

# Five Nations Energy Inc.



Presented by:  
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And  
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# James Bay area of Ontario





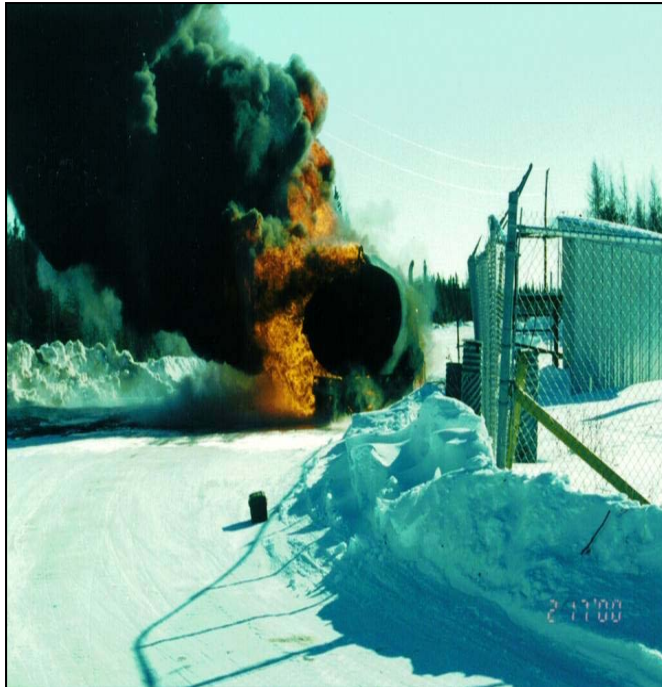


# History of Electricity Supply

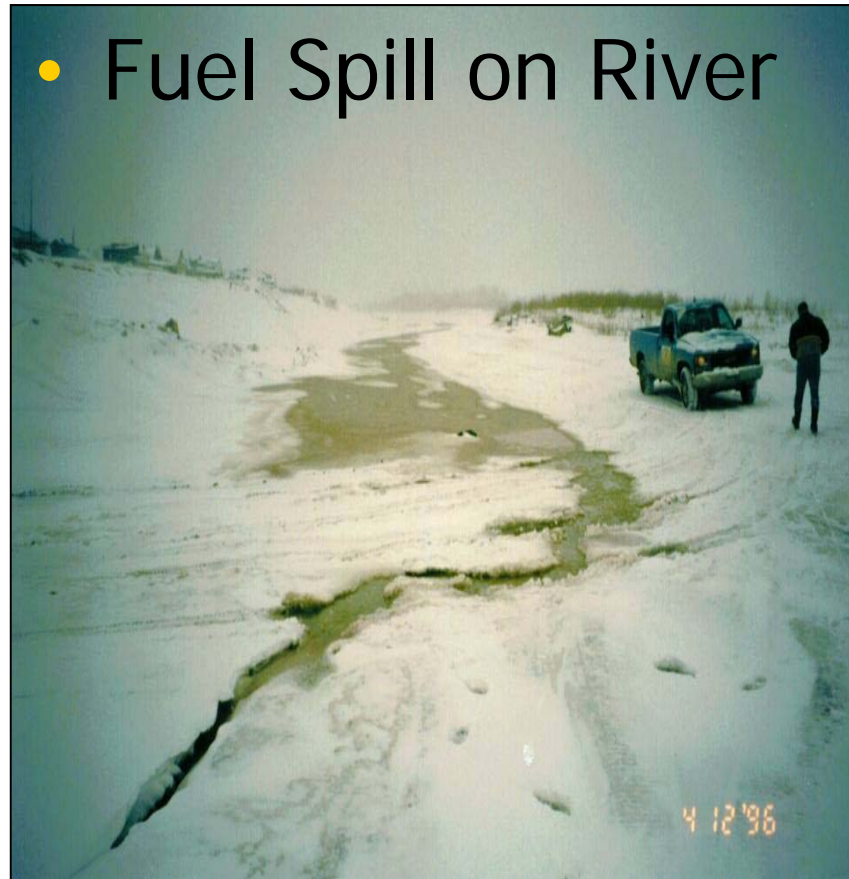
- First energization occurred in Fort Albany-late 1950's Department of Defense Mid-Canada radar base as part of the Distant Early Warning system installed diesel generators.
- Transferred to Catholic Mission mid 1960's
- Distribution system extended to community residents early 1970's and operated by Ontario Hydro
- Low Voltage (8132volts) line built to Kashechewan mid 1970's, distribution system built and operated by Ontario Hydro
- Early 1970's diesel generation and distribution system built and operated by Ontario Hydro
- All based on Electrification agreement between Federal Government and Ontario Provincial Crown Corporation Ontario Hydro



