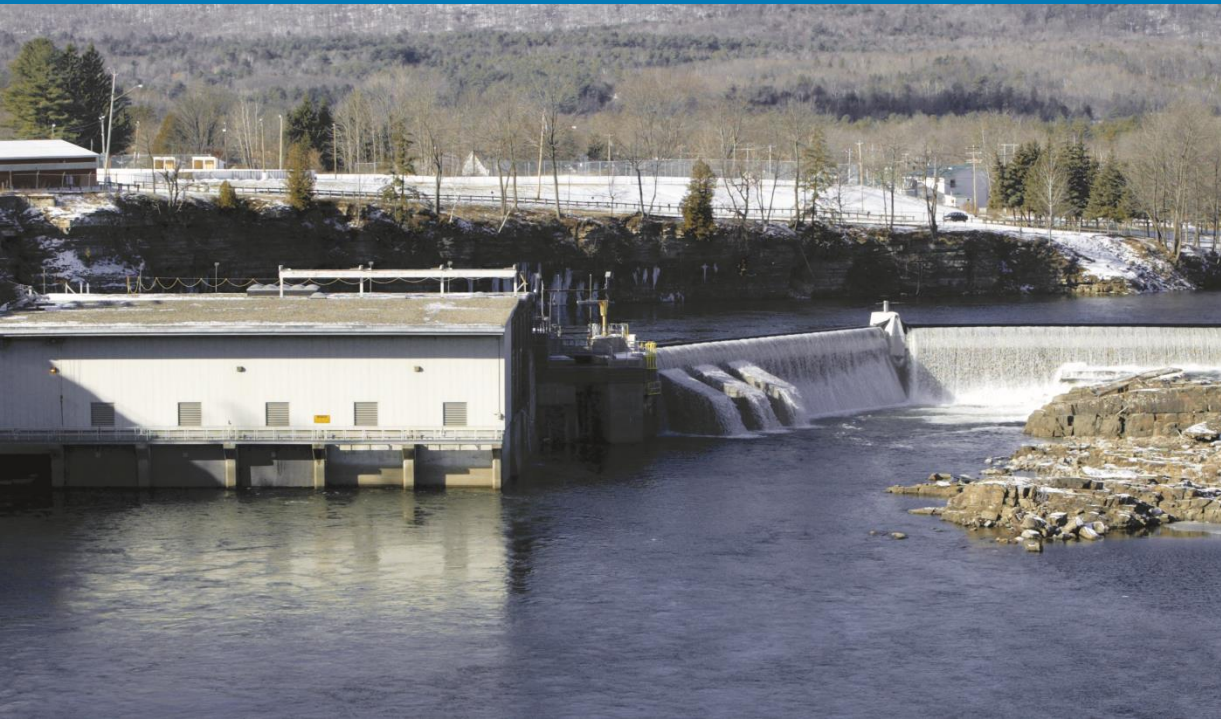




AtlanticPower Corporation



Annual and Special Meeting of Shareholders

June 17, 2020



Cautionary Note Regarding Forward-Looking Statements

To the extent any statements made in this presentation contain information that is not historical, these statements are forward-looking statements or forward-looking information, as applicable, within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, and under Canadian securities law (collectively “forward-looking statements”).

