

**Atlantic Canada**  
**Electricity Market Issues**

**Presented to**

***CAMPUT 2003***

***Banff***

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**By**

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**Énergie NB Power**

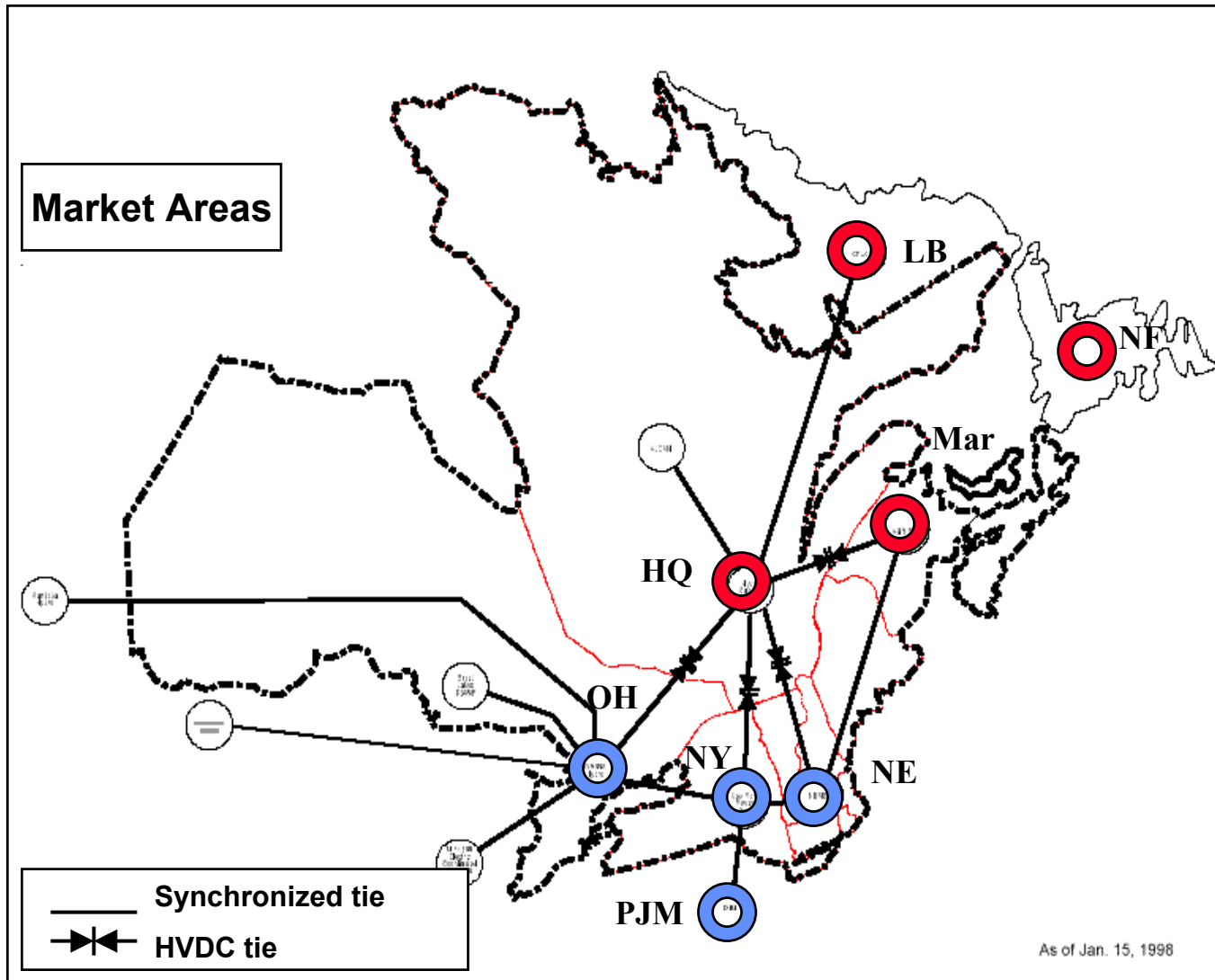
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# Presentation Summary

