

A Progress Report on Contracted Electricity Supply



2012
Second
Quarter



Preface

The Ontario Power Authority (OPA) was established by the Ontario government under the *Electricity Restructuring Act, 2004* (amending the *Electricity Act, 1998*), as Ontario's long-term energy planner to accommodate Ontario's growing electricity demand and to ensure a clean, reliable, cost-effective and sustainable supply of electricity for Ontarians.

In accordance with the Ontario Energy Board (OEB) Order EB-2005-0489 dated March 3, 2006, the OPA posts regular updates on its website on the progress of procurement initiatives, including the progress of projects selected, subject to confidentiality constraints. *A Progress Report on Contracted Electricity Supply* is posted on a quarterly basis to provide an update on the status of the OPA's contracted electricity supply projects and procurement initiatives.

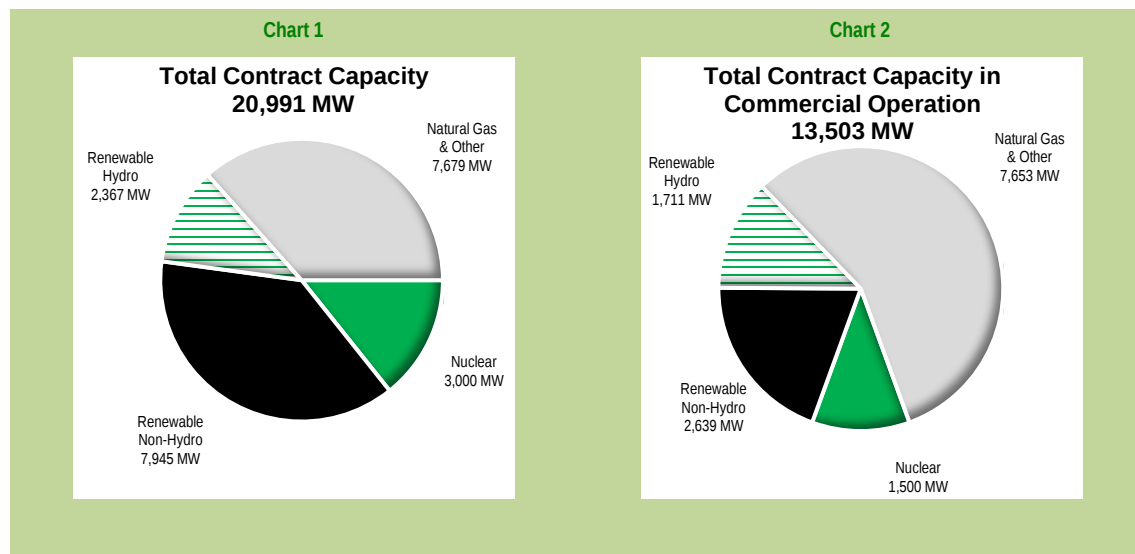
Together with our partners, we ensure that electricity needs are met for the benefit of Ontario both now and in the future. We plan and procure electricity supply from diverse resources and facilitate the measures needed to achieve ambitious conservation targets.

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Executive Summary

Overview



As of the end of the second quarter of 2012, the OPA administered contracts for 20,991¹ megawatts (MW) of electricity supply² generation.

Of this 20,991 MW of supply capacity, 4,728 MW were procured from existing generating facilities, which required minimal or no new capital investment. The remaining capacity of 16,263 MW was procured from new development, expansion, redevelopment, or refurbishment of existing facilities. This capacity represents over \$35 billion of new capital investment in power generation in Ontario's electricity system since 2005.

Since the last reporting period, the overall net decrease in contracted capacity was about 94 MW and the capacity that achieved commercial operation was about 516 MW.

By the end of the reporting period, the OPA had 7,945 MW of renewable non-hydroelectric, 2,367 MW of renewable hydroelectric, 7,679 MW of natural gas and other fuel sources and 3,000 MW of nuclear capacity under contract (see Chart 1).

Of this total capacity, 2,639 MW from renewable non-hydroelectric, 1,711 MW from renewable hydroelectric, 7,653 MW from natural gas and other fuel sources and 1,500 MW from nuclear generation were in commercial operation, for a total of 13,503 MW (see Chart 2). The remaining 7,488 MW of the OPA's contracted capacity were in various stages of development.

¹ Throughout this report, variations in MW and percentage occur due to value rounding.

² All capacity figures in this report refer to average contract capacity.

Within the total renewable generation capacity, about 1,403 MW were contracted with Aboriginal participation and 329 MW were contracted with community and municipal participation. This represented about 8.3 percent of OPA's total procured generation capacity.

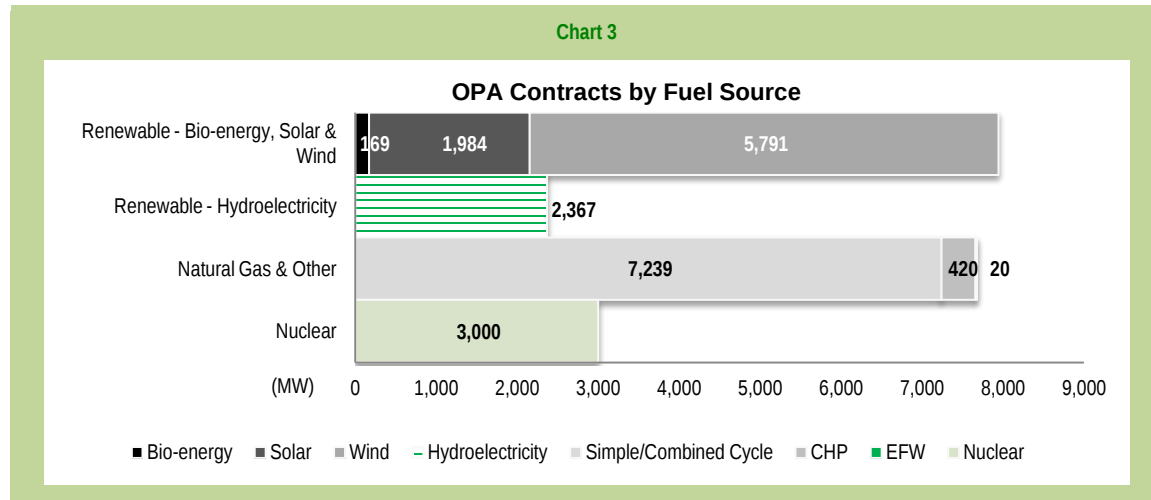


Table 1: Breakdown of Total Contract Capacity as of June 30, 2012

	Total	Under Development	Commercial Operation
Renewables			
Bio-energy	169	110	59
Solar	1,984	1,420	564
Wind	5,791	3,776	2,015
Non-Hydroelectric – Subtotal (MW)	7,945	5,307	2,639
Hydroelectric	2,367	655	1,711
Renewables – Subtotal (MW)	10,312	5,962	4,350
Natural Gas and Other Fuel Sources			
Combined Heat and Power (CHP)	420	6	414
Simple Cycle and Combined Cycle (SC/CC)	7,239	0	7,239
Energy From Waste (EFW)	20	20	-
Natural Gas and Other – Subtotal (MW)	7,679	26	7,653
Nuclear			
Bruce A	3,000	1,500	1,500
Nuclear – Subtotal (MW)	3,000	1,500	1,500
Total Contract Capacity (MW)	20,991	7,488	13,503

