

A Progress Report on Contracted Electricity Supply



2012
Third
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.

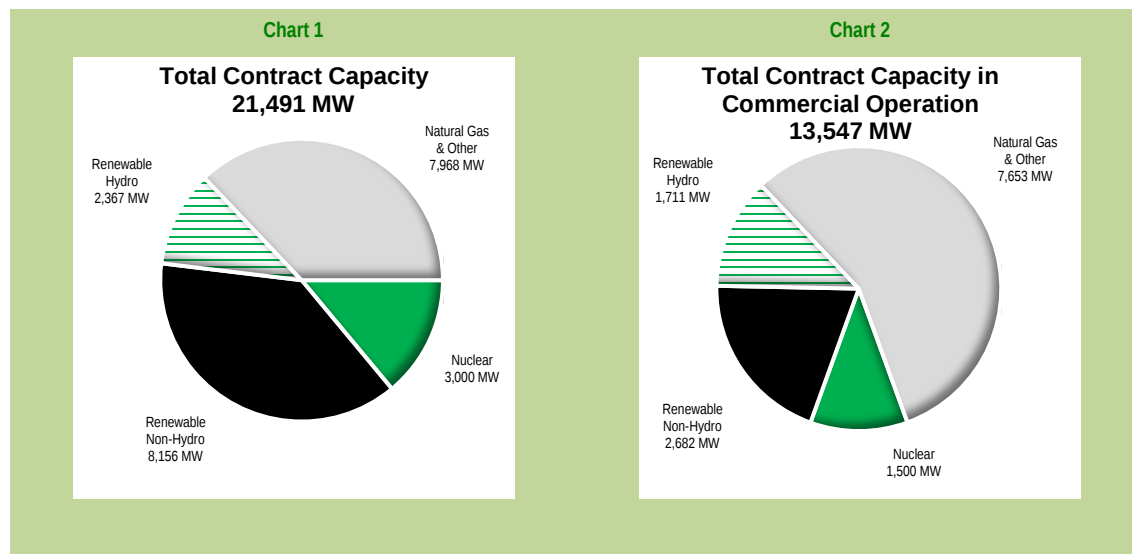
Together with our partners, we ensure that electricity needs are met for the benefit of Ontario both now and in the future. We plan and procure electricity supply from diverse resources and facilitate the measures needed to achieve ambitious conservation targets.

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Executive Summary

Overview



As of the end of the third quarter of 2012, the OPA administered contracts for 21,491¹ megawatts (MW) of electricity supply² generation.

Of this 21,491 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 16,763 MW was procured from new development, expansion, redevelopment, or refurbishment of existing facilities. This capacity represents about \$36 billion of new capital investment in power generation in Ontario's electricity system since 2005.

Since the last reporting period, the overall net increase in contracted capacity was 500 MW and the capacity that achieved commercial operation was 44 MW.

By the end of the reporting period, the OPA had 8,156 MW of renewable non-hydroelectric, 2,367 MW of renewable hydroelectric, 7,968 MW of natural gas and other fuel sources and 3,000 MW of nuclear capacity under contract (see Chart 1).

Of this total capacity, 2,682 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 13,547 MW (see Chart 2). The remaining 7,944 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 229 MW were contracted with community and municipal participation. This represented about 7.6 percent of the OPA's total procured generation capacity.

