

ATLANTIC POWER CORP
Form 424B5
January 23, 2018

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)

[Table of Contents](#)

**Filed Pursuant to Rule 424(b)(5)
Registration No. 333-221903**

A copy of this preliminary prospectus supplement has been filed with the securities regulatory authorities in each of the provinces and territories of Canada but has not yet become final for the purpose of the sale of securities. Information contained in this preliminary prospectus supplement may not be complete and may have to be amended.

*No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. This preliminary prospectus supplement (this "**prospectus supplement**"), together with the short form base shelf prospectus dated December 19, 2017 (the "**short form base shelf prospectus**") to which it relates, as amended or supplemented, and each document deemed to be incorporated by reference into the short form base shelf prospectus, constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities. Atlantic Power Corporation has filed a shelf registration statement on Form S-3, and a prospectus supplement and accompanying prospectus, with the United States Securities and Exchange Commission under the United States Securities Act of 1933, as amended, with respect to these securities. See the continuation of this cover page on the succeeding pages and "Plan of Distribution".*

Information has been incorporated by reference in this prospectus supplement and into the accompanying short form base shelf prospectus from documents filed with securities commissions or similar authorities in Canada. Copies of the documents incorporated herein by reference may be obtained on request without charge from the Corporate Secretary of Atlantic Power Corporation at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026, telephone 617.977.2400, and are also available electronically at www.sedar.com.

**PRELIMINARY PROSPECTUS SUPPLEMENT
To the Short Form Base Shelf Prospectus dated December 19, 2017**

New Issue

January 22, 2018

Atlantic Power Corporation

Cdn\$

% Series E Convertible Unsecured Subordinated Debentures due 2025

This prospectus supplement, together with the short form base shelf prospectus, qualifies the distribution of Cdn\$ aggregate principal amount of % series E convertible unsecured subordinated debentures due 2025 (the "**Initial Debentures**") of Atlantic Power Corporation (the "**Company**") as well as the Cdn\$ aggregate principal amount of % series E convertible unsecured subordinated debentures due 2025 of the Company issuable under the Over-Allotment Option (as defined below) (the "**Over-Allotment Debentures**", and together with the Initial Debentures, the "**Debentures**") at a price of Cdn\$1,000 per Cdn\$1,000 principal amount of Debentures (the "**Offering**"). The Debentures have a maturity date of January 31, 2025 (the "**Maturity Date**") and bear interest at an annual rate of % payable semi-annually in arrears on the last day of July and January in each year (each, an "**Interest Payment Date**") (or the immediately following business day if any Interest Payment Date would not otherwise be a business day) commencing on **July 31, 2018**. The first interest payment will represent accrued interest for the period from the closing date of the Offering up to, but excluding July 31, 2018. Further particulars concerning the attributes of the Debentures are set out under "Description of the Debentures" in the U.S. Prospectus (as defined below), which is included in this prospectus supplement. The terms and offering price of the Debentures were determined by negotiation between RBC Dominion Securities Inc., and (collectively, the "**Underwriters**") and the Company. See "Plan of Distribution". The registered office of the Company is located at 215-10451 Shellbridge Way, Richmond, British Columbia, V6X 2W8 and the head office of the Company is located at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026.

Conversion Privilege

Each Debenture will be convertible into common shares of the Company ("**Common Shares**") at the option of the holder at any time prior to the close of business on the earlier of (i) the business day immediately preceding the Maturity Date or (ii) if called for redemption, the business day immediately preceding the date specified by the Company for redemption of the Debentures at a conversion price of Cdn\$ _____ per Common Share (the "**Conversion Price**"), being a conversion rate of approximately _____ Common Shares per Cdn\$1,000 principal amount of Debentures (an initial conversion premium of approximately _____ % to a reference price of Cdn\$ _____), subject to adjustment in accordance with the trust indenture governing the terms of the Debentures. Holders converting their Debentures will receive accrued and unpaid interest thereon for the period from the last interest payment date on their Debentures to, but not including, the date of conversion. Further particulars concerning the conversion privilege, including provisions for the adjustment of the Conversion Price in certain events, are set out under "Description of the Debentures Conversion Privilege" in the U.S. Prospectus.

The Debentures may not be redeemed by the Company before January 31, 2021 (except in certain limited circumstances following a Change of Control (as defined below)). On or after January 31, 2021 and prior to January 31, 2023, the Debentures may be redeemed by the Company, in whole or in part from time to time, on not more than 60 days and not less than 30 days prior notice, at a redemption price equal to the principal amount thereof plus accrued and unpaid interest, provided that the volume weighted average price of the Common Shares on the Toronto Stock Exchange (the "**TSX**") for the 20 consecutive trading days ending five trading days preceding the date on which notice of redemption is given is not less than 125% of the Conversion Price at the time notice of redemption is given. On or after January 31, 2023 and prior to the Maturity Date, the Debentures may be redeemed in whole or in part from time to time at the option of the Company on not more than 60 days and not less than 30 days prior notice at a price equal to their principal amount plus accrued and unpaid interest. Further particulars of the interest, redemption, repurchase and maturity provisions of the Debentures are set out under "Description of the Debentures" in the U.S. Prospectus.

The Company has filed a registration statement on Form S-3, as amended (File No. 333-221903) (the "**U.S. Registration Statement**") and a preliminary prospectus supplement and an accompanying prospectus with respect to the Debentures and the Common Shares underlying the Debentures with the United States Securities and Exchange Commission (the "**SEC**") under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"). The U.S. preliminary prospectus supplement dated the date hereof to the shelf prospectus dated December 19, 2017 contained in the U.S. Registration Statement (together, the "**U.S. Prospectus**") is included in and forms a part of this prospectus supplement and the short form base shelf prospectus other than the sections in the U.S. Prospectus entitled "Where You Can Find More Information" and "Information Incorporated by Reference". This prospectus supplement and the short form base shelf prospectus qualifies the distribution of Debentures offered hereby to investors resident in each of the provinces and territories of Canada. In accordance with the requirements of applicable securities laws in each such province and territory, the disclosure in the U.S. Prospectus included in this prospectus supplement and the short form base shelf prospectus is supplemented with the following additional disclosure contained herein. See "Supplemental Canadian Disclosure". **Neither the SEC nor any state securities commission has approved or disapproved these securities or determined if this prospectus supplement or the accompanying short form base shelf prospectus is truthful or complete. Any representation to the contrary is a criminal offense. Any information contained in, or incorporated by reference into, this prospectus supplement or the accompanying short form base shelf prospectus that is not otherwise contained in, or incorporated by reference into, the U.S. Prospectus is being provided solely to satisfy securities legislation of the provinces and territories of Canada.**

(Continued on next page)

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

Table of Contents

(Continued from previous page)

The Company intends to use the net proceeds of this Offering to fund the redemption of all of the Company's 5.75% Series C convertible unsecured subordinated debentures (the "**Series C Debentures**") (current outstanding balance of US\$42.5 million) which mature on June 30, 2019 and which have a par call date of June 30, 2017. The Company intends to use the remainder of the net proceeds, if any, to fund a partial redemption of the Company's 6.00% Series D extendible convertible unsecured subordinated debentures (the "**Series D Debentures**") (current outstanding balance of Cdn\$81.0 million), which mature on December 31, 2019 and which have a par call date of December 31, 2017.

There is currently no market through which the Debentures may be sold and purchasers may not be able to resell the Debentures purchased under this prospectus supplement and the short form base shelf prospectus. This may affect the pricing of the Debentures in the secondary market, the transparency and availability of trading prices, the liquidity of the Debentures, and the extent of issuer regulation. See "Risk Factors" in the U.S. Prospectus.

The outstanding Common Shares are listed on the TSX under the symbol "ATP" and on the New York Stock Exchange (the "**NYSE**") under the symbol "AT". The closing price of the Common Shares on the TSX and on the NYSE on January 19, 2018, the last trading day before the date of this prospectus supplement, was Cdn\$2.99 and US\$2.40, respectively, per Common Share. The outstanding Series C Debentures and Series D Debentures are listed on the TSX under the symbols "ATP.DB.U" and "ATP.DB.D", respectively. The closing price of the Series D Debentures on the TSX on January 19, 2018, the last trading day before the date of this prospectus supplement, was Cdn\$100.60 per Cdn\$100 principal amount of such debentures. The closing price of the Series C Debentures on the TSX on January 19, 2018, the last trading day before the date of this prospectus supplement, was US\$100.50 per US\$100 principal amount of such debentures. The Company has applied to list the Debentures and the Common Shares issuable upon the conversion of the Debentures, including the Common Shares issuable on a conversion premium in the event of a Change of Control of the Company resulting from a cash change of control (as described under "Description of the Debentures Cash Change of Control" in the U.S. Prospectus) ("**Cash Change of Control**"), on the TSX. The Company has also applied to list the Common Shares issuable upon the conversion and similar events of the Debentures on the NYSE. Listing will be subject to the Company fulfilling all of the listing requirements of the TSX and NYSE.

The Underwriters, as principals, conditionally offer the Debentures, subject to prior sale, if, as and when issued by the Company and accepted by the Underwriters in accordance with the conditions contained in the Underwriting Agreement referred to under "Plan of Distribution" and subject to approval of certain legal matters on behalf of the Company by Goodmans LLP and on behalf of the Underwriters by Blake, Cassels & Graydon LLP. The Debentures shall be taken up by the Underwriters, if at all, on or before a date not later than 42 days after the date of this prospectus supplement.

| | Price to the Public(1) | Underwriting Discounts or Commissions(2) | Net Proceeds(3) |
|----------------|---------------------------|--|--------------------|
| Per Debenture | Cdn\$ 1,000 | Cdn\$ 40 | Cdn\$ 960 |
| Total Offering | Cdn\$ | Cdn\$ | Cdn\$ |

- (1) The offering price and terms of the Debentures were determined through negotiation between the Company and the Underwriters.
- (2) The Company has granted to the Underwriters an over-allotment option, exercisable in whole or in part at any time not later than the 30th day following closing of the Offering, to purchase up to an additional Cdn\$ _____ million aggregate principal amount of Over-Allotment Debentures, on the same terms as set out above, to cover over-allotments, if any (the "**Over-Allotment Option**"). If the Over-Allotment Option is exercised in full, the total aggregate "Price to the Public", "Underwriting Discounts or Commissions" and "Net Proceeds" (before deducting expenses of the Offering) will be Cdn\$ _____, Cdn\$ _____ and Cdn\$ _____, respectively. This prospectus supplement also qualifies the grant of the Over-Allotment Option and the issuance of the Over-Allotment Debentures upon exercise, if any, of the Over-Allotment Option. A purchaser who acquires Debentures forming part of the underwriters' over-allotment position acquires those Debentures under this prospectus supplement, regardless of whether the over-allotment position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases.
- (3) Net proceeds before deducting the expenses of the Offering, which are estimated to be approximately Cdn\$ _____.

The following table sets forth the number of Over-Allotment Debentures that may be issued by the Corporation pursuant to the Over-Allotment Option:

| Underwriters' Position | Maximum Size or Number of Securities Available | Exercise Period | Exercise Price |
|------------------------|---|---|--------------------------------------|
| Over-Allotment Option | Cdn\$ _____ million aggregate principal amount of Over-Allotment Debentures | Up to 30 days after the closing of the Offering | \$1,000 per Over-Allotment Debenture |

Subscriptions for the Debentures will be received subject to rejection or allotment, in whole or in part, and the right is reserved to close the subscription books at any time without notice. Certificates representing the Debentures will be issued in registered form in the name of CDS Clearing and Depository Services Inc. ("**CDS**") or its nominee and will be deposited with CDS on the date of issue of the Debentures, which is expected to occur on or about January _____, 2018 or such later date as the Underwriters and the Company may agree, but in any event no later than January _____, 2018. Holders of Debentures will not be entitled to

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

receive physical certificates representing their Debentures. A purchaser of Debentures will receive only a customer confirmation from the registered dealer that is a participant in CDS and from or through which the Debentures are purchased.

RBC Dominion Securities Inc., and are affiliates of lenders that are part of a syndicate of lenders that has provided a US\$700 million senior secured term loan and US\$200 million senior secured revolving credit facility to the Company. Consequently, the Company may be considered a "connected issuer" of each of RBC Dominion Securities Inc., and in connection with the Offering under applicable Canadian securities laws. See "Relationship Between the Company and the Underwriters.

In certain circumstances, the Underwriters may offer the Debentures at a price lower than the price stated above. The Underwriters may, in connection with the Offering, effect transactions that stabilize or maintain the market price of the Debentures at levels other than those that might otherwise prevail in the open market. Such transactions, if commenced, may be interrupted or discontinued at any time. See "Plan of Distribution".

The Company's earnings coverage ratios for the 12-month periods ending December 31, 2016 and September 30, 2017 provided in this prospectus supplement, calculated on the basis of the Company's financial statements prepared in accordance with United States generally accepted accounting principles and incorporated by reference in the short form base shelf prospectus and in this prospectus supplement, respectively, were less than one to one. See "Earnings Coverage Ratios".

An investment in the Debentures is speculative and subject to a number of risks that should be considered by a prospective investor. Prospective investors should carefully review the sections entitled "Cautionary Statement Regarding Forward-Looking Information" in this prospectus supplement and "Cautionary Note Regarding Forward-Looking Information" and "Risk Factors" in the U.S. Prospectus.

The Debentures are not "deposits" within the meaning of the *Canada Deposit Insurance Corporation Act* (Canada) and are not insured under the provisions of that act or any other legislation.

TABLE OF CONTENTS

| | Page |
|---|-------------|
| <u>ABOUT THIS PROSPECTUS SUPPLEMENT</u> | <u>C-1</u> |
| <u>DOCUMENTS INCORPORATED BY REFERENCE</u> | <u>C-1</u> |
| <u>MARKETING MATERIALS</u> | <u>C-2</u> |
| <u>SUPPLEMENTAL CANADIAN DISCLOSURE</u> | <u>C-2</u> |
| <u>CURRENCY AND EXCHANGE RATE INFORMATION</u> | <u>C-2</u> |
| <u>NOTICE TO INVESTORS REGARDING GAAP</u> | <u>C-3</u> |
| <u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION</u> | <u>C-3</u> |
| <u>ELIGIBILITY FOR INVESTMENT</u> | <u>C-4</u> |
| <u>PRIOR SALES</u> | <u>C-5</u> |
| <u>TRADING PRICE AND VOLUME</u> | <u>C-5</u> |
| <u>EARNINGS COVERAGE RATIOS</u> | <u>C-8</u> |
| <u>PLAN OF DISTRIBUTION</u> | <u>C-8</u> |
| <u>RELATIONSHIP BETWEEN THE COMPANY AND THE UNDERWRITERS</u> | <u>C-10</u> |
| <u>CONDITIONAL LISTING APPLICATION</u> | <u>C-11</u> |
| <u>INTERESTS OF EXPERTS</u> | <u>C-11</u> |
| <u>CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS</u> | <u>C-11</u> |
| <u>MATERIAL CONTRACTS</u> | <u>C-15</u> |
| <u>AUDITORS, TRANSFER AGENT AND REGISTRAR AND CO-TRUSTEES</u> | <u>C-16</u> |
| <u>PURCHASERS' STATUTORY RIGHTS OF RESCISSION AND WITHDRAWAL</u> | <u>C-16</u> |
| <u>PURCHASERS' CONTRACTUAL RIGHTS</u> | <u>C-16</u> |
| <u>UNITED STATES PROSPECTUS</u> | <u>C-17</u> |
| <u>GLOSSARY OF TERMS</u> | <u>C-18</u> |
| <u>CERTIFICATE OF THE COMPANY</u> | <u>C-21</u> |
| <u>CERTIFICATE OF THE UNDERWRITERS</u> | <u>C-22</u> |

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

Capitalized terms used in this prospectus supplement that are not defined herein have the meanings ascribed thereto in the short form base shelf prospectus.

Readers should rely only on the information contained in this prospectus supplement, the short form base shelf prospectus and the documents specifically incorporated by reference herein or in the short form base shelf prospectus. The Company and the Underwriters have not authorized any other person to provide prospective investors with different information and any such information should not be relied upon. The Company and the Underwriters are not making an offer to sell the Debentures in any jurisdiction where the offer or sale is not permitted. Readers should assume that the information appearing in this prospectus supplement and the short form base shelf prospectus, as well as information the Company has previously filed with the securities regulatory authority in the provinces and territories of Canada that is incorporated by reference into this prospectus supplement and the short form base shelf prospectus, is accurate as of their respective dates only. The business, financial condition, results of operations and prospects of the Company may have changed since those dates.

DOCUMENTS INCORPORATED BY REFERENCE

This prospectus supplement is deemed, as of the date hereof, to be incorporated by reference into the accompanying short form base shelf prospectus, solely for the purpose of offering the Debentures hereunder. Other documents are also incorporated, or deemed to be incorporated, by reference into the short form base shelf prospectus and reference should be made to the short form base shelf prospectus for full particulars thereof. In addition, the template version (as defined in National Instrument 41-101 *General Prospectus Requirements* ("**NI 41-101**") of the term sheet dated January 22, 2018 (the "**Term Sheet**"), filed by the Company with the securities commissions or similar authorities in the provinces and territories of Canada in connection with this Offering, is specifically incorporated by reference into the short form base shelf prospectus as supplemented by this prospectus supplement.

Any documents of the type required by section 11.1 of Form 44-101F1 of National Instrument 44-101 *Short Form Prospectus Distributions* to be incorporated by reference in a short form prospectus, if filed by the Company with the securities commissions or similar regulatory authorities in the provinces and territories of Canada in which this prospectus supplement has been filed subsequent to the date of this prospectus supplement and prior to the termination of the distribution of the Debentures, shall be deemed to be incorporated by reference in the short form base shelf prospectus for purposes of this Offering.

Any statement contained in a document incorporated or deemed to be incorporated by reference in the short form base shelf prospectus shall be deemed to be modified or superseded for the purposes of this Offering to the extent that a statement contained herein or in any other subsequently filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of a modifying or superseding statement shall not be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that was required to be stated or that was necessary to make a statement not misleading in light of the circumstances in which it was made. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of the short form base shelf prospectus or this prospectus supplement.

Information has been incorporated by reference in the accompanying short form base shelf prospectus as supplemented by this prospectus supplement from documents filed with the securities

Table of Contents

commissions or similar authorities in the provinces and territories of Canada. Copies of the documents incorporated by reference herein may be obtained on request without charge from the Corporate Secretary of the Company at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026, telephone 617.977.2400. In addition, copies of the documents incorporated by reference herein may be obtained from the securities commissions or similar authorities in Canada through SEDAR at www.sedar.com.

MARKETING MATERIALS

A "template version" of the "marketing materials" (as such terms are defined under NI 41-101) for this Offering, consisting of the Term Sheet, was filed with the securities commission or similar authorities in each of the provinces and territories of Canada on January 22, 2018. The template version of the marketing materials is incorporated by reference into this prospectus supplement, but is not part of this prospectus supplement to the extent that its contents have been modified or superseded by a statement contained in this prospectus supplement. In addition, any template version of any other marketing materials filed with the securities commission or similar authority in each of the provinces and territories of Canada in connection with this Offering after the date hereof but prior to the termination of the distribution of the securities under this prospectus supplement is deemed to be incorporated by reference herein.

SUPPLEMENTAL CANADIAN DISCLOSURE

In accordance with the requirements of applicable securities laws in each province and territory of Canada, the disclosure in the U.S. Prospectus included in this prospectus supplement and the short form base shelf prospectus is supplemented with the following additional disclosure.

CURRENCY AND EXCHANGE RATE INFORMATION

In this prospectus supplement, references 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 Canadian dollars, unless otherwise stated.

The business of many of the Company's power projects, described under "Summary Our Company" in the U.S. Prospectus (the "**Projects**"), is conducted in major markets in the United States and their revenues and expenses are denominated, earned and incurred primarily in U.S. dollars. The reporting currency used in the Company's financial statements is U.S. dollars. The following table sets forth, for each period indicated: (i) the high and low noon, or high and low average daily, exchange rates during such period; (ii) the average noon or daily exchange rates for such period; and (iii) the noon or average daily exchange rate at the end of such period, for one U.S. dollar, expressed in Canadian dollars, as quoted by the Bank of Canada. As of May 1, 2017, the Bank of Canada no longer publishes updated data for exchange rates published under previous methodologies, including daily noon and closing rates, as well as high and low rates. As a result, the exchange rates presented for the twelve months ended December 31, 2017 are based on the Bank of Canada's new methodology that

Table of Contents

calculates an average daily exchange rate. On January 19, 2018, the daily average exchange rate as quoted by the Bank of Canada was US\$1.00 = Cdn\$1.2459.

| | Twelve Months Ended | | |
|------------|---------------------|--------------|--------------|
| | 2017 | 2016 | 2015 |
| | (Average Daily) | (Noon) | (Noon) |
| High | Cdn\$ 1.3743 | Cdn\$ 1.4589 | Cdn\$ 1.3990 |
| Low | Cdn\$ 1.2128 | Cdn\$ 1.2544 | Cdn\$ 1.1728 |
| Average | Cdn\$ 1.2986 | Cdn\$ 1.3248 | Cdn\$ 1.2787 |
| Period End | Cdn\$ 1.2545 | Cdn\$ 1.3427 | Cdn\$ 1.3840 |

Source: Bank of Canada

NOTICE TO INVESTORS REGARDING GAAP

The Company prepares its financial statements in accordance with United States generally accepted accounting principles ("U.S. GAAP"). The consolidated financial statements of the Company as of December 31, 2016 and December 31, 2015 and for each of the years in the three-year period ended December 31, 2016, together with the notes thereto and the auditors' reports thereon, and the corresponding management's discussion and analysis of the financial condition and results of operations of the Company for the year ended December 31, 2016, and the quarterly report on Form 10-Q of the Company for the three and nine months ended September 30, 2017, together with the notes thereto, and the corresponding management's discussion and analysis of the financial condition and results of operations of the Company for the three and nine months ended September 30, 2017, incorporated by reference in this prospectus supplement, have been prepared in accordance with U.S. GAAP, which differ in certain material respects from Canadian GAAP.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

Certain information in this prospectus supplement, the short form base shelf prospectus and the documents incorporated by reference herein and in the short form base shelf prospectus may constitute "forward looking information", as such term is used in applicable Canadian securities legislation, about the Company including its financial condition, results of operations, business strategies, operating efficiencies, synergies, revenue enhancements, competitive positions, plans and objectives of management and growth opportunities of the Company, various matters with respect to the markets for Common Shares and Debentures and other matters. Forward-looking information generally can be identified by the use of words such as "outlook", "objective", "may", "will", "expect", "intend", "estimate", "anticipate", "believe", "should", "plans", "continue" or similar expressions suggesting future outcomes or events. Prospective investors should also refer to "Cautionary Statement Regarding Forward-Looking Information" in the short form base shelf prospectus and "Cautionary Note Regarding Forward-Looking Information" in the U.S. Prospectus for further detail on such forward-looking information and statements.

