



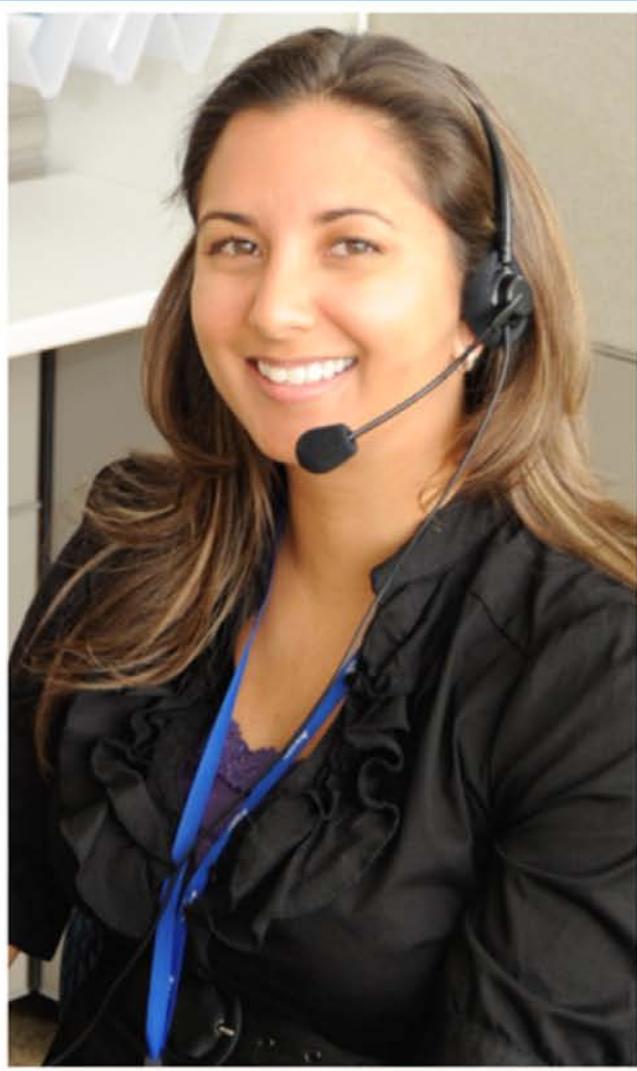
BUILDING ON THE SUCCESS STORY

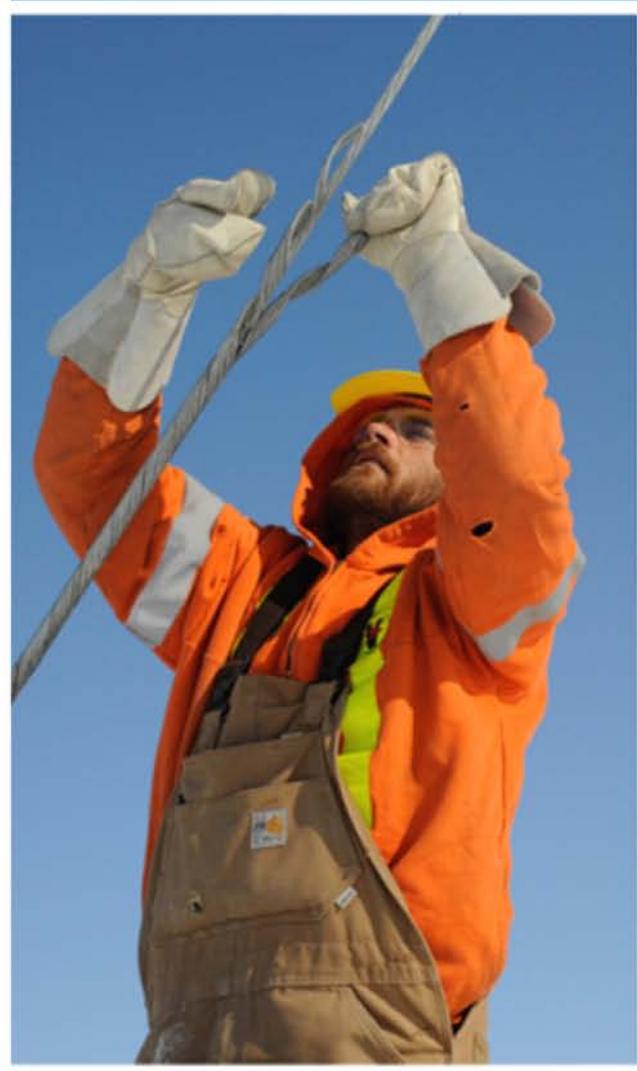
- THE ROAD AHEAD FOR MANITOBA HYDRO -

Scott A Thomson, CA
President and CEO, Manitoba Hydro

Winnipeg Chamber of Commerce
September 19, 2012







Everything you care about...
starts with **SAFETY.**



**STAY SAFE.
TOGETHER.**



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Manitoba Hydro Profile

- **6 471 employees**
- **542 282 electricity customers**
- **267 542 natural gas customers**
- **Exports to three wholesale markets in Canada + Midwest U.S.**
- **Electricity rates – lowest in North America**

Manitoba Hydro Profile (Cont'd)