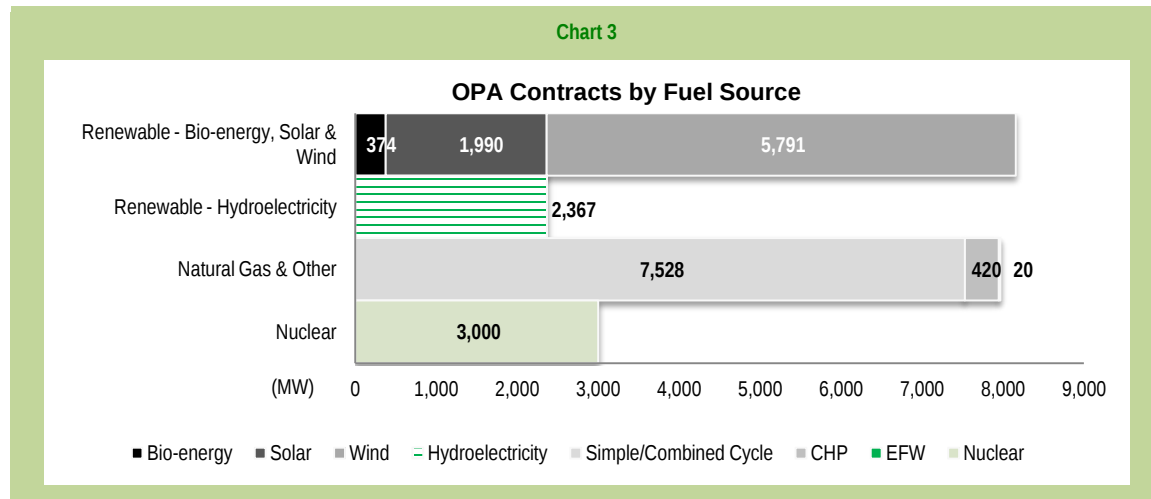


Table 1: Breakdown of Total Contract Capacity as of September 30, 2012

	Total	Under Development	Commercial Operation
Renewables			
Bio-energy	374	313	62
Solar	1,990	1,385	606
Wind	5,791	3,776	2,015
Non-Hydroelectric – Subtotal (MW)	8,156	5,474	2,682
Hydroelectric	2,367	655	1,711
Renewables – Subtotal (MW)	10,523	6,129	4,394
Natural Gas and Other Fuel Sources			
Combined Heat and Power (CHP)	420	6	414
Simple Cycle and Combined Cycle (SC/CC)	7,528	289	7,239
Energy From Waste (EFW)	20	20	-
Natural Gas and Other – Subtotal (MW)	7,968	315	7,653
Nuclear			
Bruce A	3,000	1,500	1,500
Nuclear – Subtotal (MW)	3,000	1,500	1,500
Total Contract Capacity (MW)	21,491	7,944	13,547

New Contracts

Renewable Energy – Non-Hydroelectricity

Bio-energy

Within the reporting period, the OPA entered into a 10-year agreement with Ontario Power Generation Inc. (OPG) to convert its 211-MW coal-fired Atikokan Generating Station (GS) near Thunder Bay into a 205-MW facility that burns wood pellets as fuel for electricity generation. The converted facility is forecasted to be completed in 2014.

Solar

Within the reporting period, 9.4 MW of combined capacity was contracted through the micro Feed-in Tariff (microFIT) Program.

Contracts That Reached Commercial Operation

Renewable Energy – Non-Hydroelectricity

Bio-energy

Within the reporting period, 2.2 MW of combined capacity came into commercial operation.

Solar

Within the reporting period, 41.7 MW of combined capacity came into commercial operation.

Contract Amendments

Renewable Energy – Non-Hydroelectricity

Solar

Within the reporting period, solar capacity was reduced by 0.5 MW through contract amendments.

Natural Gas and Other Fuel Sources

Simple Cycle and Combined Cycle

On July 9, 2012, the OPA reached an agreement with Greenfield South Power Corporation to relocate the 289-MW Greenfield South Power Plant from Mississauga to Sarnia. The plant was renamed the Green Electron Power Plant.

On September 24, 2012, the OPA reached an agreement in principle with TransCanada Energy to relocate its 900-MW combined cycle plant to the Lennox GS site owned by OPG from Oakville. The Lennox GS site is located in the Town of Greater Napanee in eastern Ontario.

Contract Terminations

Renewable Energy – Non-Hydroelectricity

Solar

Within the reporting period, 3.0 MW of combined capacity from 16 FIT contracts were terminated due to contract counterparties failing to meet contract requirements.

Wind

Within the reporting period, one 32-kilowatt FIT contract was terminated due to the contract counterparty failing to meet contract requirements.

Contract Capacity – Progress Table

The following table shows the OPA's contracted capacity that has achieved commercial operation since 2005, and the capacity that will reach commercial operation in accordance with the milestone commercial operation dates.

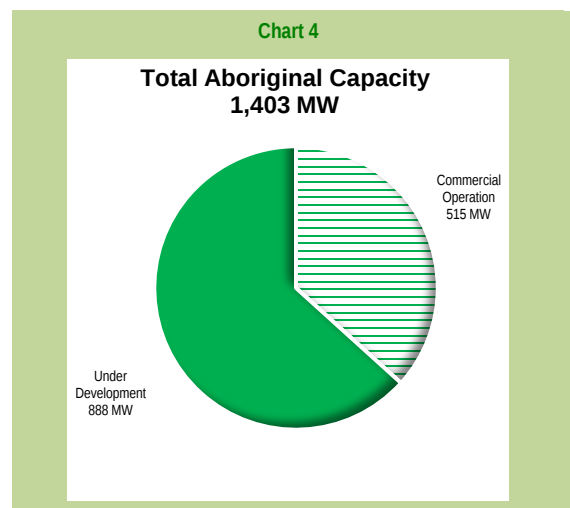
Table 2: Contract Capacity – Commercial Operation Progress Table as of September 30, 2012