Material factors or assumptions that were applied in providing forward-looking information include, but are not limited to the Company's future growth potential, its results of operations, future cash flows, the continued performance and business prospects and opportunities of the Company and the Projects, third party projections of regional fuel and electric capacity and energy prices, the completion of certain transactions, including this Offering, the Company's ability to continue to develop and grow, the Company's future levels of indebtedness and the tax laws as currently in effect remaining unchanged and the current general regulatory environment and economic conditions remaining unchanged.

Table of Contents

Forward-looking information contained in this prospectus supplement reflects management's current expectations regarding future events and operating performance, and speaks only as of the date of this prospectus supplement. Such forward-looking information is based on currently available competitive, financial and economic data and operating plans and are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or general industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Factors that could cause the Company's actual results, performance or achievements to vary from those expressed or inferred herein include, but are not limited to, the following: the ability of the Company to generate sufficient cash flow to service the Company's debt obligations or implement its business plan, including financing internal or external growth opportunities; the outcome or impact of the business strategy of the Company to increase its intrinsic value on a per-share basis through disciplined management of the Company's balance sheet and cost structure and investment of the Company's discretionary cash in a combination of organic and external growth projects, acquisitions and repurchases of debt and equity securities; the ability or inability of the Company to renew or enter into new power purchase agreements on favorable terms or at all after the expiration of the Company's current agreements; the ability of the Company to meet the financial covenants under its existing credit facilities and other indebtedness; expectations regarding maintenance and capital expenditures; the impact of legislative, regulatory, competitive and technological changes; and the other risk factors under the heading "Risk Factors" in the U.S. Prospectus and other risk factors relating to the Company and the power industry, as detailed from time to time in the Company's filings with the SEC and the Canadian Securities Administrators, including, without limitation, the Company's annual report on Form 10-K, as amended, and any subsequent quarterly reports on Form 10-Q. Many of these risks and uncertainties could affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company or on its behalf. The impact of any one factor on a particular piece of forward-looking information is not determinable with certainty as such factors are interdependent upon other factors, and management's course of action would depend upon its assessment of the future considering all information then available.

Should any risk factor affect the Company in an unexpected manner, or should assumptions underlying the forward-looking information prove incorrect, the actual results or events may differ materially from the results or events predicted. Unless otherwise indicated, forward-looking information does not take into account the effect that transactions or non-recurring or other special items announced or occurring after the date it is provided may have on the business of the Company. All of the forward-looking information reflected in this prospectus supplement, the short form base shelf prospectus and the documents incorporated by reference herein and therein are qualified by these cautionary statements. There can be no assurance that the results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences for the Company. Prospective investors should carefully consider the information contained under the heading "Risk Factors" in the U.S. Prospectus and other information included in this prospectus supplement, the short form base shelf prospectus and the U.S. Prospectus before making investment decisions with regard to the Debentures. Forward-looking information is provided and forward-looking statements are made as of the date of this prospectus supplement and except as may be required by applicable law, the Company disclaims any intention and assumes no obligation to publicly update or revise such forward-looking information or forward-looking statements whether as a result of new information, future events or otherwise.

ELIGIBILITY FOR INVESTMENT

In the opinion of Goodmans LLP, counsel for the Company, and Blake, Cassels & Graydon LLP, counsel for the Underwriters, based on the provisions of the *Income Tax Act* (Canada) and the regulations thereunder (collectively, the "**Tax Act**") in effect as of the date hereof, the Debentures

Table of Contents

being offered pursuant to this Offering and the Common Shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures, would be qualified investments under the Tax Act for trusts governed by registered retirement savings plans ("**RRSPs**"), registered retirement income funds ("**RRIFs**"), deferred profit sharing plans (except, in the case of Debentures, a deferred profit sharing plan to which the Company, or an employer that does not deal at arm's length with the Company, has made a contribution), registered education savings plans ("**RESPs**"), registered disability savings plans ("**RDSPs**") and tax-free savings accounts ("**TFSAs**") (collectively "**Exempt Plans**"), at the time of the acquisition by the Exempt Plan provided that, at that time: (A) in the case of the Debentures, (i) the Debentures are listed on a designated stock exchange (which currently includes both the TSX and the NYSE), (ii) the Common Shares are listed on a designated stock exchange, or (iii) the Company is a "public corporation" as defined in the Tax Act; and (B) in the case of the Common Shares, either (i) the Common Shares are listed on a designated stock exchange, or (ii) the Company is a "public corporation".

Notwithstanding the foregoing, if the Debentures, or the Common Shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures, are a "prohibited investment" for a TFSA, RRSP, RRIF, RDSP or RESP, the holder of the TFSA or RDSP, the annuitant of the RRSP or RRIF or the subscriber of the RESP, as the case may be, will be subject to a penalty tax as set out in the Tax Act. Debentures or Common Shares will generally be a "prohibited investment" for a TFSA, RRSP, RRIF, RDSP or RESP if the holder of the TFSA or RDSP, the annuitant of the RRSP or RRIF or the subscriber of the RESP, as the case may be, does not deal at arm's length with the Company for purposes of the Tax Act or has a "significant interest" (within the meaning of the Tax Act) in the Company. In addition, a Common Share will generally not be a "prohibited investment" if the Common Share is "excluded property" (as defined in the Tax Act for purposes of the prohibited investment rules) for trusts governed by a TFSA, RRSP, RRIF, RDSP or RESP. Holders of TFSAs or RDSPs, subscribers of RESPs and annuitants of RRSPs or RRIFs should consult their own tax advisors to ensure that the Debentures and Common Shares would not be a prohibited investment having regard to their particular circumstances.

PRIOR SALES

During the 12-month period before the date of this prospectus supplement, the Company has not issued any Common Shares, or issued any securities that are convertible or exchangeable into Common Shares, other than the following issuances of Common Shares pursuant the Company's long-term incentive plan:

| Date | Price Per Common Share | Number of Common Shares |
|-------------|-------------------------------|--------------------------------|
| 3/1/2017 | US\$2.38 | 579,609 |
| 4/30/2017 | US\$2.51 | 4,950 |
| 5/12/2017 | US\$2.41 | 6,710 |
| 6/23/2017 | US\$2.48 | 7,943 |
| 6/30/2017 | US\$2.40 | 31,808 |
| 8/18/2017 | US\$2.46 | 10,296 |
| 8/29/2017 | US\$2.43 | 14,163 |

TRADING PRICE AND VOLUME

The Common Shares are listed and traded on the TSX under the trading symbol "ATP" and on the NYSE under the trading symbol "AT". The following tables show the monthly range of high and low prices per Common Share and the total volume of Common Shares traded on the TSX and the NYSE during the 12-month period before the date of this prospectus supplement. On January 19, 2018, being the last day on which the Common Shares traded prior to the date of this prospectus

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

Table of Contents

supplement, the closing price of the Common Shares on the TSX and on the NYSE was Cdn\$2.99 and US\$2.40, respectively.

| TSX Date | High | Low | Volume |
|----------------------|-------------|------------|---------------|
| January 2017 | Cdn\$ 3.54 | Cdn\$ 3.02 | 118,444 |
| February 2017 | Cdn\$ 3.15 | Cdn\$ 2.97 | 832,618 |
| March 2017 | Cdn\$ 3.60 | Cdn\$ 3.06 | 433,782 |
| April 2017 | Cdn\$ 3.62 | Cdn\$ 3.30 | 908,292 |
| May 2017 | Cdn\$ 3.45 | Cdn\$ 3.11 | 1,044,463 |
| June 2017 | Cdn\$ 3.45 | Cdn\$ 3.05 | 226,724 |
| July 2017 | Cdn\$ 3.15 | Cdn\$ 2.87 | 930,428 |
| August 2017 | Cdn\$ 3.19 | Cdn\$ 2.87 | 1,072,341 |
| September 2017 | Cdn\$ 3.12 | Cdn\$ 2.88 | 964,005 |
| October 2017 | Cdn\$ 3.23 | Cdn\$ 3.00 | 909,582 |
| November 2017 | Cdn\$ 3.29 | Cdn\$ 2.98 | 979,386 |
| December 2017 | Cdn\$ 3.26 | Cdn\$ 2.96 | 855,628 |
| January 1 - 19, 2018 | Cdn\$ 3.23 | Cdn\$ 2.79 | 3,300,866 |

| NYSE Date | High | Low | Volume |
|----------------------|-------------|------------|---------------|
| January 2017 | US\$ 2.65 | US\$ 2.30 | 129,412 |
| February 2017 | US\$ 2.40 | US\$ 2.25 | 959,570 |
| March 2017 | US\$ 2.70 | US\$ 2.30 | 845,607 |
| April 2017 | US\$ 2.70 | US\$ 2.45 | 1,029,920 |
| May 2017 | US\$ 2.55 | US\$ 2.30 | 1,086,044 |
| June 2017 | US\$ 2.55 | US\$ 2.32 | 1,150,450 |
| July 2017 | US\$ 2.425 | US\$ 2.30 | 1,187,233 |
| August 2017 | US\$ 2.50 | US\$ 2.30 | 1,174,928 |
| September 2017 | US\$ 2.50 | US\$ 2.35 | 1,455,027 |
| October 2017 | US\$ 2.55 | US\$ 2.40 | 1,087,040 |
| November 2017 | US\$ 2.55 | US\$ 2.35 | 1,210,863 |
| December 2017 | US\$ 2.55 | US\$ 2.35 | 1,972,904 |
| January 1 - 19, 2018 | US\$ 2.575 | US\$ 2.20 | 3,310,364 |

The Series C Debentures issued pursuant to the trust indenture dated as of December 17, 2009 (the "**Original Indenture**") between the Company and Computershare Trust Company of Canada (the "**Canadian Debenture Trustee**"), as supplemented by the second supplemental indenture dated July 5, 2012 between the Company and the Canadian Debenture Trustee and as further supplemented by the sixth supplemental indenture dated March 22, 2013 between the Company and the Canadian Debenture Trustee are listed and traded on the TSX under the trading symbol "ATP.DB.U". The following table shows the monthly range of high and low prices per US\$100 principal amount of Series C Debentures and total monthly volumes traded on the TSX during the period before the date of this prospectus supplement. On January 19, 2018, being the last day on which the Series C

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

Table of Contents

Debentures traded prior to the date of this prospectus supplement, the closing price of the Series C Debentures on the TSX was US\$100.50 per US\$100 principal amount of such debentures.

| Date | High | Low | Volume |
|----------------------|-------------|-------------|---------------|
| January 2017 | US\$ 99.31 | US\$ 98.75 | 4,780 |
| February 2017 | US\$ 100.11 | US\$ 99.40 | 4,730 |
| March 2017 | US\$ 100.51 | US\$ 99.90 | 3,080 |
| April 2017 | US\$ 100.55 | US\$ 100.05 | 10,750 |
| May 2017 | US\$ 101.00 | US\$ 100.25 | 5,290 |
| June 2017 | US\$ 100.56 | US\$ 100.20 | 6,530 |
| July 2017 | US\$ 101.00 | US\$ 100.12 | 2,230 |
| August 2017 | US\$ 100.35 | US\$ 100.30 | 2,690 |
| September 2017 | US\$ 100.53 | US\$ 100.20 | 3,840 |
| October 2017 | US\$ 100.30 | US\$ 99.75 | 5,140 |
| November 2017 | US\$ 100.50 | US\$ 100.21 | 5,470 |
| December 2017 | US\$ 100.51 | US\$ 100.21 | 5,770 |
| January 1 - 19, 2018 | US\$ 100.75 | US\$ 100.21 | 980 |

The Series D Debentures issued pursuant to the Original Indenture, as supplemented by the fourth supplemental indenture dated November 29, 2012 among the Company, the Canadian Debenture Trustee and Computershare Trust Company, N.A. (the "**U.S. Debenture Trustee**") and as further supplemented by the fifth supplemental indenture dated December 11, 2012 among the Company, the Canadian Debenture Trustee and the U.S. Debenture Trustee are listed and traded on the TSX under the trading symbol "ATP.DB.D". The following table shows the monthly range of high and low prices per Cdn\$100 principal amount of Series D Debentures and total monthly volumes traded on the TSX during the period before the date of this prospectus supplement. On January 19, 2018, being the last day on which the Series D Debentures traded prior to the date of this prospectus supplement, the closing price of the Series D Debentures on the TSX was Cdn\$100.60 per Cdn\$100 principal amount of such debentures.

| Date | High | Low | Volume |
|----------------------|--------------|--------------|---------------|
| January 2017 | Cdn\$ 100.26 | Cdn\$ 99.50 | 13,120 |
| February 2017 | Cdn\$ 100.98 | Cdn\$ 99.77 | 9,210 |
| March 2017 | Cdn\$ 100.76 | Cdn\$ 100.25 | 5,900 |
| April 2017 | Cdn\$ 100.99 | Cdn\$ 100.40 | 10,290 |
| May 2017 | Cdn\$ 101.50 | Cdn\$ 100.50 | 9,825 |
| June 2017 | Cdn\$ 102.26 | Cdn\$ 100.25 | 10,310 |
| July 2017 | Cdn\$ 102.00 | Cdn\$ 100.26 | 4,145 |
| August 2017 | Cdn\$ 100.87 | Cdn\$ 100.00 | 10,800 |
| September 2017 | Cdn\$ 101.25 | Cdn\$ 100.38 | 4,930 |
| October 2017 | Cdn\$ 100.90 | Cdn\$ 100.40 | 6,350 |
| November 2017 | Cdn\$ 102.50 | Cdn\$ 100.35 | 8,335 |
| December 2017 | Cdn\$ 101.18 | Cdn\$ 100.26 | 5,160 |
| January 1 - 19, 2018 | Cdn\$ 101.50 | Cdn\$ 100.40 | 4,320 |

Table of Contents**EARNINGS COVERAGE RATIOS**

The earnings coverage ratios set forth below have been prepared using financial information which has been prepared on the basis of the U.S. GAAP financial statements incorporated by reference in this prospectus supplement and the short form base shelf prospectus. The *pro forma* earnings assume that there are no additional earnings derived from indebtedness incurred in connection with this Offering. Earnings coverage is equal to net income attributable to the Company from continuing operations before interest expense on all long-term debt and income taxes, divided by interest expense on long-term debt (after giving effect to the Offering). The calculations below have been adjusted to account for the repayment by the Company on October 13, 2017 of the term loan at the Company's Piedmont project in the amount of US\$54.6 million, which occurred subsequent to September 30, 2017.

In accordance with the presentation and measurement requirements of U.S. GAAP, the Company's interest requirements for all long term debt, including the current portion, amounted to approximately US\$108.7 million and approximately US\$69.8 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively. The Company's loss before interest and income tax for the 12 months ended December 31, 2016 and September 30, 2017, respectively, was approximately US\$21.8 million and US\$26.1 million. Accordingly, the earnings coverage ratios for each of the 12 months ended December 31, 2016 and the 12 months ended September 30, 2017 are less than one-to-one. The additional earnings required to achieve an earnings coverage ratio of 1.0 would have been approximately US\$130.5 million and approximately US\$95.9 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively.

In accordance with the presentation and measurement requirements of U.S. GAAP and after giving effect to the Offering, the Company's *pro forma* interest requirements for all long term debt, including the current portion, amounted to approximately US\$ million and approximately US\$ million for the 12 months ended December 31, 2016 and September 30, 2017, respectively. The Company's loss before interest and income tax for the 12 months ended December 31, 2016 and September 30, 2017, respectively, was approximately US\$ million and US\$ million, which is US\$ million and US\$ million less than the Company's *pro forma* interest requirements for each respective period. The additional earnings required to achieve an earnings coverage ratio of 1.0 would have been approximately US\$ million and approximately US\$ million for the 12 months ended December 31, 2016 and September 30, 2017, respectively.

PLAN OF DISTRIBUTION

Subject to the terms and conditions contained in the underwriting agreement between the Company and the Underwriters (the "**Underwriting Agreement**"), the Company has agreed to issue and sell, and the Underwriters have severally agreed to purchase, as principals, on the closing date, being January , 2018 or such other date as may be agreed upon by the Company and the Underwriters, but in any event not later than January , 2018 an aggregate Cdn\$ principal amount of Debentures at a price of Cdn\$1,000 per Debenture, payable in cash against delivery by the Company of certificates evidencing the Debentures. The Debentures are being offered to investors resident in all of the provinces and territories of Canada. The terms and conditions of the Offering were determined by negotiation between the Company and the Underwriters. The Underwriting Agreement provides for Underwriters' discounts and commissions of Cdn\$40 per Cdn\$1,000 principal amount of Debentures in consideration for the Underwriters' services in connection with the Offering.

The Company has granted the Underwriters the Over-Allotment Option to purchase up to an additional Cdn\$ aggregate principal amount of Debentures at a price of Cdn\$1,000 per Debenture, exercisable, at any time and from time to time, in whole or in part, from the closing of the Offering until that date that is 30 days following the closing of the Offering for the purposes of covering the Underwriters' over-allocation position, if any. If the Over-Allotment Option is exercised in

Table of Contents

full, and assuming Underwriters' discounts and commissions of Cdn\$40 per Cdn\$1,000 principal amount of Over-Allotment Debentures is paid on the gross proceeds of the sale of the Over-Allotment Debentures, the gross proceeds of the Offering, the Underwriters' fee and the net proceeds to the Company (before deducting expenses of the Offering) will be Cdn\$, Cdn\$ and Cdn\$, respectively. This prospectus supplement also qualifies for distribution the grant of the Over-Allotment Option and the issuance of the Over-Allotment Debentures. A purchaser who acquires Debentures forming part of the underwriters' over-allotment position acquires such Debentures under this prospectus supplement regardless of whether the over-allotment position is ultimately filled through the exercise of the Over-Allotment Option or secondary market purchases.

The obligations of the Underwriters under the Underwriting Agreement are several and each Underwriter may terminate its obligations thereunder at its discretion upon the occurrence of certain stated events, including: (i) an inquiry, action, suit, investigation or other proceeding (whether formal or informal) is commenced, announced or threatened or any order or ruling is issued under or pursuant to any relevant statute or by any federal, provincial, state, municipal or other governmental department, commission, court, board, bureau, agency or instrumentality or any third party, including, without limitation, the TSX, the NYSE or any securities regulatory authority (other than any such inquiry, action, suit, investigation or other proceeding or order relating solely to any of the Underwriters) or there is any change of law, or interpretation or administration thereof, which, in the reasonable opinion of such Underwriter, acting in good faith, (a) operates to prevent or restrict the trading in the Common Shares or the Debentures, or adversely impacts the distribution or the marketability of the Debentures, or materially and adversely affects or will materially and adversely affect the market price or value of the Common Shares or the Debentures, or (b) operates to prevent, suspend, hinder, delay, restrict or otherwise materially adversely affect the transactions contemplated in the Underwriting Agreement; (ii) there should develop, occur or come into effect or existence any event, action, state, condition or major financial occurrence of national or international consequence, acts of terrorism, hostility, war or like event or escalation thereof or other calamity or crisis, or any governmental action, law, regulation, inquiry or other occurrence of any nature which, in the reasonable opinion of such Underwriter, materially adversely affects or may materially adversely affect the financial markets in Canada or the United States or the business, operations or affairs of the Company and its subsidiaries taken as a whole or the market price or value of the Debentures or the Common Shares; or (iii) there shall occur any material change (actual, imminent or reasonably expected) in the business, affairs, operations, assets, liabilities (contingent or otherwise), capital or ownership of the Company and its subsidiaries taken as a whole, howsoever caused, or there should be discovered any previously undisclosed material fact (other than a material fact related solely to any of the Underwriters) or there should occur a change (other than a change related solely to any of the Underwriters) in a material fact contained in the U.S. Prospectus or this prospectus supplement and the accompanying short form base shelf prospectus, in each case which, in the opinion of such Underwriter, acting reasonably, could be expected to result in the purchasers of a material number of the Debentures exercising their right under securities laws to withdraw from or rescind their purchase thereof or their right to sue for damages in respect thereof or which has or could reasonably be expected to have a material adverse effect on the market price or value of the Common Shares or the Debentures. The Underwriters are, however, obligated to take up and pay for all of the offered Debentures if any Debentures are purchased under the Underwriting Agreement. The Underwriters propose to offer the Debentures to the public initially at the Offering price and in the principal amount, respectively, specified on the cover page of this prospectus supplement. After the Underwriters have made a reasonable effort to sell all of the Debentures offered hereby at the Offering price and in the principal amount, respectively, specified on the cover page, the Offering price for the Debentures may be decreased and may be further changed from time to time to amounts not greater than those set forth on the cover page. The compensation realized by the Underwriters will be decreased by the

Table of Contents

amount that the aggregate price paid by the purchasers of the Debentures is less than the amount paid by the Underwriters to the Company.

The Underwriting Agreement also provides that the Company will indemnify the Underwriters and their respective affiliates and their respective directors, officers, employees, shareholders and agents against certain liabilities and expenses or will contribute to payments that the Underwriters may be required to make.

