

IESO 2010Q1 18-Month Outlook Update

FASC Meeting March 1, 2010



Season	Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Summer 2010	23,556	25,756
Winter 2010-11	22,379	23,454
Summer 2011	23,356	25,556
Year	Normal Weather Energy (TWh)	% Growth in Energy
2006 Energy	152.3	-1.9%
2007 Energy	151.6	-0.5%
2008 Energy	148.9	-1.8%
2009 Energy	140.4	-5.7%
2010 Energy (Forecast)	141.1	0.5%
2011 Energy (Forecast)	141.9	0.6%

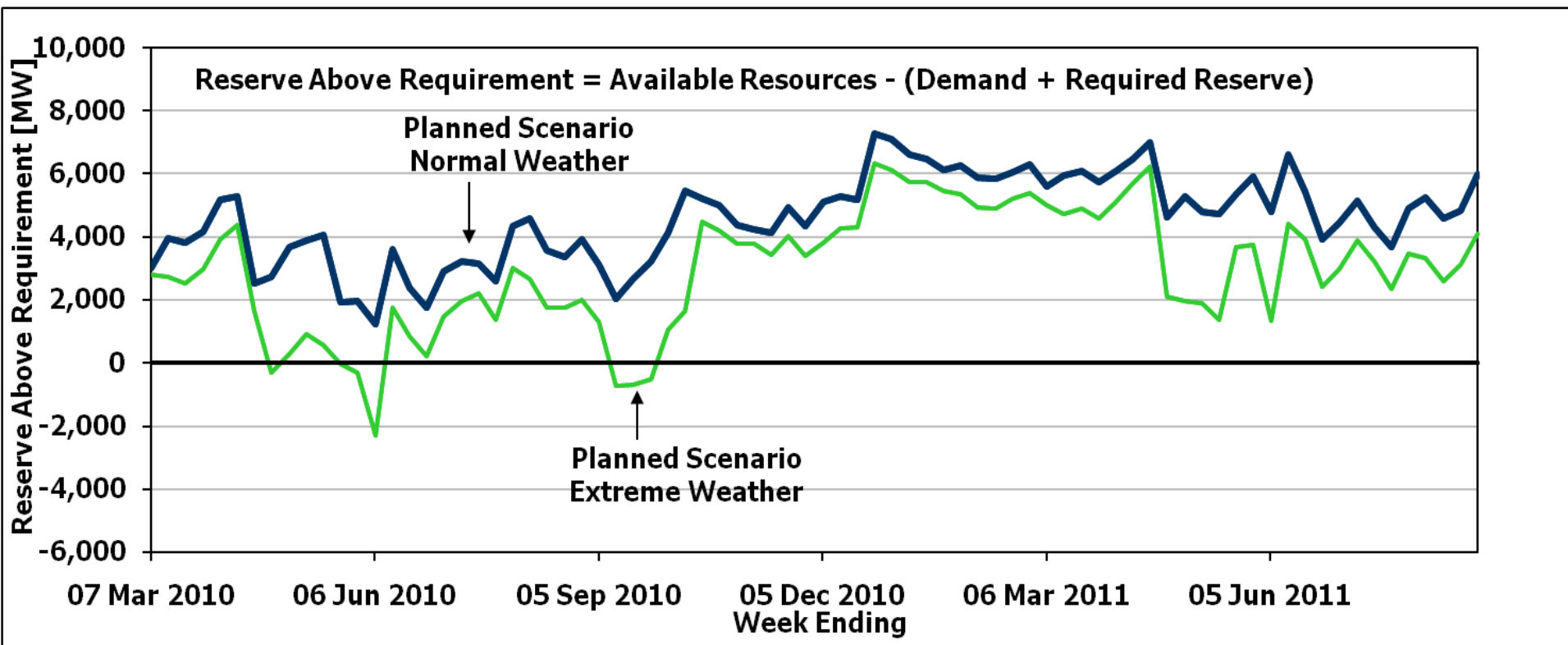
- **Table includes impacts of conservation targets and embedded generation**

Existing Installed Resources

Fuel Type	Total Capacity (MW)	Number of Stations	Change in Capacity (MW)	Change in Stations
Nuclear	11,426	5	0	0
Hydroelectric	7,914	70	3	0
Coal	6,434	4	0	0
Oil / Gas	8,552	27	17	0
Wind	1,084	8	0	0
Biomass / Landfill Gas	75	5	0	0
Total	35,485	119	20	0

