

UNDERTAKING NO. J2.1

REFERENCE

Hearing Day May 10, 2011 Tr. p. 52

UNDERTAKING NO. J2.1: TO PROVIDE SUMMARY OF EXHIBIT B, TAB 1, SCHEDULE 1, PAGE 9 OF 10 WHICH DISCLOSES THE REPORT CONTENT RELATED TO THE PLANNING OUTLOOK AND PARTICULARLY REGARDING FIT AND MICROFIT UPTAKE AND ADDITIONAL RESOURCE REQUIREMENTS.

RESPONSE

On September 2, 2010, the OPA submitted to the Ministry of Energy, a report titled Ontario Electricity Status and Outlook: 2005 – 2030.

The report summarizes the recent history of electricity service, provides a status report of Ontario's electricity system as of the second quarter of 2010 and an outlook of electricity service to 2015 given the procurements that are underway and the Directives received. The report also provides scenarios of possible future electricity demand to 2030 and illustrates the anticipated generation capability for the same timeframe.

Additional Resource Requirements

The Board specifically requested a summary of the additional resource requirements taking into consideration committed and directed conservation and supply as well as disclosing the report content related to FIT and microFIT uptake.¹

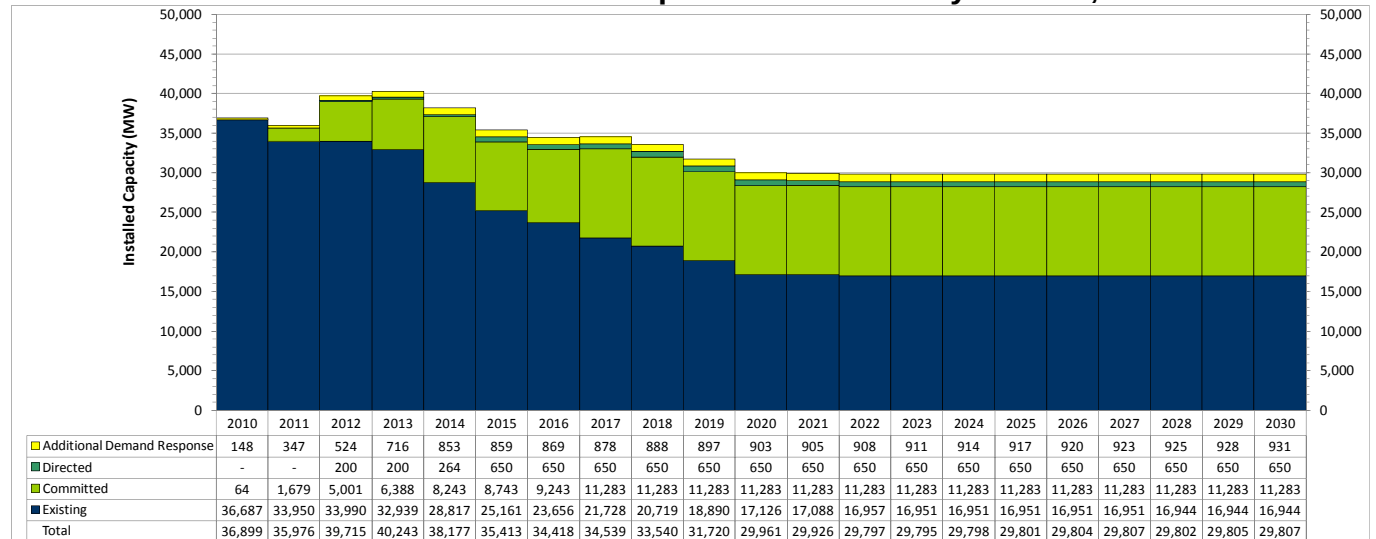
The OPA developed an analysis of the additional resource requirements that may be required for the period commencing 2011 and ending in 2030. The analysis was performed under three demand scenarios that were net of the conservation forecast. The analysis also reflected the understanding of the status of directives for procurement of conservation and supply resources and any targets that were in place at the end of the second quarter of 2010. The analysis did not factor in any potential directives.