Pursuant to policy statements of certain securities regulators, the Underwriters may not, throughout the period of distribution, bid for or purchase the Debentures. The foregoing restriction is subject to exceptions, on the condition that the bid or purchase is not engaged in for the purpose of creating actual or apparent active trading in, or raising the price of, any of the Debentures. These exceptions include bids or purchases permitted under the Universal Market Integrity Rules of the Investment Industry Regulatory Organization of Canada relating to market stabilization and passive market making activities and bids or purchases made for and on behalf of a customer where the order was not solicited during the period of distribution. Under the first mentioned exception, in connection with this Offering, the Underwriters may effect transactions that stabilize or maintain the market price of the Debentures at levels other than those which might otherwise prevail in the open market. Those transactions, if commenced, may be interrupted or discontinued at any time.

Subject to certain exceptions, the Company and the senior officers and directors of the Company have agreed with the Underwriters not to create, allot, authorize, offer, issue, secure, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise lend, transfer or dispose of any Common Shares or any securities convertible into or exercisable or exchangeable for any Common Shares, including convertible debentures, or enter into any swap or other arrangement that transfers to another any of the economic consequences of ownership of Common Shares or any securities convertible into or exercisable or exchangeable for Common Shares, including convertible debentures, or agree to or announce any intention to effect any of the foregoing, for a period of 90 days from the closing of the Offering without the prior written consent of RBC Dominion Securities Inc., on behalf of the Underwriters, which consent may not be unreasonably withheld; except in each case for (i) the Debentures; (ii) as may be granted, issued or delivered under our security-based compensation arrangements, or (iii) issuances upon the conversion of outstanding convertible debentures.

The Debentures will be issued in "book-entry only" form and must be purchased or transferred through a CDS Participant. At closing, the Company will cause global certificates representing the Debentures to be delivered to, and registered in the name of, CDS or its nominee. All rights of holders of Debentures must be exercised through, and all payments or other property to which such holder is entitled will be made or delivered by, CDS or the CDS Participant through which the holder of Debentures holds such Debentures. Each person who acquires Debentures will receive only a customer confirmation of purchase from the Underwriter or registered dealer from or through which the Debentures are acquired in accordance with the practices and procedures of the Underwriter or registered dealer. The practices of registered dealers may vary, but generally customer confirmations are issued promptly after execution of a customer order. CDS is responsible for establishing and maintaining book-entry accounts for its CDS Participants having interests in the Debentures. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Book Entry, Delivery and Form" in the U.S. Prospectus.

RELATIONSHIP BETWEEN THE COMPANY AND THE UNDERWRITERS

RBC Dominion Securities Inc., and are affiliates of banks that are part of a syndicate of lenders that has provided a US\$700 million senior secured term loan (the "**Term Loan Facility**") and US\$200 million senior secured revolving credit facility (the "**Revolving Facility**") to

Table of Contents

the Company. Consequently, the Company may be considered a "connected issuer" of each of RBC Dominion Securities Inc., and in connection with the Offering under applicable Canadian securities laws.

As of December 31, 2017, there was approximately US\$540 million outstanding under the Term Loan Facility and as of the date of this prospectus supplement, there is no amount outstanding under the Revolving Facility. The Company is in compliance with all material terms and conditions of the Term Loan Facility and the Revolving Facility and no waiver of any default has occurred thereunder. The Company has granted a security interest over certain of its assets to the lenders under the Term Loan Facility and the Revolving Facility. Neither the financial position of the Company nor the value of the security under the Term Loan Facility or the Revolving Facility has changed substantially since the Term Loan Facility and the Revolving Facility were entered into.

The decision to purchase Debentures by RBC Dominion Securities Inc., and was made independently of their affiliated lenders under the Term Loan Facility or the Revolving Facility and such lenders had no influence as to the determination of the terms of the distribution of Debentures. The terms of the Offering, including the Offering price for the Debentures, were determined by negotiation between the Company and the Underwriters, without involvement of any affiliate lenders under the Term Loan Facility or the Revolving Facility. None of RBC Dominion Securities Inc., and will receive any direct benefit from the Offering aside from their proportionate share of the Underwriters' fee.

CONDITIONAL LISTING APPLICATION

The Company has applied to list the Debentures and the Common Shares issuable upon the conversion of the Debentures, including the Common Shares issuable on a conversion premium in the event of a Change of Control of the Company resulting from a Cash Change of Control, on the TSX. The Company has also applied to list the Common Shares issuable upon the conversion and similar events of the Debentures on the NYSE. Listing will be subject to the Company fulfilling all of the listing requirements of the TSX and NYSE.

INTERESTS OF EXPERTS

Certain legal matters relating to the Offering will be passed upon on behalf of the Company by Goodmans LLP, the Company's Canadian counsel, and by Cleary Gottlieb Steen & Hamilton LLP, the Company's U.S. counsel and on behalf of the Underwriters by Blake, Cassels & Graydon LLP, the Underwriters' Canadian counsel, and by Paul, Weiss, Rifkind, Wharton & Garrison LLP, the Underwriters' U.S. counsel. As at the date hereof, the partners and associates of Goodmans LLP, as a group, beneficially own, directly or indirectly, less than 1% of the securities of the Company, and the partners and associates of Blake, Cassels & Graydon LLP, as a group, beneficially own, directly or indirectly, less than 1% of the securities of the Company.

KPMG LLP, as auditors of the Company, has advised the Company that it is independent in accordance with the auditor's rules of professional conduct in the United States and has complied with the SEC's rules on auditor independence.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

In the opinion of Goodmans LLP, counsel to the Company, and Blake, Cassels & Graydon LLP, counsel to the Underwriters (collectively, "**Counsel**"), the following summary describes the principal Canadian federal income tax considerations pursuant to the Tax Act generally applicable to a holder that acquires Debentures pursuant to the Offering and that, for purposes of the Tax Act and at all relevant times is, or is deemed to be, resident in Canada, holds such Debentures and will hold Common Shares issuable on the conversion, redemption, purchase for cancellation or maturity of such

Table of Contents

Debentures (the Debentures and Common Shares, collectively, the "**Securities**") as capital property and deals at arm's length with the Company and each of the Underwriters and is not affiliated with the Company or any of the Underwriters (a "**Holder**"). Generally, the Securities will be considered to be capital property to a Holder provided the Holder does not hold the Securities in the course of carrying on a business of trading or dealing in securities and has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade. Certain Holders that might not otherwise be considered to hold their Securities as capital property may, in certain circumstances, be entitled to have the Securities, and all other "Canadian securities" (as defined in the Tax Act) owned by such Holders in the taxation year of the election and all subsequent taxation years deemed to be treated as capital property by making the irrevocable election permitted by subsection 39(4) of the Tax Act. Such Holders should consult their own tax advisors for advice with respect to whether an election under subsection 39(4) of the Tax Act is available or advisable having regard to their particular circumstances.

This summary does not address the possible application of the "foreign affiliate dumping" rules in section 212.3 of the Tax Act to a Holder that (i) is a corporation resident in Canada and (ii) is (or does not deal at arm's length with a corporation resident in Canada that is), or becomes as part of a transaction or event or series of transactions or events that includes the acquisition of Securities, controlled by a non-resident corporation for the purposes of such rules. Such Holders should consult their own tax advisors with respect to the possible application of these rules.

This summary is not applicable to a Holder (i) that is a "financial institution", as defined in the Tax Act for the purposes of the "mark-to-market rules" in the Tax Act, (ii) an interest in which would be a "tax shelter investment" as defined in the Tax Act, (iii) that is a "specified financial institution" as defined in the Tax Act, (iv) that makes or has made a functional currency reporting election pursuant to section 261 of the Tax Act, or (v) that has entered or will enter into a "derivative forward agreement", as defined in the Tax Act, with respect to Securities. Any such Holder should consult its own tax advisor with respect to an investment in the Securities. In addition, this summary does not address the deductibility of interest by a Holder that has borrowed money or otherwise incurred debt in connection with the acquisition of Debentures.

This summary is based upon the provisions of the Tax Act in force as of the date hereof, all specific proposals to amend the Tax Act that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "**Proposed Amendments**"), and Counsel's understanding of the current administrative policies and assessing practices of the Canada Revenue Agency ("**CRA**") made publicly available prior to the date hereof. This summary assumes the Proposed Amendments will be enacted in the form proposed; however, no assurance can be given that the Proposed Amendments will be enacted in the form proposed, or at all. This summary is not exhaustive of all possible Canadian federal income tax considerations and, except for the Proposed Amendments, does not take into account any changes in the law or in administrative policies or assessing practices, whether by legislative, administrative, governmental or judicial action or decision, nor does it take into account provincial, territorial or foreign tax considerations, which may differ significantly from those discussed in this prospectus supplement.

On July 18, 2017, the Minister of Finance (Canada) released a consultation paper that included an announcement of the Government's intention to amend the Tax Act to, among other things, increase the amount of tax applicable to certain investment income earned through a private corporation (the "**July 2017 Consultation Paper**"). On October 18, 2017, the Government of Canada announced its intention to move forward with these passive investment measures, which are expected to be introduced in the 2018 Federal Budget. This summary does not address the potential implications of the July 2017 Consultation Paper. Holders should consult their tax advisors with respect to the implications of the July 2017 Consultation Paper as they relate to the holding, acquisition and disposition of Securities.

Table of Contents

This summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any particular Holder or prospective holder of Securities, and no representations with respect to the income tax consequences to any Holder or prospective holder are made. Consequently, Holders and prospective holders of Securities should consult their own tax advisors for advice with respect to the tax consequences to them of acquiring Securities, having regard to their particular circumstances.

Taxation of Interest on Debentures

A Holder of Debentures that is a corporation, partnership, unit trust or any trust of which a corporation or a partnership is a beneficiary will be required to include in computing its income for a taxation year any interest on the Debentures that accrues or is deemed to accrue to it to the end of the particular taxation year or that has become receivable by or is received by the Holder before the end of that taxation year, except to the extent that such interest was included in computing the Holder's income for a preceding taxation year.

Any other Holder, including an individual other than a trust described in the paragraph above, will be required to include in computing income for a taxation year all interest on the Debentures that is received or receivable by the Holder in that taxation year (depending upon the method regularly followed by the Holder in computing income), except to the extent that the interest was included in the Holder's income for a preceding taxation year. In addition, if a Holder holds an interest in a Debenture that is an "investment contract" (as defined in the Tax Act) in relation to a Holder on an "anniversary day" as defined in the Tax Act, such Holder will be required to include in computing income for a taxation year any interest that accrues to the Holder on the Debenture up to the end of such "anniversary day" in that year to the extent such interest was not otherwise included in the Holder's income for that year or a preceding year.

A Holder of Debentures that throughout the relevant taxation year is a "Canadian-controlled private corporation", as defined in the Tax Act, may be liable to pay a refundable tax on its "aggregate investment income", which is defined in the Tax Act to include interest income.

The Company may elect to pay interest by issuing Common Shares to an agent for sale, in which event a Holder would be entitled to a cash payment equal to the interest owed to the Holder from the proceeds of sale of such Common Shares by the agent. If the Company were to pay interest in this manner, the Canadian federal income tax consequences to a Holder would not differ from those described above.

Exercise of Conversion Privilege

Generally, a Holder that converts a Debenture into Common Shares or Common Shares and cash delivered in lieu of a fraction of a Common Share pursuant to the conversion privilege will be deemed not to have disposed of the Debenture for purposes of the Tax Act and, accordingly, will not be considered to realize a capital gain (or capital loss) on such conversion. Under the current administrative practice of the CRA, a Holder that, upon conversion of a Debenture, receives cash not in excess of \$200 in lieu of a fraction of a Common Share may elect to either treat this amount as proceeds of disposition of a portion of the Debenture, thereby realizing a capital gain (or capital loss), or reduce the adjusted cost base of the Common Shares that the Holder receives on the conversion by the amount of the cash received.

Upon a conversion of a Debenture, interest accrued thereon to the date of conversion will be included in computing the income of the Holder as described above under "Taxation of Interest on Debentures".

Table of Contents

The aggregate cost to a Holder of the Common Shares acquired on the conversion of a Debenture will generally be equal to the aggregate of the Holder's adjusted cost base of the Debenture immediately before the conversion, subject to the discussion above regarding cash in lieu of a fraction of a Common Share. The adjusted cost base to a Holder of Common Shares acquired at any time will be determined by averaging the cost of such Common Shares with the adjusted cost base of any other Common Shares owned by the Holder as capital property at the time.

Disposition of Debentures

A disposition or deemed disposition of a Debenture by a Holder, including upon a redemption, payment on maturity or purchase for cancellation or pursuant to an agreement by a converting Holder to receive cash in lieu of Common Shares, but not including upon the conversion of a Debenture into Common Shares pursuant to a Holder's right of conversion as described above, generally will result in the Holder realizing a capital gain (or a capital loss) equal to the amount by which the proceeds of disposition, which do not include any amount otherwise required to be included in the Holder's income as interest, are greater (or less) than the aggregate of the adjusted cost base of the Debenture to the Holder and any reasonable costs of disposition. Such capital gain (or capital loss) will be subject to the tax treatment described below under "Taxation of Capital Gains and Capital Losses".

If the Company pays any amount upon the redemption, purchase or maturity of a Debenture by issuing Common Shares to a Holder, the Holder's proceeds of disposition of the Debenture will be equal to the fair market value, at the time of disposition of the Debenture, of the Common Shares and any other consideration so received (except any consideration received in satisfaction of accrued interest). The Holder's cost of any Common Shares so received will be equal to the fair market value of such Common Shares. The adjusted cost base to a Holder of Common Shares at any time will be determined by averaging the cost of such Common Shares with the adjusted cost base of any other Common Shares owned by the Holder as capital property at that time.

Upon a disposition or deemed disposition of a Debenture, a Holder generally will be required to include in income interest accrued on the Debenture to the date of disposition (as described above under "Taxation of Interest on Debentures") to the extent such amount has not otherwise been included in the Holder's income for the taxation year or a preceding taxation year, and such amount will be excluded in computing the Holder's proceeds of disposition of the Debenture.

Receipt of Dividends on Common Shares

A Holder will be required to include in computing its income for a taxation year any dividends received (or deemed to be received) on such Holder's Common Shares, unless in the case of Canadian resident corporations, the application of a specific anti-avoidance rule discussed below re-characterizes such dividends as proceeds of disposition or a capital gain.

Dividends received or deemed to be received on the Common Shares by a Holder that is an individual (other than certain trusts) will be included in computing the individual's income for tax purposes and will be subject to the gross-up and dividend tax credit rules normally applicable to dividends received from a "taxable Canadian corporation" (as defined in the Tax Act), including the enhanced gross-up and dividend tax credit for "eligible dividends" (as defined in the Tax Act) paid by taxable Canadian corporations such as the Company. A dividend will be eligible for the enhanced gross-up and dividend tax credit if the recipient receives written notice (which may include a notice published on the Company's website) from the Company designating the dividend as an "eligible dividend".

A Holder that is a corporation will be required to include dividends received or deemed to be received on Common Shares in computing its income for tax purposes and generally will be entitled to deduct the amount of such dividends in computing its taxable income, with the result that no tax will

Table of Contents

be payable by it in respect of such dividends. In certain circumstances, subsection 55(2) of the Tax Act will treat a taxable dividend received by a Holder that is a corporation as proceeds of disposition or a capital gain. Holders that are corporations are urged to consult their own tax advisors having regard to their particular circumstances.

Certain corporations, including a "private corporation" or a "subject corporation" (as such terms are defined in the Tax Act), may be liable to pay a refundable tax under Part IV of the Tax Act on dividends received or deemed to be received on Common Shares to the extent such dividends are deductible in computing taxable income.

Taxable dividends received by an individual (including certain trusts) may give rise to a liability for alternative minimum tax as calculated under the detailed rules set out in the Tax Act.

Disposition of Common Shares

A disposition or a deemed disposition of a Common Share by a Holder (except to the Company, unless purchased by the Company in the open market in the manner in which shares are normally purchased by any member of the public in the open market) generally will result in the Holder realizing a capital gain (or a capital loss) equal to the amount by which the proceeds of disposition of the Common Share are greater (or less) than the aggregate of the adjusted cost base of the Common Share to the Holder and any reasonable costs of disposition. Such capital gain (or capital loss) will be subject to the tax treatment described below under "Taxation of Capital Gains and Capital Losses".

Taxation of Capital Gains and Capital Losses

Generally, one-half of any capital gain (a "**taxable capital gain**") realized by a Holder in a taxation year must be included in the Holder's income for the year, and one-half of any capital loss (an "**allowable capital loss**") realized by a Holder in a taxation year must be deducted from taxable capital gains realized by the Holder in that year. Allowable capital losses for a taxation year in excess of taxable capital gains for that year generally may be carried back and deducted in any of the three preceding taxation years or carried forward and deducted in any subsequent taxation year against net taxable capital gains realized in such years, to the extent and under the circumstances described in the Tax Act.

The amount of any capital loss realized by a Holder that is a corporation on the disposition of a Common Share may be reduced by the amount of dividends received or deemed to be received by it on such Common Share (or on a share for which the Common Share has been substituted) to the extent and under the circumstances described by the Tax Act. Similar rules may apply where a corporation is a member of a partnership or a beneficiary of a trust that owns Common Shares, directly or indirectly, through a partnership or a trust.

A Holder that is, throughout the relevant taxation year, a "Canadian- controlled private corporation", as defined in the Tax Act, may be liable for a refundable tax on investment income, including taxable capital gains.

Capital gains realized by an individual (including certain trusts) may give rise to a liability for alternative minimum tax as calculated under the detailed rules set out in the Tax Act.

MATERIAL CONTRACTS

The only material contracts, other than contracts entered into in the ordinary course of business, to which the Company will become a party prior to or at the closing of the Offering are as follows:

- (a) the Underwriting Agreement referred to under "Plan of Distribution"; and

Table of Contents

(b)

the Seventh Supplement referred to under "Description of the Debentures" in the U.S. Prospectus.

Copies of these agreements will be available at www.sedar.com or may be examined at the registered office of the Company, at 215-10451 Shellbridge Way, Richmond, British Columbia, V6X 2W8, during normal business hours until the expiry of the 30-day period following the date of this prospectus supplement.

AUDITORS, TRANSFER AGENT AND REGISTRAR AND CO-TRUSTEES

The auditors of the Company are KPMG LLP, an independent registered public accounting firm, 345 Park Avenue, New York, NY 10154.

The transfer agent and registrar for the Common Shares is Computershare Investor Services Inc. at its principal office in Toronto, Ontario.

The trustee of the Series C Debentures is Computershare Trust Company of Canada, at its principal office in Toronto, Ontario. The co-trustees of the Series D Debentures and the Debentures are Computershare Trust Company of Canada, at its principal office in Toronto, Ontario and Computershare Trust Company, N.A., at its principal office in Golden, Colorado.

PURCHASERS' STATUTORY RIGHTS OF RESCISSION AND WITHDRAWAL

Securities legislation in certain of the provinces and territories of Canada provides purchasers with the right to withdraw from an agreement to purchase securities. This right generally may be exercised within two business days after receipt or deemed receipt of a prospectus and any amendment. In several of the provinces and territories, the securities legislation further provides a purchaser with remedies for rescission or, in some jurisdictions, revisions of the price or damages if the prospectus and any amendment contains a misrepresentation or is not delivered to the purchaser, provided that the remedies for rescission, revisions of the price or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of these rights or consult with a legal advisor.

PURCHASERS' CONTRACTUAL RIGHTS

Original purchasers of Debentures will have a contractual right of rescission against the Company following the conversion of such Debentures in the event that this prospectus supplement, the short form base shelf prospectus or any amendment thereto contains a misrepresentation. The contractual right of rescission will entitle such original purchasers to receive from the Company, upon surrender of the Common Shares issued upon conversion of such Debentures, the amount paid for such Debentures, provided that (i) the conversion takes place within 180 days of the date of the purchase of the Debentures under this prospectus supplement and the short form base shelf prospectus; and (ii) the right of rescission is exercised within 180 days of the date of the purchase of such Debentures under this prospectus supplement and the short form base shelf prospectus.

Original purchasers of Debentures are further advised that in an offering of convertible securities, such as the Debentures, the statutory right of action for damages for a misrepresentation contained in a prospectus is limited, under the securities legislation of certain provinces and territories, to the price at which the convertible security was offered to the public under the prospectus offering. This means that, under the securities legislation of certain provinces and territories, any further payment made by an original purchaser at the time of conversion of the security may not be recoverable in a statutory action for damages in such provinces or territories. The purchaser should refer to any applicable

Table of Contents

provisions of the securities legislation of the purchaser's province or territory for the particulars of this statutory right of action for damages, or consult with a legal adviser.

UNITED STATES PROSPECTUS

The text of the U.S. prospectus supplement, which forms part of the U.S. Registration Statement filed with the SEC, is attached and forms a part of this prospectus supplement and the short form base shelf prospectus other than the section in the U.S. Prospectus entitled "Where You Can Find More Information". All securities purchased under this prospectus supplement and the short form base shelf prospectus, including securities purchased by Canadian investors, will also be registered pursuant to the U.S. Registration Statement under the U.S. Securities Act. The U.S. Securities Act affords certain protections in relation to the U.S. Prospectus.

C-17

Table of Contents

GLOSSARY OF TERMS

In this prospectus supplement, capitalized terms used herein and not defined herein shall have the meanings defined in the short form base shelf prospectus and the following terms will have the meanings set forth below. Words importing the singular include the plural and vice versa and words importing any gender include all genders:

"**affiliate**" has the meaning ascribed thereto in the Securities Act.

"**allowable capital loss**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**Canadian Debenture Trustee**" means Computershare Trust Company of Canada.

"**Canadian GAAP**" means the accounting principles generally accepted in Canada.

"**Cash Change of Control**" means a cash change of control as described under "Description of the Debentures Cash Change of Control" in the U.S. Prospectus.

"**CDS**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**CDS Participant**" means a participant in the CDS depository service.

"**Change of Control**" will be deemed to occur upon the occurrence of any of the following events:

- (i) an acquisition by a person or group of persons acting jointly or in concert (within the meaning of the Securities Act) of ownership of, or voting control or direction over, 50% or more of the Common Shares; or
- (ii) the sale or other transfer of all or substantially all the consolidated assets of the Company.

A Change of Control will not include a sale, merger, reorganization or other similar transaction if the previous holders of the Common Shares hold at least 50% of the voting control in such merged, reorganized or other continuing entity.