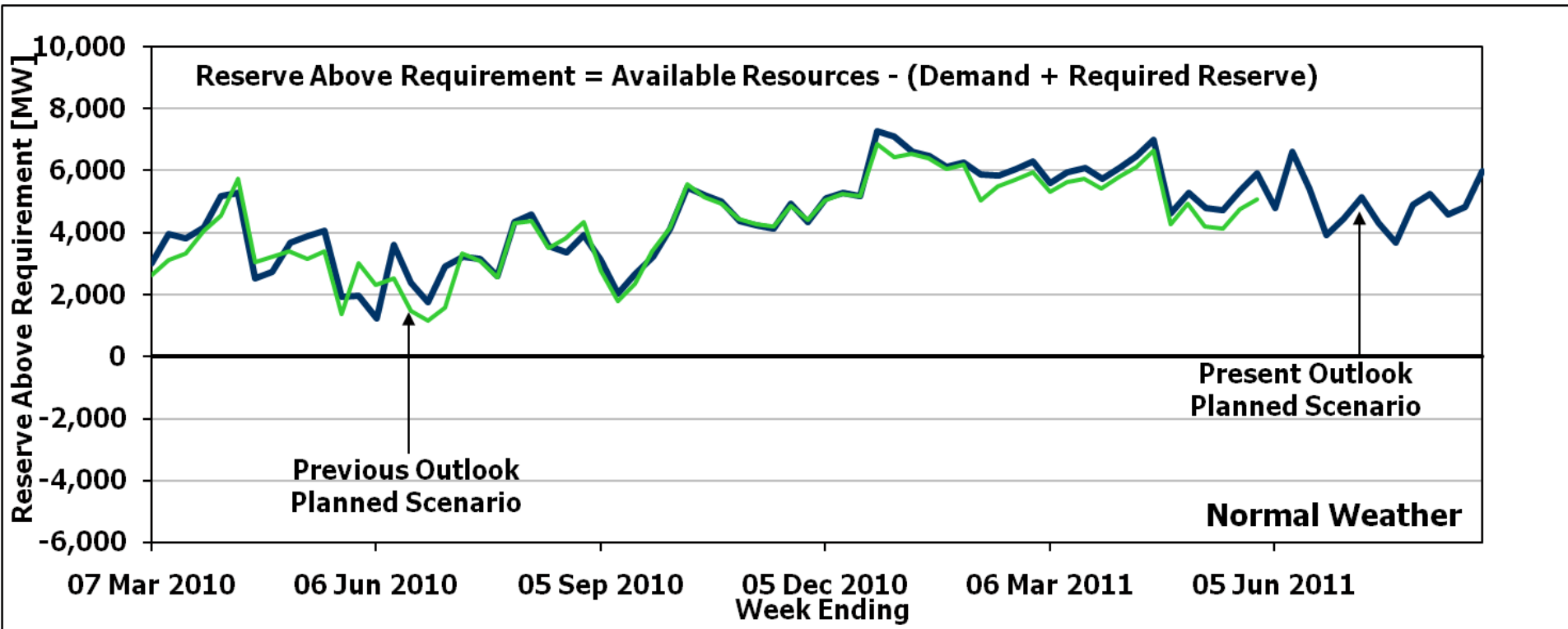
Committed and Contracted Generation Resources

Proponent/Project Name	Zone	Fuel Type	Estimated Effective Date	Change	Project Status	Capacity Considered	
						Firm (MW)	Planned (MW)
Retirement of Wawaïtin 25 Hz generation to convert to 60 Hz	Northeast	Water	2010-Q1		Connection Assessment	-11	-11
Nuclear Upgrade	N/A	Uranium	2010-Q2	Delayed	Construction	27	27
Healey Falls G1	East	Water	2010-Q2		Construction		16
Thorold Cogeneration Project	Niagara	Gas	2010-Q2		Commissioning	236	236
Conversion of Fort Frances Steam Turbine to burn biomass	Northwest	Biomass	2010-Q3	Delayed	Commissioning	47	47
Halton Hills Generating Station	Southwest	Gas	2010-Q3		Construction		632
Shutdown of Lambton G1 and G2	West	Coal	2010-Q4			-970	-970
Shutdown of Nanticoke G3 and G4	Southwest	Coal	2010-Q4			-980	-980
Return of Sandy Falls as 60 Hz plant	Northeast	Water	2010-Q4		Construction		5
Return of Lower Sturgeon as 60 Hz plant	Northeast	Water	2010-Q4		Construction		14
Return of Wawaïtin as 60 Hz plant	Northeast	Water	2010-Q4		Construction		15
Hound Chute	Northeast	Water	2010-Q4		Construction		10
Leamington Pollution Control Plant	West	Oil	2011-Q1		Approvals & Permits		2
Raleigh Wind Energy Centre	West	Wind	2011-Q1	Delayed	Construction		78
Bruce Unit 2	Bruce	Uranium	2011-Q1		Construction		750
Bruce Unit 1	Bruce	Uranium	2011-Q3		Construction		750
Becker Cogeneration	Northwest	Biomass	2011-Q3		Approvals & Permits		15
Total						-1,651	636