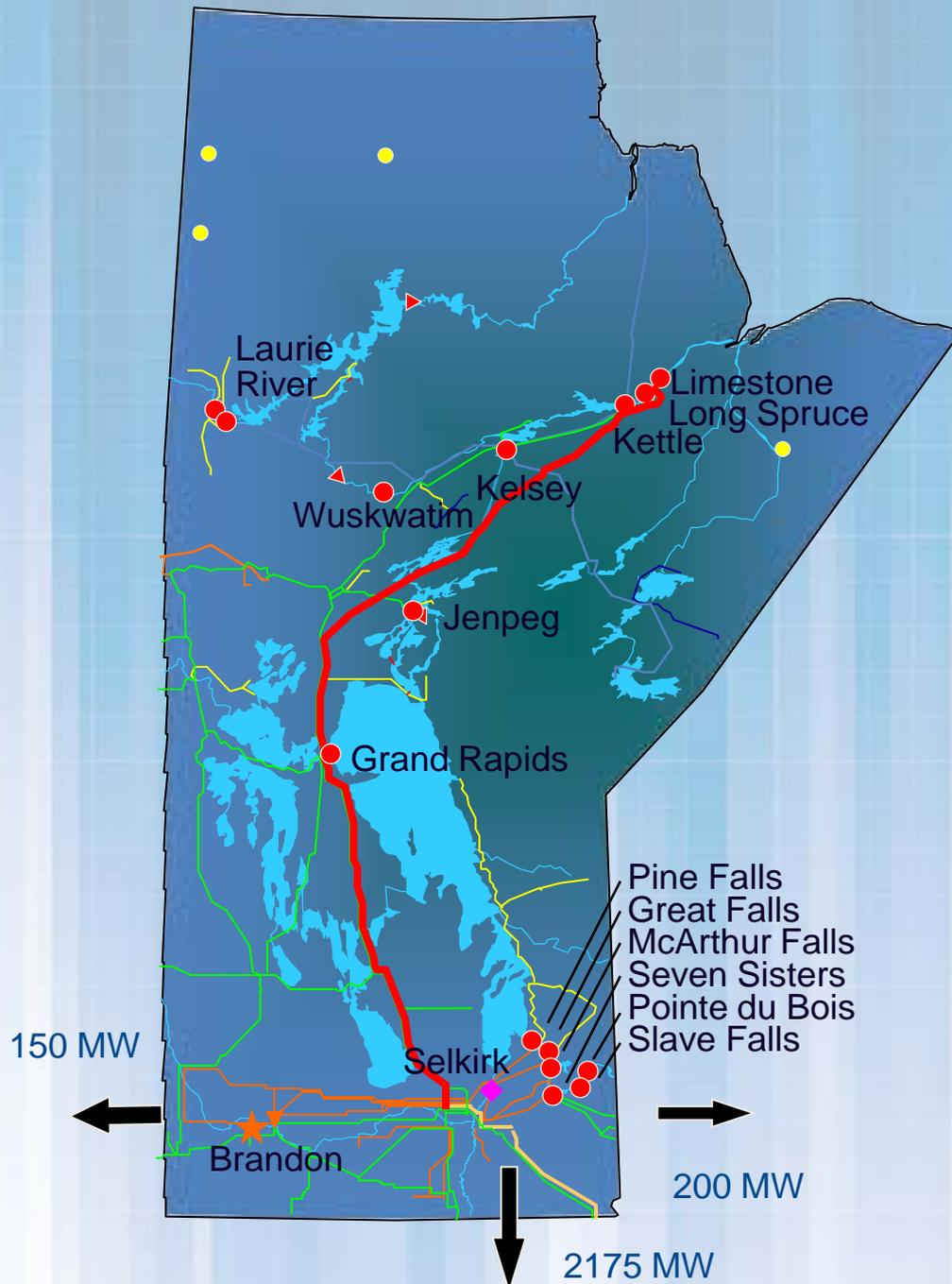
- **As at March 31, 2012**
 - **Net Income \$61 million**
 - **Total assets of \$13.8 billion**
 - **Retained earnings \$2.5 billion**
- **Generating capacity 5500 megawatts**
- **98% of electricity produced (30 billion kilowatt hours) is clean renewable hydropower generated at 15 generating stations**

Generating Stations and Interconnections

2011/12 – Energy

- 80% Nelson R.
- 9% Wpg. R.
- 7% Sask. R.
- 3% Wind
- 1% Thermal & Imports

-  HVDC
-  Other Transmission
-  Other Transmission
-  Other Transmission
-  Selkirk -Natural Gas
-  Brandon – Coal
-  Brandon – Gas Comb. Turbine
-  Brandon – Coal
-  Control Structures
-  Diesel Sites
-  Hydraulic G.S.'s



Economic Impact of Manitoba Hydro

Operations

- 16,580 person-years of employment annually
- \$1.4 billion of Manitoba's gross domestic product

Employment Impact of New Generation and Transmission Projects

- Keeyask G.S. – 9,170 person-years of direct and indirect employment
- Bipole III Transmission – 8,782 person-years of direct and indirect employment

Stop drafts and save.

Small changes add up.



Where can you save energy?

Small changes add up.



Fix leaks and save energy.

Small changes add up.









