

Policy Section: Corporate

Policy #: 9.01

POLICY STATEMENT

Pursuant to its legislative mandate to plan and provide for Nunavut's long-term energy needs for affordable energy, Qulliq Energy Corporation (QEC) supports the development of renewable energy by Independent Power Producers (IPP), for sale exclusively to QEC.

To facilitate this, QEC has developed the IPP Program. Through this program, QEC endeavors to augment its energy generation with renewable energy. It provides opportunities to Inuit organizations, Regional Inuit Associations, and Inuit-owned entities to develop local, renewable energy that best serves the long-term economic interests and energy self-reliance of Nunavummiut, reduce Nunavut's carbon footprint and facilitate the purchase of such energy by QEC without compromising the safety, quality, and reliability of QEC's power distribution system or increase costs to its customers.

GUIDING PRINCIPLES

The Independent Power Producers Policy promotes the following Inuit Societal Values:

Piliriqatigiinniq / **Ikajuqtigiinniq** (working together for a common cause): it requires the collaboration of multiple stakeholders throughout the territory, to reduce greenhouse gas emissions and increase economic opportunities for Nunavut.

Qanuqtuurniq (being innovative and resourceful): it utilizes innovative and proven energy technologies that rely on renewable energy resources in Nunavut which can be integrated into QEC's power distribution system.

Avatittinnik Kamatsiarniq (respect and care for the land, animals, and the environment): It reduces dependence on diesel fuel to produce energy and helps mitigate greenhouse gas emissions through the program proponents' renewable energy projects in Nunavut.

Inuuqatigiitsiarniq (respecting others, relationships, and caring for people): QEC values, respects and cares for the relationships it has with its customers and the environment in which it operates. QEC prioritizes that its customers have access to electricity generated from renewable energy resources, at an affordable cost. QEC values and respects the relationships that it will build with the Independent Power Producers of energy in Nunavut.

APPLICATION



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This policy applies to eligible Independent Power Producers who wish to generate electricity from eligible renewable energy resources in Nunavut, for sale exclusively to

QEC. Independent Power Producers must have prior experience in operating and maintaining power generation facilities.

QEC will be responsible for capacity and electricity supply requirements.

This policy does not apply to renewable energy projects covered under QEC's Net Metering Program and Commercial and Institutional Power Producers Program.

DEFINITIONS

Call for Power – is the solicitation of Independent Power Producers, to produce electrical generation capacity using renewable energy resources in Nunavut. This Call will be executed through QEC's procurement process.

Community Power – is any project where a municipality, Inuit organization, or Inuitowned company in Nunavut, owns a controlling interest in a renewable energy project wherein the majority of the social and economic benefits are distributed locally in Nunavut.

Eligible energy sources - are renewable energy resources authorized under the IPP including, but not limited to, wind, solar, hydro, geothermal and other energy resources as QEC may from time to time designate as such.

Energy - means electricity and is measured in kWh.

Generation and Connection Agreement (GCA) - is an agreement that an Independent Power Producer signs with QEC after the renewable energy generating facility have been built and is ready to be connected to the QEC power distribution system.

Connection Impact Assessment - is a detailed engineering analysis of a project's impact on QEC's electrical generation and supply grid. The results of this analysis include a technical report outlining a project's feasibility, the technical specifications needed for the project, and the project's impact on QEC's generation and distribution system.

Inuit organizations - refer to designated Nunavut-Inuit-owned organizations under the Nunavut Agreement including Development Corporations and Regional Inuit Associations.



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Inuit - owned companies - are companies/entities that are at least 51% owned by Nunavut Inuit and registered under the Inuit Firm Registry Database maintained by Nunavut Tunngavik Incorporated (NTI).

Power - means capacity and is measured in kW.

Power Purchase Agreement (PPA) - is a legal contract between an Independent Power Producer and QEC that details the commercial terms, each party's legal obligations, and rights with respect to the sale of energy from a renewable energy generation facility to QEC.

Municipality - refers to one or the other of Nunavut's 25 communities.

Renewable Energy - is energy derived from natural processes that are replenished at a rate that is equal to or faster than the rate at which it is consumed. There are various forms of renewable energy, derived directly or indirectly from the sun or the heat generated deep within the earth. They include energy generated from solar, wind, geothermal, hydropower, and ocean resources, solid biomass, biogas, and liquid biofuels. Biomass is a renewable resource only if its rate of consumption does not exceed its rate of regeneration.

Technical Interconnection Requirements (TIR) - is a document establishing criteria and standards that must be met, to ensure that the interconnections of new renewable energy generating facilities do not adversely impact the safety, quality, or reliability of QEC's power distribution system.