Energy Supply	2005-2009	2010	2011	2012 Q1-Q3	2012 Q4	2013	2014	2015	2016	TOTAL (MW)
Renewable	2,309	1,041	776	269	89	1,362	3,773	898	6	10,523
Natural Gas and Other Fuel Sources	4,242	3,018	-	393	-	-	6	-	309	7,679
Nuclear	1,500	-	-	-	1,500	-	-	-	-	3,000
Total (MW)	8,051	4,059	776	662	1,589	1,362	3,779	898	315	21,491
Cumulative Total (MW)	8,051	12,110	12,886	13,548	15,137	16,499	20,278	21,176	21,491	

Aboriginal and Community Participation

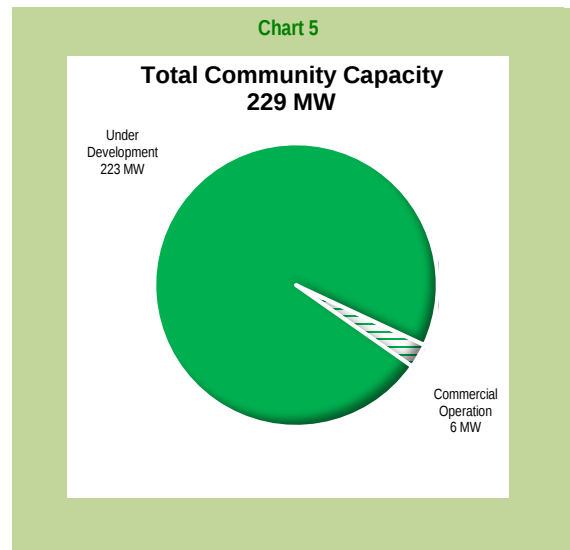
Aboriginal Participation

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 were 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, 92 communities were participating in the development of renewable generation projects throughout Ontario. These communities were participating in 14 MW of bio-energy, 47 MW of solar, 167 MW of wind and 1 MW of hydroelectric generation projects. Within the reporting period, ownership of a 100-MW contract was changed and the contract no longer met the criteria for community participation.



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 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 the reporting period, the OPA was managing 8,156 MW of combined capacity from renewable non-hydroelectric energy projects, of which 2,682 MW of capacity were in commercial operation and 5,474 MW were under development. The breakdown is shown in Charts 6 and 7 below.

Chart 6

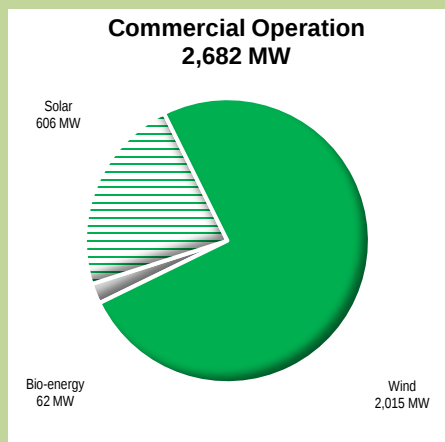
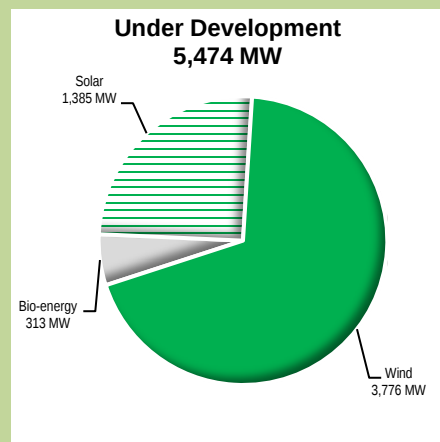


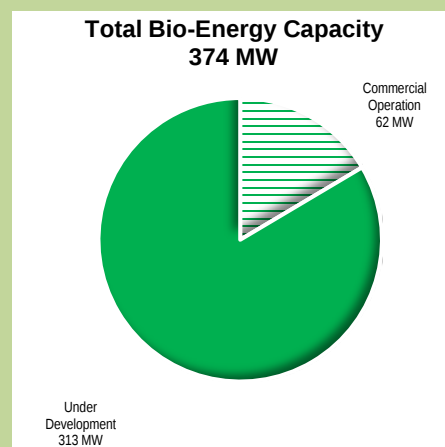
Chart 7



Bio-Energy

By the end of the reporting period, the OPA was managing 374 MW of combined capacity from bio-energy projects. The 205-MW Atikokan bio-energy conversion project is forecasted to be completed in 2014. The remaining capacity from projects that were under development is scheduled to be in service at or before the end of 2014.