New Contracts

Renewable Energy – Non-Hydroelectricity

Solar

Within the reporting period, 12.3 MW of new capacity was contracted.

Contracts That Reached Commercial Operation

Renewable Energy – Non-Hydroelectricity

Bio-energy

Within the reporting period, 2.0 MW of capacity came into commercial operation.

Solar

Within the reporting period, 82.3 MW of capacity came into commercial operation, including the 10 MW SunE Rutley Solar Farm developed by SunEdison Canada Inc. in Ingleside, which is the first large-scale solar project to come online under the FIT Program.

Wind

Within the reporting period, 38.8 MW of capacity came into commercial operation, including the 4 MW Mother Earth Renewable Energy (MERE) wind project located on M'Chigeeng First Nation lands on Manitoulin Island. The project is 100 percent owned by the M'Chigeeng First Nation.

Natural Gas and Other Fuel Sources

Simple Cycle and Combined Cycle

On May 9, 2012, York Energy Centre which is a simple cycle power plant came into commercial operation, adding 393 MW to Ontario's electricity supply.

Contract Amendments

Renewable Energy – Non-Hydroelectricity

Bio-energy

Within the reporting period, bio-energy capacity was reduced by 0.4 MW through contract amendments.

Solar

Within the reporting period, solar capacity was reduced by 4.5 MW through contract amendments.

Contract Terminations

Renewable Energy – Non-Hydroelectricity

Bio-energy

Within the reporting period, 40.1 MW of bio-energy contract capacity was terminated due to contract counterparties failing to meet contract requirements.

Solar

Within the reporting period, 41.3 MW of combined capacity from over 200 FIT contracts was terminated due to contract counterparties failing to meet contract requirements.

Wind

Within the reporting period, 20.0 MW of capacity was terminated due to the failure of one FIT contract counterparty to meet contract requirements.

Contract Capacity – Progress and Forecasts Table

The following table shows the OPA's contracted capacity that has achieved commercial operation since 2005 and the current forecast of commercial operation contract milestones.

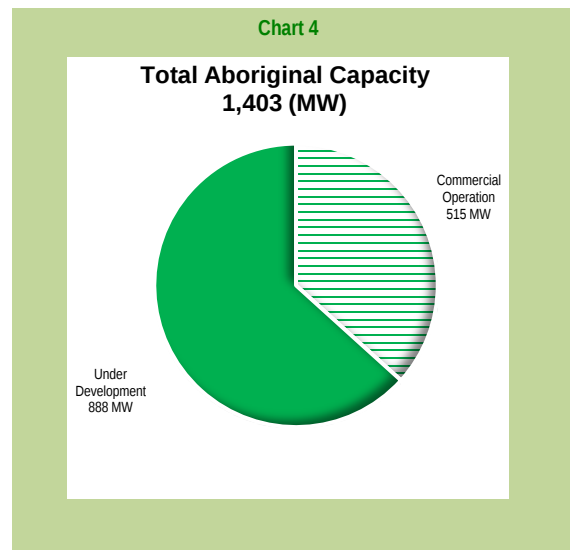
Table 2: Contract Capacity – Commercial Operation and Forecast Table as of June 30, 2012

Energy Supply	2005-2009	2010	2011	2012 Q1-Q2	2012 Q3-4	2013	2014	2015	2016	TOTAL (MW)
Renewable	2,309	1,041	776	225	138	1,148	3,773	898	6	10,312
Natural Gas and Other Fuel Sources	4,242	3,018	-	393	-	-	6	-	20	7,679
Nuclear	1,500	-	-	-	1,500	-	-	-	-	3,000
Total (MW)	8,051	4,059	776	618	1,638	1,148	3,779	898	26	20,991
Cumulative Total (MW)	8,051	12,110	12,886	13,503	15,141	16,289	20,067	20,965	20,991	

Aboriginal and Community Participation

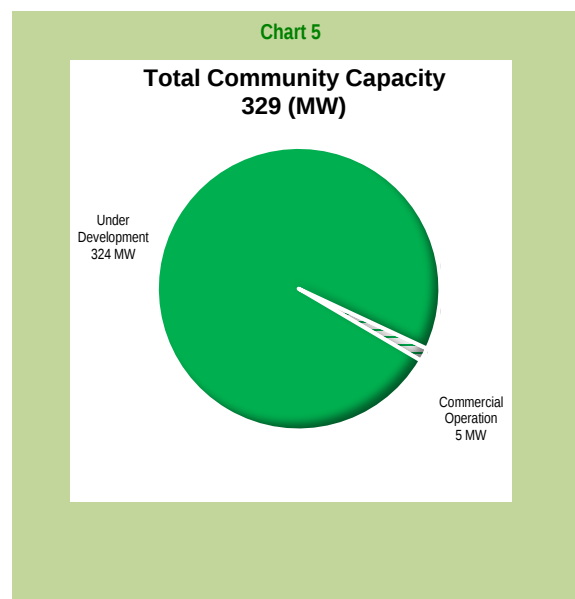
Aboriginal Participation

By the end of the reporting period, 19 First Nations and Métis communities were participating in the development of renewable generation projects throughout Ontario. These Aboriginal groups are participating in 5 MW of solar, 364 MW of wind and 1,034 MW of hydroelectric generation projects.



Community Participation

By the end of the reporting period, 93 community participants were participating in the development of renewable generation projects throughout Ontario. These community participants are participating in 14 MW of bio-energy, 47 MW of solar, 267 MW of wind and 1 MW of hydroelectric generation projects.