WUSKOWATIM

Powering OUTLOOK



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CREE N

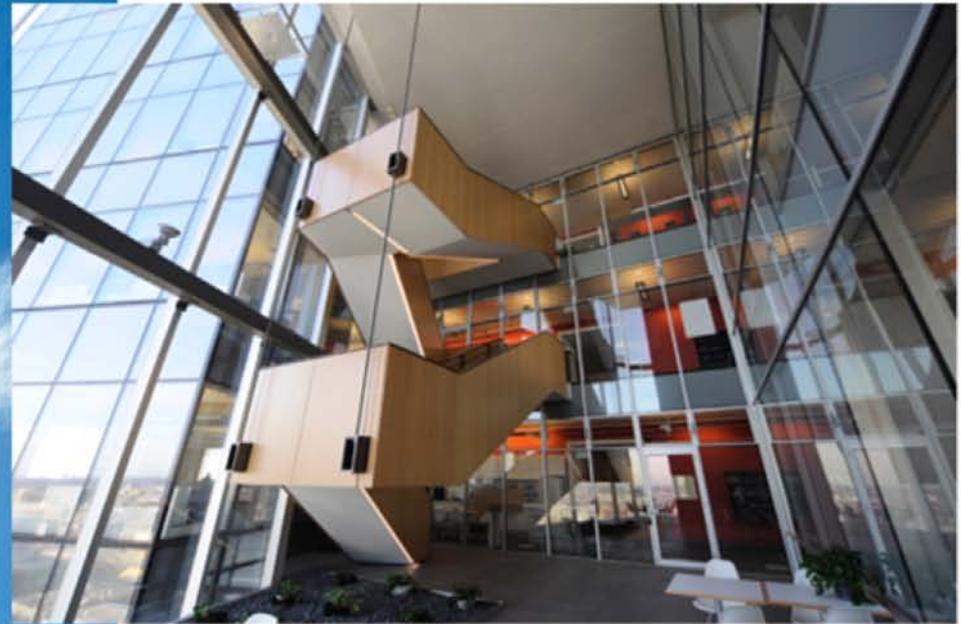
nitoba
dio



NISICAWAYASIHK

CREE NATION







Where do we go from here?

New Generation required

Rebuild Electrical Grid

Adjust to Reduced Export Revenue

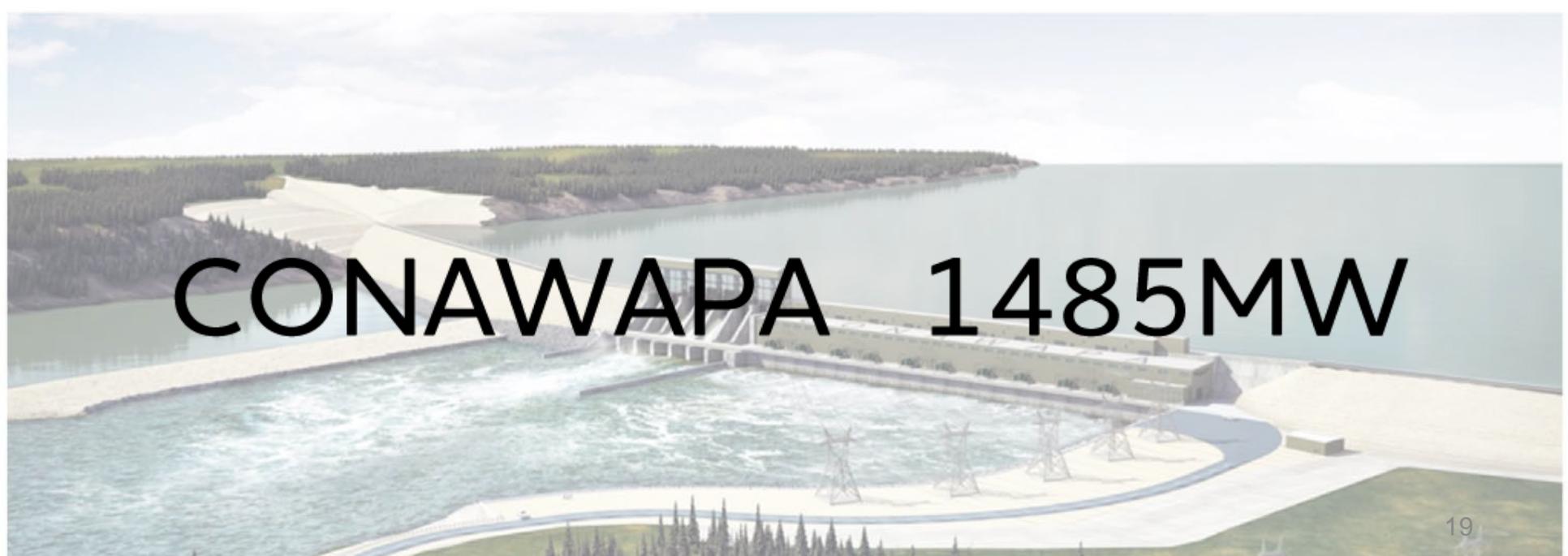
**\$20 billion investment in
new generation and
infrastructure**