# Issues with Diesel-Fort Albany



# Issues with Diesel-Attawapiskat



# From Diesel To Grid Based Supply

- Early 1970's - Ontario Hydro Remote Community Systems operated diesel generators in the communities
- Federal Government (Indian and Northern Affairs Canada-INAC) covered the cost for the initial construction of generation and distribution assets for the communities
- Generation and distribution assets then operated by Ontario Hydro
- INAC covered costs of upgrades to diesel generators required by community growth





# Energy supply policy impacts

- Indian & Northern Affairs Canada Policy
  - Restricting community growth by insufficient energy supply
    - Original residential supply limited to 20 amps, increased to 60 amps, by mid 90's 100 to 200 amp allowing electric heat
  - Limited infrastructure growth
    - Schools
    - Arenas
    - Health Centres/Nursing Stations
    - Housing



# Energy Supply Policy impacts



# Identifying a solution:

- 1985: Bird and Hale Report:
  - Determined that 115kv high voltage line technically feasible to replace diesel plants
    - Commissioned by NAN (Provincial Treaty Organization) and MNDM (Government of Ontario-Ministry of Northern Development and Mines)
    - At the urging of the community of Attawapiskat
- 1994: Nishnawbe Aski Nation and Mushkegowuk Council commission energy study in Attawapiskat
  - Community impetus behind study, not government or industry
  - Examined Wind, Solar, Small Hydro, Biomass, transmission line connection to Ontario electricity grid at Moosonee
  - Determines that transmission line connection is most cost effective solution for the long term



# Transmission in Ontario Mid 1990's





# Identifying a solution:

- 1996: Chiefs pass a resolution regarding the energy crisis in their communities
  - Communities support process by loaning \$41k each to the Project: FN's paid back once financing achieved.
- 1997: Pre-selection process of contractors and designers resulting in SNC Lavalin commissioned to carry out a feasibility study
- September 1997: SNC Lavalin Feasibility study and Fenco MacLaren Environmental Impact Study show that the transmission line is economically viable
- Decision is made by Chiefs to proceed



# Community Engagement & Support



# Five Nations Energy Inc. formed

- Incorporated September 1997 to realize the dream of an unrestricted, reliable, safe, source of energy with minimal environmental impacts for Attawapiskat, Kashechewan, and Fort Albany.



Former Chief of Attawapiskat, Ignace Gull, and the late Ernie T. Sutherland, 1<sup>st</sup> President of FNEI and former Chief of Moose Cree First Nation





# FNEI Line Route along James Bay





# Selling the idea-how to pay for it

- Initial capital cost estimates \$50Million
- Capital and Operating costs initially to be covered by customers
  - Lobbied for legislation change
  - Transmission pool concept “postage stamp” rate instituted
- Capital Cost of Generation Upgrades to INAC
  - \$5 Million per year in one of each of the three communities, electricity subsidies
- INAC signs multi-year funding agreement for \$33 Million with FNEI
- Funding agreement used as collateral for commercial loans



# Construction financing finalized December 2000

- No Equity Partners
- Initial Financing:
  - \$12 million loan from the Bank of Montreal
  - \$12 million loan from Pacific and Western Capital
  - \$11 million sale of the Moosonee tapping station and initial 50 miles of the transmission line to Hydro One Networks-(Provincial contribution)
  - \$3.4 million loan from Pacific and Western Capital
  - \$2 million loan from SNC Lavalin Capital Ltd.
- \$4.9 million interest free loan from the Northern Ontario Heritage Fund Corporation to cover interest costs during construction
- All financing based on confidence by senior lenders that FNEI team in place would be able to repay loans



# Engineering, Design & Construction team members Selected

- SNC Lavalin Inc.
  - World renowned, Canada's largest engineering firm
- PowerTel Utility Contractors Ltd.
  - Extensive experience in North-Eastern Ontario
  - Understood terrain-muskeg
  - Over 40 years experience
- Turnkey contract between FNEI and SNC Lavalin with PowerTel as constructor