"**Common Shares**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Company**" means Atlantic Power Corporation.

"**Conversion Price**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Counsel**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**CRA**" means the Canada Revenue Agency.

"**Debentures**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Holder**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**Initial Debentures**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Interest Payment Date**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Maturity Date**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

Table of Contents

"**NI 41-101**" has the meaning ascribed thereto herein under "Documents Incorporated by Reference".

"**NYSE**" means the New York Stock Exchange.

"**Offering**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Original Indenture**" has the meaning ascribed thereto herein under "Trading Price and Volume".

"**Over-Allotment Debentures**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Over-Allotment Option**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**person**" includes an individual, corporation, company, partnership, joint venture, association, trust, trustee, unincorporated organization or government or any agency or political subdivision thereof.

"**Projects**" means the power projects described under "Summary Our Company" in the U.S. Prospectus.

"**Proposed Amendments**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**RDSPs**" has the meaning ascribed thereto herein under "Eligibility for Investment".

"**RESPs**" has the meaning ascribed thereto herein under "Eligibility for Investment".

"**Revolving Facility**" has the meaning ascribed thereto herein under "Relationship Between the Company and the Underwriters".

"**RRIFs**" has the meaning ascribed thereto herein under "Eligibility for Investment".

"**RRSPs**" has the meaning ascribed thereto herein under "Eligibility for Investment".

"**SEC**" means the United States Securities and Exchange Commission.

"**Securities**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**Securities Act**" means the *Securities Act* (Ontario), as amended.

"**Series C Debentures**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Series D Debentures**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Subsidiary**" has the meaning ascribed thereto in the Securities Act.

"**Tax Act**" means the *Income Tax Act* (Canada) and the regulations thereunder, in each case in effect on the date hereof.

"**taxable capital gain**" has the meaning ascribed thereto herein under "Certain Canadian Federal Income Tax Considerations".

"**Term Loan Facility**" has the meaning ascribed thereto herein under "Relationship Between the Company and the Underwriters".

"**Term Sheet**" has the meaning ascribed thereto herein under "Documents Incorporated by Reference".

"**TFSAs**" has the meaning ascribed thereto herein under "Eligibility for Investment".

Table of Contents

"**TSX**" means the Toronto Stock Exchange.

"**Underwriters**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**Underwriting Agreement**" means the underwriting agreement among the Company and the Underwriters described under "Plan of Distribution".

"**U.S. Debenture Trustee**" means Computershare Trust Company, N.A.

"**U.S. GAAP**" means the accounting principles generally accepted in the United States.

"**U.S. Prospectus**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**U.S. Registration Statement**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

"**U.S. Securities Act**" has the meaning ascribed thereto on the cover page of this prospectus supplement.

Table of Contents

Base Shelf Prospectus

This short form prospectus is a base shelf prospectus. This short form prospectus has been filed under legislation in each of the provinces and territories of Canada that permits certain information about these securities to be determined after this prospectus has become final and that permits the omission from this prospectus of that information. The legislation requires the delivery to purchasers of a prospectus supplement containing the omitted information within a specified period of time after agreeing to purchase any of these securities.

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise. This short form prospectus constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities. Atlantic Power Corporation has filed a registration statement on Form S-3 with the United States Securities and Exchange Commission under the United States Securities Act of 1933, as amended, with respect to these securities. See "Plan of Distribution".

Information has been incorporated by reference in this short form prospectus from documents filed with securities commissions or similar authorities in Canada. Copies of the documents incorporated herein by reference may be obtained on request without charge from the Corporate Secretary of Atlantic Power Corporation at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026, telephone 617.977.2400, and are also available electronically at www.sedar.com.

SHORT FORM BASE SHELF PROSPECTUS

New Issue

December 19, 2017

Atlantic Power Corporation

US\$250,000,000
Common Shares
Debt Securities
Warrants
Subscription Receipts
Units

Atlantic Power Corporation (the "**Company**") may offer for sale and issue from time to time, in any combination: (i) common shares of the Company ("**Common Shares**"); (ii) debt securities of the Company ("**Debt Securities**"); (iii) warrants exercisable to acquire Common Shares and/or other securities of the Company ("**Warrants**"); (iv) subscription receipts exchangeable for Common Shares and/or other securities of the Company ("**Subscription Receipts**"); or (v) securities comprised of one or more of Common Shares, Debt Securities, Warrants and/or Subscription Receipts offered together as a unit ("**Units**", and together with the Common Shares, the Debt Securities, the Warrants and the Subscription Receipts, the "**Securities**") up to an aggregate initial offering price of US\$250,000,000 (or its equivalent in Canadian dollars or any other currency or currency unit used to denominate the Securities) during the 25-month period that this short form base shelf prospectus (this "**Prospectus**"), including amendments hereto, remains effective.

The Company has filed a registration statement on Form S-3, as amended (File No. 333-221903) (the "**U.S. Registration Statement**"), with respect to the offerings of the Securities with the United States Securities and Exchange Commission (the "**SEC**") under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"). The U.S. prospectus contained in the U.S. Registration Statement (the "**U.S. Prospectus**") is included in and forms a part of this Prospectus other than the section in the U.S. Prospectus entitled "Where You Can Find More Information".

The specific terms of any Securities offered will be described in one or more shelf prospectus supplements (collectively or individually, as the case may be, a "**Prospectus Supplement**"), and may include, where applicable: (i) in the case of Common Shares, the number of Common Shares being offered, the offering price and any other specific terms; (ii) in the case of Debt Securities, the specific designation, aggregate principal amount, whether payment on the Debt Securities will be senior or subordinated to the issuer's other liabilities and obligations, denomination (which may be in U.S. dollars or any other currency or in units based on or relating to foreign currencies), maturity date, interest rate (which may be fixed or variable) or method of determining the interest rates, any conversion or exchange rates attached to the Debt Securities, whether the issuer may redeem the Debt Securities at its option, whether the Debt Securities will be secured by any of the Company's assets or guaranteed by any other person and any other specific terms; (iii) in the case of Warrants, the number of Warrants being offered, the offering price, the terms, conditions and procedures for the exercise of such Warrants into or for Common Shares and/or other securities of the Company and any other specific terms; (iv) in the case of Subscription Receipts, the number of Subscription Receipts being offered, the offering price, the terms, conditions and procedures for the exchange of the Subscription Receipts into or for Common Shares and/or other securities of the Company and any other specific terms; and (v) in the case of Units, the number of Units being offered, the offering price, the terms of the Common Shares, Debt Securities, Warrants and/or Subscription Receipts, as the case may be, underlying the Units, and any other specific terms. A Prospectus Supplement may include specific variable terms pertaining to the Securities that are not within the alternatives and parameters described in this Prospectus.

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

All shelf information permitted under applicable laws to be omitted from this Prospectus will be contained in one or more Prospectus Supplements that will be delivered to purchasers together with this Prospectus. Each Prospectus Supplement will be deemed to be incorporated by reference into this Prospectus for the purposes of securities legislation as of the date of such Prospectus Supplement and only for the purposes of the distribution of the Securities to which the Prospectus Supplement pertains.

The Company may sell Securities to or through underwriters or dealers purchasing as principals, and may also offer and sell the Securities to one or more purchasers directly or through agents, subject to any exemption from registration requirements, from time to time. The Prospectus Supplement relating to a particular offering of Securities will identify each underwriter, dealer or agent engaged in connection with the offering and sale of Securities, and will set forth the method of distribution of such Securities, including, to the extent applicable, the proceeds to the Company and any fees, discounts or other compensation payable to such underwriters, dealers or agents and any other material terms of the plan of distribution. **In connection with any offering of Securities (unless otherwise specified in the relevant Prospectus Supplement), the underwriters, dealers or agents may over-allot or effect transactions which stabilize or maintain the market price of the Securities offered at levels other than those which might otherwise prevail on the open market. Such transactions, if commenced, may be discontinued at any time. In the event of an underwritten offering of Securities, in certain circumstances, the underwriters, dealers or agents may offer the Securities at a price lower than the offering price stated in the applicable Prospectus Supplement.** See "Plan of Distribution".

The outstanding Common Shares are listed on the Toronto Stock Exchange (the "TSX") under the symbol "ATP" and on the New York Stock Exchange (the "NYSE") under the symbol "AT". The closing price of the Common Shares on the TSX and on the NYSE on December 18, 2017, the last trading day before the date of this Prospectus, was Cdn\$3.07 and US\$2.35, respectively, per Common Share. The outstanding 5.75% series C convertible unsecured subordinated debentures due June 30, 2019 (the "Series C Debentures") and 6.00% series D extendible convertible unsecured subordinated debentures due December 31, 2019 (the "Series D Debentures") of the Company are listed on the TSX under the symbols "ATP.DB.U" and "ATP.DB.D", respectively. The closing price of the Series D Debentures on the TSX on December 18, 2017, the last trading day before the date of this Prospectus, was Cdn\$100.45 per Cdn\$100 principal amount of such debentures. No Series C Debentures were traded on the TSX on December 18, 2017. The closing price of the Series C Debentures on the TSX on December 15, 2017, the last day on which the Series C Debentures traded before the date of this Prospectus, was Cdn\$100.25 per Cdn\$100 principal amount of such debentures.

There is currently no market through which the Debt Securities, Warrants, Subscription Receipts or Units may be sold and purchasers may not be able to resell such securities purchased under this Prospectus. This may affect the pricing of the Debt Securities, Warrants, Subscription Receipts and Units in the secondary market, the transparency and availability of trading prices, the liquidity of such securities, and the extent of issuer regulation. See "Risk Factors - No Market for Debt Securities, Warrants, Subscription Receipts or Units".

The Company's earnings coverage ratios for the 12-month periods ending December 31, 2016 and September 30, 2017, calculated on the basis of the Company's financial statements prepared in accordance with United States generally accepted accounting principles and incorporated by reference in this Prospectus, were less than one to one. See "Earnings Coverage Ratios".

The Company's registered office is located at 215-10451 Shellbridge Way, Richmond, British Columbia, V6X 2W8 and the Company's head office is located at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026.

An investment in the Securities is speculative and subject to a number of risks that should be considered by a prospective investor. Prospective investors should carefully review the sections entitled "Cautionary Statement Regarding Forward-Looking Information" and "Risk Factors" in this Prospectus and "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors" in the U.S. Prospectus.

Table of Contents

TABLE OF CONTENTS

| | Page |
|---|-------------|
| <u>DOCUMENTS INCORPORATED BY REFERENCE</u> | <u>C-3</u> |
| <u>SUPPLEMENTAL CANADIAN DISCLOSURE</u> | <u>C-4</u> |
| <u>CURRENCY AND EXCHANGE RATE INFORMATION</u> | <u>C-4</u> |
| <u>NOTICE TO INVESTORS REGARDING GAAP</u> | <u>C-5</u> |
| <u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION</u> | <u>C-5</u> |
| <u>PRIOR SALES</u> | <u>C-7</u> |
| <u>TRADING PRICE AND VOLUME</u> | <u>C-7</u> |
| <u>EARNINGS COVERAGE RATIOS</u> | <u>C-10</u> |
| <u>CONSOLIDATED CAPITALIZATION</u> | <u>C-10</u> |
| <u>PLAN OF DISTRIBUTION</u> | <u>C-11</u> |
| <u>RISK FACTORS</u> | <u>C-13</u> |
| <u>CANADIAN TRUST INDENTURE LEGISLATION</u> | <u>C-13</u> |
| <u>INTERESTS OF EXPERTS</u> | <u>C-13</u> |
| <u>AUDITORS, TRANSFER AGENT AND REGISTRAR</u> | <u>C-13</u> |
| <u>SERVICE OF PROCESS AND ENFORCEABILITY OF LIABILITIES</u> | <u>C-14</u> |
| <u>PURCHASERS' STATUTORY RIGHTS OF RESCISSION AND WITHDRAWAL</u> | <u>C-14</u> |
| <u>PURCHASERS' CONTRACTUAL RIGHTS</u> | <u>C-14</u> |
| <u>UNITED STATES PROSPECTUS</u> | <u>C-15</u> |
| <u>CERTIFICATE OF THE COMPANY</u> | <u>C-16</u> |

Table of Contents

DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this Prospectus from documents filed with the securities commissions or similar authorities in the provinces and territories of Canada. Copies of the documents incorporated in this Prospectus by reference may be obtained on request without charge from the Corporate Secretary of the Company at 3 Allied Drive, Suite 220, Dedham, Massachusetts, U.S.A., 02026, telephone 617.977.2400. In addition, copies of the documents incorporated by reference herein may be obtained from the securities commissions or similar authorities in Canada through SEDAR at www.sedar.com.

The following documents of the Company, filed with the securities commissions or similar authorities in the provinces and territories of Canada, are specifically incorporated by reference into and form an integral part of this Prospectus:

- (a) the Company's annual report on Form 10-K for the fiscal year ended December 31, 2016 (the "**Annual Report**"), filed on SEDAR on March 2, 2017;
- (b) the consolidated financial statements of the Company as of December 31, 2016 and December 31, 2015 and for the two years ended December 31, 2016, together with the notes thereto and the auditors' reports thereon (the "**Annual Financial Statements**"), filed on SEDAR on March 2, 2017;
- (c) management's discussion and analysis of the financial condition and results of operations of the Company for the year ended December 31, 2016 (the "**Annual MD&A**"), filed on SEDAR on March 2, 2017;
- (d) the quarterly report on Form 10-Q of the Company for the three and nine months ended September 30, 2017, together with the notes thereto (the "**Q3 Financial Statements**"), filed on SEDAR on November 9, 2017;
- (e) management's discussion and analysis of the financial condition and results of operations of the Company for the three and nine months ended September 30, 2017 (the "**Q3 MD&A**"), filed on SEDAR on November 9, 2017; and
- (f) the management information circular and proxy statement of the Company dated April 28, 2017, distributed in connection with the annual and special meeting of shareholders held on June 20, 2017 (the "**Circular**"), filed on SEDAR on April 28, 2017.

Any documents of the type required by section 11.1 of Form 44-101F1 of National Instrument 44-101 *Short Form Prospectus Distributions* to be incorporated by reference in a short form prospectus, if filed by the Company with the securities commissions or similar regulatory authorities in the provinces and territories of Canada in which this Prospectus has been filed subsequent to the date of this Prospectus and prior to the termination of the distribution, shall be deemed to be incorporated by reference in this Prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this Prospectus shall be deemed to be modified or superseded for the purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document that it modifies or supersedes. The making of a modifying or superseding statement shall not be deemed an admission for any purposes that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that was required to be stated or that was necessary to make a statement not misleading in light of the circumstances in which

Table of Contents

it was made. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

Upon a new annual information form (or annual report on Form 10-K, as applicable) and related annual audited financial statements and the management's discussion and analysis in respect thereof being filed by the Company with, and where required, accepted by, the applicable securities regulatory authorities during the currency of this Prospectus, the previous annual information form (or annual report on Form 10-K, as applicable), the previous annual audited financial statements, all interim unaudited financial statements and the management's discussion and analysis in respect thereof, material change reports and business acquisition reports filed by the Company prior to the commencement of the Company's fiscal year in which the new annual information form (or annual report on Form 10-K, as applicable) was filed shall be deemed no longer to be incorporated into this Prospectus for purposes of future offers and sales of Securities hereunder. Upon an interim unaudited financial statements and the management's discussion and analysis in respect thereof being filed by the Company with the applicable securities regulatory authorities during the currency of this Prospectus, all interim unaudited financial statements and the management's discussion and analysis in respect thereof filed prior to the new interim unaudited financial statements shall be deemed no longer to be incorporated into this Prospectus for purposes of future offers and sales of Securities hereunder. Upon a new management information circular relating to an annual meeting of shareholders of the Company being filed by the Company with the applicable securities regulatory authorities during the currency of this Prospectus, the management information circular for the preceding annual meeting of shareholders shall be deemed no longer to be incorporated by reference into this Prospectus for purposes of future offers and sales of Securities hereunder.

A Prospectus Supplement containing the specific terms of an offering of any Securities, updated disclosure of earnings interest coverage ratios (if applicable) and any additional or updated information that the Company may elect to include (provided that such information does not describe a material change that has not already been the subject of a material change report or a prospectus amendment) will be delivered to purchasers of such Securities, together with this Prospectus, and will be deemed to be incorporated into this Prospectus as of the date of such Prospectus Supplement, but only for purposes of the offering of such Securities covered by that Prospectus Supplement.

SUPPLEMENTAL CANADIAN DISCLOSURE

In accordance with the requirements of applicable securities laws in each province and territory of Canada, the disclosure in the U.S. Prospectus included in this Prospectus is supplemented with the following additional disclosure.

CURRENCY AND EXCHANGE RATE INFORMATION

In this Prospectus, references 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 stated.

The business of many of the Company's power generation projects, described under "Our Company" in the U.S. Prospectus (the "**Projects**"), is conducted in major markets in the United States and their revenues and expenses are denominated, earned and incurred primarily in U.S. dollars. The reporting currency used in the Company's financial statements is U.S. dollars. The following table sets forth, for each period indicated: (i) the high and low noon, or high and low average daily, exchange rates during such period; (ii) the average noon or daily exchange rates for such period; and (iii) the noon or average daily exchange rate at the end of such period, for one U.S. dollar, expressed in Canadian dollars, as quoted by the Bank of Canada. As of May 1, 2017, the Bank of Canada no longer publishes updated data for exchange rates published under previous methodologies, including daily

Table of Contents

noon and closing rates, as well as high and low rates. As a result, the exchange rates presented for the nine months ended September 30, 2017 are based on the Bank of Canada's new methodology that calculates an average daily exchange rate. On December 18, 2017, the daily average exchange rate as quoted by the Bank of Canada was US\$1.00 = Cdn\$1.2865.

| | Nine Months Ended September 30 | | | | Twelve Months Ended December 31 | | | |
|------------|-----------------------------------|----------------|----------------|----------------|------------------------------------|--|--|--|
| | 2017 (Average Daily) | 2016 (Noon) | 2016 (Noon) | 2015 (Noon) | 2014 (Noon) | | | |
| High | Cdn\$ 1.3743 | Cdn\$ 1.4589 | Cdn\$ 1.4589 | Cdn\$ 1.3990 | Cdn\$ 1.1643 | | | |
| Low | Cdn\$ 1.2128 | Cdn\$ 1.2544 | Cdn\$ 1.2544 | Cdn\$ 1.1728 | Cdn\$ 1.0614 | | | |
| Average | Cdn\$ 1.3074 | Cdn\$ 1.3218 | Cdn\$ 1.3248 | Cdn\$ 1.2787 | Cdn\$ 1.1045 | | | |
| Period End | Cdn\$ 1.2480 | Cdn\$ 1.3117 | Cdn\$ 1.3427 | Cdn\$ 1.3840 | Cdn\$ 1.1601 | | | |

Source: Bank of Canada

NOTICE TO INVESTORS REGARDING GAAP

The Company prepares its financial statements in accordance with United States generally accepted accounting principles ("U.S. GAAP"). The Annual Financial Statements and the corresponding Annual MD&A, and the Q3 Financial Statements and the corresponding Q3 MD&A, incorporated by reference in this Prospectus, have been prepared in accordance with U.S. GAAP, which differ in certain material respects from Canadian GAAP.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

Certain information in this Prospectus and the documents incorporated by reference herein may constitute "forward-looking information", as such term is used in applicable Canadian securities legislation, about the Company including its financial condition, results of operations, business strategies, operating efficiencies, synergies, revenue enhancements, competitive positions, plans and objectives of management and growth opportunities of the Company, various matters with respect to the markets for Common Shares and Debt Securities and other matters. Forward-looking information generally can be identified by the use of words such as "outlook", "objective", "may", "will", "expect", "intend", "estimate", "anticipate", "believe", "should", "plans", "continue" or similar expressions suggesting future outcomes or events. Prospective investors should also refer to "Cautionary Note Regarding Forward-Looking Statements" in the U.S. Prospectus for further detail on such forward-looking information and statements.

Material factors or assumptions that were applied in providing forward-looking information, include, but are not limited to the Company's future growth potential, its results of operations, future cash flows, the continued performance and business prospects and opportunities of the Company and the Projects, third party projections of regional fuel and electric capacity and energy prices, the completion of certain transactions, the Company's ability to continue to develop and grow, the Company's future levels of indebtedness, and the tax laws as currently in effect remaining unchanged and the current general regulatory environment and economic conditions remaining unchanged.

Forward-looking information contained in this Prospectus reflects management's current expectations regarding future events and operating performance, and speaks only as of the date of this Prospectus. Such forward-looking information is based on currently available competitive, financial and economic data and operating plans and are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or general industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Factors that could cause the Company's

Table of Contents

actual results, performance or achievements to vary from those expressed or inferred herein include, but are not limited to, the following: the ability of the Company to generate sufficient cash flow to service the Company's debt obligations or implement its business plan, including financing internal or external growth opportunities; the outcome or impact of the business strategy of the Company to increase its intrinsic value on a per-share basis through disciplined management of the Company's balance sheet and cost structure and investment of the Company's discretionary cash in a combination of organic and external growth projects, acquisitions and repurchases of debt and equity securities; the ability of the Company to renew or enter into new power purchase agreements on favorable terms or at all after the expiration of the Company's current agreements; the ability of the Company to meet the financial covenants under its existing credit facilities and other indebtedness; expectations regarding maintenance and capital expenditures; the impact of legislative, regulatory, competitive and technological changes; and the other risk factors under the heading "Risk Factors" in this Prospectus, under the heading "Risk Factors" in the U.S. Prospectus and other risk factors relating to the Company and the power industry, as detailed from time to time in the Company's filings with the SEC and the Canadian Securities Administrators, including, without limitation, the Annual Report, as amended, and any subsequent quarterly reports on Form 10-Q. Many of these risks and uncertainties could affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company or on its behalf. The impact of any one factor on a particular piece of forward-looking information is not determinable with certainty as such factors are interdependent upon other factors, and management's course of action would depend upon its assessment of the future considering all information then available.

