

# 2007Q4 18-Month Outlook

Presentation to FASC  
January 16, 2008

Greg Hine

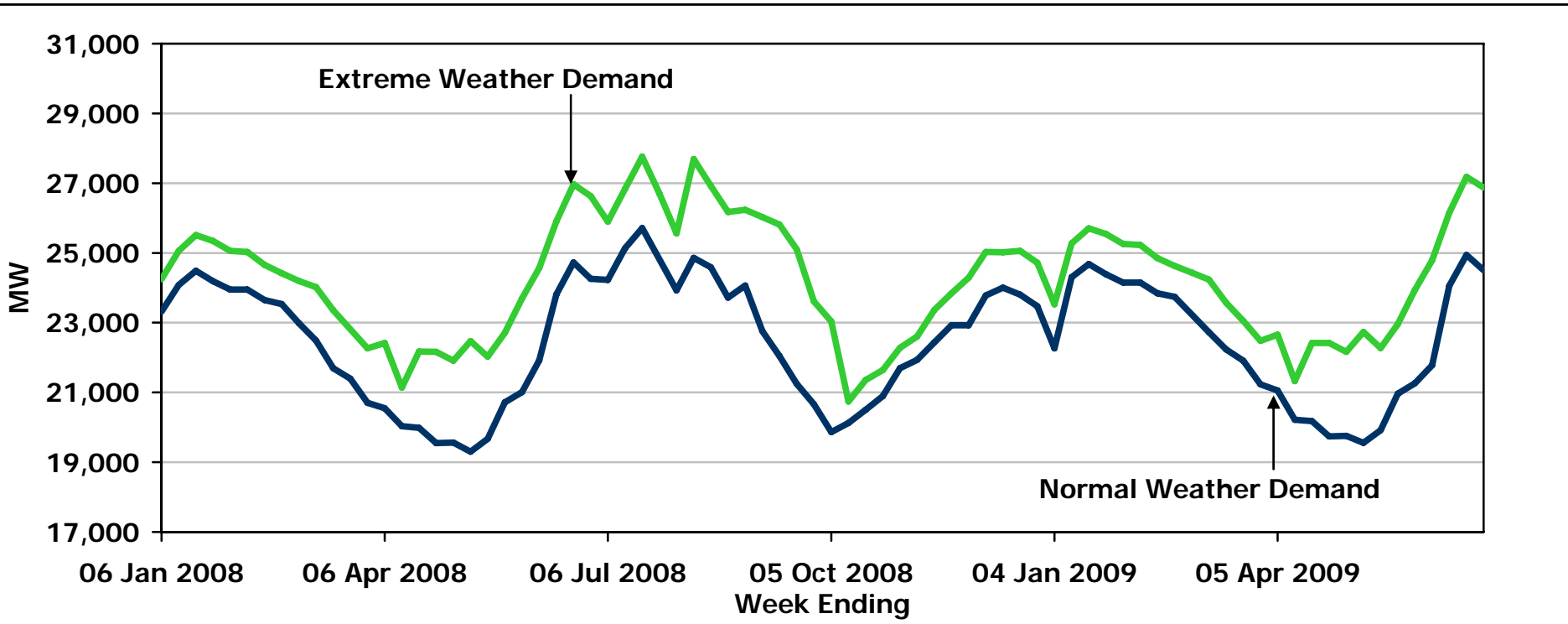


- Reliability for summer 2008 based on:
  - Timely completion of Phase One of Portlands
  - Continued availability of local autotransformers and generation from Pickering
  - The role that interconnections will play during highest demand periods
- Ontario well-positioned for summer peak of 2008
- More than 4,600 megawatts (MW) of new supply is scheduled to come into service over next 18 months

Season	Seasonal Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Winter 2007-08	24,693	25,511
Summer 2008	25,929	27,760
Winter 2008-09	24,889	25,707

- **Table does not include Conservation targets**
- **2006 energy (actual weather corrected):  
152.3 TWh (decrease 1.6%)**
- **2007 energy: 151.8 TWh (decrease 0.3%)**
- **2008 energy: 153.6 TWh (increase 1.1%)**

