3,661	
Composite Ann	nual Accrual Rate	9			1.57%	
Probable Remaining Life 17.35						

# Qulliq Energy Corporation Account 397 – Distribution Plant – Communication Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 14-R2

			Amount		Annual
Assets Year		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>
1982	8,932	8,932	-	1.00	
2011	156,035	156,035	-	4.38	
2013	10,700	9,156	1,543	5.41	285
2014	71,122	48,766	22,356	5.99	3,732
2015	17,068	10,499	6,569	6.61	994
2017	70,489	20,302	50,187	7.96	6,306
2018	337,341	86,526	250,816	8.68	28,887
2019	607,481	124,116	483,365	9.44	51,217
Total	1,279,168	464,331	814,836		91,421
Composite Ann	nual Accrual Rate	)			7.15%
Probable Remaining Life 8.9					

# Qulliq Energy Corporation Account 398 – Distribution Plant – Miscellaneous Equipment Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 15-S1

			Amount		Annual	
<b>Assets Year</b>		<b>Allocated Book</b>	Remaining to be	ASL Remaining	Depreciation at	
of Installation	Original Cost	Reserve	Depreciated	Life (years)	Annual Factor	
2002	19,646	19,646	-	2.50		
2005	23,552	23,552	-	3.46		
2010	455,437	382,782	72,655	5.32	13,655	
2011	160,044	123,451	36,593	5.75	6,367	
2012	187,754	130,484	57,270	6.20	9,243	
2013	83,783	51,722	32,061	6.67	4,807	
2016	193,305	134,052	59,253	8.27	7,162	
2018	136,468	47,038	89,430	9.53	9,384	
2022	157,065	8,025	149,040	12.63	11,798	
2023	102,244	588	101,656	13.55	7,505	
Total	1,519,296	921,338	597,958		69,919	
Composite Ann	Composite Annual Accrual Rate					
Probable Remaining Life 8.55						

# Qulliq Energy Corporation Account 399 – Distribution Plant – Other Tangible Plant Calculated Annual Accrual and Depreciation Rate Based on Original Cost as of March 31, 2024

ASL Remaining Life Survivor Curve: 20-R3

			Amount		Annual
<b>Assets Year</b>		Allocated Book	Remaining to be	<b>ASL Remaining</b>	Depreciation at
of Installation	<b>Original Cost</b>	Reserve	Depreciated	Life (years)	<b>Annual Factor</b>
2006	113,253	113,253	-	5.03	_
2011	853,662	680,308	173,354	8.15	21,266
2015	154,545	72,871	81,674	11.26	7,255
Total	1,121,461	866,433	255,027		28,521
Composite Annual Accrual Rate					2.54%
Probable Remaining Life					8.94





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## APPENDIX G GLOSSARY OF TERMS

### 1 **Amortization**

- 2 Allocation of the cost of an asset over its useful life, reflecting a reduction in the value of
- 3 an asset with the passage of time, due in particular to wear and tear.

## 4 Capacity

- 5 The load at which a generation unit, generation station, or other electrical apparatus is
- 6 rated either by the user or by the manufacturer.

## 7 Consumer Price Index (CPI)

- 8 A measure of the percentage change over time in the cost of purchasing a constant
- 9 "basket" of goods and services. The basket consists of items for which there are
- 10 continually measurable market prices, so that changes in the cost of the basket are due
- 11 only to price movements.

## 12 **Commercial**

13 Customer classification for service other than domestic or street lighting.

## 14 Corporation

16

15 Qulliq Energy Corporation

## Cost of Service

- 17 The total cost to the Corporation of providing energy and related utility services to its
- 18 customers. Includes the cost of invested capital as well as operational costs.

### 1 Customer

- 2 Individual or entity that takes service from the utility. Similar customers are grouped into
- 3 customer classes. Customer classes are usually differentiated from each other in terms
- 4 of the level and type of service they require from the utility.

#### 5 **Customer Class**

6 A distinction between users of electrical energy.

#### 7 Demand

- 8 The rate at which electric energy is delivered to or by a system, part of a system or a
- 9 piece of equipment; expressed in kilowatts, kilovolt-amperes, or other suitable unit at a
- 10 given instant or averages over any designated period of time. The primary source of
- 11 demand is the power-consuming equipment of the customers.