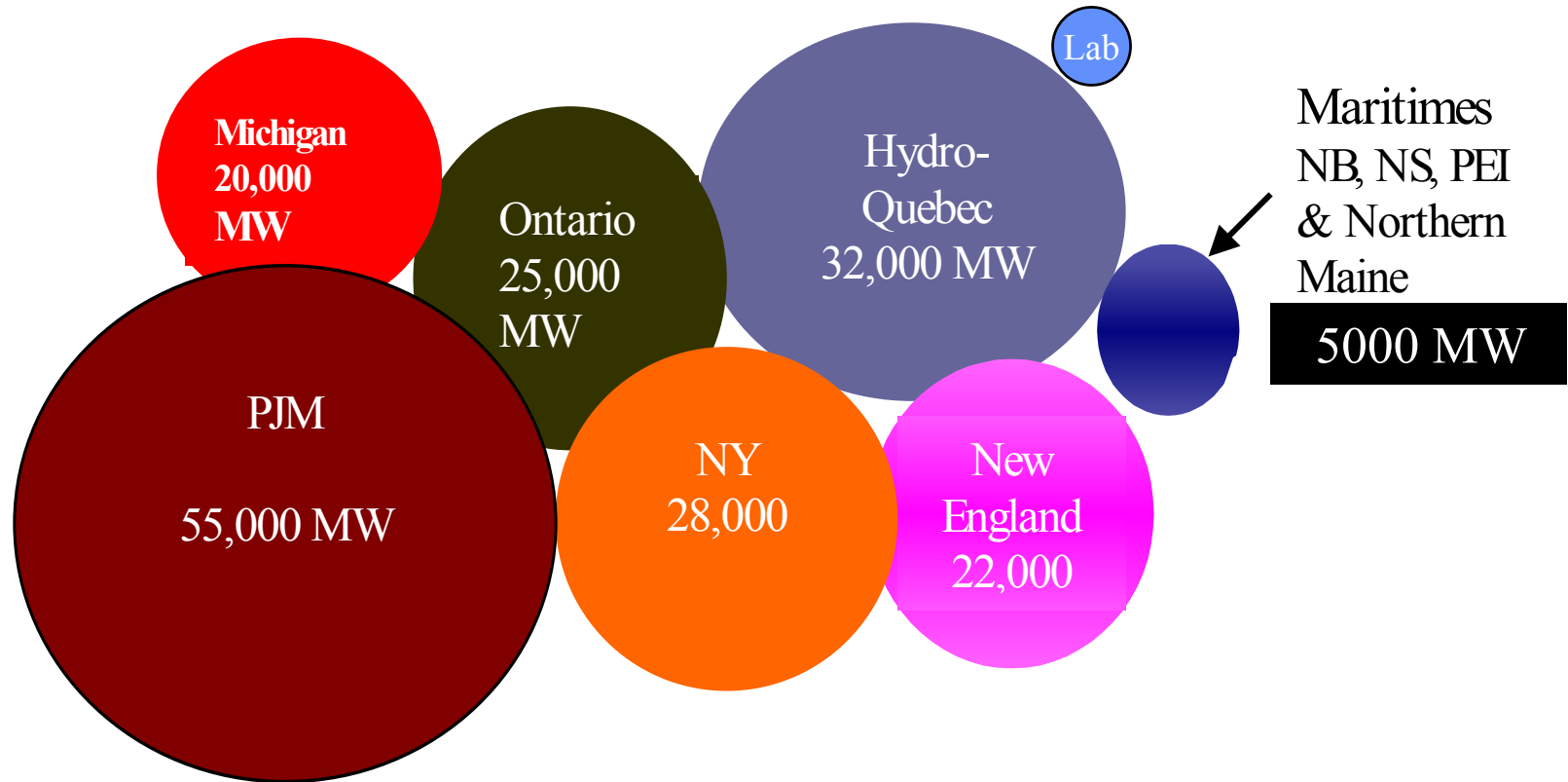
- **Regional Market**
  - Background and trade patterns
- **Future Directions**
  - Opportunities and Issues
- **Possible solutions**
  - Projects and Regulatory



# Northeast Regional Market



# Northeast Market Scope



Old Data - Recent Experience is 10% increase!!!