Development Plan

New Hydro plus Exports



KEEYASK 695MW



CONAWAPA 1485MW

Independent Reviews

Need for and Alternatives to (NFAT) and Environmental Reviews

Investment in existing infrastructure

Canada-wide issue

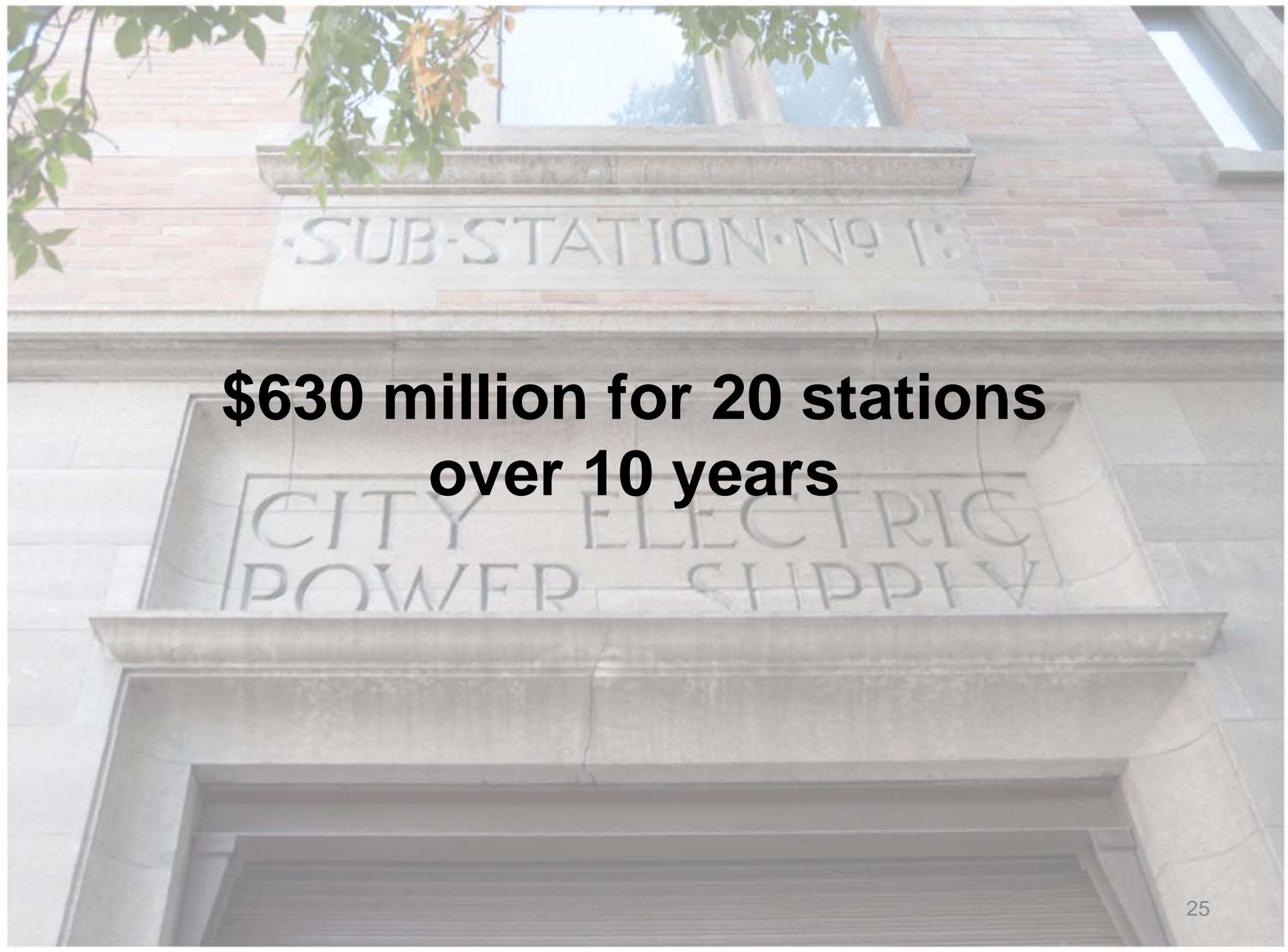
**\$350 billion required over the
next 20 years**



