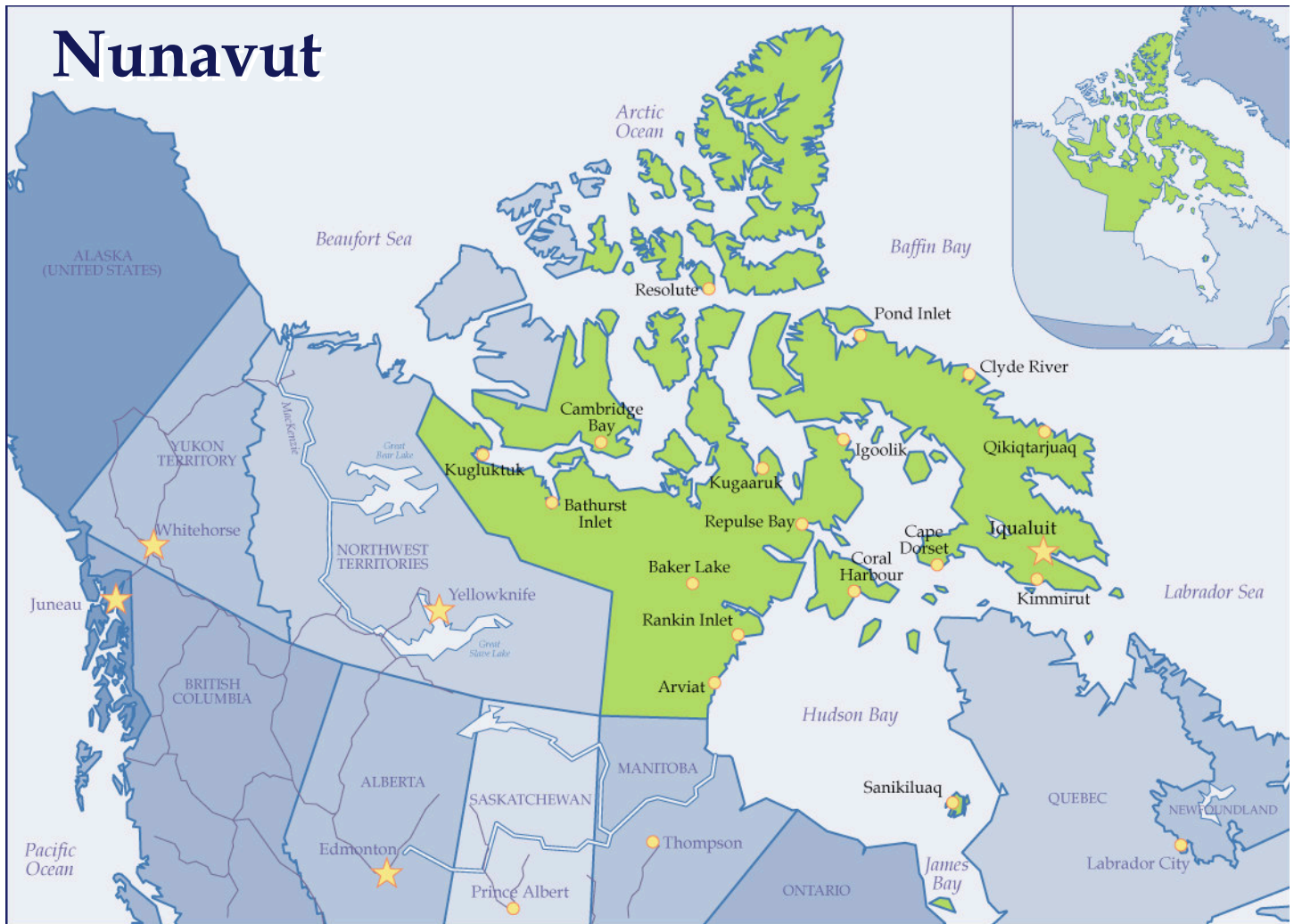


# Nunavut



## MACRO ECONOMIC INDICATORS

Population (2000)	29,400
Population density (2000)	-
GSP per capita, \$, (2003)	\$ 24,000
GSP growth (CAGR 1997-2001)	4.6% p.a.

