

# IESO 2007Q3 18-Month Outlook

FASC Meeting      October 22, 2007

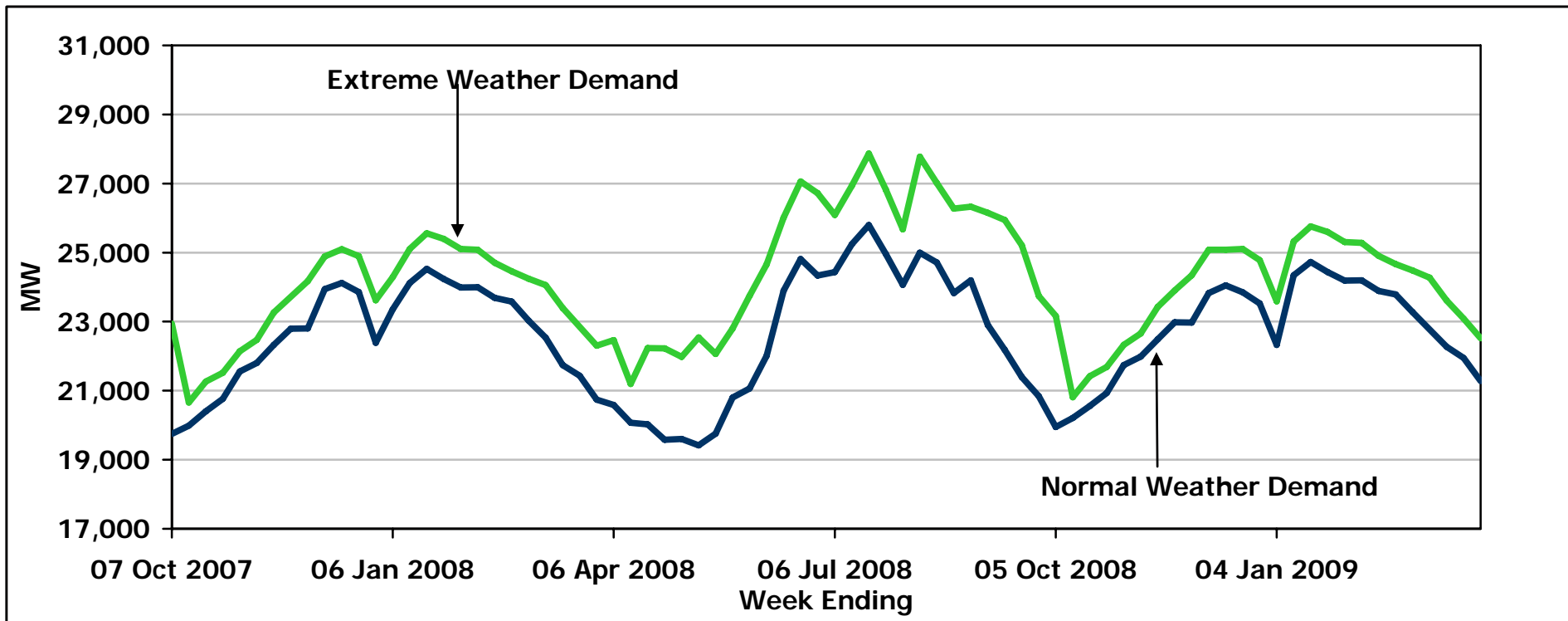


- Assumptions & Risks
- Firm Resource Scenario and Planned Resource Scenario
- Results
- Key Findings and Conclusions

Season	Seasonal Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Winter 2007-08	24,739	25,558
Summer 2008	26,041	27,867
Winter 2008-09	24,937	25,756

- **2006 energy (actual weather corrected):  
152.3 TWh (decrease 1.6%)**
- **2007 energy: 152.8 TWh (increase 0.3%)**
- **2008 energy: 154.5 TWh (increase 1.1%)**

# Weekly Demand Profile - Firm Resource Scenario



- Two Scenarios – Firm and Planned
  - Firm Resource Scenario includes:
    - Existing demand response programs (Dispatchable, OPA's DR 1 and loads under contract)
    - Existing conservation programs
  - Planned Resource Scenario includes:
    - Planned demand response programs (Dispatchable, DR1, DR2 & DR3 and loads under contract)
    - Targeted conservation savings – composed of energy efficiency, fuel switching, conservation and self-generation
- Targeted conservation starts in 2008