Should any risk factor affect the Company in an unexpected manner, or should assumptions underlying the forward-looking information prove incorrect, the actual results or events may differ materially from the results or events predicted. Unless otherwise indicated, forward-looking information does not take into account the effect that transactions or non-recurring or other special items announced or occurring after the date it is provided may have on the business of the Company. All of the forward-looking information reflected in this Prospectus and the documents incorporated by reference herein are qualified by these cautionary statements. There can be no assurance that the results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences for the Company. Prospective investors should carefully consider the information contained under the heading "Risk factors" in the U.S. Prospectus and other information included in this Prospectus and any applicable Prospectus Supplement before making investment decisions with regard to any Securities. Forward-looking information is provided and forward-looking statements are made as of the date of this Prospectus and except as may be required by applicable law, the Company disclaims any intention and assumes no obligation to publicly update or revise such forward-looking information or forward-looking statements whether as a result of new information, future events or otherwise.

Table of Contents**PRIOR SALES**

During the 12-month period before the date of this Prospectus, the Company has not issued any Securities, or issued any securities that are convertible or exchangeable into Securities, other than the following issuances of Common Shares pursuant the Company's long-term incentive plan (the "LTIP"):

| Date | Price Per Common Share | | Number of Common Shares |
|-----------|------------------------|------|-------------------------|
| 3/1/2017 | US\$ | 2.38 | 579,609 |
| 4/30/2017 | US\$ | 2.51 | 4,950 |
| 5/12/2017 | US\$ | 2.41 | 6,710 |
| 6/23/2017 | US\$ | 2.48 | 7,943 |
| 6/30/2017 | US\$ | 2.40 | 31,808 |
| 8/18/2017 | US\$ | 2.46 | 10,296 |
| 8/29/2017 | US\$ | 2.43 | 14,163 |

TRADING PRICE AND VOLUME

The Common Shares began trading on the TSX on December 2, 2009, under the trading symbol "ATP" and on the NYSE on July 23, 2010 under the trading symbol "AT". The following tables show the monthly range of high and low prices per Common Share and the total volume of Common Shares traded on the TSX and the NYSE during the 12-month period before the date of this Prospectus. On December 18, 2017, being the last day on which the Common Shares traded prior to the date of this Prospectus, the closing price of the Common Shares on the TSX and on the NYSE was Cdn\$3.07 and US\$2.35, respectively.

| TSX Date | High | | Low | | Volume |
|-----------------------|-------|------|-------|------|-----------|
| December 2016 | Cdn\$ | 3.64 | Cdn\$ | 3.31 | 1,497,008 |
| January 2017 | Cdn\$ | 3.54 | Cdn\$ | 3.02 | 2,118,444 |
| February 2017 | Cdn\$ | 3.15 | Cdn\$ | 2.97 | 832,618 |
| March 2017 | Cdn\$ | 3.60 | Cdn\$ | 3.06 | 1,433,782 |
| April 2017 | Cdn\$ | 3.62 | Cdn\$ | 3.30 | 908,292 |
| May 2017 | Cdn\$ | 3.45 | Cdn\$ | 3.11 | 1,044,463 |
| June 2017 | Cdn\$ | 3.45 | Cdn\$ | 3.05 | 1,226,724 |
| July 2017 | Cdn\$ | 3.15 | Cdn\$ | 2.87 | 930,428 |
| August 2017 | Cdn\$ | 3.19 | Cdn\$ | 2.87 | 1,072,341 |
| September 2017 | Cdn\$ | 3.12 | Cdn\$ | 2.88 | 964,005 |
| October 2017 | Cdn\$ | 3.23 | Cdn\$ | 3.00 | 909,582 |
| November 2017 | Cdn\$ | 3.29 | Cdn\$ | 2.98 | 979,386 |
| December 1 - 18, 2017 | Cdn\$ | 3.26 | Cdn\$ | 3.04 | 660,495 |

C-7

Table of Contents

| NYSE Date | | High | | Low | Volume |
|-----------------------|------|-------|------|------|-----------|
| December 2016 | US\$ | 2.725 | US\$ | 2.50 | 1,817,510 |
| January 2017 | US\$ | 2.65 | US\$ | 2.30 | 1,129,412 |
| February 2017 | US\$ | 2.40 | US\$ | 2.25 | 959,570 |
| March 2017 | US\$ | 2.70 | US\$ | 2.30 | 1,845,607 |
| April 2017 | US\$ | 2.70 | US\$ | 2.45 | 1,029,920 |
| May 2017 | US\$ | 2.55 | US\$ | 2.30 | 1,086,044 |
| June 2017 | US\$ | 2.55 | US\$ | 2.35 | 2,150,450 |
| July 2017 | US\$ | 2.425 | US\$ | 2.30 | 1,187,233 |
| August 2017 | US\$ | 2.50 | US\$ | 2.30 | 1,174,928 |
| September 2017 | US\$ | 2.50 | US\$ | 2.35 | 1,455,027 |
| October 2017 | US\$ | 2.55 | US\$ | 2.40 | 1,087,040 |
| November 2017 | US\$ | 2.55 | US\$ | 2.35 | 1,210,863 |
| December 1 - 18, 2017 | US\$ | 2.55 | US\$ | 2.35 | 1,428,394 |

The Series C Debentures issued pursuant to the trust indenture dated as of December 17, 2009 (the "**Original Indenture**") between the Company and Computershare Trust Company of Canada (the "**Canadian Debenture Trustee**"), as supplemented by the second supplemental indenture dated July 5, 2012 between the Company and the Canadian Debenture Trustee and as further supplemented by the sixth supplemental indenture dated March 22, 2013 between the Company and the Canadian Debenture Trustee, were listed for trading on the TSX on July 5, 2012, under the trading symbol "ATP.DB.U". The following table shows the monthly range of high and low prices per Cdn\$100 principal amount of Series C Debentures and total monthly volumes traded on the TSX during the period before the date of this Prospectus. No Series C Debentures were traded on the TSX on December 18, 2017. On December 15, 2017, being the last day on which the Series C Debentures traded prior to the date of this Prospectus, the closing price of the Series C Debentures on the TSX was Cdn\$100.25 per Cdn\$100 principal amount of such debentures.

| Date | | High | | Low | Volume |
|-----------------------|-------|--------|-------|--------|--------|
| December 2016 | Cdn\$ | 99.21 | Cdn\$ | 98.49 | 9,600 |
| January 2017 | Cdn\$ | 99.31 | Cdn\$ | 98.75 | 4,780 |
| February 2017 | Cdn\$ | 100.11 | Cdn\$ | 99.40 | 4,730 |
| March 2017 | Cdn\$ | 100.51 | Cdn\$ | 99.90 | 3,080 |
| April 2017 | Cdn\$ | 100.55 | Cdn\$ | 100.05 | 10,750 |
| May 2017 | Cdn\$ | 101.00 | Cdn\$ | 100.25 | 5,290 |
| June 2017 | Cdn\$ | 100.56 | Cdn\$ | 100.20 | 6,530 |
| July 2017 | Cdn\$ | 101.00 | Cdn\$ | 100.12 | 2,230 |
| August 2017 | Cdn\$ | 100.35 | Cdn\$ | 100.30 | 2,690 |
| September 2017 | Cdn\$ | 100.53 | Cdn\$ | 100.20 | 3,840 |
| October 2017 | Cdn\$ | 100.30 | Cdn\$ | 99.75 | 5,140 |
| November 2017 | Cdn\$ | 100.50 | Cdn\$ | 100.21 | 5,470 |
| December 1 - 18, 2017 | Cdn\$ | 100.51 | Cdn\$ | 100.21 | 610 |

The Series D Debentures issued pursuant to the Original Indenture, as supplemented by the fourth supplemental indenture dated November 29, 2012 among the Company, the Canadian Debenture Trustee and Computershare Trust Company, N.A. (the "**U.S. Debenture Trustee**") and as further supplemented by the fifth supplemental indenture dated December 11, 2012 among the Company, the Canadian Debenture Trustee and the U.S. Debenture Trustee, were listed for trading on the TSX on December 11, 2012, under the trading symbol "ATP.DB.D". The following table shows the monthly range of high and low prices per Cdn\$100 principal amount of Series D Debentures and total monthly volumes traded on the TSX during the period before the date of this Prospectus. On December 18, 2017, being the last day on which the Series D Debentures traded prior to the date of

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

Table of Contents

this Prospectus, the closing price of the Series D Debentures on the TSX was Cdn\$100.45 per Cdn\$100 principal amount of such debentures.

| Date | | High | | Low | Volume |
|-----------------------|-------|-------------|-------|------------|---------------|
| December 2016 | Cdn\$ | 100.25 | Cdn\$ | 97.00 | 12,610 |
| January 2017 | Cdn\$ | 100.26 | Cdn\$ | 99.50 | 13,120 |
| February 2017 | Cdn\$ | 100.98 | Cdn\$ | 99.77 | 9,210 |
| March 2017 | Cdn\$ | 100.76 | Cdn\$ | 100.25 | 5,900 |
| April 2017 | Cdn\$ | 100.99 | Cdn\$ | 100.40 | 10,290 |
| May 2017 | Cdn\$ | 101.50 | Cdn\$ | 100.50 | 9,825 |
| June 2017 | Cdn\$ | 102.26 | Cdn\$ | 100.25 | 10,310 |
| July 2017 | Cdn\$ | 102.00 | Cdn\$ | 100.26 | 4,145 |
| August 2017 | Cdn\$ | 100.87 | Cdn\$ | 100.00 | 10,800 |
| September 2017 | Cdn\$ | 101.25 | Cdn\$ | 100.38 | 4,930 |
| October 2017 | Cdn\$ | 100.90 | Cdn\$ | 100.40 | 6,350 |
| November 2017 | Cdn\$ | 102.50 | Cdn\$ | 100.35 | 8,335 |
| December 1 - 18, 2017 | Cdn\$ | 101.18 | Cdn\$ | 100.26 | 4,370 |

C-9

Table of Contents

EARNINGS COVERAGE RATIOS

The earnings coverage ratios set forth below have been prepared on the basis of the U.S. GAAP financial statements incorporated by reference in this Prospectus. Earnings coverage is equal to net income before interest expense on all long-term debt and income taxes, divided by interest expense on long-term debt. The calculations below have been adjusted to account for the repayment of the Piedmont Loan (as defined below) which occurred subsequent to September 30, 2017.

In accordance with the presentation and measurement requirements of U.S. GAAP, the Company's interest requirements for all long term debt, including the current portion, amounted to approximately US\$108.7 million and approximately US\$69.8 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively. The Company's loss before interest and income tax for the 12 months ended December 31, 2016 and September 30, 2017, respectively, was approximately US\$21.8 million and US\$26.1 million. Accordingly, the earnings coverage ratios for each of the 12 months ended December 31, 2016 and the 12 months ended September 30, 2017 are less than one-to-one. The additional earnings required to achieve an earnings coverage ratio of 1.0 would have been approximately US\$130.5 million and approximately US\$95.9 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively.

The earnings coverage ratios and the interest requirements do not give effect to the issuance of any Debt Securities that may be issued pursuant to any Prospectus Supplement since the aggregate principal amounts and the terms of such Debt Securities are not presently known. Earnings coverage ratios will be provided as required in the applicable Prospectus Supplement(s) with respect to the issuance of Debt Securities pursuant to this Prospectus.

CONSOLIDATED CAPITALIZATION

The following table presents the cash and cash equivalents and consolidated capitalization of the Company as of September 30, 2017: (i) on an actual basis; and (ii) on an as adjusted basis to give effect to the repayment by the Company on October 13, 2017 of the term loan at the Company's

Table of Contents

Piedmont project (the "**Piedmont Loan**") in the amount of US\$54.6 million and termination of related interest rate swap agreements (the "**Swap Agreements**") with cash on hand.

| | As of September 30, 2017 | |
|---|--------------------------|------------------|
| | Actual | As adjusted |
| | (unaudited) | |
| | (in thousands of US\$) | |
| Cash and cash equivalents: | 122,374 | 58,289(2) |
| Debt: | | |
| Series C Debentures | 42,532 | 42,532 |
| Series D Debentures | 64,888 | 64,888 |
| Senior unsecured notes | 168,273 | 168,273 |
| Current portion of senior secured term loan facility | 92,500 | 92,500 |
| Senior secured term loan facility | 470,228 | 470,228 |
| Current portion of project-level debt | 63,958 | 9,400 |
| Project-level debt | 24,185 | 24,185 |
| Total debt: | 926,564 | 872,006 |
| Shareholders' equity: | | |
| Common shares, no par value per share, unlimited authorized shares, 115,211,976, shares issued and outstanding, actual; 115,211,976 shares issued and outstanding, as adjusted(1) | 1,274,336 | 1,274,336 |
| Preferred shares issued by a subsidiary company | 215,157 | 215,157 |
| Accumulated other comprehensive loss | (132,303) | (132,303) |
| Retained deficit | (1,117,321) | (1,127,674)(3) |
| Total shareholder's equity | 239,869 | 229,516 |
| Total capitalization | 1,166,433 | 1,101,522 |

(1) Excludes (i) 8,050,306 shares issuable upon conversion, redemption, purchase for cancellation or maturity of the Company's outstanding convertible debentures, and (ii) 2,884,574 unvested notional shares granted under the terms of the LTIP.

(2) Cash and cash equivalents includes adjustments for the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as related refinancing costs.

(3) Retained deficit includes adjustments for expenses related to the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as a write down of related deferred financing costs.

Other than as set out above, there have been no material changes in share and loan capital of the Company, on a consolidated basis, since September 30, 2017.

PLAN OF DISTRIBUTION

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

The Company may sell Securities to or through underwriters or dealers, and may also sell Securities to one or more other purchasers directly or through agents, subject to any exemption from registration requirements. The Securities may be sold from time to time in one or more transactions at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or negotiated prices.

Each Prospectus Supplement relating to a particular offering of Securities will set forth the terms of the offering, including the name or names of any underwriters, dealers or agents and the method of distribution of such Securities, including, to the extent applicable, the initial offering price of the

C-11

Table of Contents

Securities, the proceeds to the Company and any fees, discounts or other compensation payable to such underwriters, dealers or agents and any other material terms of the plan of distribution.

Underwriters, dealers and agents who participate in the distribution of Securities may be entitled under agreements to be entered into with the Company to indemnification by the Company against certain liabilities, including liabilities under securities legislation, or to contribution with respect to payments which they may be required to make in respect thereof. Such underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for, the Company in the ordinary course of business.

Any offering of Debt Securities, Warrants, Subscription Receipts or Units will be a new issue of securities with no established trading market. Unless otherwise specified in the applicable Prospectus Supplement, the Debt Securities, Warrants, Subscription Receipts or Units will not be listed on any securities exchange. Certain dealers may make a market in the Debt Securities, Warrants, Subscription Receipts or Units, but will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given that any dealer will make a market in the Debt Securities, Warrants, Subscription Receipts or Units or as to the liquidity of the trading market, if any, for such securities.

In connection with any offering of Securities (unless otherwise specified in the relevant Prospectus Supplement), the underwriters, dealers or agents may over-allot or effect transactions which stabilize or maintain the market price of the Securities offered at levels other than those which might otherwise prevail on the open market. Such transactions, if commenced, may be discontinued at any time. A purchaser that acquires Securities forming part of an over-allocation position acquires such Securities under this Prospectus.

In the event of an underwritten offering of Securities, the underwriters, dealers or agents propose to offer the Securities to the public at the offering price stated in the applicable Prospectus Supplement. After a reasonable effort has been made to sell all of the Securities at the offering price, the underwriters, dealers or agents may subsequently reduce and thereafter change, from time to time, the price at which the Securities are offered, provided that the Securities are not at any time offered at a price greater than the offering price. The compensation realized by such underwriters, dealers or agents will be decreased by the amount that the aggregate price paid by purchasers for the Securities is less than the gross proceeds paid by the underwriters, dealers or agents to the Company.

Table of Contents

RISK FACTORS

Prospective investors in a particular offering of the Securities should carefully consider, in addition to information contained in the Prospectus Supplement relating to such offering and the information incorporated, or deemed to be incorporated, by reference herein, including the risk factors, uncertainties and additional information set forth in the Company's most recent annual report on Form 10-K, as amended, any subsequent quarterly reports on Form 10-Q and the U.S. Prospectus, for the purposes of such offering, the risk factor listed below.

No Market for Debt Securities, Warrants, Subscription Receipts or Units

There is currently no market through which Debt Securities, Warrants, Subscription Receipts or Units that may be offered under this Prospectus and any Prospectus Supplement may be sold, and purchasers of such securities may not be able to resell such securities. No assurance can be given that an active or liquid trading market for the Debt Securities, Warrants, Subscription Receipts or Units will develop or, if developed, that such market will be sustained. This may affect the pricing of the Debt Securities, Warrants, Subscription Receipts and Units in the secondary market, the transparency and availability of trading prices, the liquidity of such securities and the extent of issuer regulation. The public offering prices of the Debt Securities, Warrants, Subscription Receipts and Units may be determined by negotiation between the Company and underwriters based on several factors and may bear no relationship to prices at which such securities will trade in the public market subsequent to such offering. See "Plan of Distribution".

CANADIAN TRUST INDENTURE LEGISLATION

Under applicable Canadian law, a Canadian licensed trust company may be required to be appointed as co-trustee under any or all of the indentures in connection with the issuance of any Debt Securities offered for sale in Canada and the United States pursuant to this Prospectus and a Prospectus Supplement. In such circumstances, the Company may make an application to the appropriate Canadian regulatory authorities prior to such issuance for exemptions from this and other requirements of Canadian law applicable to the indentures. If such relief is not sought and/or obtained, the applicable legislative requirements will be complied with at the time of the applicable offering.

INTERESTS OF EXPERTS

Certain legal matters relating to the offering of the Securities will be passed upon on behalf of the Company by Goodmans LLP, the Company's Canadian counsel, and by Cleary Gottlieb Steen & Hamilton LLP, the Company's U.S. counsel. As at the date hereof, the partners and associates of Goodmans LLP, as a group, beneficially own, directly or indirectly, less than 1% of the securities of the Company, and the partners and associates of Cleary Gottlieb Steen & Hamilton LLP, as a group, beneficially own, directly or indirectly, less than 1% of the securities of the Company. If any underwriters or dealers named in a Prospectus Supplement retain their own counsel to pass upon legal matters relating to the Securities, such counsel will be named in such Prospectus Supplement.

KPMG LLP, as auditors of the Company, has advised the Company that it is independent in accordance with the auditor's rules of professional conduct in the United States and has complied with the SEC's rules on auditor independence.

AUDITORS, TRANSFER AGENT AND REGISTRAR

The auditors of the Company are KPMG LLP, an independent registered public accounting firm, 345 Park Avenue, New York, NY 10154.

Table of Contents

The transfer agent and registrar for the Common Shares is Computershare Investor Services Inc. at its principal office in Toronto, Ontario.

SERVICE OF PROCESS AND ENFORCEABILITY OF LIABILITIES

Each of James J. Moore, Jr., President, Chief Executive Officer and a director of the Company, Terrence Ronan, the Chief Financial Officer of the Company, Holli Ladhani, a director of the Company, R. Foster Duncan, a director of the Company, and Kevin Howell, a director of the Company, resides outside of Canada. Each such individual has appointed GODA Incorporators Inc., Bay Adelaide Centre, 333 Bay Street, Suite 3400, Toronto, Ontario, M5H 2S7 as its agent for service of process in the Province of Ontario. Purchasers are advised that it may not be possible for investors to enforce judgments obtained in Canada against any person or company that is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction or resides outside of Canada, even if the party has appointed an agent for service of process.

PURCHASERS' STATUTORY RIGHTS OF RESCISSION AND WITHDRAWAL

Securities legislation in certain of the provinces and territories of Canada provides purchasers with the right to withdraw from an agreement to purchase securities. This right generally may be exercised within two business days after receipt or deemed receipt of a prospectus and any amendment. In several of the provinces and territories, the securities legislation further provides a purchaser with remedies for rescission or, in some jurisdictions, revisions of the price or damages if the prospectus and any amendment contains a misrepresentation or is not delivered to the purchaser, provided that the remedies for rescission, revisions of the price or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of these rights or consult with a legal advisor.

PURCHASERS' CONTRACTUAL RIGHTS

Original purchasers of Securities which are convertible or exchangeable into other securities of the Company will have a contractual right of rescission following the conversion or exchange of such Securities in the event that this Prospectus, as supplemented by the Prospectus Supplement pursuant to which such Securities are issued, or any amendment thereto contains a misrepresentation. The contractual right of rescission will entitle such original purchasers to receive from the Company, upon surrender of the applicable underlying securities issued upon conversion or exchange of such Securities, the amount paid for such Securities, provided that: (i) the conversion or exchange takes place within 180 days of the date of the purchase of the convertible or exchangeable Securities under this Prospectus, as supplemented by the Prospectus Supplement pursuant to which such Securities are issued; and (ii) the right of rescission is exercised within 180 days of the date of the purchase of such convertible or exchangeable Securities under this Prospectus, as supplemented by the Prospectus Supplement pursuant to which such Securities are issued.

Original purchasers of Securities which are convertible or exchangeable into other securities of the Company are further advised that in an offering of such Securities, the statutory right of action for damages for a misrepresentation contained in a prospectus is, under the securities legislation of certain provinces and territories, limited to the price at which the convertible or exchangeable security was offered to the public under the prospectus offering. Accordingly, any further payment made at the time of conversion or exchange of the security may not be recoverable in a statutory action for damages in such provinces or territories. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for the particulars of this statutory right of action for damages, or consult with a legal advisor.

Table of Contents

UNITED STATES PROSPECTUS

The text of the U.S. Prospectus, which forms part of the U.S. Registration Statement filed with the SEC, is attached and forms a part of this Prospectus other than the section in the U.S. Prospectus entitled "Where You Can Find More Information". All securities purchased under this Prospectus, including securities purchased by Canadian investors, will also be registered pursuant to the U.S. Registration Statement under the U.S. Securities Act. The U.S. Securities Act affords certain protections in relation to the U.S. Prospectus.

C-15

Table of Contents

CERTIFICATE OF THE COMPANY

Dated: December 19, 2017

This short form prospectus, together with the documents incorporated in this prospectus by reference, constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by the securities legislation of each of the provinces and territories of Canada.