Forward-looking statements can generally be identified by the use of words such as “should,” “intend,” “may,” “expect,” “believe,” “anticipate,” “estimate,” “continue,” “plan,” “project,” “will,” “could,” “would,” “target,” “potential” and other similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Although Atlantic Power Corporation (“AT”, “Atlantic Power” or the “Company”) believes that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties and should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not or the times at or by which such performance or results will be achieved. Please refer to the factors discussed under “Risk Factors” and “Forward-Looking Information” in the Company’s periodic reports as filed with the Securities and Exchange Commission from time to time for a detailed discussion of the risks and uncertainties affecting the Company, including, without limitation, the effects of the coronavirus pandemic on the Company’s business and results, including the measures taken by governmental authorities to address it, which may precipitate or exacerbate other risks and/or uncertainties; the outcome or impact of the Company’s business strategy to increase the intrinsic value of the Company on a per-share basis through disciplined management of its balance sheet and cost structure and investment of its discretionary cash in a combination of organic and external growth projects, acquisitions, and repurchases of debt and equity securities; the Company’s ability to enter into new PPAs on favorable terms or at all after the expiration of existing agreements, and the outcome or impact on the Company’s business of any such actions. Although the forward-looking statements contained in this presentation are based upon what are believed to be reasonable assumptions, investors cannot be assured that actual results will be consistent with these forward-looking statements, and the differences may be material. These forward-looking statements are made as of the date of this presentation and, except as expressly required by applicable law, the Company assumes no obligation to update or revise them to reflect new events or circumstances. The Company’s ability to achieve its longer-term goals, including those described in this presentation, is based on significant assumptions relating to and including, among other things, the general conditions of the markets in which it operates, revenues, internal and external growth opportunities, its ability to sell assets at favorable prices or at all and general financial market and interest rate conditions. The Company’s actual results may differ, possibly materially and adversely, from these goals.

Disclaimer – Non-GAAP Measures

Project Adjusted EBITDA is not a measure recognized under GAAP and does not have a standardized meaning prescribed by GAAP, and is therefore unlikely to be comparable to similar measures presented by other companies. Investors are cautioned that the Company may calculate this non-GAAP measure in a manner that is different from other companies. The most directly comparable GAAP measure is project income (loss). Project Adjusted EBITDA is defined as project income (loss) plus interest, taxes, depreciation and amortization (including non-cash impairment charges), and changes in the fair value of derivative instruments. Management uses Project Adjusted EBITDA at the project level to provide comparative information about project performance and believes such information is helpful to investors.

All amounts in this presentation are in US\$ and approximate unless otherwise stated.

Leverage ratio

- **Consolidated debt to Adjusted EBITDA**, calculated for the trailing four quarters.
- **Consolidated debt** includes both long-term debt and the current portion of long-term debt at APLP Holdings, specifically the amount outstanding under the term loan and the amount borrowed under the revolver, if any, the Medium Term Notes, and consolidated project debt (Epsilon Power Partners and Cadillac).
- **Adjusted EBITDA** is calculated as the Consolidated Net Income of APLP Holdings plus the sum of consolidated interest expense, tax expense, depreciation and amortization expense, and other non-cash charges, minus non-cash gains. The Consolidated Net Income includes an allocation of the majority of Atlantic Power G&A expense. It also excludes earnings attributable to equity-owned projects but includes cash distributions received from those projects.

Reference to “Cdn\$” and “Canadian dollars” are to the lawful currency of Canada and references to “\$”, “US\$” and “U.S. dollars” are to the lawful currency of the United States. All dollar amounts herein are in U.S. dollars, unless otherwise indicated.



YTD 2020 Highlights

Q1 2020 Financial Results

- Project Adjusted EBITDA modestly exceeded our expectations (higher water flows at Curtis Palmer)
- On track to achieve 2020 guidance
- Continued to strengthen balance sheet by repaying \$21.6 million of debt

Other Financial Developments

- Executed favorable changes to both term loan and revolver
 - Targeted debt balances amended to reflect sale of Manchief in 2022
 - Maturity dates for both extended to April 2025
 - Spread reduced 25 basis points to LIBOR plus 2.50%; to be reduced another 25 basis points upon achieving leverage ratio of 2.75 times or lower
- Received second tranche of insurance recovery for Cadillac (\$7.4 million; total \$18.6 million through March 31)

Capital Allocation Initiatives

- Significant repurchases of common and preferred shares under normal course issuer bid (NCIB)
- Completed substantial issuer bid (SIB) for common shares on May 1, repurchasing approximately 12% of outstanding shares at a price of \$2.00 per share