A reserve margin of 17% was added to the scenarios of forecast peak demand to assess the requirement for electricity supply.

An outlook for the installed capacity of electricity supply was prepared. The outlook considers the existing, committed and directed resources that are anticipated to be available over the plan period and are presented in Figure 1 below. The outlook does not include any resources for which a procurement directive had not been issued as of the development of the report.

¹ TR. Volume 2, page 51

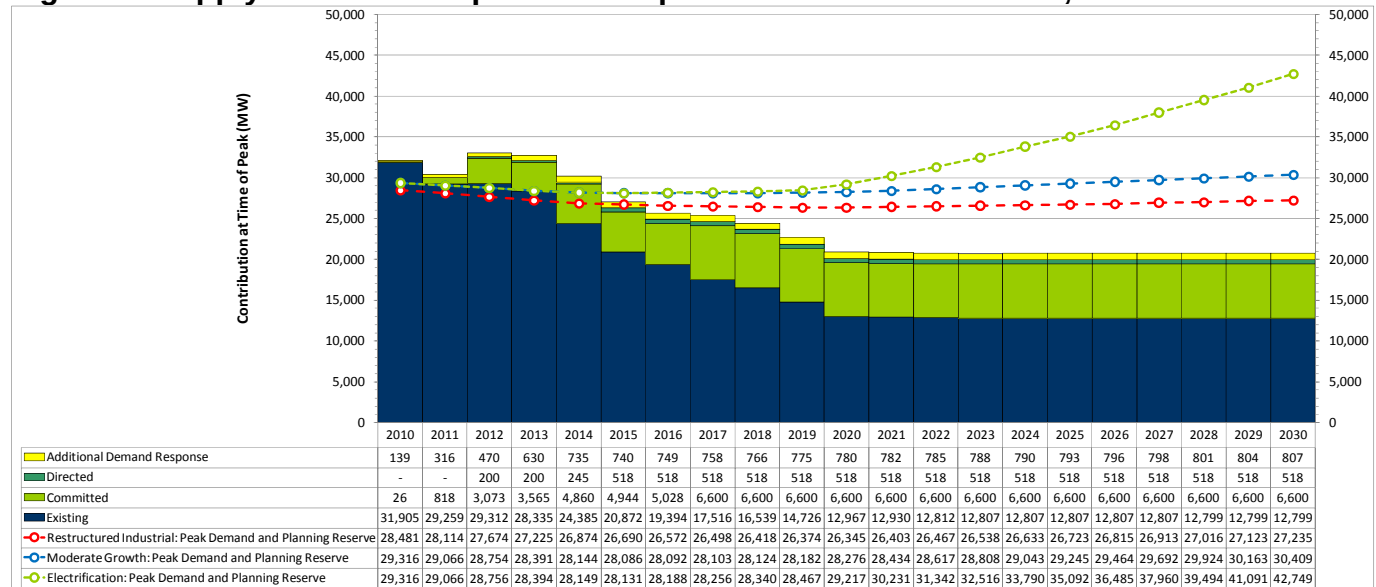
Figure 1: Supply Outlook 2010 – 2030: Existing, Committed, Directed Supply and Additional Demand Response Decreases by about 6,000 MW



Source: OPA

The installed capacity was adjusted to reflect the estimated contribution of each resource at the time of peak and then compared to the requirement for electricity supply (net demand inclusive of conservation and a reserve margin) to identify the capacity gap over the planning period.