ATLANTIC POWER CORPORATION

By: (Signed) JAMES J. MOORE, JR.
Chief Executive Officer

By: (Signed) TERRENCE RONAN
Chief Financial Officer

ATLANTIC POWER CORPORATION

On Behalf of the Board of Directors

By: (Signed) IRVING R. GERSTEIN
Director

By: (Signed) HOLLI LADHANI
Director

C-16

Table of Contents

CERTIFICATE OF THE COMPANY

Dated: January 22, 2018

The short form prospectus, together with the documents incorporated in the prospectus by reference, as supplemented by the foregoing, constitutes full, true and plain disclosure of all material facts relating to the securities offered by the prospectus and this supplement as required by the securities legislation of each of the provinces and territories of Canada.

ATLANTIC POWER CORPORATION

(Unsigned)
Chief Executive Officer

(Unsigned)
Chief Financial Officer

ATLANTIC POWER CORPORATION

On Behalf of the Board of Directors

(Unsigned)
Director

(Unsigned)
Director

C-21

Table of Contents

CERTIFICATE OF THE UNDERWRITERS

Dated: January 22, 2018

To the best of our knowledge, information and belief, the short form prospectus, together with the documents incorporated in the prospectus by reference, as supplemented by the foregoing, constitutes full, true and plain disclosure of all material facts relating to the securities offered by the prospectus and this supplement as required by the securities legislation of each of the provinces and territories of Canada.

RBC DOMINION SECURITIES INC.

(Unsigned)

C-22

Table of Contents

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement is not an offer to sell the securities and is not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 22, 2018

**Preliminary Prospectus Supplement
(To Prospectus dated December 19, 2017)**

Atlantic Power Corporation

Cdn\$

% Series E Convertible Unsecured Subordinated Debentures Due 2025

We are offering Cdn\$ _____ aggregate principal amount of _____ % Series E convertible unsecured subordinated debentures due 2025 (the "Debentures"), at a price of Cdn\$1,000 per Cdn\$1,000 principal amount of Debentures. The Debentures have a maturity date of January 31, 2025 (the "Maturity Date"). The Debentures bear interest at an annual rate of _____ % payable semi-annually in arrears on the last day of January and July in each year (each, an "Interest Payment Date") (or the immediately following business day if any Interest Payment Date would not otherwise be a business day), commencing on July 31, 2018. The first interest payment will represent accrued interest for the period from, and including, the date of the closing of the offering of the Debentures up to, but excluding, July 31, 2018.

Each Debenture will be convertible into our common shares at the option of the holder at any time prior to the close of business on the earlier of (i) the business day immediately preceding the Maturity Date and (ii) if we elect to redeem the Debentures prior to maturity as described below, the business day immediately preceding the date specified by us for redemption at a conversion price of Cdn\$ _____ per common share, being a conversion rate of approximately _____ common shares per Cdn\$1,000 principal amount of Debentures, subject to adjustment in accordance with the trust indenture governing the terms of the Debentures.

The Debentures may not be redeemed by us before January 31, 2021 (except in certain limited circumstances following a change of control, as defined below). On or after January 31, 2021 and prior to January 31, 2023, we may redeem the Debentures, in whole or in part from time to time, on not more than 60 days and not less than 30 days prior notice at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, up to but excluding the date set for redemption, *provided that* the daily volume-weighted average trading price of our common shares on the Toronto Stock Exchange (the "TSX"), averaged for the 20 consecutive trading days ending 5 trading days prior to the date on which we provide notice of redemption, is not less than 125% of the conversion price at the time notice of redemption is given. On or after January 31, 2023 and prior to the Maturity Date, we may redeem the Debentures, in whole or in part from time to time, on not more than 60 days and not less than 30 days prior notice at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, up to but excluding the date set for redemption. Further particulars concerning the attributes of the Debentures are set out under "Description of the Debentures."

Investing in our securities is speculative and involves risks. For a discussion of certain risk factors that should be considered in connection with an investment in the Debentures and the common shares issuable upon conversion of the Debentures, see "Risk Factors" beginning on page S-13 of this prospectus supplement and in Item 1A. of Part II of our Quarterly Reports on Form 10-Q for the quarterly periods ended September 30, 2017, June 30, 2017 and March 31, 2017 and in Part I of our Annual Report on Form 10-K for the year ended December 31, 2016.

Neither the Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

| | Per Debenture | Total Offering |
|-------------------------|---------------|----------------|
| Price to the Public | Cdn\$ 1,000 | Cdn\$ _____ |
| Underwriting Discount | Cdn\$ 40 | Cdn\$ _____ |
| Net Proceeds to Company | Cdn\$ 960 | Cdn\$ _____ |

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

The underwriters may also exercise their option to purchase up to an additional Cdn\$ _____ aggregate principal amount of Debentures from us, at the price to the public, less the underwriting discount, at any time up to 30 days after the closing of this offering to cover over-allotments, if any, on the same terms and conditions as set forth in this prospectus supplement.

If not all the Debentures are sold at the public offering price, the underwriters may change the offering price and may offer Debentures from time to time for sale in negotiated transactions or otherwise, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

Our outstanding common shares are listed on the TSX under the symbol "ATP" and on the New York Stock Exchange (the "NYSE") under the symbol "AT". The last reported sale price of our common shares on January 19, 2018 on the TSX and the NYSE was Cdn\$2.99 and US\$2.40 per common share, respectively. We have applied to list the common shares issuable upon conversion of the Debentures on the TSX and the NYSE under the same symbols. The Debentures constitute a new issue of our securities for which there is currently no public market. We have also applied to list the Debentures on the TSX. Listing will be subject to our fulfilling all of the listing requirements of the TSX and the NYSE.

Book-entry only certificates representing the Debentures will be issued in registered form in the name of CDS Clearing and Depository Services Inc. ("CDS") or its nominee and will be deposited with CDS on the date of issue of the Debentures, which is expected to occur on January _____, 2018 or such later date as we and the underwriters may agree, but in any event no later than February _____, 2018.

Book-Running Manager

RBC CAPITAL MARKETS

The date of this prospectus supplement is January _____, 2018.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

| | Page |
|---|-------------|
| <u>ABOUT THIS PROSPECTUS SUPPLEMENT</u> | <u>S-1</u> |
| <u>INFORMATION INCORPORATED BY REFERENCE</u> | <u>S-1</u> |
| <u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION</u> | <u>S-2</u> |
| <u>CURRENCY AND EXCHANGE RATE INFORMATION</u> | <u>S-4</u> |
| <u>ENFORCEABILITY OF CIVIL LIABILITIES</u> | <u>S-5</u> |
| <u>SUMMARY</u> | <u>S-6</u> |
| <u>RECENT DEVELOPMENTS</u> | <u>S-6</u> |
| <u>RISK FACTORS</u> | <u>S-13</u> |
| <u>USE OF PROCEEDS</u> | <u>S-22</u> |
| <u>MARKET PRICE OF THE COMMON SHARES</u> | <u>S-22</u> |
| <u>DIVIDEND POLICY</u> | <u>S-23</u> |
| <u>CONSOLIDATED CAPITALIZATION</u> | <u>S-24</u> |
| <u>DESCRIPTION OF THE DEBENTURES</u> | <u>S-25</u> |
| <u>DESCRIPTION OF COMMON SHARES</u> | <u>S-29</u> |
| <u>CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS</u> | <u>S-30</u> |
| <u>CERTAIN MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS</u> | <u>S-33</u> |
| <u>UNDERWRITING</u> | <u>S-40</u> |
| <u>LEGAL MATTERS</u> | <u>S-44</u> |

Prospectus

| | Page |
|---|-------------|
| <u>ABOUT THIS PROSPECTUS</u> | <u>3</u> |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | <u>3</u> |
| <u>OUR COMPANY</u> | <u>4</u> |
| <u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u> | <u>4</u> |
| <u>RISK FACTORS</u> | <u>6</u> |
| <u>USE OF PROCEEDS</u> | <u>6</u> |

| | |
|---|-----------|
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | <u>6</u> |
| <u>SUPPLEMENTAL CANADIAN DISCLOSURE</u> | <u>6</u> |
| <u>DESCRIPTION OF COMMON SHARES</u> | <u>7</u> |
| <u>DESCRIPTION OF DEBT SECURITIES</u> | <u>11</u> |
| <u>DESCRIPTION OF WARRANTS</u> | <u>14</u> |
| <u>DESCRIPTION OF UNITS</u> | <u>30</u> |
| <u>DESCRIPTION OF SUBSCRIPTION RECEIPTS</u> | <u>31</u> |
| <u>PLAN OF DISTRIBUTION</u> | <u>31</u> |
| <u>LEGAL MATTERS</u> | <u>31</u> |
| <u>EXPERTS</u> | <u>33</u> |
| | <u>33</u> |

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the Debentures and the common shares issuable upon conversion of the Debentures and also adds to and updates certain information contained in the accompanying prospectus and the documents incorporated by reference herein. The second part, the accompanying prospectus, gives more general information about us and the securities we may offer from time to time under our shelf registration statement, some of which may not apply to this offering of Debentures. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement.

We are responsible for the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus, any related free writing prospectus and, for prospective purchasers in Canada, the Canadian prospectus supplement and accompanying Canadian base shelf prospectus and any marketing materials (as defined under applicable Canadian securities laws) that we prepare or authorize. We and the underwriters have not authorized anyone to provide any other information, and we take no responsibility for any other information that others may provide you. We and the underwriters are not making an offer to sell the Debentures in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or the Canadian prospectus supplement and accompanying Canadian base shelf prospectus is accurate as of any date other than the date of the applicable document. Our business, financial condition, results of operations and prospects may have changed since those dates.

As used in this prospectus supplement, the terms "Atlantic Power," the "Company," "we," "our" and "us" refer to Atlantic Power Corporation, together with those entities owned or controlled by Atlantic Power Corporation, unless the context indicates otherwise. The phrase "common shares issuable upon conversion" includes common shares issuable upon conversion, redemption or maturity, unless such phrase is used in connection with a discussion of listing common shares on the TSX or the NYSE or the context indicates otherwise. Defined terms used in this prospectus supplement that are not defined herein have the meanings ascribed thereto in the accompanying prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus supplement and accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. Information that is furnished, rather than filed, on our Current Reports on Form 8-K is not incorporated by reference in this prospectus supplement or the accompanying prospectus.

Table of Contents

We incorporate by reference the documents listed below and any future filings that we will make after the date of this prospectus supplement with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"):

our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 2, 2017;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 4, 2017;

our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed with the SEC on August 3, 2017;

our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed with the SEC on November 9, 2017;

our annual Proxy Statement on Schedule 14A relating to our annual meeting of shareholders, filed with the SEC on April 28, 2017;

our Current Reports on Form 8-K filed with the SEC on June 20, 2017 and August 28, 2017, except, in any such cases, the portions furnished and not filed pursuant to Item 7.01 or otherwise; and

the description of the Company's common shares contained in the Company's Registration Statement on Form 10, filed with the SEC on July 21, 2010.

Any statement contained in any document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or the accompanying prospectus modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

You may request a copy of these filings, any exhibits we have specifically incorporated by reference as an exhibit in this prospectus supplement and our Canadian securities filings at no cost by writing us at Atlantic Power Corporation, 3 Allied Drive, Suite 220, Dedham, Massachusetts 02026 USA, Attention: Corporate Secretary, or by calling us at (617) 977-2400.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of Canadian securities laws. Statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein that are not historical facts are hereby identified as forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act and forward-looking information within the meaning defined under applicable Canadian securities legislation (collectively, "forward-looking statements").

Forward-looking statements generally can be identified by the use of words such as "outlook," "objective," "may," "will," "expect," "intend," "estimate," "anticipate," "believe," "should,"

Table of Contents

"plans," "continue" or similar expressions suggesting future outcomes or events. Examples of such statements include, but are not limited to, statements with respect to the following:

our ability to generate sufficient cash flow to service our debt obligations or implement our business plan, including financing internal or external growth opportunities;

the outcome or impact of our business strategy to increase our intrinsic value on a per-share basis through disciplined management of our balance sheet and cost structure and investment of our discretionary cash in a combination of organic and external growth projects, acquisitions, and repurchases of debt and equity securities;

our ability to renew or enter into new PPAs on favorable terms or at all after the expiration of our current agreements;

our ability to meet the financial covenants under our existing credit facilities and other indebtedness;

expectations regarding maintenance and capital expenditures;

the implications of the recent U.S. tax law reform; and

the impact of legislative, regulatory, competitive and technological changes.

Such forward-looking statements reflect our current expectations regarding future events and operating performance and speak only as of the date such statement is made. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as may be required by applicable law. Such forward-looking statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, the Company's future growth potential, its results of operations, future cash flows, the continued performance and business prospects and opportunities of the Company and its projects, third party projections of regional fuel and electric capacity and energy prices, the completion of certain transactions, the Company's ability to continue to develop and grow, the Company's future levels of indebtedness, and the tax laws as currently in effect remaining unchanged and the current general regulatory environment and economic conditions remaining unchanged. Many of these risks and uncertainties can affect our actual results and could cause our actual results to differ materially from those expressed or implied in any forward-looking statement made by us or on our behalf.

Forward-looking statements involve significant risks and uncertainties, 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. In addition, a number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors included in the filings we make from time to time with the SEC and the risk factors listed under "Cautionary Statement Regarding Forward-Looking Information" and described under "Item 1A. Risk Factors" in our most recent Annual Report on Form 10-K, and subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. The impact of any one factor on a particular piece of forward-looking information is not determinable with certainty as such factors are interdependent upon other factors, and management's course of action would depend upon its assessment of the future considering all information then available.

Table of Contents

Our business is both highly competitive and subject to various risks. Should any risk factor affect the Company in an unexpected manner, or should assumptions underlying the forward-looking information prove incorrect, the actual results or events may differ materially from the results or events predicted. Unless otherwise indicated, forward-looking information does not take into account the effect that transactions or non-recurring or other special items announced or occurring after the date it is provided may have on the business of the Company. All of the forward-looking information reflected in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein are qualified by these cautionary statements.

CURRENCY AND EXCHANGE RATE INFORMATION

In this prospectus supplement, references 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 Canadian dollars, unless otherwise stated.

The business of many of our power generation projects, described under "Our Company" below, is conducted in major markets in the United States and their revenues and expenses are denominated, earned and incurred primarily in U.S. dollars. The reporting currency used in our financial statements is U.S. dollars. The following table sets forth, for each period indicated: (i) the high and low noon, or high and low average daily, exchange rates during such period; (ii) the average noon or daily exchange rates for such period; and (iii) the noon or average daily exchange rate at the end of such period, for one U.S. dollar, expressed in Canadian dollars, as quoted by the Bank of Canada. As of May 1, 2017, the Bank of Canada no longer publishes updated data for exchange rates published under previous methodologies, including daily noon and closing rates, as well as high and low rates. As a result, the exchange rates presented for the twelve months ended December 31, 2017 are based on the Bank of Canada's new methodology that calculates an average daily exchange rate. On January 19, 2018, the daily average exchange rate as quoted by the Bank of Canada was US\$1.00 = Cdn\$1.2459.

| Twelve Months Ended December 31 | | | | | | |
|--|-------|------------------------|-------|---------------|-------|---------------|
| | | 2017 | | 2016 | | 2015 |
| | | (Average Daily) | | (Noon) | | (Noon) |
| High | Cdn\$ | 1.3743 | Cdn\$ | 1.4589 | Cdn\$ | 1.3990 |
| Low | Cdn\$ | 1.2128 | Cdn\$ | 1.2544 | Cdn\$ | 1.1728 |
| Average | Cdn\$ | 1.2986 | Cdn\$ | 1.3248 | Cdn\$ | 1.2787 |
| Period End | Cdn\$ | 1.2545 | Cdn\$ | 1.3427 | Cdn\$ | 1.3840 |

Source: Bank of Canada

Table of Contents

ENFORCEABILITY OF CIVIL LIABILITIES

We are a corporation organized under the laws of British Columbia, Canada. Some of our directors and officers and certain other persons named in this prospectus supplement do not reside in the United States, and all or a significant portion of their assets are not located in the United States. As a result, you may not be able to effect service of process within the United States upon these persons or enforce against them any judgments obtained in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States. Also, a significant percentage of the Company's assets are not located in the United States. There is doubt as to the enforceability in other jurisdictions, either in original actions or in actions for enforcement of judgments of U.S. courts, of civil liabilities predicated on the U.S. federal securities laws.

S-5

Table of Contents

SUMMARY

This summary highlights information contained elsewhere in this prospectus supplement and does not contain all of the information you should consider in making your investment decision. You should read this summary together with the more detailed information included elsewhere in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus, including our financial statements and the related notes. You should carefully consider, among other things, the matters discussed in "Risk Factors" in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein.

Our Company

Atlantic Power Corporation owns and operates a diverse fleet of power generation assets in the United States and Canada. Our power generation projects sell electricity to utilities and other large commercial customers largely under long-term power purchase agreements ("PPAs"), which seek to minimize exposure to changes in commodity prices. Our power generation projects in operation have an aggregate electric generating capacity on a gross ownership basis of approximately 1,793 megawatts (or "MW") in which our net ownership basis is approximately 1,440 MW. Our current portfolio consists of interests in 22 power generation projects across nine states in the United States and two provinces in Canada. Eighteen of the projects are currently operational, totalling 1,633 MW on a gross ownership basis and 1,280 MW on a net ownership basis. The remaining four projects, all in Ontario, are not operational, three due to revised contractual arrangements with the off taker and the other, Tunis, has a forward-starting 15-year contractual agreement that will commence before June 2019. Eighteen of our power generation projects are majority-owned and directly operated and maintained by us.

Our common shares trade on the TSX under the symbol "ATP" and on the NYSE under the symbol "AT."

Our registered office is located at 215-10451 Shellbridge Way, Richmond, British Columbia, Canada V6X 2W8 and our headquarters is located at 3 Allied Drive, Suite 220, Dedham, Massachusetts 02026 USA. Our telephone number is (617) 977-2400 and the address of our website is www.atlanticpower.com. Our website is included in this prospectus supplement as an inactive textual reference only. Other than specific documents incorporated by reference, information on our website is not incorporated into this prospectus supplement, the accompanying prospectus or our other securities filings and does not form a part of this prospectus supplement.

Recent Developments

We test our long-lived assets and goodwill for impairment at least annually, or more often if deemed appropriate based on management's determination of the occurrence of certain trigger events under our impairment policy. In the fourth quarter of 2017, we successfully negotiated a one year extension to our PPA at the Williams Lake reporting unit. As a result of this extension, the PPA at Williams Lake will expire on June 30, 2019. We determined that the renegotiation of the PPA triggered an event-driven review of the long-lived assets at the Williams Lake project for impairment. We are also in the process of conducting our annual long-lived assets and goodwill impairment test at our Curtis Palmer and Frederickson reporting units with respect to the fourth quarter of 2017. While the results of these impairment tests are not yet final, management currently anticipates recording a non-cash impairment charge, which is currently estimated to be in the aggregate approximately US\$70 million, in our fourth quarter and full year 2017 financial results. Such estimated impairment charge is subject to adjustment in connection with the finalization of our 2017 audited financial statements.

Table of Contents

The Offering

The summary below describes the principal terms of the Debentures. Certain of the terms described below are subject to important limitations and exceptions. The "Description of the Debentures" and "Description of Common Shares" sections of this prospectus supplement and the "Description of Debt Securities" and "Description of Common Shares" sections of the accompanying prospectus contain additional information about the Debentures and the common shares issuable upon conversion, redemption or maturity of the Debentures. In this summary of the offering section, the terms "Atlantic Power," the "Company," "we," "our" and "us" refer only to Atlantic Power Corporation and not to any of its subsidiaries.

| | |
|------------------------|---|
| Issuer | Atlantic Power Corporation, a British Columbia corporation. |
| Debentures Offered | Cdn\$ % Series E Convertible Unsecured Subordinated Debentures due 2025. |
| Over-allotment Option | The underwriters have the option to purchase up to an additional Cdn\$ aggregate principal amount of Debentures from us, at the price to the public, less the underwriting discount, at any time up to 30 days after the date of closing of this offering to cover over-allotments, if any, on the same terms and conditions as set forth in this prospectus supplement. |
| Maturity Date | The Debentures will mature on January 31, 2025. |
| Interest Rate | % per annum. |
| Interest Payment Dates | Interest will be payable semi-annually in arrears on the last day of January and July in each year (or the immediately following business day if any interest payment date would not otherwise be a business day) commencing on July 31, 2018 computed on the basis of a 360-day year composed of twelve 30-day months. The initial interest payment due on July 31, 2018 will represent accrued interest from, and including, the closing of the offering of the Debentures up to, but excluding, July 31, 2018. |

Table of Contents

Conversion Privilege

Each Debenture will be convertible into our common shares at the option of the holder at any time prior to the close of business on the earlier of (i) the business day immediately preceding the Maturity Date and (ii) if we elect to redeem the Debentures prior to maturity, the business day immediately preceding the date specified for redemption at a conversion price of Cdn\$ per common share, being a conversion ratio of approximately common shares per Cdn\$1,000 principal amount of Debentures (an initial conversion premium of approximately % to a reference price of Cdn\$), subject to adjustment in accordance with the Indenture (as defined herein). Holders converting their Debentures will also receive accrued and unpaid interest thereon to, but excluding, the date of conversion. If a holder elects to convert its Debentures in connection with a change of control (as defined herein) that occurs before January 31, 2023, the conversion rate will be adjusted such that the holder will be entitled to receive additional common shares as a "make whole" premium on conversion in certain circumstances. See "Description of the Debentures Conversion Privilege" and "Description of the Debentures Cash Change of Control."

Redemption

The Debentures may not be redeemed by the Company before January 31, 2021 (except in certain limited circumstances following a change of control (as defined herein)). On or after January 31, 2021 and prior to January 31, 2023, we may redeem the Debentures, in whole or in part from time to time, on not more than 60 days and not less than 30 days prior notice, at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, up to but excluding the date set for redemption, *provided that* the daily volume-weighted average trading price of our common shares on the TSX averaged for the 20 consecutive trading days ending 5 trading days preceding the date on which we provide notice of redemption is not less than 125% of the conversion price at the time notice of redemption is given.