Additional Details and Related Links

For further information on the OPA's electricity supply projects, visit <http://www.powerauthority.on.ca/current-electricity-contracts>.

For further information on the OPA's FIT and micro Feed-in Tariff (microFIT) programs, visit <http://fit.powerauthority.on.ca>.

For further information on programs offered to First Nations and Métis communities, visit <http://www.powerauthority.on.ca/first-nations-metis-relations/aboriginal-energy-partnership-program>.

Renewable Energy

Non-Hydroelectric Projects

By the end of this reporting period, the OPA was managing 7,945 MW of combined capacity from renewable non-hydroelectric energy projects, of which 2,639 MW of capacity were in commercial operation and 5,307 MW were under development. The breakdown is shown in Charts 6 and 7 below.

Chart 6

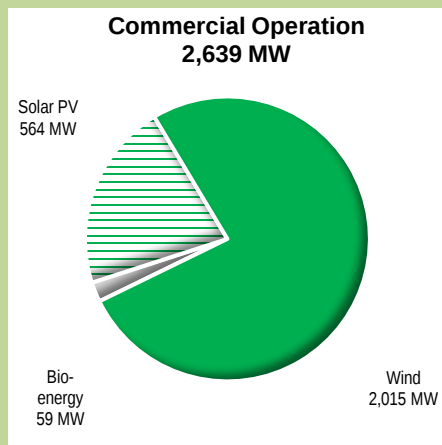
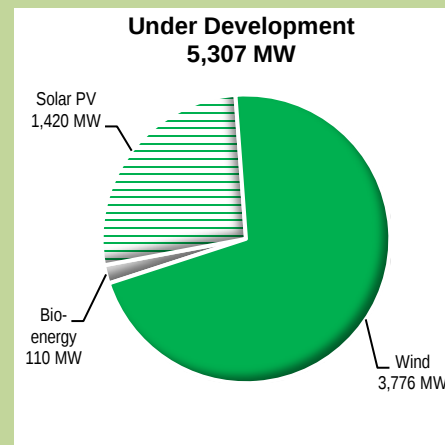


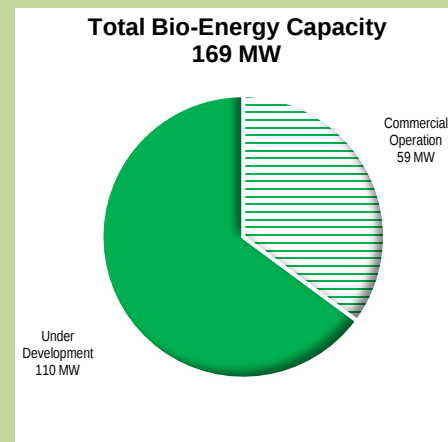
Chart 7



Bio-Energy

By the end of the reporting period, the OPA was managing 169 MW of combined capacity from bio-energy projects. All of the capacity from projects that are currently under development is scheduled to be in service at or before the end of 2014.

Chart 8



The status of these non-FIT bio-energy projects as submitted by the developers to the OPA is set out in Table 3.

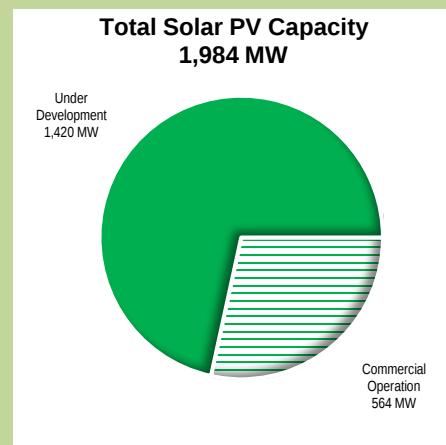
Table 3: Progress Status of non-FIT Bio-Energy Projects as of June 30, 2012

Developer	Project
Becker Cogeneration Plant	Becker Cogeneration Plant, Hornepayne, Ontario Capacity: 8 MW Status: - Construction on foundations and bark pads nearing completion - Erection of structural steel for powerhouse in progress - Turbine has been relocated to Sudbury for refurbishment
	Thunder Bay Condensing Turbine Project, Thunder Bay, Ontario Capacity: 40 MW Status: - Transformer installed and dead end structure in substation in place - Turbine and generator refurbishment complete; condenser refurbishment in progress - Turbine and generator foundation complete, pedestal in progress
Resolute FP Canada Inc. (name changed, previously known as AbiBow Canada Inc.)	

Solar

By the end of the reporting period, the OPA was managing 1,984 MW of combined capacity from solar projects. Of the total capacity, 5 MW were developed with Aboriginal participation. All of the capacity from projects that are under development is scheduled to be in service at or before the end of 2014.

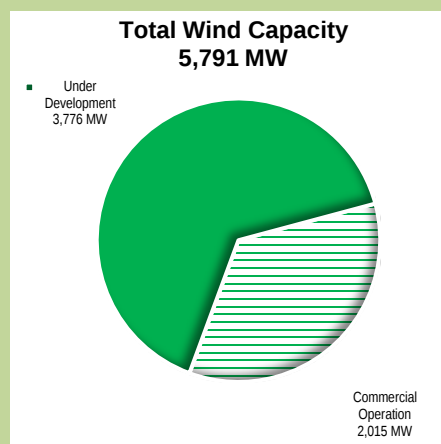
Chart 9



Wind

By the end of the reporting period, the OPA was managing 5,791 MW of combined capacity from wind projects. Of the total capacity, 364 MW were developed with Aboriginal participation. All of the capacity from projects that are currently under development is scheduled to be in service at or before the end of 2015.

Chart 10

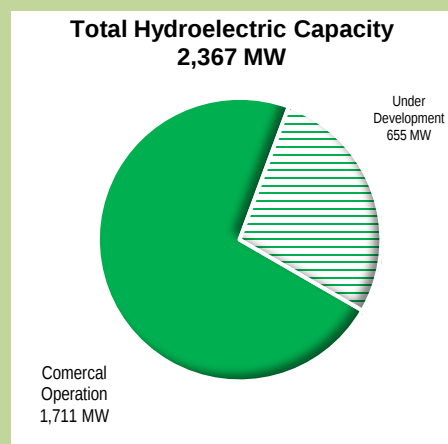


Hydroelectric Projects

Hydroelectricity

By the end of the reporting period, the OPA was managing 2,367 MW of combined capacity from hydroelectric projects. Of the total capacity, 1,034 MW were developed with Aboriginal participation. All of the capacity from projects that are currently under development is scheduled to be in service at or before the end of 2016.