Chart 8



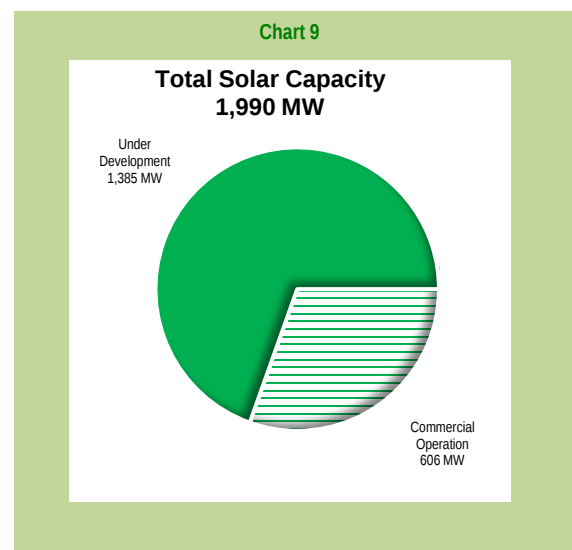
The status of these non-FIT bio-energy projects as submitted by the developers to the OPA is set out in Table 3.

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

Developer	Project
Ontario Power Generation	Atikokan Generating Station, Atikokan Capacity: 205 MW Status: - Main EPC (Engineering, Procurement and Construction) contracts were created - Construction activities were under way, including: site excavation, preparing road access, rock profiling and cleaning, foundation concrete forming and pouring and backfilling with crushed rock
	Becker Cogeneration Plant, Hornepayne Capacity: 8 MW Status: - Powerhouse measuring 60 x 24 metres that will house most of the plant equipment was close to completion. Bridge crane was being installed inside the powerhouse - Construction on turbine foundations and bark pads completed - Turbine refurbishment at an off-site facility was started
Resolute FP Canada Inc. (name changed, previously known as AbiBow Canada Inc.)	Thunder Bay Condensing Turbine Project, Thunder Bay Capacity: 40 MW Status: - Cooling tower structure was 95 percent completed - Electrical annex was in progress - Condenser was refurbished and was being installed; installation of electrical revenue metering equipment was in progress

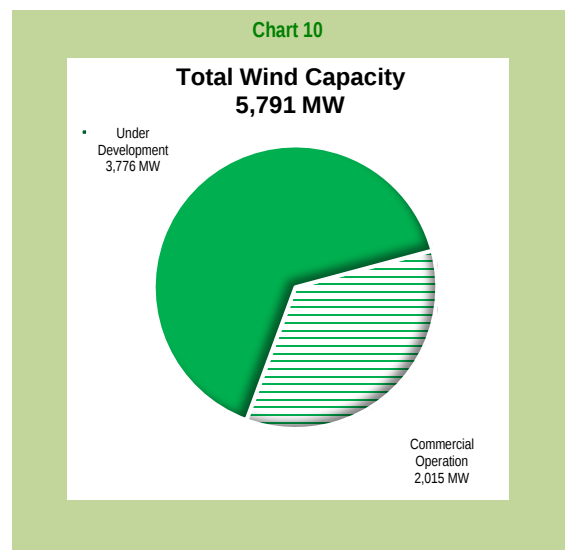
Solar

By the end of the reporting period, the OPA was managing 1,990 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 were under development is scheduled to be in service at or before the end of 2014.



Wind

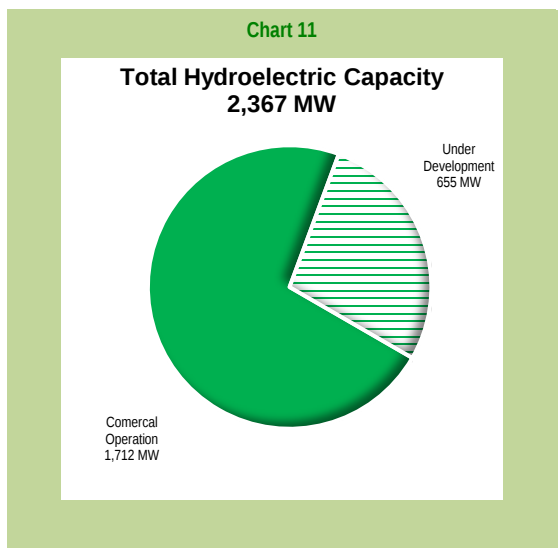
By the end of the reporting period, the OPA was managing 5,791 MW of combined capacity from wind projects. Of the total capacity, 364 MW were developed with Aboriginal participation. All of the capacity from projects that were under development is scheduled to be in service at or before the end of 2015.