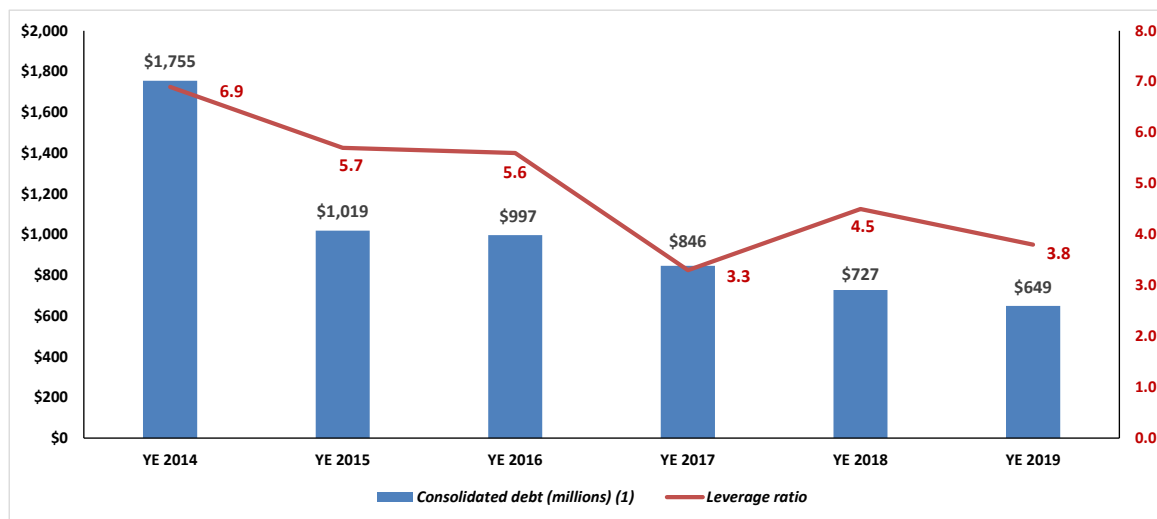
Operational and Commercial Developments

- Cadillac repairs on track for a targeted return to service in Q3 2020
- Calstock PPA recently extended six months to mid-December
 - Provides government additional time to evaluate role of Calstock and biomass in the province
- Oxnard PPA expired in May and was not renewed
 - However, plant is under a Reliability Must Run agreement with California Independent System Operator through end of this year

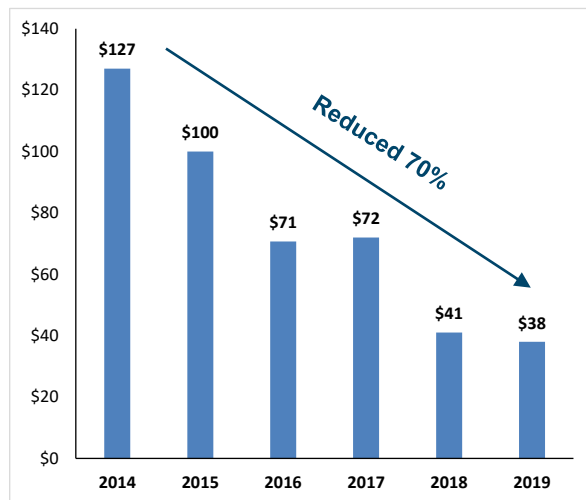


2015 – 2019: Achieved Significant Debt and Cost Reductions

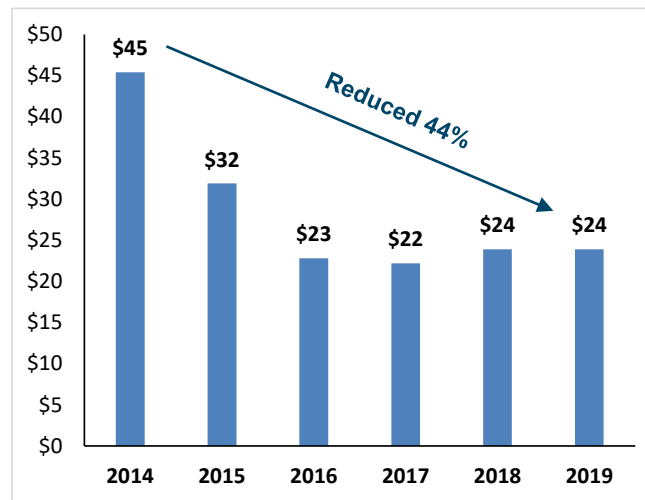
(\$ millions)