Chart 11



The status of these non-FIT hydroelectric projects as submitted by the developers to the OPA is set out in Table 4.

Table 4: Progress Status of non-FIT Hydroelectric Projects as of June 30, 2012

Developer	Project
Ontario Power Generation and Moose Cree First Nation Partnership	Lower Mattagami Hydroelectric Station Expansion, Kapuskasing: Mattagami River Capacity: 438 MW Status: - Harmon Generating Station (GS), Little Long GS, and Smoky Falls GS - work on concrete pours continued to progress well - Kipling GS - work on Cofferdam #2 and #3 was completed; drilling, blasting, and excavation are under way
	Island Falls Generating Station, Smooth Rock Falls: Mattagami River Capacity: 20.0 MW Status: No change in project status for this reporting period

Renewable Program Projects – Development Status

Renewable Energy Standard Offer Program

A total of 856 MW were contracted through the Renewable Energy Standard Offer Program (RESOP), 716 MW were in service and the remaining 140 MW had forecasted milestone commercial operation dates prior to the end of 2014.

Feed-in Tariff Program

By the end of the reporting period, 4,555 MW of combined capacity were contracted through the Feed-in Tariff (FIT) Program, of which 59 MW were from bio-energy, 1,196 MW were from solar, 3,113 MW were from wind and 188 MW were from hydroelectricity. Of this total capacity, 319 MW were in commercial operation. In addition, through the microFIT Program 114 MW of combined contract capacity from solar generation were in commercial operation.

Furthermore, 402 MW of capacity were from projects that reached the notice to proceed (NTP) stage of development. Of these, 4 MW were from bio-energy, 153 MW were from wind, 183 MW were from solar and 63 MW were from hydroelectric generation. The remaining 3,835 MW were in the pre-NTP stage of development, of which 44 MW were from bio-energy, 2,708 MW were from wind, 958 MW were from solar and 126 MW were from hydroelectric generation.

Feed-in Tariff Projects – Progress Table

The status of these large FIT projects as submitted by the developers to the OPA is set out in Table 5.

Legend

REA	Renewable Energy Approvals	SIA	System Impact Assessment
CIA	Connection Impact Assessment	DCP	Domestic Content Plan
FIN	Financing Plan	NTP	Notice to Proceed
CON	Construction		

Progress

C	Complete	U	Under Way
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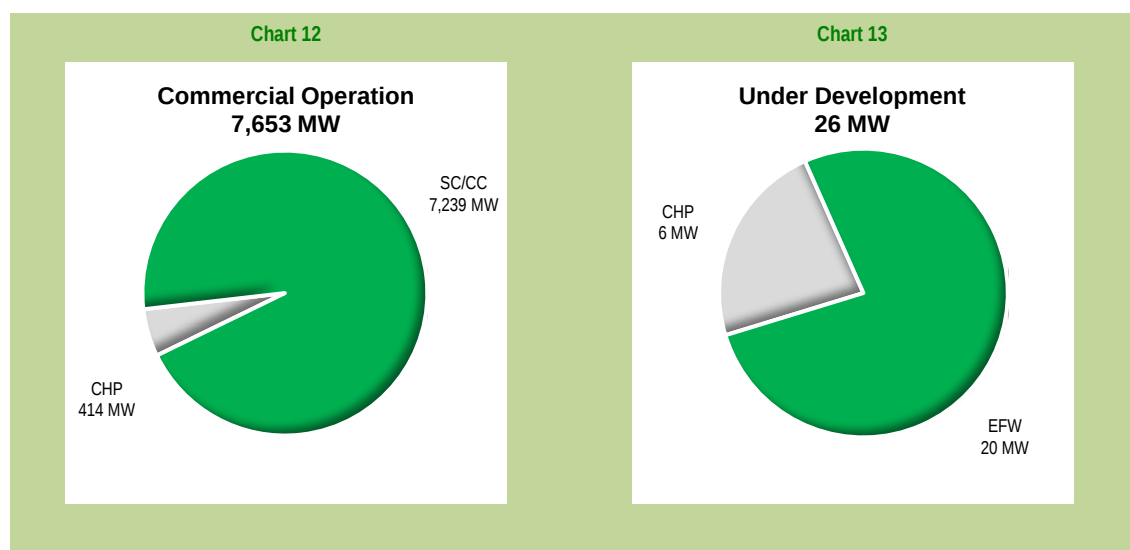
Table 5: Progress Status of Selected Feed-in Tariff Projects as of June 30, 2012

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON	
				REA		SIA/CIA		DCP		FIN			U	C
				U	C	U	C	U	C	U	C			
Algonquin Power	Amherst Island Wind Project	Stella	75	✓		✓			✓	✓				
Capital Power GP Holdings Inc.	Port Dover/ Nanticoke Wind Project	Walpole	105	✓			✓							
China Longyuan Power Group Corporation Limited	Dufferin Wind Farm	Shelburne	100	✓			✓		✓	✓				
DP Energy (60 MW)	Bow Lake Phase 1 (wind)	Montreal River Harbour	20	✓			✓	✓		✓				
	Bow Lake Phase 2a (wind)	Montreal River Harbour	20	✓			✓	✓		✓				
	Bow Lake Phase 2b (wind)	Montreal River Harbour	20	✓			✓	✓		✓				
Henvey Inlet First Nation	Nigig Power Corporation (wind)	Pickering	300	✓		✓			✓	✓				
International Power plc. (198 MW)	East Lake St. Clair Wind	Wallaceburg	99		✓		✓		✓		✓			
	Erieau Wind	Chatham-Kent	99	✓		✓		✓			✓			
NextEra Energy (686 MW)	Adelaide Wind Energy Centre	Middlesex County	60	✓			✓	✓		✓				
	Blowwater Wind Energy Centre	Zurich	60	✓			✓	✓		✓				