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 were under development is scheduled to be in service at or before the end of 2016.



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 September 30, 2012

Developer	Project
Ontario Power Generation and Moose Cree First Nation Partnership	Lower Mattagami Hydroelectric Station Expansion, Kapuskasing: Mattagami River Capacity: 491 MW Status: • Harmon GS – Concrete work continued to progress well • Kipling GS – Drilling, blasting and excavation were complete. The draft tube form modules were installed and rebar was being placed. Work was advancing in the switchyard • Little Long GS – The majority of concrete work was complete. Electrical and mechanical parts were being delivered to the site. The superstructure was erected and installation of the roof deck started. Cofferdam removal was under way • Smoky Falls GS – Tailrace excavation downstream of the tailrace plug was successfully completed. The steel superstructure erection over the west service bay was complete and ready to be enclosed. Towers were erected for the four km, two-circuit transmission line to the Hydro One connection point
	Island Falls Generating Station, Smooth Rock Falls: Mattagami River Capacity: 20.0 MW Status: • No change in project status for the 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), 736 MW were in service and the remaining 120 MW had milestone commercial operation dates prior to the end of 2014.

Feed-in Tariff Program

By the end of the reporting period, 4,552 MW of combined capacity were contracted through the FIT Program, of which 59 MW were from bio-energy, 1,192 MW were from solar, 3,113 MW were from wind and 188 MW were from hydroelectricity. Of this total capacity, 333 MW were in commercial operation. In addition, 123 MW of combined contract capacity from solar generation were in commercial operation under the microFIT Program.

Furthermore, 516 MW of capacity were from projects that reached the notice to proceed (NTP) stage of development. Of these, 22 MW were from bio-energy, 279 MW were from solar, 153 MW were from wind and 63 MW were from hydroelectric generation. The remaining 3,702 MW were in the pre-NTP stage of development, of which 24 MW were from bio-energy, 845 MW were from solar, 2,708 MW were from wind and 126 MW were from hydroelectric generation.

Feed-in Tariff Projects – Progress Table

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

Legend

Reg EA	Regulatory Environmental 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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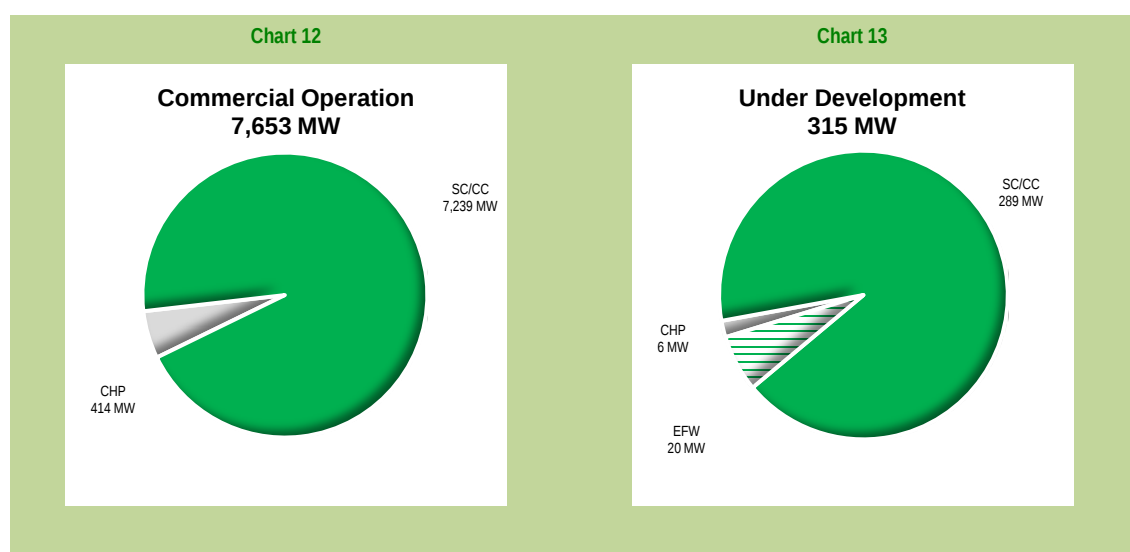
Table 5: Progress Status of Selected Feed-in Tariff Projects as of September 30, 2012