**Énergie NB Power**

# Market Characteristics

- **Ontario, New York, New England, PJM**
  - Independent multi-settlement markets
  - Almost complete retail access
- **Quebec**
  - Functionally unbundled OATT
  - Wholesale access
- **Newfoundland & Labrador**
  - Regulated monopoly



# Market Characteristics

- **Nova Scotia**
  - Regulated monopoly
  - Target wholesale access for 2005
- **PEI**
  - Wholesale access (one muni)
  - Implement NB OATT
- **New Brunswick, Northern Maine**
  - Independently implemented OATT
  - Retail access



# Regional Trade Patterns

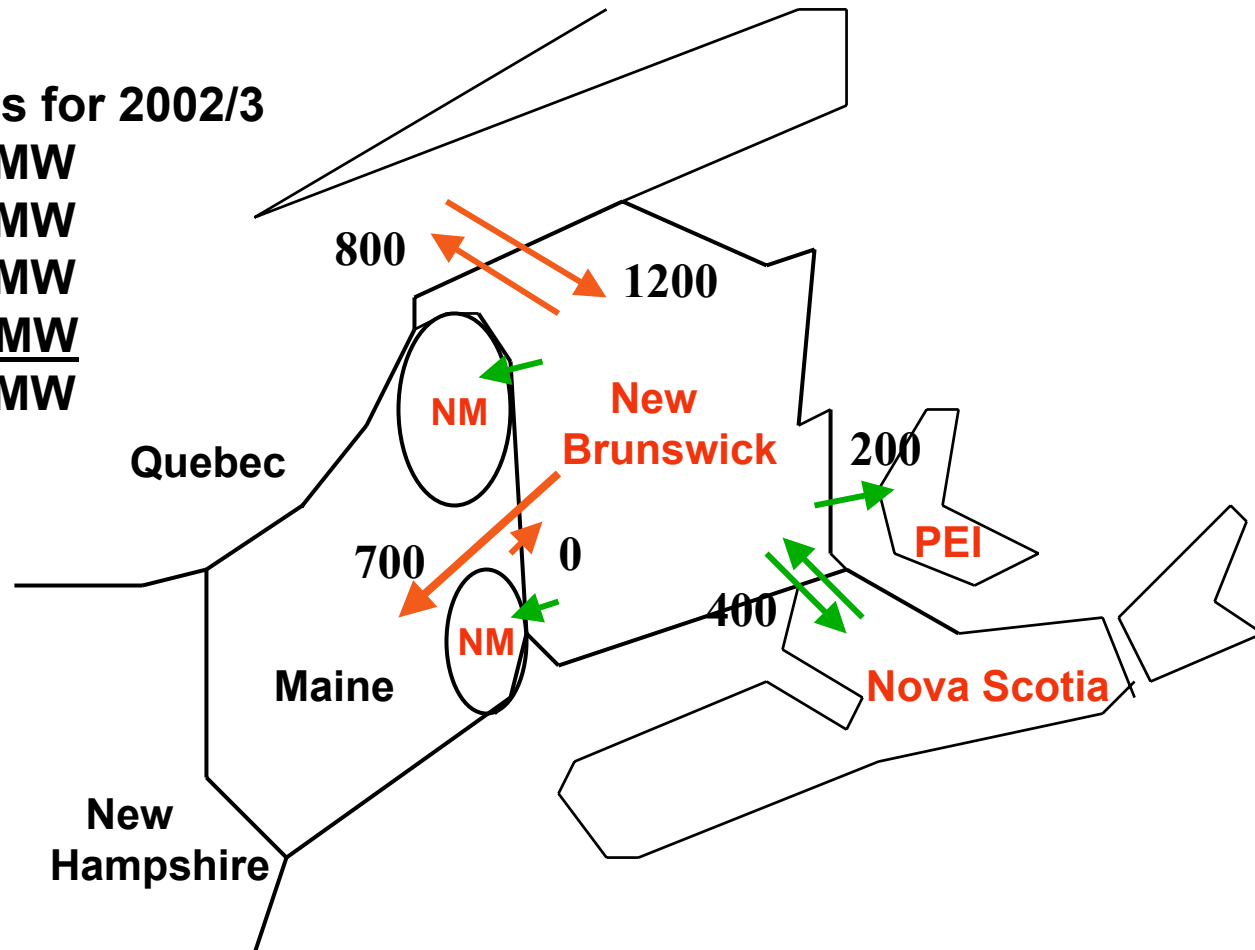
- **NL is isolated from markets**
  - Export under contracts to HQ
- **Quebec and Maritimes**
  - Winter peaking systems
  - Export surplus in summer
  - Import if possible when economic in winter



