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UTILITY RATES REVIEW COUNCIL OF NUNAVUT
IGLUIN AULATJUTITIGUN AKITUTILAANGINNUT KATIMAYIIT NUNAVUNMI
COUSEIL D'EXAMEN DES TAUX DES ENTREPRISES DE SERVICE DU NUNAVUT

May 16, 2023

Hon. PJ Akeeagok
Minister Responsible for the Qulliq Energy Corporation
Legislative Assembly of Nunavut
P.O. Box 2410
Iqaluit, NU X0A 0H0

Dear Minister Akeeagok,

RE: Net Metering Program Revision Application, Utility Rates Review Council of Nunavut's Report 2023-01.

By letter dated February 16, 2023, the Qulliq Energy Corporation (QEC) applied to the Minister Responsible for QEC for approval of its request to revise the terms and conditions of service related to its Net Metering Program (NMP). QEC requested approval to increase the individual customer renewable generation limit from 10 kilowatts to 15 kilowatts, and to increase the number of municipal accounts per community from one to two. By letter dated February 20, 2023, the Minister Responsible for QEC requested advice from the Utility Rates Review Council of Nunavut (URRC) with respect to QEC's application.

During the URRC's public process and review of the application, QEC also proposed to eliminate the annual reset date for NMP account credits as NMP customers are expected to fully utilize any excess generation during fall/winter months at the proposed 15-kilowatt individual customer renewable energy generation capacity limit. This additional proposal was based on a review of customer submissions and QEC's experience with NMP to date.

In response to the application and the Minister's request, please find attached the URRC's Report 2023-01, respecting QEC's Net Metering Program Revision Application.

Yours truly,

Monica Ell-Kanayuk, Chair
Utility Rates Review Council of Nunavut

CC: Jimi Onalik, Deputy Minister, Executive and Intergovernmental Affairs
Rick Hunt, President, Qulliq Energy Corporation
Hon. David Joanasie, Minister responsible for the URRC
Laurie-Anne White, Executive Director, URRC

Report to the Minister Responsible for the Qulliq Energy Corporation on:

Net Metering Program Revision Application

Report 2023-01

May 16, 2023

UTILITY RATES REVIEW COUNCIL OF NUNAVUT

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LIST OF ABBREVIATIONS

GN	Government of Nunavut
GNWT	Government of Northwest Territories
GRA	General Rate Application
kW	Kilowatt
NMP	Net Metering Program
NTPC	Northwest Territories Power Corporation
QEC	Qulliq Energy Corporation
QEC Act	*Qulliq Energy Corporation Act*
RCC	Revenue to Cost Coverage
T&Cs	Terms and Conditions of Service
URRC	Utility Rates Review Council of Nunavut
URRC Act	*Utility Rates Review Council Act*

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1.0 BACKGROUND

1. Qulliq Energy Corporation (QEC), as a designated utility, is required pursuant to Section 12 of the *Utilities Rates Review Council Act* (URRC Act), to seek approval from the responsible Minister prior to imposing a rate or tariff. In this regard, Section 12 of the URRC Act provides for the application for approval of a rate or tariff as follows:

   (1) A designated utility that desires to impose a rate or tariff shall make an application in writing to the responsible Minister for approval of the rate or tariff.

   Request for advice of Review Council
   (2) Within 15 days of receiving an application under subsection (1), the responsible Minister shall request the advice of the Review Council.

   Notice to elected officials
   (3) The responsible Minister (QEC) shall give reasonable notice of a request for advice under subsection (2) to mayors and members of the Legislative Assembly who represent a municipality or constituency where the residents, in his or her opinion, are likely to be affected by the rate or tariff.

2. Sections 5(1)(b) and (e) of the *Qulliq Energy Corporation Act* (QEC Act) state, among other things, that objects of QEC are:

   (b) to plan and provide for Nunavut's long-term needs for affordable energy, taking into consideration Nunavut's desire to enhance energy self-reliance and to conserve energy and energy resources;

   (e) subject to the Utilities Rates Review Council Act, to set rates and tariffs for energy and services supplied by the Corporation and its subsidiaries;

3. Section 7(e) of the URRC Act states, among others, the purposes of the Utility Rates Review Council of Nunavut (URRC) are to advise the responsible Minister of a designated utility concerning the imposition of rates and tariffs in accordance with sections 11 to 18 (of the URRC Act).