## ELECTRICITY SECTOR STATISTICS

Installed capacity ('03)	50 MW
Peak demand ('03)	28 MW
Consumption ('03)	129 GWh
Load growth ('03-'08)	3.0% p.a.
Generation ('03)	144 GWh
Imports	- MW
Exports	- MW

## USEFUL LINKS

Nunavut Power  
<http://www.nunavutpower.com>  
 Government of Nunavut  
[www.gov.nu.ca](http://www.gov.nu.ca)

## NUNAVUT DIRECTORY

### REGULATOR

Ministry of Energy

### GENERATION

Nunavut Power

### WHOLESALE MARKET

*There is currently no wholesale market in Nunavut*

### TRANSMISSION

Nunavut Power

### DISTRIBUTION

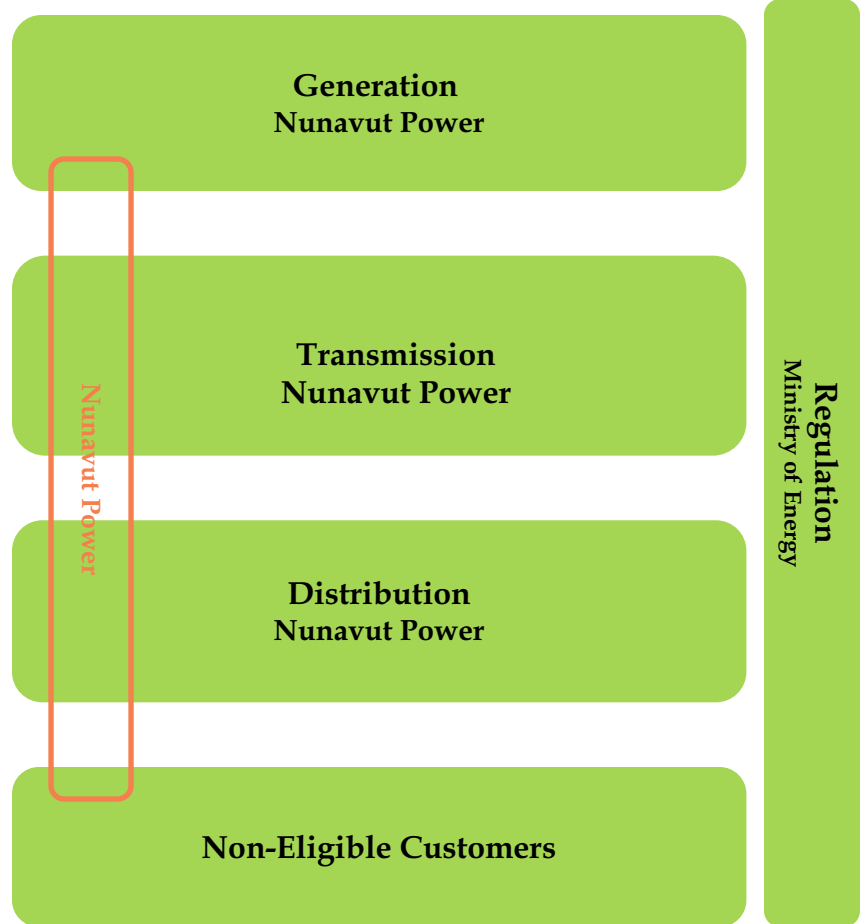
Nunavut Power

### SUPPLY

*Customers are not free to choose their own suppliers*

# NUNAVUT SNAPSHOT

- After creation of Nunavut province on March 31, 2001, all physical assets of Northwest Territories Power Corporation (NTPC) located in Nunavut granted to Nunavut Power Corporation (NPC)
- NPC was established by the Nunavut Power Utilities Act as a Qulliq Energy Corporation (QEC) subsidiary; responsible for the generation and distribution
- QEC is a Crown Corporation owned 100% by the Government of Nunavut (GN)
- The Nunavut Power Utilities Act was renamed the QEC Act in March 2003
- Nunavut system consists of isolated diesel generators and is totally regulated
- Nunavut has no interconnections with neighboring provinces
- The Ministry of Energy has jurisdiction over QEC. The Minister employs a Utility Rates Review Council to provide independent advisory services in review of utility applications, major capital projects, and electricity rates