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON	
				REA		SIA/CIA		DCP		FIN			U	C
				U	C	U	C	U	C	U	C			
	Bornish Wind Energy Centre	Keyser	74	✓			✓	✓		✓				
	Conestogo Wind Energy Centre	Alma	23		✓		✓		✓		✓	✓		
	Conestogo Wind Energy Centre 1	Drayton	69	✓			✓		✓					
	East Durham Wind Energy Centre	Priceville	23	✓			✓		✓					
	Goshen Wind Energy Centre	Dashwood	102	✓			✓	✓		✓				
	Jericho Wind Energy Centre	Thedford	150	✓			✓	✓		✓				
	Summerhaven Wind Energy Centre	Nanticoke	125	✓			✓		✓		✓	✓		
Niagara Region Wind Corporation	Niagara Region Wind Farm	Smithville	230	✓			✓		✓	✓				
Northland Power (150 MW)	Grand Bend Wind Farm	Zurich	100	✓			✓		✓					
	McLean's Mountain Wind Farm	Little Current	50	✓			✓		✓	✓				
Pic Mobert First Nation and White River Hydro Limited Partnership (a wholly owned subsidiary of Regional Power Inc.) (19 MW)	Gitchi Animki Bezhig Generating Station	Brothers Township	9		✓		✓		✓		✓	✓		
	Gitchi Animki Niizh Generating Station	Brothers Township	10		✓		✓		✓		✓	✓		
Samsung C&T Corporation and Korea Electric Power (1,070 MW)	Armow (wind)	Kincardine	180	✓			✓		✓					
	Grand Renewable Energy Park (wind)	Haldimand County	150		✓	✓		✓		✓				
	K2 (wind)	Ashfield-Colborne-Wawanosh	270	✓			✓	✓		✓				
	South Kent (wind)	Chatham-Kent	270		✓		✓	✓		✓				
	Grand Renewable Energy Park (solar)	Haldimand County	100		✓	✓		✓		✓				

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON	
				REA		SIA/CIA		DCP		FIN			U	C
				U	C	U	C	U	C	U	C			
	Sol-Luce Kingston Solar Energy Project solar	Kingston & Loyalist Township	100	✓			✓		✓					
Suncor Energy Products Inc.	Cedar Point Wind Power Project Phase II	Forest	100	✓			✓							
Veresen Inc.	Grand Valley Wind Farms Phase 3	Grand Valley	40	✓			✓							
wpd Canada Corp.	White Pines Wind Farm	Milford	60	✓			✓	✓						

Natural Gas and Other Fuel Sources



By the end of the reporting period, the OPA was managing 7,679 MW of combined capacity from natural gas-fired projects and projects with other fuel sources. This capacity included 7,239 MW from simple cycle and combined cycle (SC/CC) contracts, 420 MW from combined heat and power (CHP) and 20 MW from energy-from-waste contracts. Of this capacity, 7,653 MW are under commercial operation and 26 MW are under development.

Simple Cycle and Combined Cycle Projects

Simple Cycle and Combined Cycle

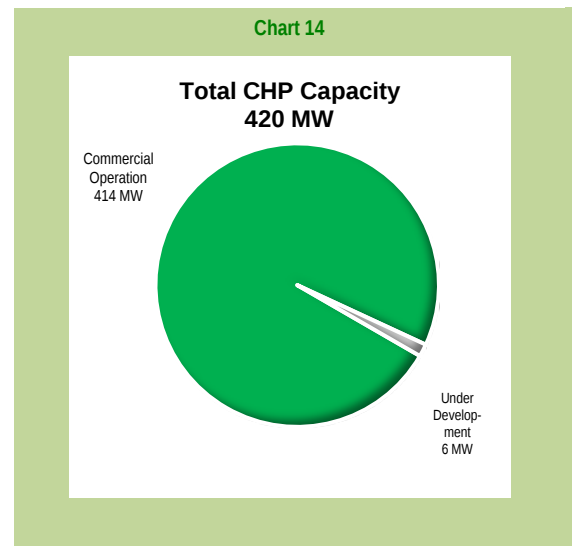
By the end of the reporting period, the OPA was managing 7,239 MW of combined capacity from simple cycle and combined cycle (SC/CC) projects. All SC/CC projects are in commercial operation.

York Energy Centre, a 393 MW SC/CC natural gas-fired project in the Township of King, achieved commercial operation on May 9, 2012, after successfully completing performance testing. The project was developed by the York Energy Centre Limited Partnership.

Combined Heat and Power Projects

Combined Heat and Power

By the end of the reporting period, the OPA was managing 420 MW of combined capacity from combined heat and power (CHP) projects. The 6 MW of capacity from the two projects listed in the following table is scheduled to be in service by 2014.



The status of the two CHP projects under development, as submitted by the developers to the OPA is set out in Table 6.

Table 6: Progress Status of Combined Heat and Power Projects as of June 30, 2012

Developer	Project
Markham District Energy Centre Inc.	Birchmount Energy Centre, Markham Capacity: 2.6 MW Status: - Engineering design tender ongoing - Major equipment contract executed, with delivery expected Q4 2012
	Bur Oak Energy Centre, Markham Capacity: 3.3 MW Status: - Engineering design tender ongoing - Major equipment contract executed, with delivery expected Q4 2012 - District Energy Plant nearing completion, with generator room finished and awaiting delivery of equipment

Energy-from-Waste Projects

By the end of the reporting period, the OPA was managing 20 MW of capacity from one energy-from-waste (EFW) project, which is under development. The target for commercial operation is mid-2016.

The status of the energy-from-waste project as submitted by the developer to the OPA is set out in Table 7.

Table 7: Progress Status of Energy-from-Waste Project as of June 30, 2012

Developer	Project
Regional Municipality of Durham-York	Durham York Energy Centre, Municipality of Clarington Capacity: 20 MW Status: - Municipal approvals complete and permits have been issued - Site preparation is complete; sewer, roadway, and parking construction is underway - Major equipment activities in progress

Nuclear

Bruce A Restart and Refurbishment Projects

The OPA had 3,000 MW of nuclear energy supply capacity under contract; 1,500 MW came from the restart of units 1 and 2, which were near completion with an expected commercial operation date in 2012. The other 1,500 MW came from units 3 and 4, which were in operation prior to contract execution and are currently in operation. These two units will be refurbished when they reach their end-of-service life.

In May 2012, when Bruce Power was preparing unit 2 to synchronize to the grid, a non-nuclear equipment malfunction occurred. Bruce Power is presently working on mitigating the damages. This event will impact the expected commercial operation date of unit 2. The expected commercial operation date of unit 1 is also delayed. The OPA was conducting technical and legal due diligence on the event in the reporting period.

For additional information on the Bruce A Restart Project, visit <http://powerauthority.on.ca/nuclear/bruce-restart-and-refurbishment-project-3000-mw-tiverton>
<http://www.brucepower.com/>.