# Maritime Control Area

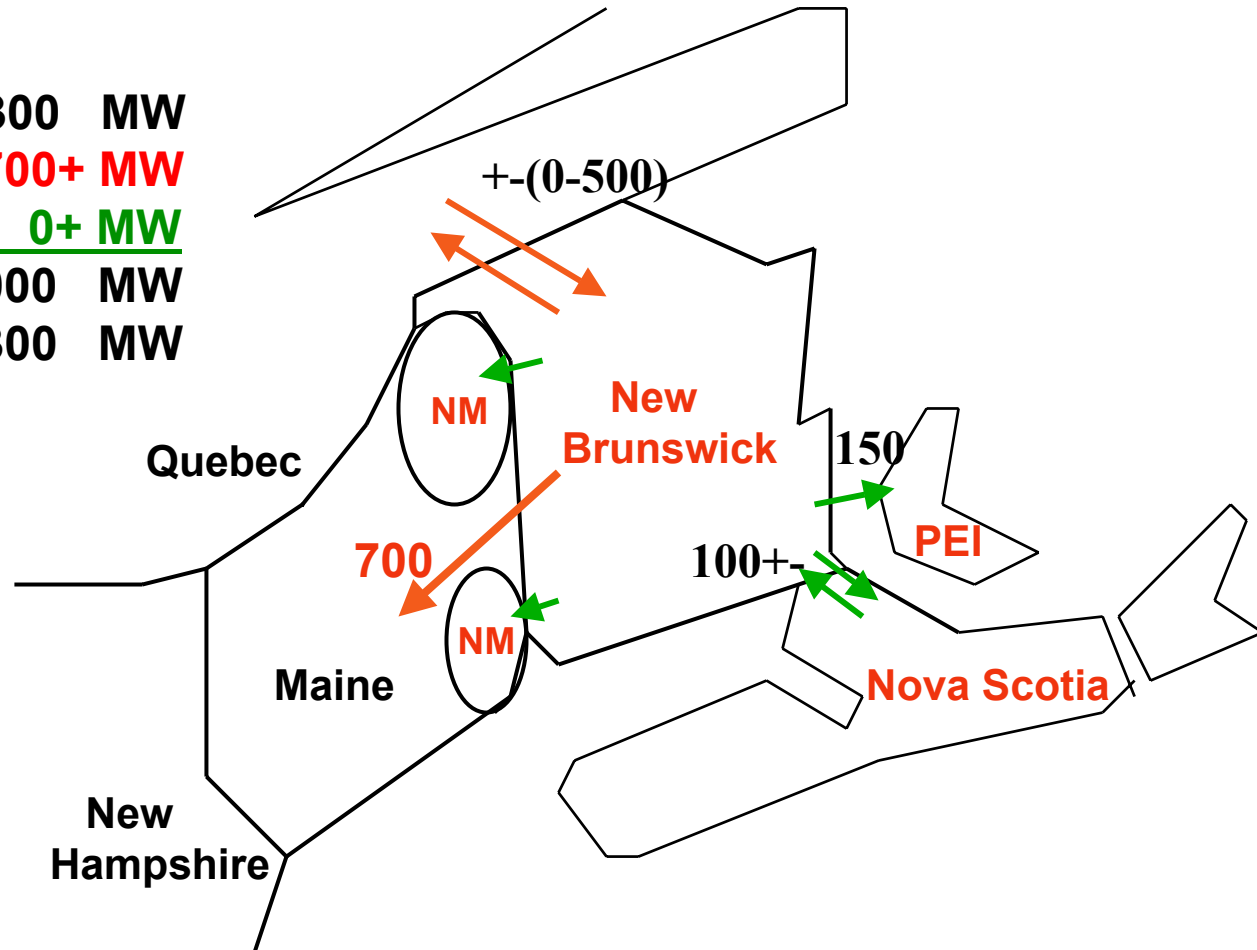
## Load estimates for 2002/3

NB	3090 MW
NS	2040 MW
PEI	205 MW
NM	145 MW
<b>Total</b>	<b>5480 MW</b>



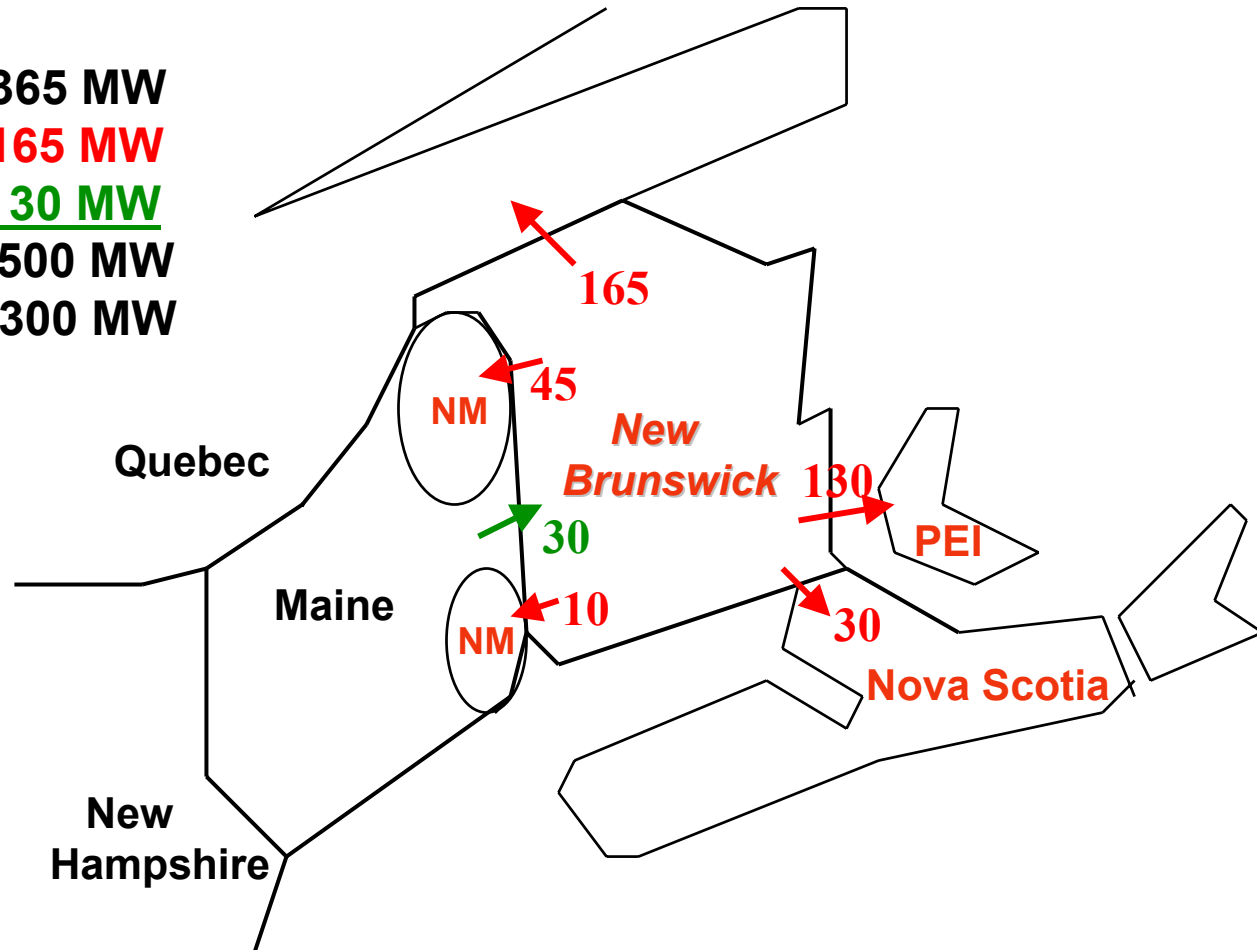
# Typical Summer Operation

Area Load	3300	MW
Exports	700+	MW
Imports	0+	MW
Net Load	4000	MW
Resources	6300	MW



# Winter Peak - 8:00 AM, Feb 17, 2003

Area Load	5365 MW
Exports	165 MW
Imports	30 MW
Net load	5500 MW
Resources	6300 MW



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# Opportunities - Market Development

- **Load growth continues despite natural gas**
- **Maritime area is deficient in capacity**
- **A variety of players to deal with**
  - Eligible market loads in NB, PEI and NM
  - Traditional utility suppliers (MECL, WPS, NSP, NBP, HQ)
  - Marketers (EA, Emera, ??)
  - NBP Disco RFP
- **Likely little or no exit fees (in NB)**
- **Good steam hosts for co-generation**



# Opportunities - Projects

- **Quebec**
  - New hydro
  - IPP natural gas
  - Disco RFPs
- **Newfoundland & Labrador**
  - On island ??
  - Lower Churchill



# Opportunities - Projects

- **NB Power projects**
  - 1000 MW Coleson Cove refurbishment
    - Conversion from oil to low cost Orimulsion
  - 635 MW Point Lepreau nuclear life extension
  - Quality energy supply but no new capacity
- **NS projects**
  - 50 MW CT plus ???
- **PEI project**
  - 150 MW combined cycle targeted
  - Fuel supply an issue