## GENERATION

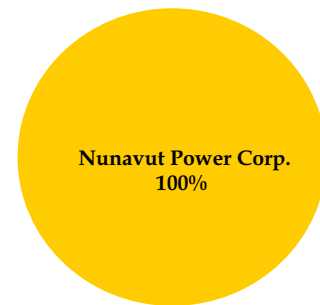
- NPC is the only generator in Nunavut
- NPC totally depends on the use of diesel fuel to generate power and uses more than 40 million liters of fuel per year
- NPC is committed to reducing this dependency through an Energy Action Plan that was approved in December 2003. The plan outlines wind and hydro opportunities in Nunavut to potentially reduce fuel consumption and green house gas emissions
- As the price of diesel fuel increases, these projects become more necessary and more viable
- Additionally, demand side management opportunities will be explored where projects have the potential to facilitate energy conservation in Nunavut's communities and can defer supply side capital expenditures. NPC is proposing demand side education and information initiatives to improve customer knowledge on reducing electricity consumption

### KEY PLAYERS

#### Capacity

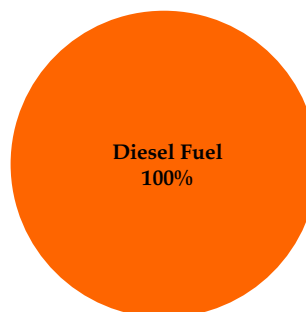


#### Generation

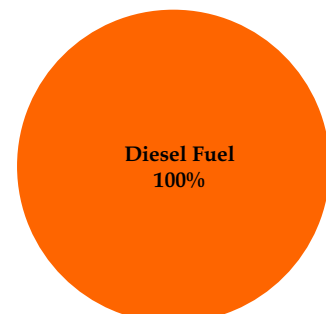


### ENERGY SOURCES

#### Capacity



#### Generation



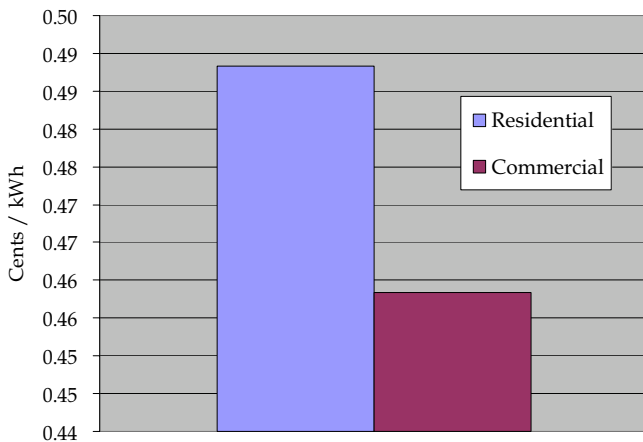
Source: Nunavut Power Corporation

## NUNAVUT ELECTRICITY SYSTEM MAP



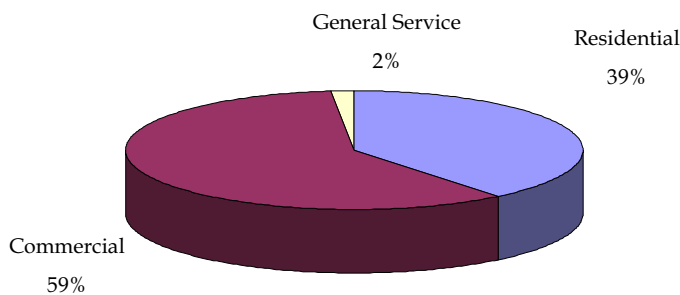
Source: Nunavut Power Corporation

## AVERAGE PRICE BY CUSTOMER GROUP, 2004



Source: Nunavut Power Corporation

## DEMAND, CUSTOMER TYPE, 2002



Source: Nunavut Power Corporation

### TRANSMISSION

- NPC owns and operates the various independent transmission systems that exist in the province
- There is no regional electricity transmission infrastructure (each of the 25 communities has an independent system)
- There are no interconnections with outside provinces