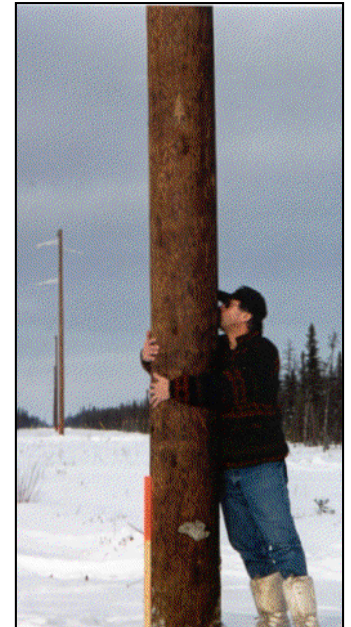


# Construction!





# Construction!



# Grand Opening Celebrations



# After financing arranged, more challenges.....

- Regulatory Challenges
  - From isolation to full fledged members of the Ontario electricity industry
  - May 1, 2002 Major Regulatory Changes (postage stamp rate)
- Ontario Energy Board (provincial regulator) transmitter license
- Initial short term agreement with Hydro One for operations and maintenance and emergency response
- Operating agreement with Independent Electricity System Operator
- Line Insurance unavailable-Self Insurance



# After financing arranged, more challenges.....

- Local Distribution Company set up and regulatory compliance including licensing
  - Existing distributor unwilling to continue
  - 3 new corporations with staff/boards/etc. setup
    - Manager, Clerk, Utility workers
    - Office and required equipment
    - Utility equipment, safety equipment
    - Inventory, spares,
    - Training and more training
    - Collections
    - Support of Chief and Council-no interference in collections!
    - Agreements with transmitter, Independent Electricity System Operator
    - Rate application approved by Ontario Energy Board





# Local Distribution Companies Setup



# What were some of the obstacles to success?

- Lack of experience and major prejudice against First Nations and First Nation business ability
- A constantly changing regulatory environment
  - caught in the midst of Ontario's electricity industry overhaul
  - rules not set and changing frequently
- Financiers saw the regulatory uncertainty as additional risk factors
- Lack of collateral and what collateral there was (a transmission line) was not easy to foreclose upon
- Identification and ownership of environmental liability



# What were some of the other challenges?

- Ongoing political changes within the First Nations
  - Suspicion from new leadership
  - Fear of change
- Bridge support in federal and provincial governments
- Higher residential consumption resulting in higher electricity bills although rates same as or lower than the rest of Ontario
  - Major housing retrofits and water and sewer infrastructure projects coincided with FNEI project
    - crawl space heating, hot water tanks, automatic washing machines, electric clothes dryers, electric house heating



# How did we succeed?

- Community Support
  - Key informal un-elected community leaders voiced support
  - Constant informal interaction/communication by key FNEI personnel
- Professional Project Team
  - Local team members with established track record of working with communities
  - Other professionals brought in as needed
  - Personal Integrity in team members key-established trust
- Regulatory and Legislative involvement
  - Project Team members established and maintained key legislative and regulatory support (example - Postage stamp transmission rate)
- Identification of “Champions” within government and industry
- Local and Regional Political Support available when required
  - Chiefs/community leaders realized this was infrastructure. A key component in their community’s development but not the answer for all the existing problems (i.e. housing)





# Operational Challenges-Albany River Breakup 2006





# Operational Challenges-Albany River Breakup 2006-Repairs



# DeBeers Canada Inc-Victor Project Diamond Mine

- DBC originally planned to utilize diesel generation
  - Planned for annual use of 13.2 Million US gallons of diesel fuel, shipped by sea, then u/g pipeline 60 miles upstream from James Bay
- Serious environmental concerns were raised by the communities, DBC decided to pursue grid based electricity for the site's significant electricity needs.
- DBC applied for and received permission from the Ontario Energy Board to connect to the Ontario wide transmission system to supply the Victor Project.
- To do this, reinforcement is needed on the transmission system including a new 138kV line from Otter Rapids to Kashechewan and modifications to the existing substations.
- Line twinned from Moosonee to Kashechewan and substations upgraded
- \$34million worth of assets transferred to FNEI



# FNEI has operated as a transmitter since Nov 2001

- Over \$20 million additional capital investment since original construction
  - \$11 million loan, remainder self-financed
- Capital projects included:
  - Fibre Optic telecommunication installation
  - Upgrades and additions to original equipment
  - Protection of line from ice damage
- Present value of assets exceed \$90 million
- Recipient of numerous awards
- Profiled by Conference Board of Canada – one of top 10 aboriginal corporations
- 6 annual scholarships awarded every year since 2003





# October 2007 -FNEI wins Northern Ontario Business Award



**First Nations Business**  
Award of Excellence





# Any Questions?

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