4. Section 13(2) of the URRC Act states, among others, the URRC shall have regard to whether the proposed rate or tariff is fair and reasonable, considering:

   (b) the cost of providing the service, including related financing costs;

   (c) any other factors set out in guidelines issued under section 6 [of the URRC Act].

5. By letter dated February 16, 2023, QEC applied to the Minister Responsible for QEC for approval of its request to revise the terms and conditions of service (T&Cs) related to its Net Metering Program (NMP). QEC requested approval to increase the individual customer renewable generation limit from 10 kilowatts (kW) to 15 kW, and to increase the number of municipal accounts per community from one to two. QEC also noted that in conjunction with the proposal to revise the T&Cs, it is proposing to update the QEC net metering policy. By letter dated February 20, 2023, the Minister Responsible for QEC requested advice from the URRC with respect to QEC's application (the Application). The URRC's consideration of these matters is set out in this report.

2.0 PARTICULARS OF THE APPLICATION

6. QEC noted that the objective of the NMP is to promote the use of renewable energy in Nunavut, reducing the reliance on diesel fuels and taking an active role in climate change mitigation.

7. QEC submitted that in 2021, it retained a consultant to review the existing policy and program and provide recommendations on changes based on performance, QEC's renewable energy generation objectives and other Canadian jurisdictional practices. Based on the recommendations in the report (Consultant's Report), QEC applied for approval to make the below-mentioned revisions to Schedule D (Conditions of Net Metering Service) of QEC's T&Cs.

8. QEC requested approval to revise the T&Cs related to its NMP. QEC requested approval to increase the individual customer renewable generation limit from 10 kW to 15 kW, and to increase the number of municipal accounts per community from one to two.

9. During the URRC's public process and review of the Application, QEC also proposed to eliminate the annual reset date for NMP account credits as NMP customers are expected to fully utilize any excess generation during fall/winter months at the proposed 15-kW individual customer renewable energy generation capacity limit. This additional proposal was based on a review of customer submissions and QEC's experience with the NMP to date.

10. QEC also noted that in conjunction with the proposal to revise the T&Cs, it is proposing to update the QEC net metering policy.

11. QEC submitted that it has developed a model for tracking and reporting on the financial impacts of the NMP (net revenue as a percentage of QEC's approved revenue requirement). QEC stated that the model was easy to update as new net metering customers join the program and that it uses similar indicators used by other utilities in monitoring their net metering programs. QEC noted that the current net revenue loss is projected to be 0.06 per cent of QEC's approved revenue requirement.

3.0 PROCESS

3.1 MAJOR OR MINOR APPLICATIONS

12. Under the URRC Act, it is directed that at the sole discretion of the URRC, the URRC shall determine whether an application is either minor or major for the purposes of determining the time required for processing of the application; a minor application provides for a time limit of 90 days for the URRC to report to the responsible Minister, while a major application provides a time limit of 150 days.

13. The Minister stated that the Application represents a request to make minor revisions to QEC's T&Cs specific to net metering. The Minister also noted that all members of the Legislative Assembly and mayors will be informed about the Application.

14. The URRC considers the Application to be minor. The need for notice, public submissions, information requests and responses can be accommodated within the 90-day time frame and that the 90-day deadline for submitting its report to the Minister would be May 19,[1] 2023.

3.2 PUBLIC PROCESS

15. During April 2021, the URRC caused notice of the Application to be provided in each of the communities served by QEC. The notices were posted on the URRC website, social media and were also provided to the government liaison officers (GLOs) in each community, and by letter to each Member of the Legislative Assembly of Nunavut, mayors, and senior administration officers (SAOs) across Nunavut. QEC also provides notice as set out in the URRC Act.

16. The URRC asked for more information from QEC regarding the Application. This was conducted through two rounds of information requests. The URRC asked several questions related to the Application and matters raised in the public submissions. QEC responded to the two rounds of information requests from the URRC on March 29, 2023, and on April 11, 2023.

[1] The actual 90-day deadline is Sunday, May 21; however, the URRC adjusted its deadline to May 19.

17. The URRC also provided an opportunity for the public to make written comments respecting the Application by the deadline of March 27, 2023. Two written public submissions were received. The matters raised in the submissions were addressed by QEC in its responses to the URRC's information requests and were considered by the URRC in this report.

4.0 EXAMINATION OF THE APPLICATION

18. The URRC notes that the Application is for an increase of the individual customer renewable generation limit from 10 kW to 15 kW, an increase of the number of municipal accounts per community from one to two, and a subsequent proposal to eliminate the annual reset date for NMP account credits.