Photo Gallery

Becker Cogeneration Plant



Photo 1 – A view of the bark pads from the sawmill log in-feed deck.



Photo 2 – The powerhouse structural steel erection in progress.

Bruce A Units 1 and 2 Restart



Photo 3 – The Unit 1 generator recently received a new paint job in preparation for return to service.



Photo 4 – The inspection of Unit 2 generator after malfunction occurred.

Durham York Energy Centre



Photo 5 – An aerial view of the site, looking north.



Photo 6 – An aerial view of the refuse pit under construction.

Harmon Generating Station



Photo 7 – A view of the concrete pour, with visible corrugated steel anchor guides.



Photo 8 – Another view of the corrugated steel anchor guides embedded in concrete.

Kipling Generating Station



Photo 9 – A view of the dewatered lagoon.



Photo 10 – Drilling and excavation in the Unit 3 footprint.

Little Long Generating Station

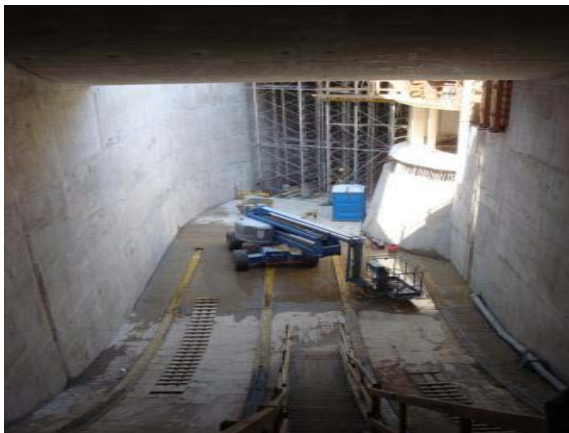


Photo 11 – The view into the scroll case and stay ring from inside the intake.



Photo 12 – A view of the concrete pour.

Smoky Falls Generating Station



Photo 13 – A westerly view from the service bay.



Photo 14 – A view from the east bank of the Mattagami River.

Thunder Bay Condensing Turbine



Photo 15 – The cooling tower under construction.



Photo 16 – The TG6 substation in progress.

Appendices

Appendix I: Electricity Targets and Progress

Table 8: OPA Total Contracted Capacity as of June 30, 2012

Energy Source	Total Contact Capacity (MW)	Capacity In Commercial Operation (MW)	Capacity Under Development (MW)	Ontario's Long-Term Energy Plan 2030 (Projected) (MW)
Bio-energy, Wind, and Solar	7,945	2,639	5,307	10,700
Hydroelectric	2,367	1,711	655	9,000
Natural Gas and Other – CHP, SC/CC & EFW	7,679	7,653	26	9,200
Nuclear	3,000	1,500	1,500	12,000
Subtotal	20,991	13,503	7,488	40,900

Appendix II: OPA Contracts and Contract Capacity

Table 9: All Contracts Capacity as of June 30, 2012

Energy Source	Contract Type	Number of Contracts			New Capacity (MW) Post-OPA Inception		Total Capacity (MW) Pre- and Post-OPA Inception		In Service and UD (MW)
		Total	In Service	Under Developm ent	In Service	Under Development	In Service	Under Developm ent	
Bio-energy	FIT	49	14	35	10.6	47.9	10.6	47.9	59
	RESOP	20	18	2	39.7	14.0	39.7	14.0	54
	CHP III	2	-	2	0.0	48.0	-	48.0	48
	RES	3	3	-	9.1	-	9.1	-	9
	Subtotal	74	35	39	59.5	109.8	59.5	109.8	169
Solar	FIT	1,590	296	1,294	55.2	1,140.4	55.2	1,140.4	1,196
	microFIT	13,057	13,057	-	113.7	-	113.7	-	114
	RESOP	57	49	8	395.2	80.0	395.2	80.0	475
	KC	2	-	2	-	200.0	-	200.0	200
	Subtotal	14,706	13,402	1,304	564.1	1,420.4	564.1	1,420.4	1,985
Wind	FIT	76	7	69	252.8	2,860.4	252.8	2,860.4	3,113
	RESOP	37	32	5	252.8	46.0	252.8	46.0	299
	RES	15	15	-	1,509.4	-	1,509.4	-	1,509
	KC	4	-	4	0.0	870.0	-	870.0	870
	Subtotal	132	54	78	2,015.0	3,776.4	2,015.0	3,776.4	5,791
Renewable Non-Hydro Subtotal		14,912	13,491	1,421	2,639	5,307	2,639	5,307	7,945
Hydroelectricity	FIT	49	-	49	-	188.1	-	188.1	188
	RESOP	16	16	-	28.2	-	28.2	-	28
	RES	3	2	1	31.0	20.0	31.0	20.0	51
	HCI	45	43	2	4.3	9.4	1,077.2	9.4	1,087
	HESA	4	3.5	0.5	62.9	438.0	575.0	438.0	1,013
Renewable Hydro Subtotal		117	64.5	52.5	126	655	1,711	655	2,367
Natural Gas (Simple Cycle/ Combined Cycle)	CES	3	3	-	1,672.0	-	1,672.0	-	1,672
	ACES	3	3	-	2,030.6	-	2,030.6	-	2,031
	EMCES	5	5	-	1,003.6	-	1,003.6	-	1,004
	Lennox	1	1	-	2,140.0	-	2,140.0	-	2,140
	PGS	1	1	-	393.0	-	393.0	-	393
	Subtotal	13	13	-	7,239.2	-	7,239.2	-	7,239
Natural Gas(CHP)	CHP I& CHPSOP	9	7	2	414.0	5.9	414.0	5.9	420
Other	EFW	1	-	1	-	20.0	-	20.0	20
Natural Gas and Other Subtotal		23	20	3	7,653	26	7,653	26	7,679
Nuclear	Bruce	1	0.5	0.5	1,500.0	1,500.0	1,500.0	1,500.0	3,000
Nuclear Subtotal		1	0.5	0.5	1,500	1,500	1,500	1,500	3,000
Subtotal			13,576	1,477	11,918	7,488	13,503	7,488	
Total			15,053		19,406		20,991		

Appendix III: Non-Standard Offer Program Contracted Facilities in Commercial Operation

Table 10: Renewable Energy – Bio-energy as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Eastview Landfill Gas Energy Plant	2.5	18-Aug-05	Q3 2025
Hamilton (Digester Gas) Cogeneration Project	1.6	10-Jul-06	Q3 2026
Trail Road Landfill Generating Facility	5.0	31-Jan-07	Q1 2027
Subtotal	9		