# Weekly Demand Profile - Firm Resource Scenario

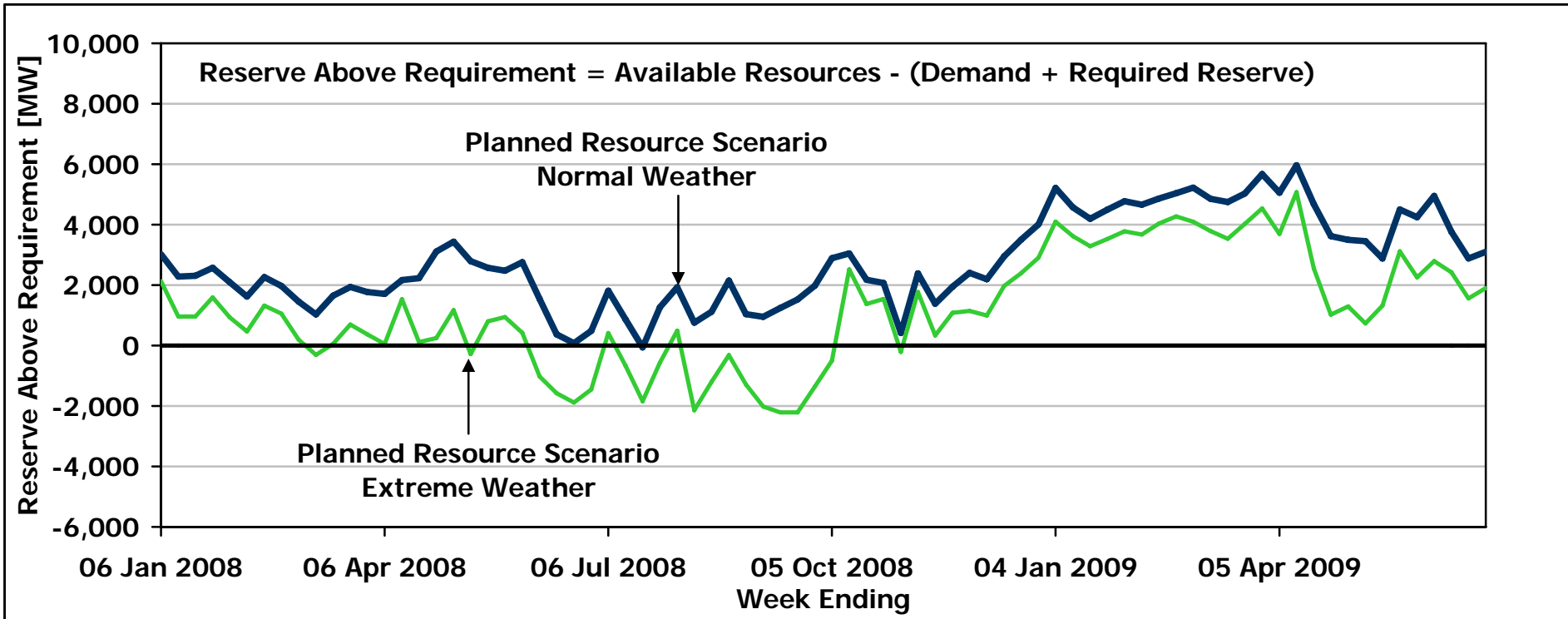


- Two Scenarios – Firm and Planned
  - Firm Scenario includes:
    - Existing demand response programs (Dispatchable, OPA's DR 1 and loads under contract)
    - Existing conservation programs
  - Planned Scenario includes:
    - Planned demand response programs (Dispatchable, DR1, DR2 & DR3 and loads under contract)
    - Targeted conservation savings

- **Firm Resource Scenario includes:**
  - Existing resources plus capacity changes to existing resources
  - Additional resources that started commissioning or come into service in the first 3 months
- **Planned Resource Scenario includes:**
  - Existing resources plus all planned resource changes

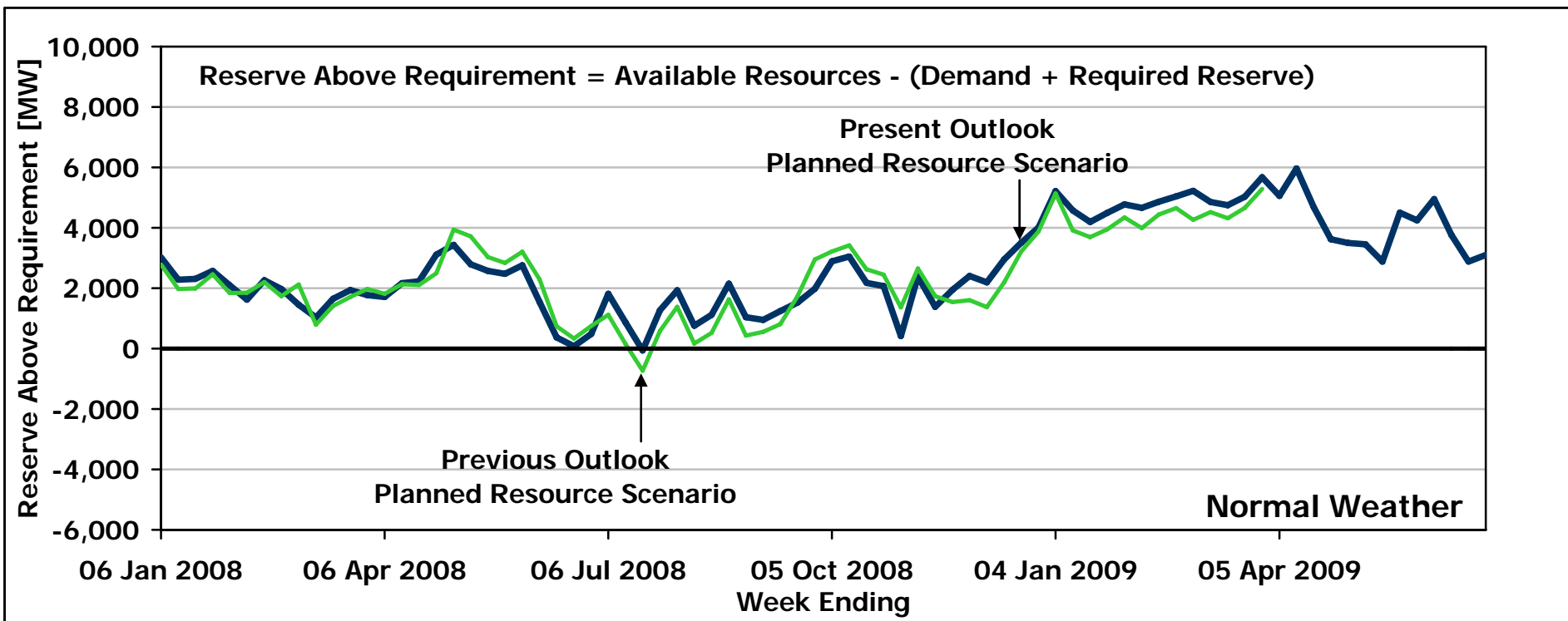
# Committed and Contracted Generation Resources