On or after January 31, 2023 and prior to the Maturity Date, we may redeem the Debentures in whole or in part at our option, on not more than 60 days and not less than 30 days prior notice, at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, up to but excluding the date set for redemption. See "Description of the Debentures Redemption and Purchase."

Table of Contents

Optional Payment at Maturity or Upon Redemption

On redemption or maturity, provided that no event of default (as defined herein) shall have occurred and be continuing, the Company may, at its option, subject to applicable regulatory approval and compliance with applicable securities laws, on not more than 60 days and not less than 40 days prior notice, elect to satisfy its obligation to repay the principal amount of the Debentures in whole or in part, by issuing and delivering that number of common shares obtained by dividing the principal amount of the outstanding Debentures which are to be redeemed or have matured by 95% of the daily volume-weighted average trading price of our common shares on the TSX averaged for the 20 consecutive trading days ending 5 trading days preceding the date fixed for redemption or maturity, plus an amount in cash equal to accrued and unpaid interest, if any, up to but excluding the date set for redemption or maturity. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Payment Upon Redemption or Maturity" in the accompanying prospectus.

Change of Control

Upon the occurrence of certain change of control events involving the Company, each holder of Debentures may require the Company to purchase, on a date which is within 30 days following the giving of notice of the change of control, the Debentures at a price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, up to but excluding the date set for purchase. If 90% or more of the principal amount of the Debentures outstanding on the date of the notice of change of control have been tendered, the Company will have the right to redeem all the remaining Debentures at the offer price. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Repurchase Upon a Change of Control."

Table of Contents

| | |
|---------------------------------------|--|
| Restriction on Share Redemption Right | <p>Subject to applicable regulatory approval and compliance with applicable securities laws, in the event of a change of control where 10% or more of the consideration for our common shares in the transaction or transactions constituting a change of control consists of cash, equity securities that are not traded or intended to be traded immediately following such transactions on a stock exchange, or other property that is not traded or intended to be traded immediately following such transactions on a stock exchange, holders of the Debentures may elect to convert their Debentures and receive, in addition to the number of common shares they otherwise would have been entitled to as described in "Conversion Privilege" above, an additional number of common shares as outlined in the table set forth under "Description of the Debentures – Cash Change of Control."</p> <p>The Company will not, directly or indirectly (through a subsidiary or otherwise) undertake or announce any rights offering, issuance of securities, subdivision of our common shares, dividend or other distribution on our common shares or any other securities, capital reorganization, reclassification or any similar type of transaction in which:</p> <ul style="list-style-type: none">(i) the number of securities to be issued;(ii) the price at which securities are to be issued, converted or exchanged; or(iii) any property or cash that is to be distributed or allocated, <p>is in whole or in part based upon, determined in reference to, related to or a function of, directly or indirectly, (a) the exercise or potential exercise of the Company's right to repay the principal amount of Debentures on redemption or maturity by delivering common shares of the Company as described in "Optional Payment at Maturity or Upon Redemption" above, or (b) the current market price determined in connection with the exercise or potential exercise of the Company's right to repay the principal amount of Debentures on redemption or maturity by delivering common shares of the Company as described in "Optional Payment at Maturity or Upon Redemption" above. See "Description of the Debentures – Restriction on Share Redemption Right."</p> |
|---------------------------------------|--|

Table of Contents

Ranking

The Debentures will rank subordinate in right of payment of principal and interest to all existing and future senior secured and senior unsecured indebtedness of the Company, including all trade creditors, and will rank *pari passu* to one another and future subordinated unsecured indebtedness. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Subordination." As of September 30, 2017, we had US\$731 million of debt outstanding that ranks senior to the Debentures, US\$107.4 million of debt outstanding that ranks *pari passu* with the Debentures, and we expect to incur additional debt in the future. The amount of debt outstanding that ranks senior to the Debentures at September 30, 2017 is comprised of US\$562.7 million outstanding under our senior secured term loan facility and US\$168.3 million of outstanding senior unsecured notes. The amount of debt outstanding that ranks *pari passu* with the Debentures at September 30, 2017 is comprised of US\$107.4 million of outstanding convertible unsecured subordinated debentures.

Risk Factors

Investing in our Debentures and the common shares issuable upon conversion or repayment of the Debentures is speculative and involves risks. You should consider carefully all the information set forth and incorporated by reference in this prospectus supplement and the accompanying prospectus. In particular, you should evaluate the specific factors set forth under the heading "Risk Factors" beginning on page S-12 of this prospectus supplement and in Item 1A. of Part II of our Quarterly Reports on Form 10-Q for the quarterly periods ended September 30, 2017, June 30, 2017 and March 31, 2017 and in Part I of our Annual Report on Form 10-K for the year ended December 31, 2016, as well as the other information contained or incorporated herein by reference, before investing in the Debentures offered hereby.

Canadian and United States Federal Income Tax Considerations

You should consult your tax advisor with respect to the Canadian and U.S. federal income tax consequences of owning the Debentures and the common shares into which the Debentures may be converted in light of your own particular situation and with respect to any tax consequences arising under the laws of any state, local, provincial, foreign or other taxing jurisdiction. See "Certain Canadian Federal Income Tax Considerations" and "Certain Material United States Federal Income Tax Considerations."

Table of Contents

Use of Proceeds

We expect to receive net proceeds of approximately Cdn\$ from the offering of the Debentures (after deducting underwriting discounts and commissions and our estimated expenses). We intend to use the net proceeds from this offering to fund the redemption of all of our 5.75% Series C convertible unsecured subordinated debentures (current outstanding balance of US\$42.5 million) that mature on June 30, 2019 and have a par call date of June 30, 2017. We intend to use the remainder of the net proceeds, if any, to fund the partial redemption of the Company's 6.00% Series D extendible convertible unsecured subordinated debentures (current outstanding balance of Cdn\$81.0 million) that mature on December 31, 2019 and have a par call date of December 31, 2017. See "Use of Proceeds." This prospectus supplement does not constitute a notice of redemption or an obligation to issue a notice of redemption for either the Series C or Series D debentures.

Listing; Currently No Public Market for Debentures

Our outstanding common shares are listed on the TSX under the symbol "ATP" and on the NYSE under the symbol "AT". We have applied to list the common shares issuable upon conversion of the Debentures on the TSX and the NYSE under the same symbols. The Debentures constitute a new issue of our securities for which there is currently no public market. We have also applied to list the Debentures on the TSX. These listings will be subject to the Company fulfilling all of the listing requirements of the TSX and the NYSE.

S-12

Table of Contents

RISK FACTORS

An investment in the Debentures and the common shares issuable upon the conversion, redemption or maturity of the Debentures is speculative and subject to certain risks, and should only be made by persons who can afford the total loss of their investment. In addition to information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, prospective investors should carefully consider uncertainties and additional information set forth in Part I of our Annual Report on Form 10-K for the year ended December 31, 2016, in Item 1A. of Part II of our Quarterly Reports on Form 10-Q for the quarterly periods ended September 30, 2017, June 30, 2017 and March 31, 2017 and in our Current Reports on Form 8-K, and the risk factors listed below. Such risk factors could have a materially adverse effect on the Company's future results of operations, business prospects or financial condition, and could cause actual events to differ materially from those described in forward-looking information. Additional risks and uncertainties not presently known to the Company, or which the Company currently deems to be immaterial, may also have an adverse effect upon the Company. The risk factors described in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein are not necessarily presented in order of importance or probability of occurrence and they do not necessarily describe all of the Company's risks and uncertainties.

Risks Relating to the Debentures

There is currently no trading market for the Debentures and the trading price of the Debentures may be volatile.

The Debentures constitute a new issue of securities of the Company for which there is currently no public market. Even if the Debentures are listed on the TSX, the Debentures may trade at a discount from their offering price depending on prevailing interest rates, the market for similar securities, our performance and other factors. Volatility in the market price and trading volume of our common shares could adversely impact the trading price of the Debentures, in addition to many of the other risk factors set forth below in "Risks Relating to the Debentures and Our Common Shares." Additionally, although we do not intend to seek a rating on the Debentures, if a rating service were to rate the Debentures and if such rating service were to lower its rating on the Debentures below the rating initially assigned to the Debentures or otherwise announce its intention to put the Debentures on credit watch, the trading price of the Debentures could decline. No assurance can be given as to whether an active trading market will develop or be maintained for the Debentures. To the extent that an active trading market for the Debentures does not develop, the liquidity and trading prices for the Debentures may be adversely affected.

We may be unable to repay or refinance the Debentures.

The Debentures will mature on January 31, 2025. There is no guarantee that we will be able to repay the outstanding principal amount upon maturity of the Debentures. We may not have generated enough cash from operations to meet this obligation. In addition, we may not be able to refinance the principal amount of the Debentures in order to repay the principal outstanding. The Debentures will not be guaranteed by any of our subsidiaries, and any restrictions on the distribution of cash at the project level, such as due to restrictive covenants in project-level

Table of Contents

financing agreements or credit facilities, could materially limit our ability to pay principal and interest on the Debentures when due. Additionally, we may, at our option, subject to any required regulatory approvals and compliance with applicable securities laws, unless an event of default has occurred and is continuing, elect to satisfy our obligation to repay, in whole or in part, the principal amount of the Debentures which are to be redeemed or which have matured by issuing and delivering freely tradable common shares to the holders of the Debentures.

In addition, we may need or desire to refinance all or a portion of the Debentures or any other future indebtedness that we incur on or before the maturity of the Debentures. There can be no assurance that we will be able to refinance any of our indebtedness on commercially reasonable terms, if at all.

The Indenture will not have any covenant restriction protections.

The Indenture (as defined herein) does not restrict us or any of our subsidiaries from incurring additional indebtedness for borrowed money or otherwise from mortgaging, pledging or charging our real or personal property or properties to secure any indebtedness or other financing. The Indenture does not contain any provisions specifically intended to protect holders of the Debentures in the event of a future leveraged transaction involving us or any of our subsidiaries.

We are obligated to repurchase the Debentures on a change of control.

Holders of Debentures have the right to require us to purchase all outstanding Debentures upon the occurrence of a change of control. However, it is possible that following a change of control, we will not have sufficient funds at that time to make the required purchase of outstanding Debentures or that restrictions contained in other indebtedness will restrict those purchases. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Repurchase upon a Change of Control" in the accompanying prospectus.

The change of control provisions in the Indenture may not protect you in the event that we consummate a highly leveraged transaction, reorganization, restructuring, merger or other similar transaction, unless such transaction constitutes a change of control as defined in such documents. Such a transaction may not involve a change in voting power or beneficial ownership or, even if it does, may not involve a change in the magnitude required to trigger our obligation to repurchase the Debentures. If an event occurs that does not constitute a change of control, we will not be required to make an offer to repurchase the Debentures and you may be required to continue to hold your Debentures despite the event. In addition, the change of control provisions in the Debentures may also delay or prevent an otherwise beneficial takeover of us due to such takeover triggering the related purchase requirement.

The Debentures may be redeemed prior to maturity.

The Debentures may be redeemed, at our option, subject to certain conditions, on or after January 31, 2021 and prior to their maturity date in whole or in part, at a redemption price equal to the principal amount thereof, together with any accrued and unpaid interest, as described under "Description of the Debentures Redemption and Purchase." Upon redemption, we may elect to pay the redemption price to holders in the lawful money of Canada or, subject to certain conditions, by issuing common shares. Holders of Debentures should assume that this redemption

Table of Contents

option will be exercised if we are able to refinance at a lower interest rate or it is otherwise in our interest to redeem the Debentures.

The Debentures may become convertible into other securities, cash or property following certain transactions.

In the event of certain transactions, pursuant to the terms of the Indenture, each Debenture will become convertible into securities, cash or property receivable by a holder of common shares in such transactions. This change could substantially reduce or eliminate any potential future value of the conversion privilege associated with the Debentures. For example, if we were acquired in a cash merger, each Debenture would become convertible solely into cash and would no longer be convertible into securities whose value would vary depending on our future prospects and other factors. See "Description of the Debentures Conversion Privilege."

If you hold Debentures, you will not be entitled to any rights with respect to our common shares, but you will be subject to all changes made with respect to our common shares.

If you hold Debentures, you will not be entitled to any rights with respect to our common shares (including, without limitation, voting rights), but if you subsequently convert your Debentures into common shares, you will be subject to all changes affecting the common shares. You will have rights with respect to our common shares only if and when we deliver common shares to you upon conversion of your Debentures and, to a limited extent, under the conversion rate adjustments applicable to the Debentures or in the event we elect, subject to certain conditions, to satisfy our obligation to repay, in whole or in part, the principal amount of the Debentures which are to be redeemed or which have matured by issuing and delivering freely tradeable common shares to the holders of the Debentures. For example, in the event that an amendment is proposed to our constituent documents requiring shareholder approval and the record date for determining the shareholders of record entitled to vote on the amendment occurs prior to delivery of common shares to you, you will not be entitled to vote on the amendment, although you will nevertheless be subject to any changes in the powers or rights of our common shares that result from such amendment.

The Debentures will initially be held in book-entry form and, therefore, you must rely on the procedures and the relevant clearing systems to exercise your rights and remedies.

Unless and until certificated Debentures are issued in exchange for book-entry interests in the Debentures, owners of the book-entry interests will not be considered owners or holders of Debentures. Instead, the depository or its nominee will be the sole holder of the Debentures. Payments of principal, interest and other amounts owing on or in respect of the Debentures in global form will be made to the paying agent, which will make payments to CDS. Thereafter, such payments will be credited to CDS participants' accounts that hold book-entry interests in the Debentures in global form and credited by such participants to indirect participants. Unlike holders of the Debentures themselves, owners of book-entry interests will not have the direct right to act upon our solicitations for consents or requests for waivers or other actions from holders of the Debentures.

Instead, if you own a book-entry interest, you will be permitted to act only to the extent you have received appropriate proxies to do so from CDS or, if applicable, a participant. We cannot

Table of Contents

assure you that procedures implemented for the granting of such proxies will be sufficient to enable you to vote on any requested actions on a timely basis.

There is a credit risk associated with payment of the principal and interest on the Debentures.

The likelihood that purchasers of the Debentures will receive payments owing to them under the terms of the Debentures will depend on our financial health and creditworthiness. Our ability to make scheduled principal and interest payments on the Debentures is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt. If we are unable to generate sufficient cash flow, or we are unable to successfully pursue alternatives such as selling assets, restructuring our outstanding debt or obtaining additional equity capital, we could default on our debt obligations.

The rights and privileges of the Debenture holders are subordinate to our senior indebtedness.

The Debentures are our unsecured obligations and are subordinate in right of payment to all of our existing and future senior indebtedness. As of September 30, 2017, we had US\$731 million of debt outstanding that ranks senior to the Debentures, comprised of US\$562.7 million outstanding under our senior secured term loan facility and US\$168.3 million of outstanding senior unsecured notes. The amount of debt outstanding that ranks *pari passu* with the Debentures at September 30, 2017 is comprised of US\$107.4 million of outstanding convertible unsecured subordinated debentures. The Indenture does not prohibit us from incurring additional senior debt or secured debt, nor does it prohibit any of our subsidiaries from incurring additional liabilities. In the event of our insolvency, bankruptcy, liquidation, reorganization, dissolution or winding up, the assets that serve as collateral for any senior indebtedness would be made available to satisfy the obligations of the creditors of such senior indebtedness before being available to pay our obligations to Debenture holders. Accordingly, all or a substantial portion of our assets could be unavailable to satisfy the claims of the Debenture holders.

Withholding tax

Effective January 1, 2008, the *Income Tax Act* (Canada) and the regulations thereunder (in each case in effect on the date hereof) (the "Tax Act") was amended to generally eliminate withholding tax on interest paid or credited to non-residents of Canada with whom the payor deals at arm's length. However, Canadian withholding tax continues to apply to payments of "participating debt interest." For purposes of the Tax Act, participating debt interest is generally interest that is paid on an obligation where all or any portion of such interest is contingent or dependent on the use of or production from property in Canada, is computed by reference to revenue, profit, cash flow, commodity price or any similar criterion or by reference to dividends paid or payable to shareholders of any class of shares of the capital stock of a corporation.

Under the Tax Act, when a debenture or other debt obligation issued by a person resident in Canada is assigned or otherwise transferred by a non-resident person to a person resident in Canada (which would include a conversion of the obligation or payment on maturity), the amount, if any, by which the price for which the obligation was assigned or transferred exceeds the price for which the obligation was issued is deemed to be a payment of interest on that obligation made by the person resident in Canada to the non-resident (an "excess"). The deeming rule does not

Table of Contents

apply in respect of certain "excluded obligations," although it is not clear whether a particular convertible debenture would qualify as an "excluded obligation." If a convertible debenture is not an "excluded obligation," issues that arise are whether any excess would be considered to exist, whether any such excess which is deemed to be interest is "participating debt interest," and if the excess is participating debt interest, whether that results in all interest on the obligation being considered to be participating debt interest.

The Canada Revenue Agency (the "CRA") has stated that it would not consider the excess or regular periodic interest payments to be participating debt interest, provided that the convertible debenture in question was issued by a public corporation and otherwise satisfied the requirements of a "standard convertible debenture" (as that term was defined in a letter from the Joint Committee on Taxation of the Canadian Bar Association and the Canadian Institute of Chartered Accountants sent to the CRA on May 10, 2010) and therefore there would be no withholding tax in such circumstances (provided that the payor and payee deal at arm's length for purposes of the Tax Act). The Debentures should generally meet the criteria set forth in the CRA's statement. However, the application of CRA's published guidance to the Debentures is uncertain and there is a risk that CRA could take the position that amounts paid or payable to a non-resident holder of Debentures on account of interest or any excess amount may be subject to Canadian withholding tax at a rate of 25% (subject to any reduction in accordance with any applicable income tax treaty or convention).

The Indenture does not contain a requirement for us to increase the amount of interest or other payments to holders of Debentures should we be required to withhold amounts in respect of income or similar taxes on payments of interest or other amounts.

Risks Relating to the Debentures and Our Common Shares

Market conditions and other factors may affect the value of the common shares issuable upon conversion of the Debentures.

The trading price of our common shares will depend on many factors, which may change from time to time, including:

conditions in the power generation markets and the energy markets generally;

interest rates;

the market for similar securities;

government action or regulation;

general economic conditions or conditions in the financial markets;

our past and future dividend practice;

our financial condition, performance, creditworthiness and prospects; and

the implications of the recent U.S. tax law reform.

Accordingly, the common shares that a Debenture holder receives upon conversion of the Debentures may trade at a price lower than the conversion price.

Table of Contents

The market price and trading volume of the common shares issuable upon conversion of the Debentures may be volatile.

The market price of our common shares may be volatile. In addition, the trading volume in our common shares may fluctuate and cause significant price variations to occur. If the market price of our common shares declines significantly, you may be unable to resell your shares at or above the price at the time of conversion. The market price of our common shares may fluctuate or decline significantly in the future.

Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our common shares include:

quarterly variations in our operating results or the quality of our assets;

changes in applicable regulations or government action;

operating results that vary from the expectations of management, securities analysts and investors;

changes in expectations as to our future financial performance;

announcements of innovations, new products, strategic developments, significant contracts, acquisitions and other material events by us or our competitors, including announcements about our ability or inability to recontract under our power purchase agreements;

changes in financial estimates or publication of research reports and recommendations by financial analysts or actions taken by rating agencies with respect to us or other companies in our industry;

the operating and securities price performance of other companies that investors believe are comparable to us;

changes in general market conditions, such as interest or foreign exchange rates, stock or commodity valuations, or volatility;

the implications of the recent U.S. tax law reform; and

actions by our current shareholders, including sales of our common shares by existing shareholders and/or directors and executive officers.

Stock markets in general have experienced significant volatility over the past several years, and may continue to experience significant price and volume volatility. As a result, the market price of our common shares may continue to be subject to market fluctuations that may be unrelated to our operating performance or prospects. Increased volatility could result in a decline in the market price of our common shares.

Volatility in the stock price of other companies often has led to securities class action litigation against those companies. Any future securities litigation against us could result in substantial costs and divert management's attention and resources, which could seriously harm our business, results of operations or financial condition.

Table of Contents

We do not intend to pay cash dividends on our common stock in the foreseeable future.

We eliminated our cash dividend policy for our common shares in February 2016. Although we currently do not expect to declare any dividends, our Board of Directors periodically evaluates the payment of dividends. If we were to decide in the future to pay dividends, our ability to do so would be dependent on, among other things, our results of operations, working capital requirements, financial condition, restrictive covenants and business opportunities, and on provisions of applicable law and other factors that our board of directors may deem relevant. If we do not pay cash dividends, holders who receive our common shares upon conversion or repayment of the Debentures will not realize a return on their investment unless the trading price of our common stock appreciates, which we cannot assure.

Present and future offerings of debt or equity securities ranking senior to our common shares may adversely affect the market price of the common shares issuable upon conversion of the Debentures.

If we decide to issue debt or equity securities ranking senior to our common shares in the future it is likely that they will be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of holders of our common shares and may result in dilution to holders of our common shares. We and, indirectly, our shareholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors, we cannot predict or estimate the amount, timing or nature of our future offerings. Holders of our common shares will bear the risk of our future offerings reducing the market price of our common shares and diluting the value of their shareholdings in us.

The number of shares available for future sale could adversely affect the market price of the common shares issuable upon conversion of the Debentures.

We cannot predict whether future issuances of our common shares or the availability of shares for resale in the open market will decrease the market price per common share. We may issue additional common shares, including securities that are convertible into or exchangeable for, or that represent the right to receive common shares. Sales of a substantial number of common shares in the public market or the perception that such sales might occur could materially adversely affect the market price of our common shares. Because our decision to issue securities in any future offering will depend on market conditions and other factors, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, our shareholders bear the risk of our future offerings reducing the market price of our common shares and diluting their shareholdings in us.

The issuance of common shares to directors, executive officers and other employees under our equity compensation plans, and other issuances of our common shares could have an adverse effect on the market price of our common shares, and the existence of restricted stock units, deferred stock units or other entitlements to common shares may materially adversely affect the terms upon which we may be able to obtain additional capital through the sale of equity securities. In addition, future sales of our common shares may be dilutive to existing shareholders.