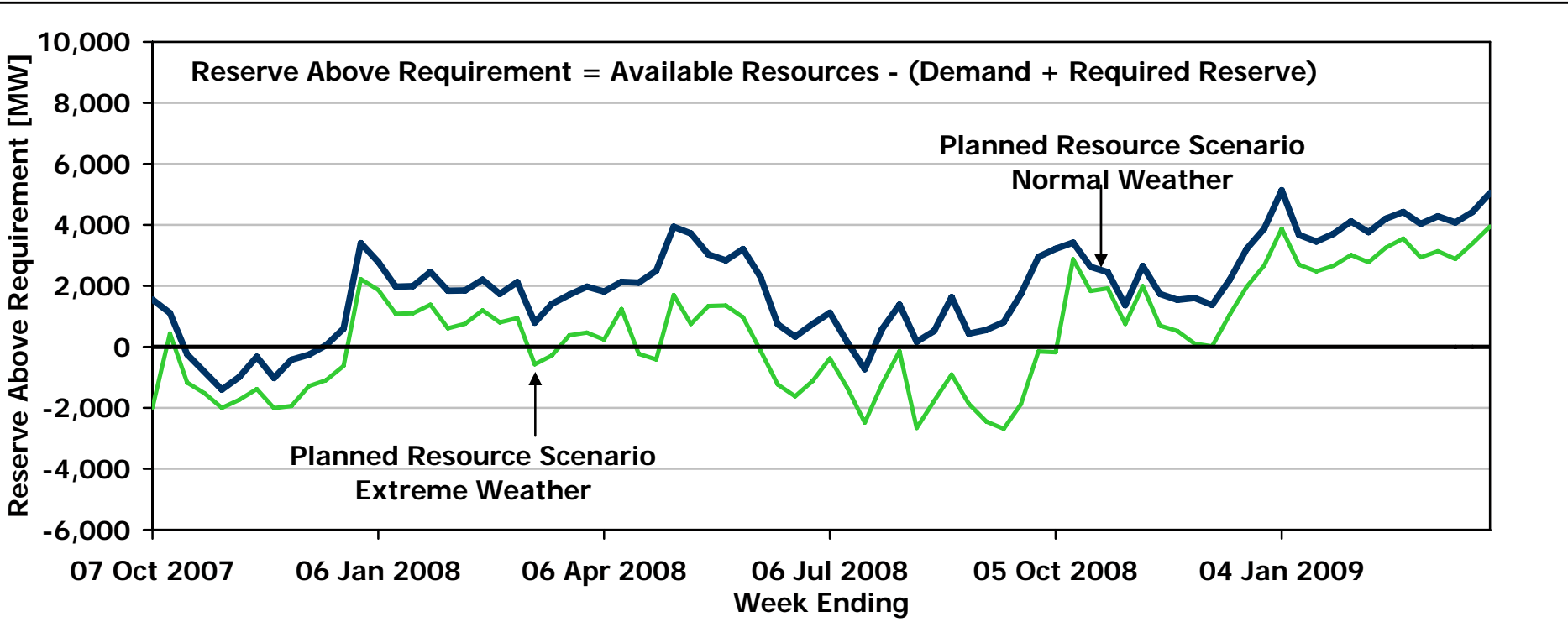
- **Firm Resource Scenario includes:**
  - Existing resources plus capacity changes to existing resources
  - Additional resources that started commissioning or come into service in the first 3 months
- **Planned Resource Scenario includes:**
  - Existing resources plus all planned resource changes

# 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	West	Gas	12	2008-Q1		Yes
Retirement of Lower Sturgeon 25 Hz gen	Northeast	Water	-5	2008-Q1	Yes	Yes
Lac Seul Project - English River	Northwest	Water	13	2008-Q1 <sup>(1)</sup>		Yes
Retirement of Sandy Falls 25 Hz	Northeast	Water	-3	2008-Q2 <sup>(1)</sup>	Yes	Yes
Umbata Falls Hydroelectric	Northwest	Water	23	2008-Q2		Yes
Durham College District Energy	Toronto	Gas	2	2008-Q2		Yes
Countryside London Cogen	West	Gas	12	2008-Q2		Yes
Portland 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
Nuclear Upgrade	N/A	Uranium	27	2008-Q4	Yes	Yes
Greenfield Energy Centre	West	Gas	1,005	2008-Q4		Yes
Melancthon II Wind Project	Southwest	Wind	132	2008-Q4		Yes
Wolfe Island Wind Project	East	Wind	198	2008-Q4		Yes
Greenfield South Power Plant	Toronto	Gas	280	2008-Q4		Yes
Enbridge Ontario Wind Power Project	Southwest	Wind	200	2008-Q4		Yes
St Clair Energy Centre	West	Gas	570	2009-Q1		Yes
<b>Total</b>			<b>2,923</b>			