Table 11: Renewable Energy – Wind as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Enbridge Ontario Wind Farm	181.5	19-Feb-09	Q1 2029
Erie Shores Wind Farm	99.0	24-May-06	Q2 2026
Gosfield Wind Project	50.6	16-Sep-10	Q4 2032
Greenwich Wind Farm	98.9	14-Oct-11	Q4 2031
Kingsbridge I Wind Power Project	39.6	16-Mar-06	Q1 2026
Kruger Energy Chatham Wind Project	99.4	01-Jan-11	Q4 2031
Kruger Energy Port Alma Wind Power Project	101.2	31-Oct-08	Q4 2028
Melancthon I Wind Plant	67.5	04-Mar-06	Q1 2026
Melancthon II Wind Plant	132.0	24-Nov-08	Q4 2028
Prince I Wind Power Project	99.0	21-Sep-06	Q3 2026
Prince II Wind Power Project	90.0	19-Nov-06	Q4 2026
Raleigh Wind Energy Centre	78.0	29-Jan-11	Q1 2031
Ripley Wind Power Project	76.0	22-Dec-07	Q4 2027
Talbot Wind Farm	98.9	16-Dec-10	Q4 2031
Wolfe Island Wind Project	197.8	26-Jun-09	Q2 2029
Subtotal	1,509		

Table 12: Renewable Energy – Hydroelectricity as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Andrews Generating Station	47.0	01-Dec-09	Q4 2029
Appleton Eco Power Centre	1.4	01-Jan-11	Q4 2030
Aubrey Falls Generating Station	162.0	01-Dec-09	Q4 2029
Barrie Small Hydro Limited	0.1	17-Jul-10	Q3 2030
Bracebridge Falls Generating Station	2.6	24-Jan-12	Q2 2030
Brewers Mills	0.9	01-May-10	Q2 2030
Burk's Falls	1.1	01-May-10	Q2 2030
Calm Lake Generating Station	9.0	01-Dec-09	Q4 2029
Campbellford-Seymour Electric Generation Inc. – Plant No. 1	2.0	01-Jan-10	Q4 2029
Chaudiere No. 2. Generating Station	8.4	01-Apr-10	Q1 2030
Chaudiere No. 4 Generating Station	9.3	01-Apr-10	Q1 2030
Clergue Generating Station	52.0	01-Dec-09	Q4 2029
Current River Hydro	0.5	01-Mar-10	Q1 2030
Devil's Gap Generating Station	0.5	01-Jun-10	Q2 2030
Domtar, Espanola Mill	18.0	01-Jan-12	Q1 2032
Dunford Generating Station	45.0	01-Dec-09	Q4 2029
Enerdu Power Systems Ltd.	0.3	01-Mar-11	Q1 2031
Fort Frances Generating Station	10.0	01-Dec-09	Q4 2029
Gananoque	0.7	01-May-10	Q2 2030
Galetta Eco Power Centre	1.6	01-Jan-11	Q4 2030
Gartshore Generating Station	23.0	01-Dec-09	Q4 2029
Glen Miller Generating Station	8.0	19-Dec-05	Q4 2025
Harmon Generating Station	141.0	22-Jun-10	Q4 2065
Harris Generating Station	12.0	01-Dec-09	Q4 2029
Healey Falls Generating Station	15.7	07-Apr-10	Q2 2060
Heywood Generating Station	7.2	01-Jan-10	Q4 2029
High Falls Generating Station #1	0.8	01-Oct-10	Q3 2030
Hogg Generating Station	18.0	01-Dec-09	Q4 2029
Hollingsworth Generating Station	23.0	01-Dec-09	Q4 2029
Hound Chute Generating Station	9.5	07-Dec-10	Q4 2060
Hurdman Dam	0.6	01-Jun-11	Q2 2031
Iroquois Falls Generating Station	29.0	01-Dec-09	Q4 2029
Island Falls Generating Station	38.0	01-Dec-09	Q4 2029

Table 12: Renewable Energy – Hydroelectricity as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Jones Falls	2.4	01-May-10	Q2 2030
Kagawong Generating Station	0.8	01-Jan-10	Q4 2029
Kenora Generating Station	6.0	01-Dec-09	Q4 2029
Kingston Mills	1.9	01-May-10	Q2 2030
Kipling Generating Station	155.0	22-Jun-10	Q4 2065
Lac Seul/Ear Falls Generating Station	29.3	18-Feb-09	Q1 2059
Little Long Generating Station	137.0	22-Jun-10	Q4 2065
London Street Generating Station	4.1	01-Jan-10	Q4 2029
Lower Sturgeon Generating Station	14.0	21-Nov-10	Q4 2060
Mackay Generating Station	62.0	01-Dec-09	Q4 2029
Maple Hill	0.6	01-Dec-10	Q4 2030
Matthias Generating Station	3.0	01-Jan-10	Q4 2029
McPhail Generating Station	13.0	01-Dec-09	Q4 2029
Minden Generating Station	4.0	01-Jan-10	Q4 2029
Mission Generating Station	16.0	01-Dec-09	Q4 2029
Moose Rapids Generating Station	1.4	01-Jan-11	Q4 2030
Norman Generating Station	10.0	01-Dec-09	Q4 2029
Parry Sound PowerGen Corporation – Cascade Street Generating Station	1.2	01-Mar-10	Q1 2030
Rayner Generating Station	46.0	01-Dec-09	Q4 2029
Red Rock Falls Generating Station	41.0	01-Dec-09	Q4 2029
Renfrew Power Generation Inc. – Lower Plant	1.0	01-Jan-10	Q4 2029
Renfrew Power Generation Inc. – Upper Plant	1.0	01-Jan-10	Q4 2029
Rideau Falls	2.0	01-May-10	Q2 2030
Sandy Falls Generating Station	5.5	27-Oct-10	Q4 2060
Scone Generator	0.1	01-Jan-10	Q4 2029
Scott Falls Generating Station	22.0	01-Dec-09	Q4 2029
Shand Dam Generating Station	0.7	01-Sep-10	Q3 2030
Smoky Falls Generating Station	53.0	22-Jun-10	Decommission Q1 2015
Steephill Generating Station	16.0	01-Dec-09	Q4 2029
Stewart Generating Station	0.2	05-Jun-10	Q2 2030
Sturgeon Falls Generating Station	7.0	01-Dec-09	Q4 2029
Swift Rapids Generating Station	7.9	01-Jan-10	Q4 2029