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON	
				Reg EA		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)	Pickerel	300	✓		✓			✓	✓				
International Power plc. (198 MW)	East Lake St. Clair Wind	Wallaceburg	99		✓		✓		✓		✓		✓	

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON		
				Reg EA		SIA/CIA		DCP		FIN			U	C	
				U	C	U	C	U	C	U	C				
	Erieau Wind	Chatham-Kent	99		✓		✓		✓		✓			✓	
Invenergy Wind Canada ULC.	Conestogo Wind Energy Centre 1	Drayton	69	✓			✓		✓		✓				
NextEra Energy (617 MW)	Adelaide Wind Energy Centre	Middlesex County	60	✓			✓		✓		✓				
	Bluewater Wind Energy Centre	Zurich	60	✓			✓		✓		✓				
	Bornish Wind Energy Centre	Keyser	74	✓			✓		✓		✓				
	Conestogo Wind Energy Centre	Alma	23		✓		✓		✓		✓	✓	✓	✓	
	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		✓		✓		✓		✓				

Developer (total capacity under development)	Project Name	Location	MW	Pre-NTP								Achieved NTP	CON	
				Reg EA		SIA/CIA		DCP		FIN			U	C
				U	C	U	C	U	C	U	C			
	K2 (wind)	Ashfield-Colborne-Wawanosh	270	✓			✓	✓		✓				
	South Kent (wind)	Chatham-Kent	270		✓		✓	✓		✓				
	Grand Renewable Energy Park (solar)	Haldimand County	100		✓	✓		✓		✓				
	Sol-Luce Kingston Solar Energy Project	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



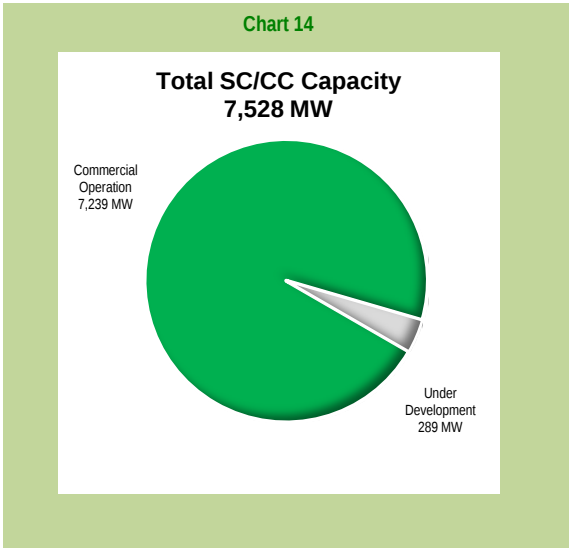
By the end of the reporting period, the OPA was managing 7,968 MW of combined capacity from natural gas-fired projects and projects with other fuel sources. This capacity included 7,528 MW from simple cycle and combined cycle (SC/CC) facilities, 420 MW from combined

heat and power (CHP) contracted facilities and a 20-MW energy-from-waste facility. Of this capacity, 7,653 MW were under commercial operation and 315 MW were under development.

Simple Cycle and Combined Cycle Projects

Simple Cycle and Combined Cycle

By the end of the reporting period, the OPA was managing 7,528 MW of combined capacity from simple cycle and combined cycle (SC/CC) projects. Of this capacity, 7,239 MW were already in operation and 289 MW were under development.



The status of the combined cycle project, as submitted by the developer to the OPA is set out in Table 6.

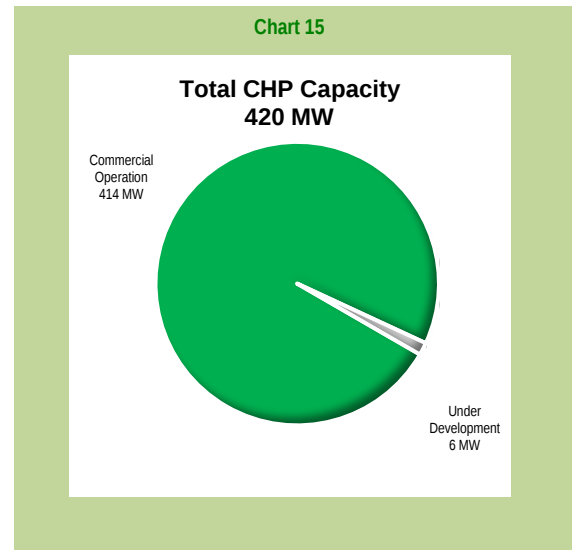
Table 6: Progress Status of Simple Cycle and Combined Cycle Projects as of September 30, 2012

Developer	Project
Greenfield South Power Corporation	Green Electron Power Plant, Sarnia Capacity: 289 MW Status: • Major equipment in long-term storage/preservation mode • Permitting for the power plant at the new site was in progress

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) contracted projects. The 6 MW of capacity from the two projects listed in the following table were 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 7.