1 000 000

**Need to replace 117 000
over 20 years for \$400 million**





SUB-STATION No 1

**\$630 million for 20 stations
over 10 years**

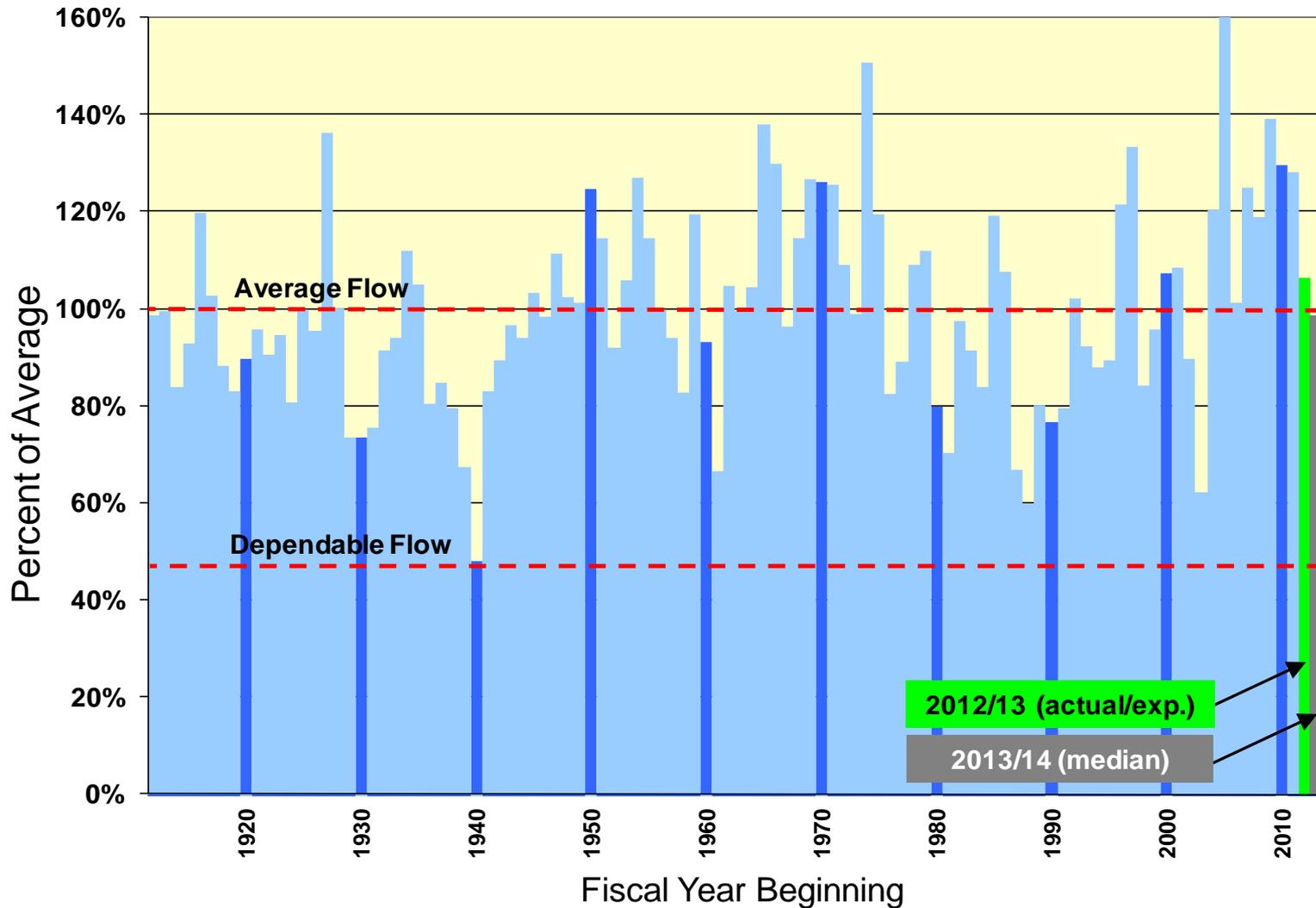
CITY ELECTRIC
POWER MISSISSIPPI



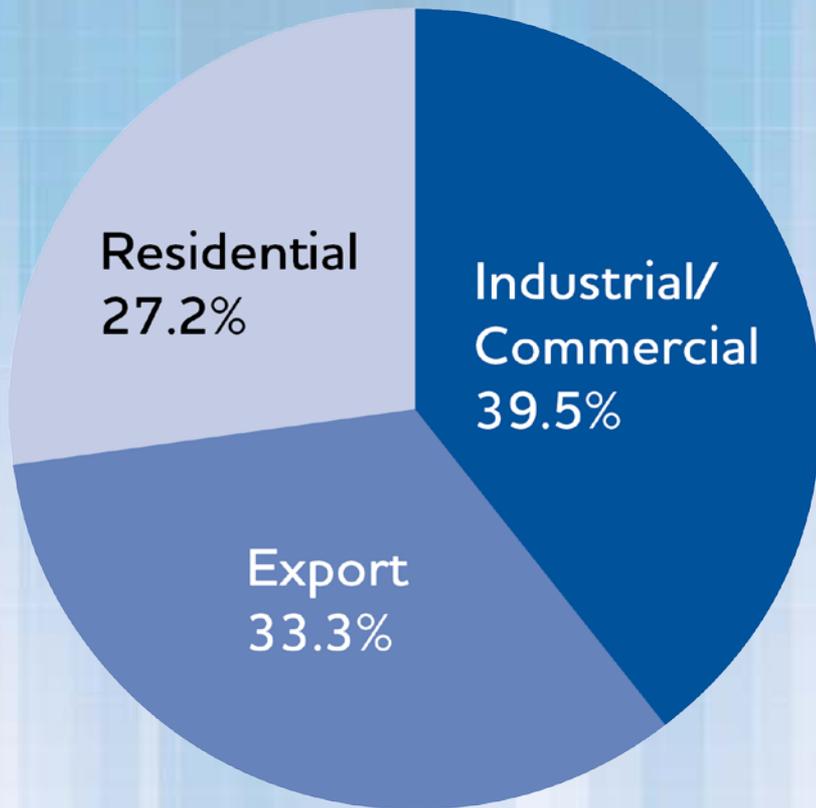
Exports

Variability of Water Supply

System Inflows



Revenue Sources - Electricity 2002/03 - 2011/12



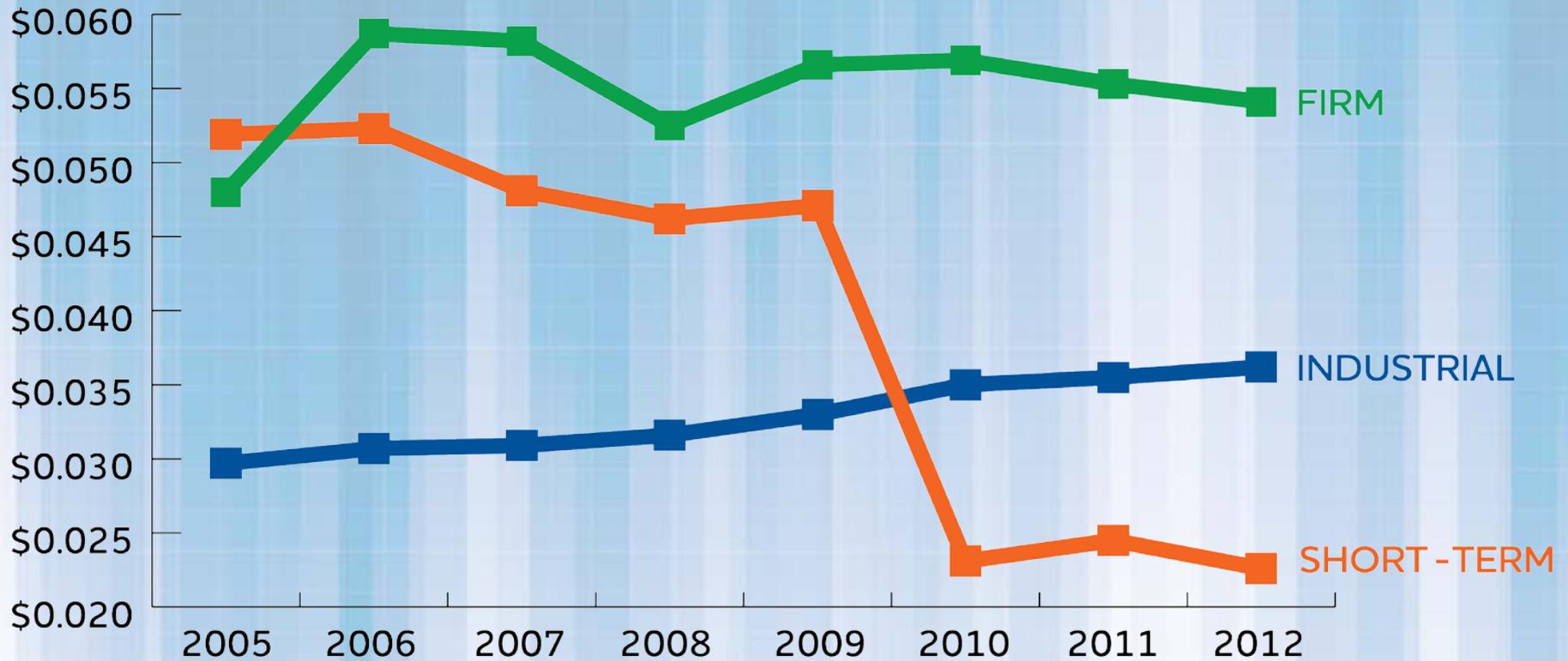
Industrial/Commercial \$6.2 billion

Export \$5.2 billion

Residential \$4.3 billion

Firm & Short-Term Export Sales vs. Manitoba Industrial Customers

(Average Rate per Kilowatt Hour)



Electricity Rate Increases 1970s

1974 - 20.6%

1975 - 19.2%

1976 - 19.8%

1977 - 15.0%

1978 - 14.9%

1979 - 14.4%

Rate Increases

- **Moderate**
- **Predictable**

Rate Increases

Ontario

**“Over the next five years, residential
Electricity prices are expected to rise by 46%”**

Ontario government news release November 18, 2010

BC Hydro

“Rate to increase 17% over 3 years.”

CBC BC, May 23, 2012

SaskPower

Seeking 4.9% increase for 2013.