ROLES AND RESPONSIBILITIES

Qulliq Energy Corporation:

In administering the IPP Program, QEC shall:

- Develop and oversee any Calls for Power as deemed necessary
- Develop a document that outlines the Technical Interconnection Requirements for safety, reliability, and power quality
- Review Independent Power Producers' technical designs and operating philosophies
- Develop all commercial terms for generating facilities that outline the capacity for generation and fix the price at which it will buy energy from an Independent Power Producer
- Ensure public transparency and standardization when evaluating and establishing Power Purchase Agreements and the Generation and Connection Agreements



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 Reserve the right to disconnect an Independent Power Producer's generating facility on reasonable grounds, including but not limited to safety, operation, maintenance, or reliability, as outlined in the Power Purchase Agreement

Independent Power Producer:

In participating in the IPP Program, Independent Power Producers shall:

- Meet QEC's interconnection requirements for safety, reliability, and power quality as outlined in the Technical Interconnection Requirements
- Adhere to good engineering standards and operating practices as established by QEC, as well as, national codes and standards
- Be responsible for obtaining Government of Nunavut electrical inspection permits and required regulatory approvals, including environmental assessments
- Be subject to QEC inspection and approval of the generation facilities' design, equipment and operating philosophy
- Be responsible for all direct and indirect costs associated with the construction of the plant, including the construction of power lines to the nearest QEC distribution interconnection, required system modifications, required changes to the existing QEC distribution lines and connection infrastructure as determined by QEC
- Be responsible for all costs related to interconnection studies and technical and administrative work associated with the installation of the proposed project
- Enter into a standardized Power Purchase Agreement with QEC
- Enter into a standardized Generation and Connection Agreement with QEC
- Design, construct, install, commission, operate, and maintain ownership of the renewable generating facility, including paying all costs associated with operation, maintenance, and decommissioning

An Independent Power Producer that fails, neglects or refuses to sign or be bound by the PPA and/or the GCA will not be connected to the QEC power distribution system and if already connected, will be disconnected.

PROVISIONS

1. Parameters of the IPP Program

There are 2 separate approaches to the development of IPP projects in this program:

a. Community Power

This approach is for community scale Independent Power Producers that can supply a substantial portion of a community's energy requirements. Municipalities,



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Inuit organizations and Inuit-owned companies/entities can apply to the IPP Program at any time, for community power generation. Municipalities and Inuit - owned companies/entities must have a controlling interest (51% or greater) for community power projects.

Applications will be approved through QEC's sole source process. Community power projects must be sized according to the electrical needs and the capacity size of the existing generation in the community. These applications will be approved on a first-come-first-serve basis, subject to availability, the ability to provide power in a safe and reliable manner and any applicable power generation or capacity limits for a particular community.

b. Call for Power

This approach is for customers with large-scale IPP capacities that can be integrated into QEC's electrical grid.

Applications will be approved through QEC's procurement process. Municipalities, Inuit organizations, and Inuit-owned companies/entities will be given the right of first refusal on Calls for Power initiated by QEC.

Community partnerships with third parties from outside of Nunavut will require:

- consultations and approvals from Nunavummiut
- minimum ownership share of such projects by the local community, must be 51%

2. Eligibility Requirements:

IPP Program applicants must provide their proposed project's energy source, capacity, location, and any other facility-related data as requested by QEC and identify the owner/representative of the establishment.

Following an initial application, QEC will undertake a Connection Impact Assessment. This will require the applicant to provide technical details of the system and a deposit for costs incurred in undertaking the Connection Impact Assessment.

The total renewable energy generation capacity which ties into a community's power system must not exceed the load demand for the community, less any capacity allocations made or to be made, if any, under the Net Metering and Commercial and Institutional Power Producer programs and as may be determined through renewable energy penetration studies.

No new applications will be approved once the defined limit has been reached.



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3. Technical Interconnection Requirements (TIR)

The TIR are the technical aspects that must be considered to successfully complete an IPP project. These considerations take into account the safety, reliability, and efficiency of the Independent Power Producers' systems.

The IPP connections must not adversely impact QEC's electrical grid.

4. Commercial Terms of Reference

The commercial terms identify and define the parameters of key conditions of a PPA between Independent Power Producers and QEC. The commercial terms outline particular areas of the PPA including:

- Cost responsibilities
- Contract duration
- Purchase price
- Design and permit compliance
- Termination of contract

All Independent Power Producers must adhere to the conditions outlined in the commercial terms.

5. Purchase Price of Renewable Energy

In adherence with QEC's legislative obligation to provide affordable energy to Nunavummiut whilst conversely ensuring that the IPP program does not increase electricity rates of QEC's customers; QEC will purchase energy from Independent Power Producers, at a guaranteed minimum price i.e. the avoided cost of diesel to enable the proponents to secure financing. The purchase price under this program will be reviewed annually by April 1, based on a 3-year historical, territorial average of the avoided cost of diesel.

QEC's ability to pay a higher price for power under the IPP program will be contingent on the availability of external funding or subsidies for this program.

6. Other

a) Scale limits per year for individual projects and overall IPP energy development, will be tied to local generation levels and different for each community. These limits



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will be determined following the conclusion of penetration studies conducted by QEC in each community.

- b) Contract durations will cover a period of 20 years, in line with QEC's standardized Power Purchase Agreement for its renewable energy programs.
- c) At the end of the PPA period of an IPP facility, QEC may elect to purchase the IPP assets, at mutually agreed upon terms.
- d) QEC may purchase energy from more than one Independent Power Producer in a community.
- e) The IPP program must not result in cross-subsidies between regular customers and customers with IPP capacity.
- f) QEC has the right to apply de-rating to IPP facilities, terms of which are detailed in QEC's standardized TIR and GCA.

PREROGATIVE OF EXECUTIVE COUNCIL

Nothing in this directive shall in any way be construed to limit the prerogative of the Executive Council to make decisions or take action respecting independent power production and the Government of Nunavut, outside the provisions of this directive.

<u>SUNSET</u>

This policy shall be in effect from the date of signature until month, day, year.