Table 7: Progress Status of Combined Heat and Power Projects as of September 30, 2012

Developer	Project
Markham District Energy Centre Inc.	Birchmount Energy Centre, Markham Capacity: 2.6 MW Status: • Connection Impact Assessment (CIA) complete • Detailed engineering design in progress
	Bur Oak Energy Centre, Markham Capacity: 3.3 MW Status: • CIA complete • Detailed engineering design in progress

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 was under development. The target for commercial operation is mid-2016.

The status of the EFW project as submitted by the developer to the OPA is set out in Table 8.

Table 8: Progress Status of Energy-from-Waste Project as of September 30, 2012

Developer	Project
	Durham York Energy Centre, Municipality of Clarington
	Capacity: 20 MW
	Status:
Regional Municipality of Durham-York	• Building permits were issued • Construction work was advancing from the refuse pit to the boiler, tipping hall, refuse and administration buildings • Turbine generator pedestal and foundations were complete. Electrical duct banks were being installed

Nuclear

Bruce A Restart and Refurbishment Projects

The OPA had 3,000 MW of nuclear energy supply capacity under contract; 1,500 MW were from the restart of units 1 and 2, which were near completion at the end of the quarter. The other 1,500 MW were from units 3 and 4, which were in operation prior to contract execution and continued operations during the reporting period. These two units will be refurbished when they reach their end-of-service life.

Bruce Power continued to conduct testing and commissioning of both units 1 and 2 in this quarter. As a result of a non-nuclear equipment malfunction that occurred in May 2012, commercial operation of these units was rescheduled to the fourth quarter of 2012.

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 – Generating facility building was in progress with bridge crane being installed. The building, which has an overall dimension of approximately 60 x 24 meters, will house most of the plant equipment.



Photo 2 – The turbine foundations located inside the generating facility building were completed.

Durham York Energy Centre

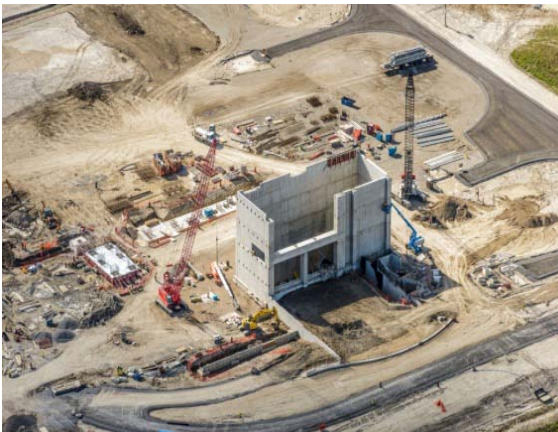


Photo 3 – An aerial view of the refuse pit under construction.



Photo 4 – Turbine generator pedestal and foundations were completed.

Lower Mattagami Hydroelectric Station Expansion

Harmon Generating Station



Photo 5 – The installation of turbine embedded parts was nearing completion.

Kipling Generating Station



Photo 6 – Concrete work was proceeding in the intake and powerhouse areas.

Little Long Generating Station



Photo 7 – The draft tube gates were installed and the area behind the cofferdam was watered up.

Smoky Falls Generating Station



Photo 8 – Concrete pours continued to progress in the service bay, intake and draft tube areas.

Summerhaven Wind Energy Centre (FIT Contract)



Photo 9 – Construction of an entrance road to the point of interconnection was started.



Photo 10 – A view of an entrance road under construction.

Thunder Bay Condensing Turbine



Photo 11 – Cooling tower structure was 95 percent complete.



Photo 12 – A view of the condensing turbine electrical annex.