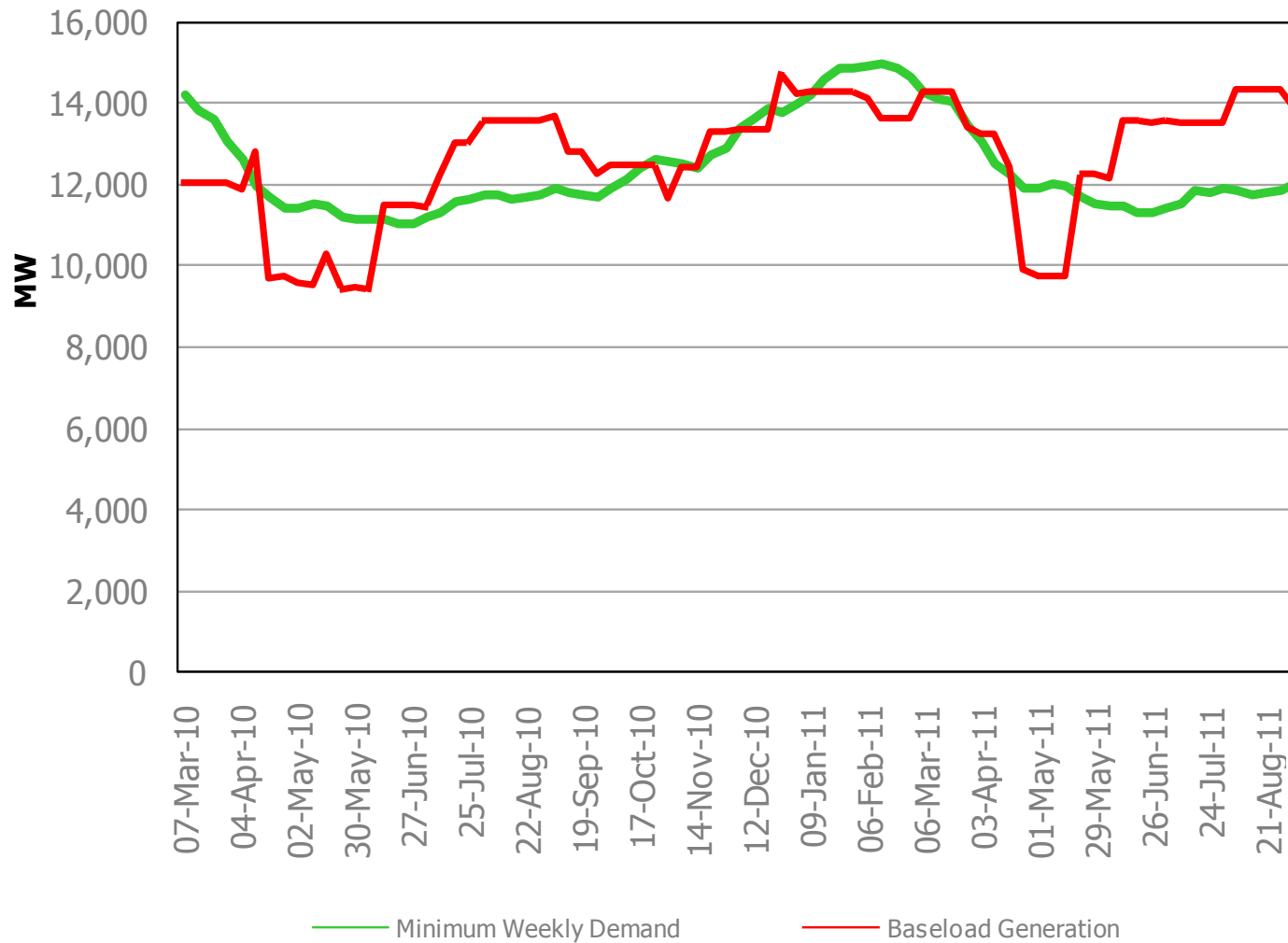


Reserve Above Requirement

Normal Weather Scenario: Present and Previous Outlook



Minimum Demand and Base Load Generation



Key Findings & Conclusions

- As expected, minimum demand levels have increased over the winter period due to overnight heating load, leading to fewer SBG instances.
- Heading into spring of 2010, SBG is expected to continue to be moderate in spite of lower minimum demands because of scheduled planned generator outages
- As generation returns to service to meet the summer peak, surplus conditions are expected to increase and persist into fall
- In Nov. and Dec. 2010, scheduled planned outages to the PA301 and PA302 circuits in conjunction with the ongoing forced outage on the BP76 circuit – all of which are on the Ontario – New York interconnection at Niagara – will significantly impact Ontario's ability to export power

Key Findings & Conclusions

- Managing grid voltages in the Northwest with the significantly lower demand, makes it difficult to maintain an acceptable voltage profile - additional reactive compensation required for voltage control.
- In spring 2010, a major planned outage in the GTA area is scheduled during a period of low demand. During this outage the loading of the 500/230 kV autotransformers at Trafalgar, Claireville and Cherrywood is expected to increase.

Key Findings & Conclusions

- 2,600MW of new and refurbished supply scheduled over the next 18 months
- Reserve requirements met in all weeks for the Planned Scenario.
- The current schedule calls for the return to service of the Bruce units in the 1st and 3rd quarters of 2011. Some of this supply may be constrained until Bruce to Milton line is completed, along with other transmission enhancements.
- The early shutdown of 2 units at Lambton and 2 units at Nanticoke will have no undue impacts on energy adequacy or reliability in Ontario.