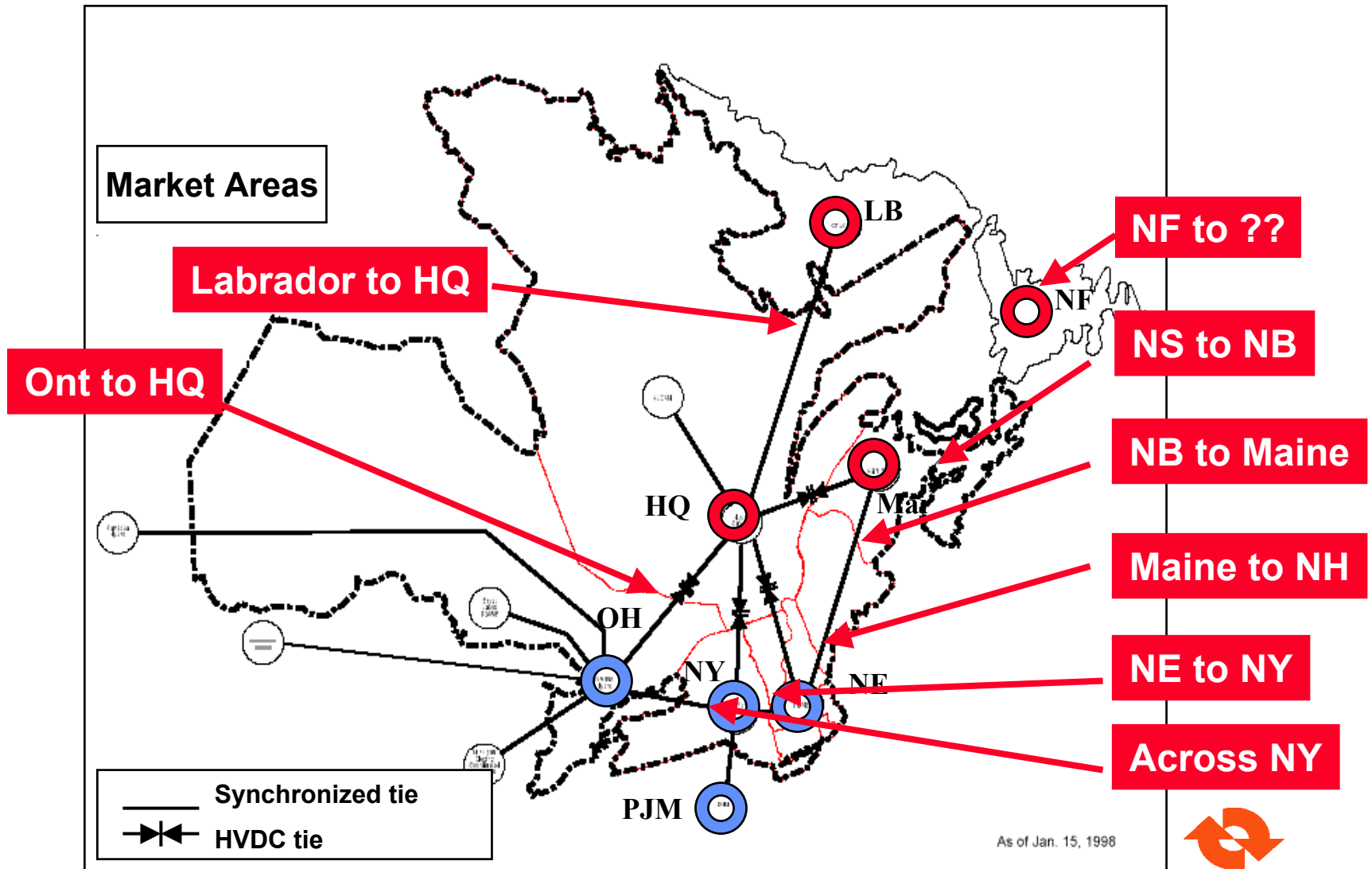


# Issues - Fuel Supply

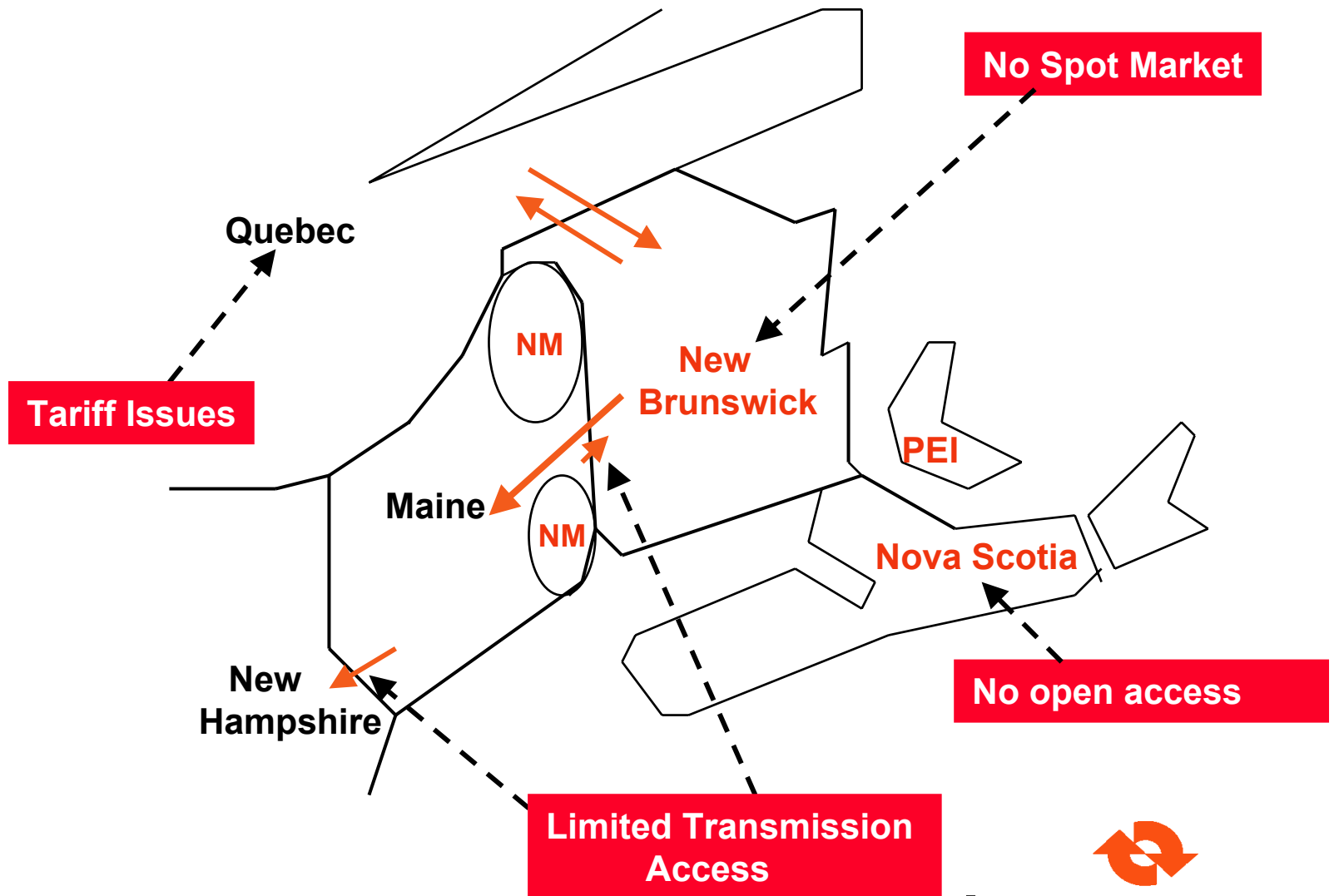
- **Natural gas challenge**
  - Existing SOEI natural gas is all contracted
  - Possible new supplies from where?
    - SOEI players have downgraded reserve estimates
    - Encana have postponed “Deep Panuke”
    - Back haul from Boston will be higher cost
    - Irving LNG project?
- **More coal has CO<sub>2</sub> challenges**
- **Developers must be creative**



# Issues - Transmission Limitations



# Issues - Maritime Market Area



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# Project Solutions

- **Transmission projects**
  - Quebec-Ontario 1200 MW HVDC
  - NB-Maine second 345kV tie line
  - Maritimes- NE/NY by undersea HVDC (Neptune,??)
  - Labrador - HQ reinforcement



# Regulatory Solutions

- **RTO developments**
  - Maritime area (ECTO?)
  - NERTO? (with Ont and NB?)
  - Remove pancaking
  - Improve access
- **Tariff improvements**
  - Implement NB OATT
  - Develop PEI & NS OATTs
  - Labrador??



# Regulatory Solutions

- **Tariff improvements**
  - Standardize approaches
    - Cost allocation
    - Tariff design
  - Remove discriminatory market power
    - HQ-Ont access in hands of generators
- **Results will be**
  - More reasonable rates in HQ and NY
  - Open market opportunities



# Questions