More than \$1.1 billion net reduction in consolidated debt since YE 2014



Cash Interest Payments



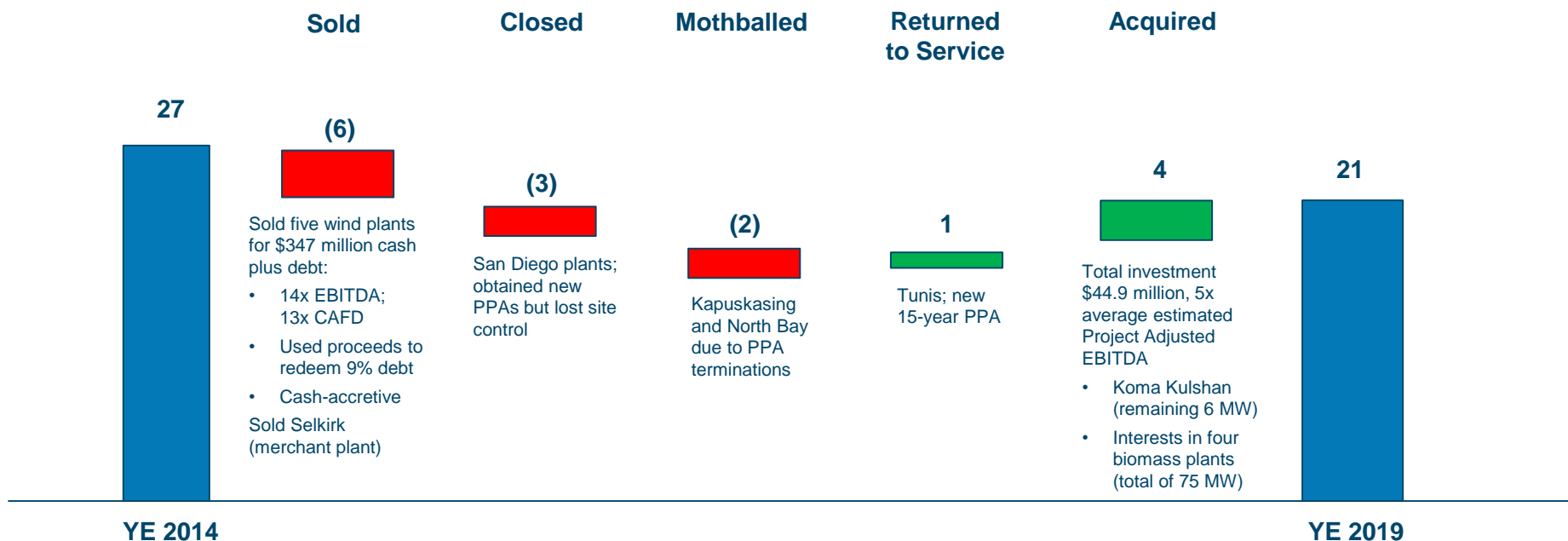
General, Administrative and Development Expense

(1) Excludes unamortized discounts and deferred financing costs.



2015 – 2019: Changes to Portfolio

(Number of Operating Plants)



Changes to Portfolio and PPA Expirations

	<u>2014</u>	<u>2019</u>	
MW	1,988	1,327	↓ 33%
Project Adjusted EBITDA (millions)	\$299	\$196	↓ 34%

Balance Sheet and Cost Reshaping

	<u>2014 – 2019</u>
Debt	↓ 63%
Cash Interest	↓ 70%
G&A	↓ 44%



Capital Allocation:

Past, Present and Future



Past: 2015 – 2019

Investments in the Fleet

- From 2013 – 2016, made \$25 million of discretionary investments in our power plants
- Improved operating efficiency, increased production, reduced operating costs
- Attractive cash-on-cash returns
- Less need for these investments today

Securities Repurchases (through year-end 2019)

- Since late 2015, repurchased approximately 17.0 million common shares at a total cost of \$38.8 million or an average price of \$2.28 per share
- Common shares outstanding reduced 11% during this period
- Invested \$19.1 million (US\$ equivalent) in the repurchase of nearly 1.6 million preferred shares, representing an average discount to par of 37%; after-tax yields of between 10% and 12%

Acquisitions

- Focus on intrinsic value per share, not absolute size of business
- In 2018 and 2019, invested a total of \$45 million to acquire ownership interests in a hydro facility and four biomass plants
- Added 81 MW net ownership to portfolio
- Extended average remaining contract life and increased longer-term cash flows
- Expected to contribute \$8 to \$10 million of Project Adjusted EBITDA annually on average through expiration of first PPA (2027)

Common Dividends

- In 2015, paid \$10 million of common dividends
- Eliminated dividend in early 2016; not consistent with business model or current market conditions



Present: 2020: Significant Acceleration of Repurchase Activity

2020 Securities Repurchases (YTD through May 31, 2020)

Common

- **NCIB:** Repurchased a total of 4.0 million common shares at an average price of \$2.16 per share
- **SIB:**
 - Launched March 25; closed May 1
 - Repurchased 12.5 million common shares at a price of \$2.00 per share (~12% of shares o/s)
- **Total investment of \$33.7 million through May 31, 2020**
 - 16.5 million common shares
 - Average price of \$2.04 per share

Preferred

- Invested \$6.4 million (US\$ equivalent) to repurchase approximately 564 thousand preferred shares
- Average discount to par of 39%

Cumulative Securities Repurchases (December 2015 – May 31, 2020)

Common

- 33.5 million shares
- Investment of \$72.5 million
- Average price of \$2.16 per share

Preferred

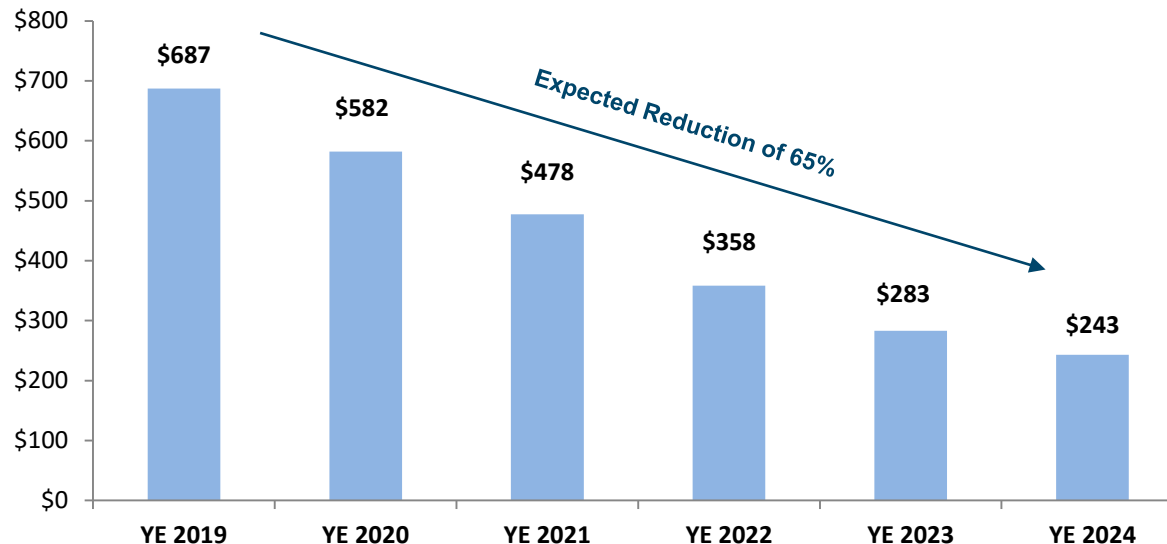
- 2.1 million shares
- Investment of \$25.5 million (US\$ equivalent)
 - Average discount to par of 37%
 - After-tax cash yields of 10% to 12%