19. The URRC notes that QEC proposed to revise Schedule D of its T&Cs and QEC's net metering policy to reflect the above-mentioned proposals as required.

20. The URRC based its review of the Application on aspects of the URRC Act and the QEC Act. One of the stated goals of the QEC Act is for QEC to "plan and provide for Nunavut's long term needs for affordable energy, taking into consideration Nunavut's desire to enhance energy self-reliance and to conserve energy and energy resources." Another stated goal is to "generate, transform, transmit, distribute, deliver, purchase, sell and supply energy on a safe, economic, efficient and reliable basis." The URRC reviewed the proposed revisions with these two goals in mind.

21. The URRC notes that each of the proposed revisions considered in isolation, and in the context of the current rates and level of NMP customer generation, appears to be relatively minor. However, the URRC notes that as the amount of NMP customer generation increases, the impacts on QEC and its customers will also increase, as will the potential for cross-subsidization between NMP customers and non-NMP customers.

22. The URRC notes that the proposed revisions have the potential to cause technical and economic/financial impacts to QEC and its customers. The Consultant's Report included discussion and analysis regarding these impacts. The URRC therefore reviewed the revisions on a technical and economic/financial basis.

23. The technical review assessed whether or not QEC is able to accommodate the amount/size of NMP projects within its electric system in each community. The technical review assessment looked at QEC's ability to connect and integrate NMP projects, without negatively affecting service levels. The URRC relied on the Consultant's Report and did not conduct its own technical assessment.

24. The URRC notes that the Consultant's Report included recommendations regarding individual customer renewable generation capacity limits, eligible customer participation, and community renewable generation capacity limits.

25. The URRC notes that the consultant's recommendations on pages 31 and 32 of the Consultant's Report regarding individual customer capacity limits suggested that "QEC should not attempt to restrict behind the meter installation for a customer's own consumption so long as the renewable energy installation does not disrupt the electricity grid" and that "This would provide clear incentives for customers to proceed with such development where feasible ***to meet their own power needs***.[2]" The consultant noted that an important consideration is whether or not the renewable generation disrupts the electricity grid reliability and stability.

26. The URRC agrees with the Consultant's Report that QEC must ensure there is grid reliability and stability in each community. The URRC also considers that there is merit on limiting the size of NMP customer renewable generation to be aligned with the customer's own power needs.

27. The economic/financial review assessed whether or not the proposed revisions did no harm to QEC, NMP customers or non-NMP customers. The URRC considers that neither QEC nor non-NMP customers should be cross-subsidizing NMP customers, and, vice-versa, NMP customers should not be cross-subsidizing QEC nor non-NMP customers.

28. The URRC considers that the best way to ensure there is no harm is to make sure that the price signals in the QEC rates lead NMP customers and QEC to make investment decisions that do not result in cross-subsidization between different customer groups nor where QEC is foregoing its return for the benefit of NMP customers. It seems that the best way to address price signals would be to adjust fixed charges and energy rates to better reflect cost causation (as per the cost-of-service study used in the 2022 general rate application (GRA).

[2] Emphasis added by the URRC.

29. The URRC notes that it has questioned QEC in the last two GRAs regarding low revenue to cost coverage (RCC) in QEC's fixed charges. Each time QEC responded that it was not as high a priority as other matters and that it could be deferred to a later date. Nevertheless, the URRC recommended changes to QEC's rates, and to improve RCC ratios, by increasing fixed charges to better reflect cost causation.

30. The URRC's consideration of the proposed revisions is organized below based on where they originated.

4.1 MATTERS RAISED DIRECTLY IN THE APPLICATION

31. QEC proposed to increase the individual customer renewable generation capacity limit from 10 kW to 15 kW. QEC provided support for the increase in the Consultant's Report. There did not appear to be any technical concerns in the Consultant's Report regarding the increase from 10 kW to 15 kW. The URRC agrees that the increase seems reasonable, so long as there is no harm to QEC, NMP customers or non-NMP customers.

32. QEC proposed to increase the availability of the NMP from one to two municipal accounts per community. QEC provided support for the increase from one to two municipal accounts in the Consultant's Report. There did not appear to be any technical concerns in the Consultant's Report regarding the increase from one to two (in fact, the recommendation was to raise the limit to three). The URRC agrees that the increase in the number of municipal accounts per community seems reasonable, so long as there is no harm to QEC, NMP customers or non-NMP customers.