Appendices

Appendix I: OPA Contracts and Contract Capacity

Table 9: All Contracts Capacity as of September 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 Development	In Service	Under Development	In Service	Under Development	
Bio-energy	FIT	49	17	32	12.8	45.7	12.8	45.7	59
	RESOP	20	18	2	39.7	14.0	39.7	14.0	54
	CHP III	2	0	2	0.0	48.0	0.0	48.0	48
	RES	3	3	0	9.1	0.0	9.1	0.0	9
	Atikokan	1	0	1	0.0	205.0	0.0	205.0	205
	Subtotal	75	38	37	61.7	312.6	61.7	312.6	374
Solar	FIT	1,574	382	1,192	67.6	1,124.6	67.6	1,124.6	1,192
	microFIT	14,076	14,076	0	123.0	0.0	123.0	0.0	123
	RESOP	57	51	6	415.2	60.0	415.2	60.0	475
	KC	2	0	2	0.0	200.0	0.0	200.0	200
	Subtotal	15,709	14,509	1,200	605.8	1,384.6	605.8	1,384.6	1,990
Wind	FIT	75	7	68	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	0	1,509.4	0.0	1,509.4	0.0	1,509
	KC	4	0	4	0.0	870.0	0.0	870.0	870
	Subtotal	131	54	77	2,015.0	3,776.4	2,015.0	3,776.4	5,791
Renewable Non-Hydro Subtotal		15,915	14,601	1,314	2,682	5,474	2,682	5,474	8,156
Hydroelectricity	FIT	49	0	49	0.0	188.1	0.0	188.1	188
	RESOP	16	16	0	28.2	0.0	28.2	0.0	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	65	53	126	655	1,711	655	2,367
Natural Gas (Simple Cycle/ Combined Cycle)	CES	4	3	1	1,672.0	289.0	1,672.0	289.0	1,961
	ACES	3	3	0	2,030.6	0.0	2,030.6	0.0	2,031
	EMCES	5	5	0	1,003.6	0.0	1,003.6	0.0	1,004
	Lennox	1	1	0	2,140.0	0.0	2,140.0	0.0	2,140
	PGS	1	1	0	393.0	0.0	393.0	0.0	393
	Subtotal	14	13	1	7,239.2	289.0	7,239.2	289.0	7,528
Natural Gas(CHP)	CHP I & CHPSOP	9	7	2	414.0	5.9	414.0	5.9	420
Other	EFW	1	0	1	0.0	20.0	0.0	20.0	20
Natural Gas and Other Subtotal		24	20	4	7,653	315	7,653	315	7,968
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			14,686	1,371	11,962	7,944	13,547	7,944	21,491
Total			16,057		19,906		21,491		

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

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

Contract Facility	Contract Capacity (MW)	Commercial Operation/Term Commencement Date	Contract Expiry Date
Eastview Landfill Gas Energy Plant	1.7	18-Aug-05	Q3 2025
Hamilton (Digester Gas) Cogeneration Project	1.6	10-Jul-06	Q3 2026
Trail Road Landfill Generating Facility	6.0	31-Jan-07	Q1 2027
Subtotal	9		

Table 11: Renewable Energy – Wind as of September 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 September 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 September 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 September 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 September 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 III: Non-Standard Offer Program Contracted Facilities Under Development

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

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Atikokan Generating Station	205.0	Q4 2013	Q4 2023
Becker Cogeneration Plant	8.0	Q4 2013	Q4 2033
Thunder Bay Condensing Turbine Project	40.0	Q1 2013	Q1 2023
Subtotal	253		

Table 17: Renewable Energy – Solar as of September 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 September 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 September 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)	267.9	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	520		

Table 20: Natural Gas and Other Fuel Sources – Simple Cycle/Combined Cycle as of September 30, 2012

Contract Facility	Contract Capacity (MW)	Scheduled Commercial Operation Date	Forecasted Contract Expiry Date
Green Electron Power Plant	289.0	Q3 2017	Q3 2037
Subtotal	289		

Table 21: Natural Gas and Other Fuel Sources – Combined Heat and Power Contracts as of September 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 22: Natural Gas and Other Fuel Sources – Energy from Waste as of September 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 23: Nuclear Energy as of September 30, 2012

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

Appendix IV: Summary of RESOP and FIT Contracts

Table 24: Renewable Energy Standard Offer Program and Feed-in Tariff Program as of September 30, 2012

Program	Fuel Source	Under Development (MW)	Commercial Operation (MW)	Total (MW)
RESOP	Bio-Energy	14	40	856
	Hydroelectric	-	28	
	Solar	60	415	
	Wind	46	253	
	Subtotal	120	736	
FIT	Bio-Energy	46	13	4,553
	Hydroelectric	188	-	
	Solar	1125	68	
	Wind	2860	253	
	Subtotal	4,219	333	
microFIT	microFIT Solar Contracts (Total 14,076)	-	123	123
Total (MW)		4,339	1,193	5,532



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