## 12 Demand Side Management (DSM)

- 13 Techniques designed to be used by the customer to reduce their consumption of
- 14 energy.

#### 15 **Distribution**

- 16 The act or process of distributing electric energy from convenient points on the
- 17 transmission or bulk power system to the consumers.

### 1 Domestic

- 2 Single family residences or an individual apartment where electrical service is provided
- 3 through one meter, provided that the residence or apartment is not used for commercial
- 4 purposes.

## 5 Efficiency

6 Engine efficiency; the amount of kilowatt-hours produced per litre of fuel.

## 7 Energy

- 8 a) Electricity;
- 9 b) Heat that is supplied through a district heating system by hot water, hot air or steam;
- manufactured gas, liquefied petroleum gas, natural gas, oil or any other combustible
- material which is supplied through a pipeline or any other distribution system directly
- to a customer; or
- 13 c) Any prescribed matter pursuant to a regulation under the Qulliq Energy Act.

## 14 Energy Consumption

- 15 Use of electrical energy over time, typically measured in kilowatt-hours (kWh).
- 16 **FERC**
- 17 Federal Energy Regulatory Commission

#### 1 Fixed Asset

- 2 Tangible property used in the operations of regulated business, but not expected to be
- 3 consumed or converted into cash in the ordinary course of business.

## 4 Generation

- 5 This term refers to the act or process of transforming other forms of energy into electric
- 6 energy, or to the amount of electric energy so produced, expressed in kWh.

## 7 Gross Plant in Service

- 8 Represents the accounting cost of all regulated assets current used in ordinary course
- 9 of business.

## 10 Heating Degree Day (HDD)

- 11 A unit measuring the extent to which an outdoor dry-bulb temperature falls below an
- 12 assumed base (18°C). One HDD is counted for each degree of deficiency below the
- 13 assumed base, for each calendar day on which such a deficiency occurs.

#### 14 Kilowatt (kW)

- 15 The measure of electrical capacity required by the customer at any instantaneous
- moment. One kilowatt equals 1,000 watts. One megawatt (MW) equals 1,000 kWs.

## 1 Kilowatt-hour (kWh)

- 2 Basic unit of electric energy equal to one kilowatt of power supplied to or taken from an
- 3 electric circuit steadily for one hour.

## 4 Load

- 5 The amount of electric power delivered or required at any specific point or points on a
- 6 system. Load originates primarily at the power-consuming equipment of customers.

## 7 Load Forecast

8 An estimate of electrical demand or energy consumption at some future time.

## 9 Losses

10 Refers to the energy that is lost through distribution and transformation.

## 11 Maintenance Expense

- 12 Direct and indirect expenses including labour, material and others incurred for
- 13 preserving the operation efficiency or physical condition of the utility plant used for
- 14 power production, transmission and distribution of energy, and administrative and
- 15 general operations.

## 16 **O&M**

## 17 Operating and Maintenance

## 1 Operating Expenses

- 2 Direct and indirect expenses, including labour, materials and others, incurred in the
- 3 production of electricity.

### 4 Outage

- 5 The period during which a generation unit, distribution line, or other facility is out of
- 6 service.

## 7 Plant

- 8 A facility or facilities for the generation, transformation, distribution, delivery, supply or
- 9 control of energy or for the distribution, delivery or supply of water and sewerage
- services and includes the site of the facility or facilities, and all land, water, rights to use
- 11 water, buildings, works, machinery, installations, materials, transmission lines,
- distribution lines, pipelines, furnishings and equipment, plant in construction, stores and
- 13 supplies acquired, constructed or used or adapted for or in connection with the facility or
- 14 facilities.

#### 15 **Power**

- 16 The rate of generating, transferring, or use of electric energy, with respect to time,
- 17 usually expressed in kilowatts (kW).

#### 1 Rate Base

- 2 The property of the Corporation used or required to be used to provide service to the
- 3 public within Nunavut.

## 4 Rates [electricity]

5 The prices at which electricity sold to the customers.

## 6 Residual Heating System

- 7 Residual heat recovery involves capturing some of the excess heat from the diesel
- 8 engines.

## 9 Revenue Requirement

- 10 The revenue level necessary to meet the cost of providing service to the utility's
- 11 customer.

## 12 Station Service

13 The electric energy used by the Corporation in the course of business.

#### 14 URRC

15 Utility Rates Review Council