33. QEC proposed to track and report on the financial impact of the NMP based on net revenue lost as a percentage of its approved revenue requirement. This was recommended in the Consultant's Report; however, no comparative data was provided. The URRC notes that the only comparative data was the one per cent net revenue loss as a percentage of net income used by the Government of Northwest Territories (GNWT).

34. The URRC questioned QEC (in information request URRC-QEC-1-1) about the tracking and reporting of net revenue loss as a percentage of net income. It seems that most of QEC's objection to using that method related to the variability of net income (as opposed to the approved revenue requirement). The URRC appreciates that net income is variable and considers that variability would be removed if approved return was used instead.

35. The URRC prepared a comparison of the two measures of net revenue loss (i.e., as a percentage of approved revenue requirement and approved return). Without comparative data neither measure is all that meaningful. However, the URRC considers that a comparison to the GNWT is more informative as per Table 1 shown below. Table 1 uses data from Table 5-1 from the Consultant's Report and approved amounts from the 2022/23 GRA.

Table 1. Comparison of methods used to estimate financial impact to QEC

	Net metering customer installation to date	Max net metering capacity at 7% limit	Max net metering capacity at 20% limit	Max net metering capacity at 45% limit
Net revenue loss from net metering ($000)	58	596	1,702	3,829
2022/23 GRA approved revenue requirement	132,900	132,900	132,900	132,900
Net revenue loss as a percentage of revenue requirement	0.04%	0.45%	1.28%	2.88%
2022/23 GRA approved return	14,105	14,105	14,105	14,105
Net revenue loss as a percentage of return	**0.41%**	**4.23%**	**12.07%**	**27.15%**
GNWT reference as a percentage of net income	1.00%	1.00%	1.00%	1.00%

36. As per Table 1 above, a comparison of the scenarios used in the Consultant's Report shows that all of the three "Max" amounts assessed by the consultant would result in a significantly greater impact on QEC than the one per cent reference for the GNWT. It also demonstrates that the net revenue loss could have a significant impact on

QEC's approved return (or ultimately on non-NMP customers). Further, the one per cent of approved revenue requirement measure as proposed by QEC represents almost 10 per cent of QEC's approved return.

37. The URRC recommends that QEC be directed to use a tracking and reporting measure of net revenue loss as a percentage of approved return, rather than approved revenue requirement. Changing to this method would make it much easier to compare QEC to Northwest Territories Power Corporation (NTPC), in the absence of any other comparative data. If QEC insists on using net revenue loss as a percentage of approved revenue requirement, it should provide comparative data from jurisdictions using that measure (if any) along with information about the net metering program.

4.2 MATTERS RAISED BY PUBLIC SUBMISSIONS

38. The URRC notes that customers, in their submissions, suggested changing the reset date in the T&Cs regarding excess generation. Customers proposed that the date be changed from March 31 to some other date. The date suggested by customers was January 31 in order to reduce the likelihood that excess electricity would be lost or confiscated before it could be applied against electricity usage. QEC's response to customer suggestions was a proposal to remove the reset date.

39. The URRC notes that QEC's proposal to remove the reset date would address NMP customer concerns. However, the URRC considers that the removal of the reset date could have undesirable unintended consequences. The URRC understands that customers do not want to lose excess generation and the ability to apply credits to a subsequent month. However, it is noted that the current provisions in the T&Cs essentially provide free energy storage to NMP customers. In the current NMP, customers receive most of the benefits of having storage, without having to invest in batteries, etc. This would not be overly concerning so long as NMP customers continue to size renewable projects to meet their own use.

40. It appears to the URRC that the absence of proper price signals (through QEC fixed charges and energy rates) and/or other restrictions based on the customers' electricity needs there is a potential harm to QEC and/or its non-NMP customers.

41. The URRC recommends that any removal of the reset date should be only made for the 2022/23 fiscal year at this time. Any future proposal to remove the reset date for excess electricity in the future should only be considered when NMP customers have incentives to size projects in line with their own needs. Otherwise, the removal of the reset date, without fixing QEC's rates or otherwise aligning the size of projects with the customer's own usage/need, creates the potential for cross-subsidization. The URRC considers that if QEC were to encounter unusual circumstances (e.g., a cyber-attack) again that necessitated the need to waive the reset date, it could file an application.

42. The URRC notes that if customers are correct, there may be a problem with the March 31 reset date, even if projects are sized in line with the customer's own needs. It may be the case that March generation is in excess of usage, and if so, the excess would be lost due to the reset date. The URRC recommends that QEC consider changing the reset date to December 31 or January 31 as suggested by customers as this may avoid the amount of excess energy that is lost or confiscated by the wrong reset date for NMP projects that are sized to meet the customers own needs.