Figure 2: Supply Outlook Compared to Requirements at Time of Peak, 2010 – 2030

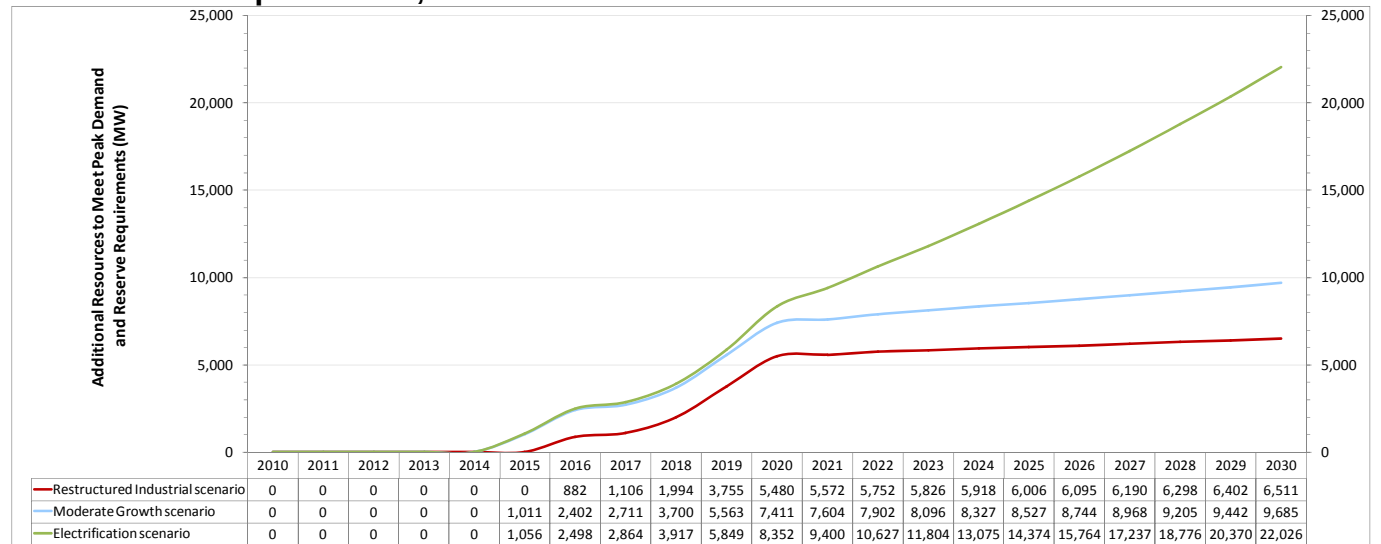


Source: OPA

The capacity gap defines the requirement for resources that is outlined in the Status and Outlook Report. Under a Moderate Growth Scenario, a requirement of about 1,000 MW is identified as beginning in 2015 growing to about 9,700 MW in 2030. This analysis did not

- 1 assume the extension of the Pickering Nuclear Generating Station or the refurbishment of
- 2 Bruce B and Darlington units.

Figure 3: Additional Resources Needed to Meet Peak Demand and Reserve Requirements, 2010 – 2030



Source: OPA

3 4 **FIT and microFIT**

5 The Status and Outlook Report considered the contribution of the FIT and microFIT
6 programs in developing the assessment of the resource requirement over the plan period.
7 In forecasting the contribution of FIT and microFIT, the OPA adopted the approach of
8 projecting the existing, committed and directed renewable resources over the plan period.

9 As of the second quarter of 2010, the OPA had received 1,300 FIT applications and
10 executed 598 FIT contracts with a combined generating capacity of 1,994 MW. The OPA
11 had also received 16,756 microFIT applications with 522 microFIT contracts having been
12 executed with a capacity of 2.9 MW. The executed FIT and microFIT contracts were
13 included in the committed and directed resources and brought the renewable level to
14 15,837 MW of installed capacity by 2017. The amount of renewable resources is aligned
15 with the target for renewable energy in the Supply Mix Directive received June 13, 2006 to
16 plan for a total capacity of renewable energy sources in Ontario of 15,700 MW. The
17 selection of 2017 was based on an analysis of the contract applications and a forecast of in
18 service dates for resources and required transmission upgrades.