Proponent/Project Name	Zone	Fuel Type	Capacity MW	Estimated Effective Date	Considered in Resource Scenario	
					FRS	PRS
Ripley Wind Power Project	Southwest	Wind	76	2007-Q4	Yes	Yes
Nuclear Upgrade	N/A	Uranium	27	2007-Q4	Yes	Yes
Great Northern Tri-Gen Facility	West	Gas	12	2008-Q1	Yes	Yes
Lac Seul Project - English River	Northwest	Water	13	2008-Q1	Yes	Yes
Umbata Falls Hydroelectric Project	Northwest	Water	23	2008-Q2		Yes
Durham College District Energy Project	Toronto	Gas	2	2008-Q2		Yes
Countryside London Cogeneration Facility	West	Gas	12	2008-Q2		Yes
Portlands Energy Centre Phase I	Toronto	Gas	250	2008-Q2		Yes
Warden Energy Centre	Toronto	Gas	5	2008-Q2		Yes
Kruger Energy Port Alma Wind Power Project	West	Wind	101	2008-Q4		Yes
Greenfield Energy Centre	West	Gas	1,005	2008-Q4		Yes
Melancthon II Wind Project	Southwest	Wind	132	2008-Q4		Yes
Nuclear Upgrade	N/A	Uranium	27	2008-Q4	Yes	Yes
Wolfe Island Wind Project	East	Wind	198	2008-Q4		Yes
Enbridge Ontario Wind Power Project	Southwest	Wind	200	2008-Q4		Yes
Goreway Station	Toronto	Gas	860	2008-Q4		Yes
Retirement of Lower Sturgeon 25 Hz generation to convert to 60 Hz	Northeast	Water	-5	2009-Q1 <sup>(1)</sup>	Yes	Yes
St. Clair Energy Centre	West	Gas	570	2009-Q1		Yes
Return of Unit 7 at Beck 1 as a 60 Hz unit	Niagara	Water	59	2009-Q1	Yes	Yes
Retirement of Sandy Falls 25 Hz generation to convert to 60 Hz	Northeast	Water	-3	2009-Q2 <sup>(1)</sup>	Yes	Yes
Retirement of the 25 Hz Frequency Changer and Units 1 & 2 at Beck 1	Niagara	Water	-50	2009-Q2	Yes	Yes
Algoma Energy Cogeneration Facility	Northeast	Industrial Gas	63	2009-Q2		Yes
Portlands Energy Centre Phase II	Toronto	Gas	288	2009-Q2		Yes
Bruce Unit 2	Bruce	Uranium	750	2009-Q2		Yes
<b>Total</b>			<b>4,613</b>			



# Reserve Above Requirement

Normal Weather Scenario: Present vs Previous Outlook



- Reserves meet or exceed requirements for all but one week in the Planned Resource Scenario

# Key Findings & Conclusions

- West of London, under certain local generation and import scenarios, there is potential for bottled capacity. Operational mechanisms are expected to be available to alleviate bottling to some extent.
- The retirement of the Niagara 25 Hz system is expected to be completed in 2009Q2.
- The conversion of the Northeast 25 Hz system is expected to begin in 2009Q1

# Key Findings & Conclusions

- As experienced in the summer of 2007, reliability of supply to the GTA is dependent on both generation and transmission facilities. To minimize the risks to the GTA as the summer of 2008 approaches, the IESO will closely monitor three key aspects:
  - availability and general condition of the 12 autotransformers feeding the GTA from Claireville, Trafalgar, Parkway and Cherrywood TS
  - availability of no less than four Pickering units during the summer months
  - progress of Portlands Phase 1, expected in service just prior to summer 2008
- 11 new and upgraded load supply transformer stations will be placed in service during the timeframe of this Outlook and shortly after.

# Key Findings & Conclusions

- If weather and equipment performance is normal, there should be no unusual concern.
- In 2008, if weather is extreme OR equipment performance is worse than normal the system will be stressed.
- In 2008, if weather is extreme AND equipment performance is worse than normal the system will be stressed and emergency actions will likely be required.
- Conditions improve significantly in 2009