Table 12: Renewable Energy – Hydroelectricity as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Tembec, Smooth Rock Falls Facilities	8.0	14-Mar-10	Q1 2030
Truisler Chute Generating Station	0.6	01-Jun-11	Q2 2031
Tweed Generating Station	0.2	01-Nov-10	Q4 2030
Twin Falls Generating Station	22.0	01-Dec-09	Q4 2029
Umbata Falls Generating Station	23.0	12-Nov-08	Q4 2028
Washburn	0.2	01-May-10	Q2 2030
Wawaitin Generating Station	15.0	22-Nov-10	Q4 2060
Wells Generating Station	239.0	01-Dec-09	Q4 2029
West Nipissing Power Generation	6.5	01-Mar-10	Q1 2030
Wilson's Falls	2.9	7-Feb-12	Q2 2030
635294 Ontario Inc.	0.5	01-Feb-10	Q1 2030
1149377 Ontario Limited	2.3	01-Jan-10	Q4 2029
Subtotal	1,684		

Table 13: Natural Gas and Other Fuel Sources – Simple Cycle and Combined Cycle as of September 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Brighton Beach Power Station	541.3	01-Jan-06	Q3 2024
Goreway Station	839.1	04-Jun-09	Q2 2029
Greenfield Energy Centre	1,005.0	16-Oct-08	Q4 2028
GTAA Cogeneration Plant	90.0	01-Feb-06	Q1 2026
Halton Hills Generating Station	641.5	01-Sep-10	Q3 2030
Lennox Generating Station	2,140.0	01-Jan-11	Q4 2012
Portlands Energy Centre	550.0	22-Apr-09	Q2 2029
Sarnia Regional Cogeneration Plant	444.0	01-Jan-06	Q4 2025
St. Clair Energy Centre	577.0	30-Mar-09	Q1 2029
Sudbury District Energy Cogeneration Plant	5.0	01-Jan-06	Q4 2024
Sudbury District Energy, Hospital Cogeneration	6.7	01-Jan-06	Q4 2024
Trent Valley Cogeneration Plant	6.7	01-Jan-06	Q4 2015
York Energy Centre	393.0	09-May-12	Q2 2032
Subtotal	7,239		

Table 14: Natural Gas and Other Fuel Sources - Combined Heat and Power Contracts as of September 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Durham College District Energy Project	2.3	11-Mar-08	Q1 2028
East Windsor Cogeneration	84.0	06-Nov-09	Q4 2029
Essar Cogeneration Facility	63.0	13-Jun-09	Q2 2029
Great Northern Tri-Gen Facility	11.3	31-Oct-08	Q4 2028
London Cogeneration Facility	12.0	31-Dec-08	Q4 2028
Thorold Cogen	236.4	28-Mar-10	Q1 2030
Warden Energy Centre	5.0	04-Jun-08	Q2 2028
Subtotal	414		

Table 15: Nuclear Energy as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Bruce A Unit 3	750.0	31-Oct-05	Q4 2037
Bruce A Unit 4	750.0	31-Oct-05	Q4 2037
Subtotal	1,500		

Appendix IV: Non-Standard Offer Program Contracted Facilities Under Development

Table 16: Renewable Energy – Bio-energy as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Becker Cogeneration Plant	8.0	Q4 2013	Q4 2033
Thunder Bay Condensing Turbine Project	40.0	Q1 2013	Q1 2023
Subtotal	48		

Table 17: Renewable Energy – Solar as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Grand Renewable Energy Park	100.0	Q1 2014	Q1 2034
Sol-Luce Kingston Solar Energy Project	100.0	Q4 2014	Q4 2034
Subtotal	200		

Table 18: Renewable Energy – Wind as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Armow Wind Project	180.0	Q4 2014	Q4 2034
Grand Renewable Energy Park	150.0	Q1 2014	Q1 2034
K2	270.0	Q4 2014	Q4 2034
South Kent Wind Project	270.0	Q1 2014	Q1 2034
Subtotal	870		

Table 19: Renewable Energy – Hydroelectricity as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Casselman Generating Station	0.5	Q4 2011	Q4 2031
Harmon Generating Station (Expansion)	78.0	Q4 2015	Q4 2065
Island Falls Generating Station (Renewable Energy Supply Contract)	20.0	TBD	TBD
Kipling Generating Station (Expansion)	78.0	Q4 2015	Q4 2065
Little Long Generating Station (Expansion)	67.0	Q4 2015	Q4 2065
Smoky Falls Generating Station (Redevelopment)	215.0	Q4 2015	Q4 2065
Stanley Adamson Powerhouse	3.9	Q2 2013	Q2 2033
Twin Falls Generating Station (Runner Upgrade)	5.0	Q1 2012 – Q1 2014	Q4 2029
Subtotal	467		

Table 20: Natural Gas and Other Fuel Sources – Combined Heat and Power as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Birchmount Energy Centre	2.6	Q3 2014	Q3 2034
Bur Oak Energy Centre	3.3	Q3 2014	Q3 2034
Subtotal	6		

Table 21: Natural Gas and Other Fuel Sources – Energy from Waste as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Durham York Energy Centre	20.0	Q3 2016	Q3 2036
Subtotal	20		

Table 22: Nuclear Energy as of June 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Bruce A Unit 1	750.0	Q3 2012	Q4 2037
Bruce A Unit 2	750.0	Q3 2012	Q4 2037
Subtotal	1,500		

Appendix V: Summary of RESOP and FIT Contracts

Table 23: Renewable Energy Standard Offer Program (RESOP) and Feed-in Tariff (FIT) as of June 30, 2012

Program	Fuel Source	Under Development (MW)	Commercial Operation (MW)	Total (MW)
RESOP	Bio-Energy	14	40	856
	Hydroelectric	-	28	
	Solar	80	395	
	Wind	46	253	
	Subtotal	140	716	
FIT	Bio-Energy	48	11	4,555
	Hydroelectric	188	-	
	Solar	1,140	55	
	Wind	2,860	253	
	Subtotal	4,237	319	
microFIT	microFIT Solar Contracts (Total 13,057)	-	114	114
Total (MW)		4,377	1,148	5,525



Ontario Power Authority

120 Adelaide Street West
Suite 1600

Toronto, ON M5H 1T1

Phone: (416) 967-7474

Fax: (416) 967-1947

www.powerauthority.on.ca