### DISTRIBUTION & SUPPLY

- NPC is the distribution system operator
- NPC serves about 11,000 customers
- Distribution and retail supply are not separated; customers cannot choose their supplier and there are no independent suppliers in the province
- NPC currently has a community rate structure. In February 2005, the Utility Rate Review Council (URRC) recommended the creation of a fuel rate rider and suggested NPC implement a capital rate rider to address the longer-term capital cost disparities between Nunavut communities.
- NPC has an average return on rate base for the 2004/05 Test Year of 8.0%. There is also a rule of thumb that for every 1% that debt exceeds 60%, the return on equity should increase by 20 basis points
- NPC is proposing an Alternative Energy Rate of \$.005 per kWh. The funds derived from the application of this rate would be separately accounted, administered by NPC and used to facilitate alternative energy initiatives in Nunavut and would be applied as a separate rate over and above the rates

## ABOUT LONDON ECONOMICS INTERNATIONAL LLC AND LONDON ECONOMICS PRESS

London Economics Press is part of London Economics International LLC, which provides global economic, financial, and strategic advisory professional services focused on energy and infrastructure sectors. The firm combines detailed understanding of specific network and commodity industries, such as electric power, with a suite of proprietary quantitative models and pragmatic economic and business analysis to produce reliable and comprehensible results. London Economics also has substantial experience in assessing the viability of large-scale projects, enhanced through its project work in merger and acquisition deals and due diligence projects.

Based in Boston and US-owned and operated, the firm has its roots in advising on the initial round of privatization of electricity, gas, and water companies in the UK. Since then, London Economics has completed countless projects for private sector clients, market institutions, and governments on privatization, asset valuation, deregulation, tariff design, market power, and strategy in virtually all deregulated markets worldwide. In assisting governments and private entities in the sector development and transition process, London Economics has provided integrated solutions to complex socio-economic issues, involving sector reform, financing, governance, tariff design, and impact analysis.

The company has assisted clients with a wide range of engagements associated with energy, water and other infrastructure, including:

**Regulatory Economics** Our skills in comparative efficiency evaluation, estimating elasticities and willingness to pay, cost causation identification, tariff modeling, and innovative rate design enable us to advise on a wide range of regulatory issues.

**Asset Valuation** The firm applies sophisticated modeling and forecasting techniques such as real options and statistical based scenario analysis to develop appropriate valuations for infrastructure assets.

**Privatization and Unbundling** London Economics advises on the configuration of firms to be privatized, and on how integrated utilities can restructure themselves into distinct business units.

**Mergers and Acquisitions** London Economics provides full service due diligence support and independent financial modeling to support bid preparation and transaction closings.

## REPRESENTATIVE CANADIAN ENGAGEMENTS

LEI has worked for utilities, regulators, market operators, and IPPs across Canada in a variety of capacities, including asset valuations, market analysis, due diligence support, and market design. Some specific projects in Canada are listed below:

**Alberta** Developed a sales process for strip capacity contracts in Alberta market and designed holding restrictions to minimize strategic bidding

**Ontario** Advised on second generation PBR for electricity distribution companies

**Québec** Analyzed the impact of electricity deregulation in neighboring regions on Hydro-Québec

**British Columbia** Assessed regulatory and market developments in Pacific Northwest and identified potential acquisition opportunities

**Ontario** Performed due diligence associated with possible acquisition of a stake in major Ontario transmission and distribution company

**Alberta** Performed electricity industry structure review and extensive stakeholder consultations to develop recommendations regarding institutional reform

**Ontario** Examined implications of proposed Ontario Standard Service Supply Code for generators

**Québec** Analyzed implications of poor hydrological conditions on Hydro-Québec's ability to export and potential implications for NPCC suppliers



717 Atlantic Avenue  
Boston, MA 02111  
617.494.8200 PHONE  
617.494.4746 FAX  
[www.londoneconomics.com](http://www.londoneconomics.com)

www.LondonEconomicsPress.com

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