Future: 2020 – 2024

Significant Reduction in Debt Expected

- Approximately 95% of cumulative Project Adjusted EBITDA and operating cash flow generated under existing contracts
- Expect to allocate majority of operating cash flow and all of Manchief sale proceeds to debt repayment
- Expect to repay \$423 million of term loan and project debt between YE 2019 and YE 2024 ⁽¹⁾
 - Represents more than 60% reduction from year-end 2019 level
 - Expect will result in lower cash interest payments and lower leverage ratios during this period



⁽¹⁾ Reduction in debt balances of \$444 million from YE 2019 to YE 2024 includes \$21 million unrealized foreign exchange gain on Cdn dollar-denominated debt in Q1 2020.



Future: 2020-2024

***Expect to generate cumulative discretionary cash flow of ~\$115 million to ~\$165 million
(after debt repayment of \$423 million, maintenance capex and preferred dividends)***

Capital Allocation Alternatives:

☐ **Option A: Build-up of discretionary cash on balance sheet**

- *Achieves Net Debt Neutral in 2025*

- or -

☐ **Option B: Repurchases of common and / or preferred shares**

- *Common:* Current market capitalization of \$186 million⁽¹⁾

- or -

- *Preferred:* Current market value \$84 million (par value of \$121 million)

- or -

☐ **Option C: Growth**

- *Revolver another source of liquidity (3/31/20 availability of \$102 million)*

- or -

☐ **Option D: Combination of the above**

← *Most likely
outcome*

← *Least likely
outcome*

***** Capital Allocation Benchmark: Accretion to intrinsic value per share *****

⁽¹⁾ Based on 6/12/20 closing stock price of \$2.00 per share and 92.8 million shares outstanding as of May 31, 2020.



Recent Questions Received from Shareholders

- ☐ **What are the low, base and high case forecasts for cash flow for the period immediately following your five-year outlook (i.e., 2025)?**

- ☐ **With all the debt and cost reductions, asset sales and acquisitions and disciplined capital allocation over the past five years, why has the share price declined during this period?**

- ☐ **What are the key reasons to hold onto Atlantic Power shares (i.e., what are the sources of upside potential)?**

- ☐ **Why not sell the company now, if the alternative is waiting for higher power prices that may or may not materialize?**



Potential Sources of Value for Atlantic Power Plants Post-PPA

Macro Trends and Implications

- ❑ Trend toward short-term contracts / merchant operations
 - Fully depreciated plants are better positioned than capital-intensive new-build plants (need long-term revenue stream)
- ❑ Current low forward energy and capacity price curves
 - Illiquid and poor predictors of future prices and values
 - Potential to increase as renewable tax credits expire, uneconomic plants are retired, supply / demand balance rationalizes
- ❑ Continued growth of intermittent wind and solar generation
 - Increasing need for flexible, dependable gas generation

Hydros

(PPAs expiring 2027⁽¹⁾ – 2037)

- Good locations; difficult / impossible to replace
- Long physical and economic lives
- Price-takers; benefit from higher gas and/or power prices
- May be able to capture capacity value in some markets
- Positioned to capitalize on renewable / environmental incentives
- Renewable value grows with carbon tax regime or tougher RPS (NY)
- Cheaper renewable than new-build solar or wind

Biomass

(PPAs expiring in 2020 and 2027 – 2043)

Though an above-market source of power, could benefit from multiple trends:

- Need for firm and reliable renewable energy
- Growing need to provide economic / environmental support to forestry sector (waste management)
- Concern over forest management and forest fire protection (provide clearing and use of forest residue)

Natural Gas

(PPAs expiring 2020 – 2023 and 2033 – 2034)

- Provide flexible, lower-cost, longer-duration firm power to backstop renewables compared to batteries or new-build gas plants
- Do not require long-term revenue streams to recover fixed costs (unlike batteries or new build gas)
- Provide ancillary services and firm hedge in hydro-dependent markets (Pacific NW)
- Combined heat and power (CHP) value to industrial customer benefits re-contracting outlook and post-PPA values for Kenilworth and Morris

⁽¹⁾ Based on cumulative generation to date, Curtis Palmer's PPA is expected to expire prior to 2027.