4.3 MATTERS RAISED BY THE URRC IN ITS EXAMINATION OF THE APPLICATION

43. The URRC notes as previously stated that the proposed revisions in isolation appear to be relatively minor. However, to assess the technical and economic/financial impacts the URRC wanted to make sure there will be no harm to QEC, NMP customers or non-NMP customers.

44. The URRC asked for additional information regarding the impact of lost revenue associated with the NMP on QEC and its customers. As noted earlier in the examination of the Application and public submissions, the URRC wants to ensure there is no harm associated with cross-subsidization by non-NMP customers, or by QEC foregoing an opportunity to collect its approved return.

45. The URRC is specifically interested in QEC's plans to address low RCC in QEC's fixed charges. In addition to QEC and non-NMP customers, there is potential harm to

NMP customers who make investment decisions for new renewable projects based on current rates. Those NMP customers may expect to continue to receive credits for electricity generation at current energy rates. In order to correct the low RCC for fixed charges, fixed charges should increase, with a corresponding decrease in energy rates. The URRC notes that NMP customers may not be aware of the potential future reduction in energy rates. It becomes more concerning to the URRC the longer that QEC delays or defers addressing this issue. The effects of the delay/deferral will eventually be borne by NMP customers, non-NMP customers, or QEC. As the number of NMP customers and generation increases the potential for harm increases. The URRC recommends that QEC be directed to begin correcting low RCC ratios for fixed charges. In the 2022/23 GRA, the URRC recommended that QEC move at least one third of the way toward full RCC with respect to demand and customer charges. The URRC again recommends that QEC be directed to file an application (GRA Phase 2, rates only) in a timely way to begin making these necessary changes. The URRC considers that the recommended correction should be relatively easily accomplished as QEC already has the information available in the 2022/23 GRA and in QEC's responses to information requests in that proceeding.

46. Similarly, the URRC is interested in ensuring cost accountability regarding NMP 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 to the URRC how the general language in Section 4.1 is sufficient to address circumstances where an NMP customer chooses to install capacity that greatly 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. Alternatively, NMP customers should not be discouraged from making investments by having to bear more cost than is required for service. The URRC recommends that QEC provide more information about a standard level of service related to the connection of NMP projects in its next GRA or NMP application.

5.0 URRC RECOMMENDATIONS

47. Having considered the foregoing matters, the URRC recommends as follows:

Net Metering Program revisions

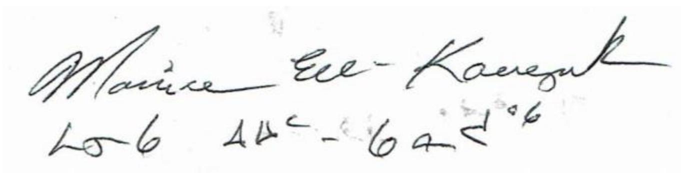
- That QEC revise its T&Cs to increase the individual customer renewable generation capacity limit from 10 kW to 15 kW.
- That QEC revise its T&Cs to increase the availability of the NMP from one to two municipal accounts per community.
- That QEC revise its T&Cs to waive/remove the reset date regarding excess electricity generation for the 2022/23 fiscal year only.
- That QEC consider changing the reset date to December/January 31 as suggested by customers.
- That QEC be directed to use a tracking and reporting measure of net revenue loss as a percentage of approved return, rather than approved revenue requirement.

General recommendations

- That QEC be directed to begin correcting low RCC ratios for fixed charges. In the 2022/23 GRA, the URRC recommended that QEC move at least one third of the way toward full RCC with respect to demand and customer charges. The URRC again recommends that QEC be directed to file an application (GRA Phase 2, rates only) in a timely way to begin making these necessary changes. The URRC considers that the recommended correction should be relatively easily accomplished as QEC already has the information available in the 2022/23 GRA and in QEC's responses to information requests in that proceeding.
- That QEC be directed to provide more information about a standard level of service related to the connection of NMP projects in its next GRA or NMP application.

48. Nothing in this report shall prejudice the URRC in its consideration of any other matters respecting QEC.

ON BEHALF OF THE
UTILITY RATES REVIEW COUNCIL OF NUNAVUT



DATED: May 16, 2023

Monica Ell-Kanayuk, Chair
Utility Rates Review Council of Nunavut