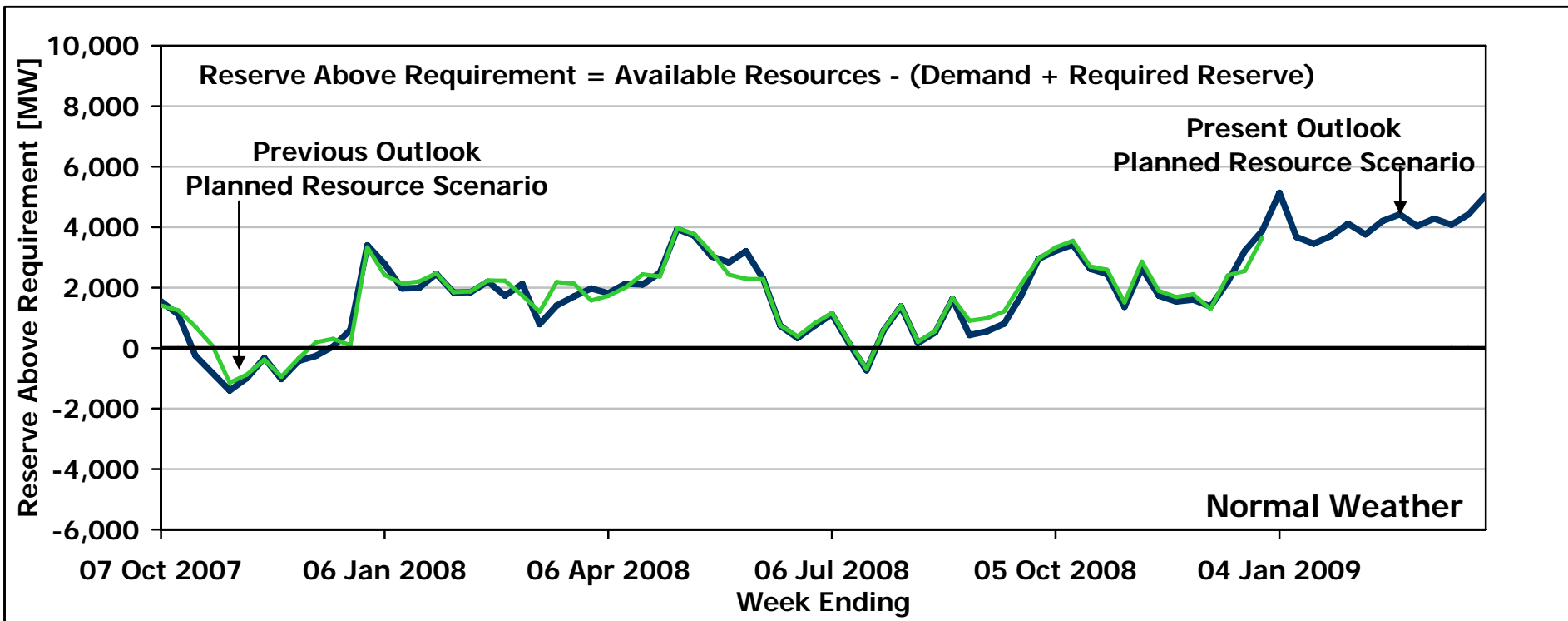
# Reserve Above Requirement

Planned Resource Scenario: Normal vs Extreme Weather



# Reserve Above Requirement

Normal Weather Scenario: Present vs Previous Outlook



- Reserves meet or exceed requirements in 69 of 78 weeks in the Planned Resource Scenario

- If weather and equipment performance is normal, there should be no unusual concern.
- If weather is extreme OR equipment performance is worse than normal the system will be stressed.
- If weather is extreme AND equipment performance is worse than normal the system will be stressed and emergency actions will likely be required.

- GTA reliability dependent on maintaining high voltage capacitor availability, autotransformer capability and a minimum number of Pickering units in-service
  - High-voltage shunt capacitor at Richview TS returned to service at half of its 410 Mvar capacity. All other high-voltage shunt capacitors have been restored to full availability.
  - Hydro One have restored all GTA autotransformers to service, have made repairs to improve reliability and plan to have spare autotransformers available by late 2008.
  - A minimum of four Pickering units are required to ensure reliable load supply if extreme weather conditions materialize during 2008.
- An outage associated with two Ontario to New York interconnection circuits at Niagara Falls scheduled in the fall of 2008 will result in reductions by up to 1150 MW in the import capability of the Ontario-New York interconnection at Niagara.
- 14 new and upgraded load supply transformer stations will be placed in service during the timeframe of this Outlook and shortly after.