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Business Model and Proactive Steps have Limited the Impact of Coronavirus Pandemic

☐ **Impact to date has been limited**

- Continuing to operate plants safely and reliably
- Zero confirmed cases to date among Atlantic Power employees and plant contractors
- Cadillac repair schedule has not been materially impacted
- Monitoring fuel supply at biomass plants; expect impact at Calstock due to reduced production by mills due to the downturn in demand
- Lower demand has reduced power prices and forward curves, which hurt re-contracting prospects for Oxnard
- Overall, we do not anticipate a material impact on operations, financial position or results
- Continuing to monitor the evolving situation; ultimate outcome remains uncertain

☐ **Believe we are well positioned overall**

- Power generation an essential business in the United States and Canada
- Substantially contracted business model (capacity payment or contracted energy rate)
- Limited financial sensitivity to downturn in demand or spot prices (may hurt re-contracting prospects in near term)
- Nearly all of our customers are investment-grade rated (Chemours/Chambers only exception)
- Not experiencing any delays in payments
- Stable liquidity; no need to access capital markets
- Well positioned to withstand extended economic or power market downturn



Power Projects and PPA Expiration Dates

Year	Project	Location	Type	Economic Interest	Net MW	Contract Expiry
2020	Oxnard	California	Nat. Gas	100%	49	12/2020
	Calstock	Ontario	Biomass	100%	35	12/2020
2021	Kenilworth	New Jersey	Nat. Gas	100%	29	9/2021
2022	Manchief	Colorado	Nat. Gas	100%	300	4/2022 ⁽¹⁾
	Moresby Lake	B.C.	Hydro	100%	6	8/2022
	Frederickson	Washington	Nat. Gas	50.15%	125	8/2022
	Nipigon	Ontario	Nat. Gas	100%	40	12/2022
2023	Orlando	Florida	Nat. Gas	50%	65	12/2023
2024	Chambers	New Jersey	Coal	40%	105	3/2024
2025 - 2029	Mamquam	B.C.	Hydro	100%	50	9/2027 ⁽²⁾
	Curtis Palmer	New York	Hydro	100%	60	12/2027 ⁽³⁾
	Craven	North Carolina	Biomass	50%	24	12/2027
	Grayling	Michigan	Biomass	30%	11	12/2027
	Cadillac	Michigan	Biomass	100%	40	6/2028
	Williams Lake	B.C.	Biomass	100%	66	9/2029
2032 - 2043	Piedmont	Georgia	Biomass	100%	55	9/2032
	Tunis	Ontario	Nat. Gas	100%	37	10/2033
	Morris	Illinois	Nat. Gas	100%	77 ⁽⁴⁾	12/2034 ⁽⁵⁾
	Koma Kulshan	Washington	Hydro	100%	13	3/2037
	Dorchester	South Carolina	Biomass	100%	20	10/2043
	Allendale	South Carolina	Biomass	100%	20	11/2043

⁽¹⁾ Public Service Co. of Colorado has executed an agreement to purchase Manchief after the expiration of the PPA in May 2022. ⁽²⁾ BC Hydro has an option to purchase Mamquam that is exercisable in Nov. 2021. ⁽³⁾ Expires at the earlier of Dec. 2027 or the provision of 10,000 GWh of generation. We expect the PPA to expire prior to Dec. 2027. ⁽⁴⁾ Equistar has right to take up to 77 MW but on average takes approx. 50 MW. Balance of 177 MW of capacity is sold to PJM. ⁽⁵⁾ Equistar has an option to purchase Morris exercisable in Dec. 2020 and Dec. 2027.