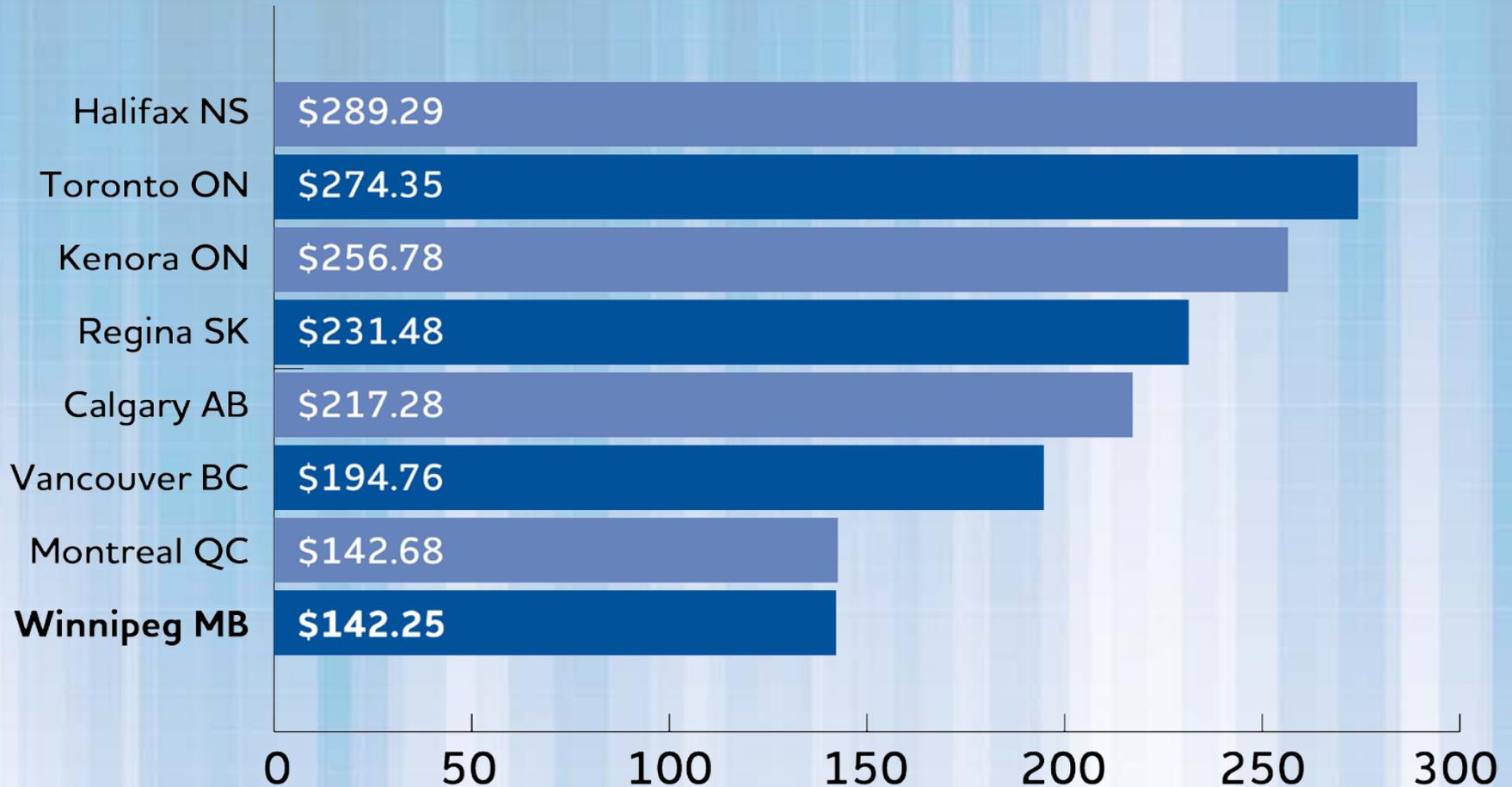
4.5% increase 2010

8.5% increase 2009

SaskPower 2013 Rate Application; Saskatchewan Rate Panel Review website

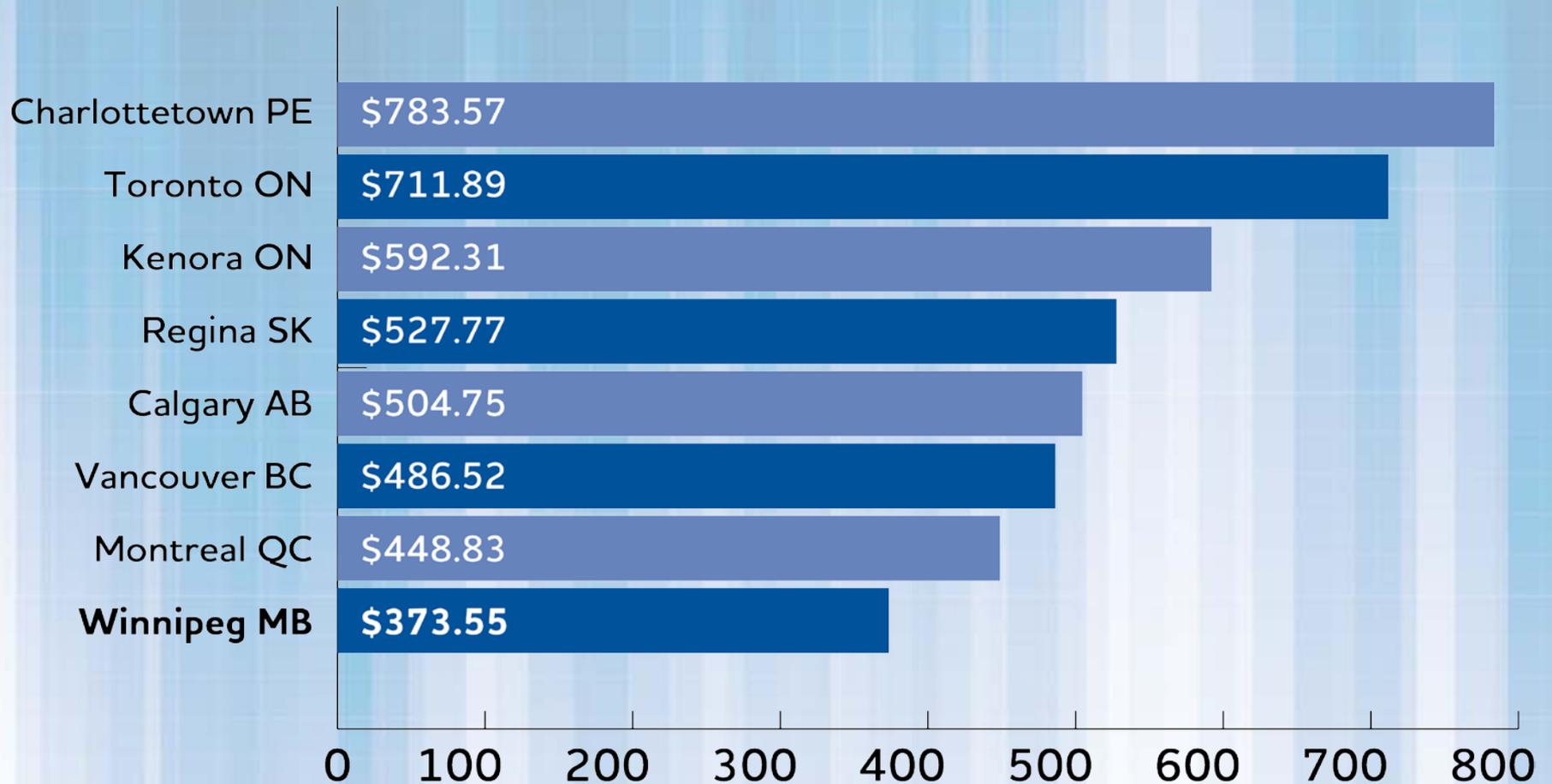
Residential Service Rate Comparisons

One month bill (May 2012) for 2000 kWh

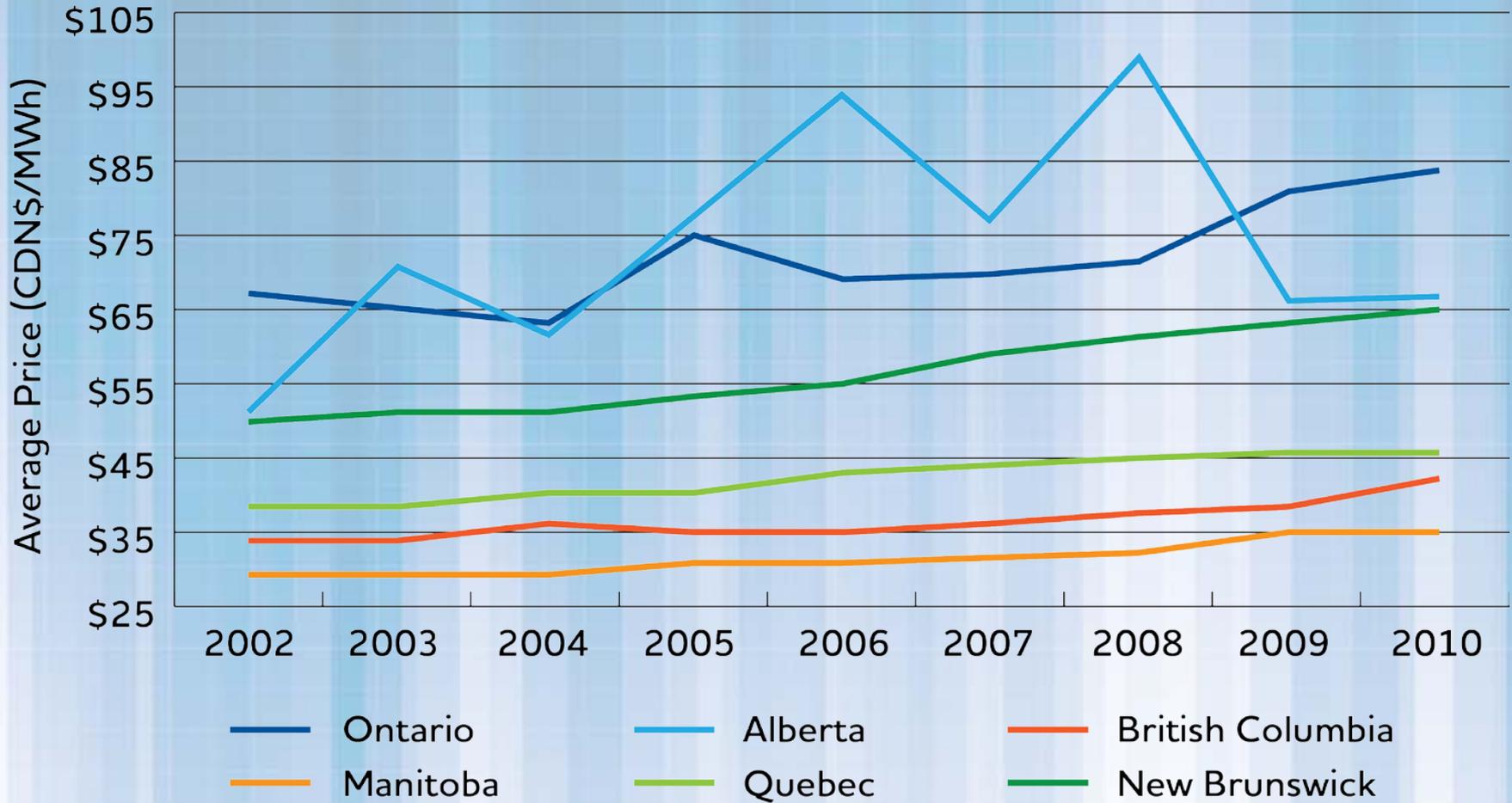


General Service Rate Comparisons

One month bill (May 2012) for 5000 kWh



Industrial Rates in Canada



Controlling Costs



POINTE DU BOIS - 1911



GREAT FALLS - 1928



SEVEN SISTERS - 1931



SLAVE FALLS - 1931

Uncertainty & Risk

Manitoba Load Growth

Interest Rates

Inflation

Exchange Rates

Fossil Fuel Prices

Environmental Policies

Construction Costs

Will gas stay cheap?

Natural Gas Dynamics

- **Shale gas expansion**
- **LNG exports**
- **Replacement for coal powered generation**
- **Increased demand with economic recovery**
- **Use as transportation fuel**



Investment 1968-80 vs. today's planned development

1968-1980

plus
\$2.4 billion
capital

\$600 million
Assets
1968

4X

2012 going forward

plus
\$19 billion
capital

\$13.8 billion
Assets
2012

1.4X



**Working together to
build
The energy network
of tomorrow**