Table of Contents

The redemption of Debentures for or repayment of principal by issuing common shares may cause common shareholders dilution.

We may determine to, subject to applicable regulatory approvals and compliance with applicable securities laws, redeem outstanding Debentures for common shares or to repay outstanding principal amounts thereunder at maturity of the Debentures or at maturity of our other outstanding convertible subordinated debentures by issuing additional common shares. The issuance of additional common shares may have a dilutive effect on shareholders and an adverse impact on the price of our common shares.

Provisions of our articles of continuance and trust indentures could discourage potential acquisition proposals and could deter or prevent a change of control.

We are governed by the *Business Corporations Act* (British Columbia) (the "BC Act"). Our articles of continuance contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of our Company by means of a tender offer, a proxy contest or otherwise. These provisions may make it more difficult for other persons, without the approval of our board of directors, to make a tender offer or otherwise acquire a substantial number of our common shares or to launch other takeover attempts that a shareholder might consider to be in such shareholder's best interest. These provisions could limit the price that some investors might be willing to pay in the future for our common shares. Additionally, the Indenture and our other outstanding debentures contain change of control provisions.

Our articles of continuance establish an advance notice procedure for "special business" and shareholder proposals to be brought before a meeting of shareholders. For special business, advance notice describing the special business to be discussed at the meeting must be provided and that notice must include any documents to be approved or ratified as an addendum or state that such document will be available for inspection at our records office or other reasonably accessible location. Shareholders at an annual meeting may not consider proposals or nominations that are not specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a shareholder of record on the record date for the meeting or a proxyholder who is entitled to vote at the meeting.

Under the BC Act, shareholders may make proposals for matters to be considered at the annual general meeting of shareholders. Such proposals must be sent to us in advance of any proposed meeting by delivering a timely written notice in proper form to our registered office. The notice must include information on the business the shareholder intends to bring before the meeting. These provisions could have the effect of delaying until the next shareholder meeting shareholder actions that are favored by the holders of a majority of our outstanding voting securities.

Investment eligibility

There can be no assurance that the Debentures or the common shares issuable upon conversion, redemption, purchase for cancellation or repayment of the Debentures will continue to be qualified investments under relevant Canadian tax laws for trusts governed by registered retirement savings plans, registered retirement income funds, deferred profit sharing plans, registered education savings plans, registered disability savings plans and tax-free savings accounts.

Table of Contents

Other Canadian federal income tax risks

There can be no assurance that Canadian federal income tax laws and CRA's administrative policies respecting the Canadian federal income tax consequences generally applicable to us, to our subsidiaries, or to a U.S. or Canadian holder of Debentures or common shares will not be changed in a manner which adversely affects holders of our Debentures or common shares.

U.S. holders may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the Debentures even though the U.S. holders do not receive a corresponding cash distribution.

The conversion rate of the Debentures is subject to adjustment in certain circumstances, including the payment of cash dividends. We do not currently intend to make payments of cash dividends on our common shares. Notwithstanding the foregoing, if the conversion rate is adjusted as a result of a distribution that is taxable to our common shareholders, such as a cash dividend, U.S. holders (as defined in "Certain Material United States Federal Income Tax Considerations" below) will be deemed to have received a dividend subject to U.S. federal income tax without the receipt of any cash. In addition, a failure to adjust (or to adjust adequately) the conversion rate after an event that increases a U.S. holder's proportionate interest in us could be treated as a deemed taxable dividend to the U.S. holder. If a make whole fundamental change occurs prior to the maturity date, under some circumstances, we will increase the conversion rate for Debentures converted in connection with the make whole fundamental change. Such increase may also be treated as a distribution subject to U.S. federal income tax as a dividend. See "Certain Material United States Federal Income Tax Considerations U.S. Holders Adjustments to the Conversion Rate of the Debentures".

Recent changes to U.S. federal income tax rules could materially adversely affect our results of operations and financial condition of our U.S. activities.

Recently enacted U.S. tax legislation makes significant changes to the U.S. federal income tax rules applicable to our activities in the United States. While the tax legislation reduces the federal corporate income tax rate from 35% to 21%, it also introduces "base erosion" rules that may effectively limit the tax deductibility of certain payments made by U.S. entities to non-U.S. affiliates and includes additional limitations on deductions attributable to interest expense. At this time, it is not possible to predict the full effect of this legislation on our business and operations. The tax legislation could have a material adverse effect on our results of operations and financial condition.

Table of Contents**USE OF PROCEEDS**

We expect to receive net proceeds of approximately Cdn\$ from the offering of Debentures (after deducting underwriting discounts and commissions of Cdn\$ and our estimated expenses of Cdn\$).

We intend to use the net proceeds from this offering to fund the redemption of all of our 5.75% Series C convertible unsecured subordinated debentures (current outstanding balance of US\$42.5 million) that mature on June 30, 2019 and have a par call date of June 30, 2017 (the "Series C Debentures"). We intend to use the remainder of the net proceeds, if any, to fund the partial redemption of the Company's 6.00% Series D extendible convertible unsecured subordinated debentures (current outstanding balance of Cdn\$81.0 million) that mature on December 31, 2019 and have a par call date of December 31, 2017 (the "Series D Debentures"). This prospectus supplement does not constitute a notice of redemption or an obligation to issue a notice of redemption for either the Series C Debentures or the Series D Debentures.

MARKET PRICE OF THE COMMON SHARES

Our common shares are listed and traded on the TSX under the symbol "ATP." The following table sets forth the quarterly price ranges of our common shares, as reported by the TSX, from the first quarter of 2014 through January 19, 2018:

| | High (Cdn\$) | Low (Cdn\$) |
|------------------------------------|---------------------|--------------------|
| 2014 | | |
| First Quarter | Cdn\$ 3.88 | Cdn\$ 2.35 |
| Second Quarter | Cdn\$ 4.40 | Cdn\$ 3.11 |
| Third Quarter | Cdn\$ 4.44 | Cdn\$ 2.43 |
| Fourth Quarter | Cdn\$ 3.40 | Cdn\$ 2.14 |
| 2015 | | |
| First Quarter | Cdn\$ 4.00 | Cdn\$ 3.04 |
| Second Quarter | Cdn\$ 4.10 | Cdn\$ 3.26 |
| Third Quarter | Cdn\$ 4.08 | Cdn\$ 2.46 |
| Fourth Quarter | Cdn\$ 2.95 | Cdn\$ 2.19 |
| 2016 | | |
| First Quarter | Cdn\$ 3.36 | Cdn\$ 2.21 |
| Second Quarter | Cdn\$ 3.49 | Cdn\$ 2.85 |
| Third Quarter | Cdn\$ 3.49 | Cdn\$ 3.05 |
| Fourth Quarter | Cdn\$ 3.67 | Cdn\$ 2.88 |
| 2017 | | |
| First Quarter | Cdn\$ 3.60 | Cdn\$ 2.97 |
| Second Quarter | Cdn\$ 3.62 | Cdn\$ 3.05 |
| Third Quarter | Cdn\$ 3.19 | Cdn\$ 2.87 |
| Fourth Quarter | Cdn\$ 3.29 | Cdn\$ 2.96 |
| 2018 | | |
| First Quarter (through January 19) | Cdn\$ 3.23 | Cdn\$ 2.79 |

S-22

Table of Contents

Our common shares are listed and traded on the NYSE under the symbol "AT". The following table sets forth the quarterly price ranges of our common shares, as reported by the NYSE, from the first quarter of 2014 through January 19, 2018:

| | High (US\$) | | Low (US\$) | |
|------------------------------------|-------------|------|------------|------|
| 2014 | | | | |
| First Quarter | US\$ | 3.60 | US\$ | 2.12 |
| Second Quarter | US\$ | 4.13 | US\$ | 2.82 |
| Third Quarter | US\$ | 4.15 | US\$ | 2.22 |
| Fourth Quarter | US\$ | 2.93 | US\$ | 1.91 |
| 2015 | | | | |
| First Quarter | US\$ | 3.12 | US\$ | 2.51 |
| Second Quarter | US\$ | 3.34 | US\$ | 2.59 |
| Third Quarter | US\$ | 3.27 | US\$ | 1.84 |
| Fourth Quarter | US\$ | 2.26 | US\$ | 1.58 |
| 2016 | | | | |
| First Quarter | US\$ | 2.58 | US\$ | 1.58 |
| Second Quarter | US\$ | 2.74 | US\$ | 2.22 |
| Third Quarter | US\$ | 2.67 | US\$ | 2.33 |
| Fourth Quarter | US\$ | 2.75 | US\$ | 2.15 |
| 2017 | | | | |
| First Quarter | US\$ | 2.70 | US\$ | 2.25 |
| Second Quarter | US\$ | 2.70 | US\$ | 2.30 |
| Third Quarter | US\$ | 2.50 | US\$ | 2.30 |
| Fourth Quarter | US\$ | 2.55 | US\$ | 2.35 |
| 2018 | | | | |
| First Quarter (through January 19) | US\$ | 2.58 | US\$ | 2.20 |

On December 31, 2017, there were 115,211,976 of our common shares issued and outstanding, and the number of holders of our common shares was approximately 35,514.

The last reported sale price of our common shares on January 19, 2018 on the TSX and the NYSE was Cdn\$2.99 and US\$2.40 per common share, respectively.

DIVIDEND POLICY

We do not presently pay dividends on our common shares. Although we currently do not expect to declare any dividends, our Board of Directors periodically evaluates the payment of dividends. See "Risk Factors – Risks Relating to the Debentures and Our Common Shares – We do not intend to pay cash dividends on our common stock in the foreseeable future."

Table of Contents**CONSOLIDATED CAPITALIZATION**

The following table presents the cash and cash equivalents and consolidated capitalization of the Company as of September 30, 2017: (i) on an actual basis; and (ii) on an as adjusted basis to give effect to (a) the repayment by the Company on October 13, 2017 of the term loan at the Company's Piedmont project (the "Piedmont Loan") and termination of the related interest rate swap agreements (the "Swap Agreements") with cash on hand, (b) the issuance of the Debentures (assuming the underwriters' over-allotment option is not exercised) and (c) the redemption in full of the Series C Debentures and the redemption in part of the Series D Debentures.

| | As of September 30, 2017 | |
|---|---------------------------------|-------------------------------|
| | Actual | As adjusted |
| | (unaudited) | |
| | (in thousands of US\$) | |
| Cash and cash equivalents: | 122,374 | 58,374 ⁽¹⁾ |
| Debt: | | |
| Series C Debentures | 42,532 | |
| Series D Debentures | 64,888 | 53,573 |
| Series E Debentures offered hereby ⁽²⁾ | | 56,091 |
| Senior unsecured notes | 168,273 | 168,273 |
| Current portion of senior secured term loan facility | 92,500 | 92,500 |
| Senior secured term loan facility | 470,228 | 470,228 |
| Current portion of project-level debt | 63,958 | 9,400 |
| Project-level debt | 24,185 | 24,185 |
| Total debt: | 926,564 | 874,250 |
| Shareholders' equity: | | |
| Common shares, no par value per share, unlimited authorized shares, 115,211,976, shares issued and outstanding, actual; 115,211,976 shares issued and outstanding, as adjusted ⁽³⁾ | 1,274,336 | 1,274,336 |
| Preferred shares issued by a subsidiary company | 215,157 | 215,157 |
| Accumulated other comprehensive loss | (132,303) | (132,303) ⁽⁴⁾ |
| Retained deficit | (1,117,321) | (1,128,440) ⁽⁴⁾⁽⁵⁾ |
| Total shareholders' equity | 239,869 | 228,150 |
| Total capitalization | 1,166,433 | 1,103,000 |

-
- (1) Cash and cash equivalents includes adjustments for the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as related refinancing costs.
- (2) Represents an assumed amount of Cdn\$70 million of Debentures equalling \$56.1 million using the September 30, 2017 exchange rate of US\$1.00 = Cdn\$1.2480. The proceeds, after commissions and expenses, will be utilized to redeem the Series C Debentures, in full, and the Series D Debentures, in part.
- (3) Excludes (i) 8,050,313 shares issuable upon conversion, redemption or maturity of the Company's outstanding convertible debentures, and (ii) 2,884,574 unvested notional shares granted under the terms of the Long-Term Incentive Plan ("LTIP").

- (4) See "Summary Recent Developments" for information regarding anticipated non-cash impairment charges to be recorded in our fourth quarter and full year 2017 financial results which will have the effect of increasing Accumulated other comprehensive loss and Retained deficit.
- (5) Retained deficit includes adjustments for expenses related to the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as a write down of deferred financing costs related to the Piedmont Loan and the Series C Debentures and Series D Debentures.

S-24

Table of Contents

DESCRIPTION OF THE DEBENTURES

The Debentures will be governed by the terms of the trust indenture (the "Base Indenture"), dated as of December 17, 2009, between us and Computershare Trust Company of Canada, as Canadian trustee (the "Canadian Trustee"), as supplemented by a fourth supplemental indenture (the "Fourth Supplement"), dated as of November 29, 2012, among us, the Canadian Trustee and Computershare Trust Company, N.A., as U.S. trustee (the "U.S. Trustee" and, together with the Canadian Trustee, the "Debenture Trustees"), and as further supplemented by a seventh supplemental indenture (the "Seventh Supplement" and, together with the Base Indenture and the Fourth Supplement, the "Indenture") to be entered into at closing among us and the Debenture Trustees. The following summary description sets forth some of the general terms and provisions of the Debentures and the Indenture. Because this is a summary description, it does not contain all of the information that may be important to you and is qualified in its entirety by reference to the Indenture and the form of the Debentures. The Base Indenture and Fourth Supplement is incorporated by reference herein to Exhibits 4.2 and 4.3 to our Registration Statement on Form S-3 (File No. 333-221903). The Seventh Supplement and form of the Debentures will be filed as exhibits to a Current Report on Form 8-K following the closing of this offering. In this description, the terms "Atlantic Power," the "Company," "we," "our" and "us" refer only to Atlantic Power Corporation and not to any of its subsidiaries.

General

The Debentures will be issued under and pursuant to the provisions of the Indenture. The Debentures will be limited to the aggregate principal amount of Cdn\$. The Company may, however, from time to time, without the consent of the holders of the outstanding debentures of the Company (including holders of the Debentures), issue debentures in addition to the Debentures offered hereby. The Debentures will be issuable only in denominations of Cdn\$1,000 and integral multiples thereof. At the closing of the offering of the Debentures, the Debentures will be available for delivery in book-entry form only through the facilities of CDS. Holders of beneficial interests in the Debentures will not have the right to receive physical certificates evidencing their ownership of Debentures except under certain circumstances described under "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Book Entry, Delivery and Form" in the accompanying prospectus. No Debentures will be issued in an amount less than the minimum denomination of Cdn\$1,000.

The Debentures will have a maturity date of January 31, 2025. The Debentures will bear interest from the date of issue at % per annum, which will be payable semi-annually in arrears on the last day of January and July in each year (each, an "Interest Payment Date") (or the immediately following business day if any Interest Payment Date would not otherwise be a business day), commencing on July 31, 2018. The first payment will represent accrued interest for the period from, and including, the date of the closing of the offering of the Debentures up to, but excluding, July 31, 2018. The interest on the Debentures will be payable in lawful money of Canada as specified in the Indenture. Subject to any required regulatory approvals and compliance with applicable securities laws and provided no event of default (as defined below) has occurred and is continuing, the Company may elect, from time to time, to satisfy all or part of its obligation to pay interest on the Debentures, on the date it is payable under the Indenture, such interest (i) in cash; (ii) by delivering a number of common shares to the Debenture trustees under the

Table of Contents

Indenture for sale, to satisfy the interest obligations in accordance with the Indenture, in which event holders of the Debentures will be entitled to receive a cash payment equal to the interest owed from the proceeds of the sale of such number of common shares or (iii) any combination of (i) and (ii) described herein. The Indenture does not contain a requirement for the Company to increase the amount of interest or other payments to holders of Debentures should the Company become required to withhold amounts in respect of income or similar taxes on payment of interest or other amounts. See "Risk Factors Risks Relating to the Debentures Withholding tax."

The principal on the Debentures will be payable in lawful money of Canada or, at the option of the Company and subject to applicable regulatory approval and compliance with applicable securities laws, by delivery of common shares to satisfy in whole or in part its obligation to repay principal under the Debentures as further described under "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Payment Upon Redemption or Maturity" and " Redemption and Purchase" in the accompanying prospectus.

The Debentures will be direct obligations of the Company and will not be secured by any mortgage, pledge, hypothec or other charge and will be subordinated to other liabilities of the Company as described under "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Subordination" in the accompanying prospectus. The Debentures will not be guaranteed by any other party, including any subsidiary of the Company.

The Indenture does not restrict the Company from incurring additional indebtedness for borrowed money or from mortgaging, pledging or charging its assets to secure any indebtedness. The Debentures will be transferable, and may be presented for conversion, at the principal offices of the Canadian Trustee in Toronto, Ontario or at the principal offices of the U.S. Trustee in Golden, Colorado. See "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Book Entry, Delivery and Form" and " Transfer and Exchange of Canadian Debt Securities" in the accompanying prospectus.

Except as set forth below, the provisions described under "Conversion Privilege," "Payment upon Redemption or Maturity," "Cancellation," "Subordination," "Repurchase upon a Change of Control," "Cash Change of Control," "Modification," "Events of Default," "Offers for Canadian Debt Securities," "Book Entry, Delivery and Form," "Transfer and Exchange of Canadian Debt Securities," "Payments," "Reports to Holders" and "Governing Law" in "Description of Debt Securities Debt Securities Issued under the Canadian Indenture" in the accompanying prospectus apply to the Debentures.

Conversion Privilege

The Debentures will be convertible at the holder's option at any time prior to the close of business on the earlier of (i) the business day immediately preceding the Maturity Date and (ii) if we elect to redeem the Debentures prior to maturity as described below, the business day immediately preceding the date specified by us for redemption, into common shares at a conversion price of Cdn\$ per common share, being a ratio of approximately common shares per Cdn\$1,000 principal amount of Debentures (an initial conversion premium of approximately % to a reference price of Cdn\$), subject to adjustment in certain circumstances. Holders converting their Debentures shall be entitled to receive, in addition to the applicable number of common shares to be received on conversion, accrued and unpaid interest in

Table of Contents

respect thereof for the period up to but excluding the date of conversion from and including the date of the latest Interest Payment Date or, if conversion occurs before the first Interest Payment Date, from the closing of the offering of the Debentures.

If a holder elects to convert its Debentures in connection with a change of control that occurs prior to January 31, 2023, the conversion ratio will be adjusted such that the holder will be entitled to receive additional common shares as a make whole premium on conversion in certain circumstances. See "Cash Change of Control."

Subject to the provisions thereof, the Indenture provides for the adjustment of the conversion rights in certain events described in "Description of Debt Securities – Debt Securities Issued under the Canadian Indenture – Conversion Privilege" in the accompanying prospectus. Such adjustments, including those described in clauses (x) and (y) in such description, apply to the conversion rights of the Debentures, provided that, with respect to clause (y), payment of a cash dividend or distribution, including the declaration of cash dividends to holders of common shares in an amount greater than Cdn\$0.06 per common share per annum will trigger an adjustment.

Redemption and Purchase

The Debentures may not be redeemed by the Company before January 31, 2021 (except in certain limited circumstances following a change of control). See "Description of Debt Securities – Debt Securities Issued under the Canadian Indenture – Repurchase Upon a Change of Control" in the accompanying prospectus. On or after January 31, 2021 and prior to January 31, 2023, the Debentures may be redeemed at the option of the Company, in whole at any time or in part from time to time, on not more than 60 days and not less than 30 days prior notice, at a redemption price equal to the principal amount thereof plus accrued and unpaid interest, if any, up to but excluding the date set for redemption, provided that the daily volume weighted average price of the common shares on the TSX, averaged for the 20 consecutive trading days ending five trading days preceding the date on which notice of redemption is given, is not less than 125% of the conversion price at the time notice of redemption is given. On or after January 31, 2023 and prior to their maturity, the Debentures may be redeemed by the Company, in whole or in part from time to time, on not more than 60 days and not less than 30 days prior notice, at a redemption price equal to the principal amount thereof plus accrued and unpaid interest, if any, up to but excluding the date set for redemption. In the event a holder of the Debentures exercises its conversion right following a notice of redemption by the Company, such holder shall be entitled to receive accrued and unpaid interest, in addition to the applicable number of common shares to be received on conversion, for the period from and including the latest interest payment date up to, but excluding, the date of conversion.

The Company will have the right to purchase Debentures in the market or by tender or by private contract as described under "Description of Debt Securities – Debt Securities Issued under the Canadian Indenture – Redemption and Purchase" in the accompanying prospectus.

Restriction on Share Redemption Right

The Company will not, directly or indirectly (through a subsidiary or otherwise) undertake or announce any rights offering, issuance of securities, subdivision of our common shares, dividend or other distribution on our common shares or any other securities, capital reorganization, reclassification or any similar type of transaction in which:

- (i) the number of securities to be issued;
- (ii) the price at which securities are to be issued, converted or exchanged; or
- (iii) any property or cash that is to be distributed or allocated,

Table of Contents

is in whole or in part based upon, determined in reference to, related to or a function of, directly or indirectly, (a) the exercise or potential exercise of the Company's right to repay the principal amount of Debentures on redemption or maturity by delivering common shares of the Company as described in "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Payment upon Redemption or Maturity" in the accompanying prospectus (the "Share Redemption Right"), or (b) the current market price determined in connection with the exercise or potential exercise of the Share Redemption Right.

Cash Change of Control

The number of additional common shares per Cdn\$1,000 principal amount of Debentures constituting the "make whole" premium holders of Debentures will be entitled to if a change of control (as described in the accompanying prospectus) occurs prior to January 31, 2023 will be determined by reference to the table below and is based on the date on which the change of control becomes effective (the "Effective Date") and the price (the "Stock Price") paid per common share in the transaction constituting the change of control. If holders of common shares receive only cash in the transaction, the Stock Price shall be the cash amount paid per common share. Otherwise, the Stock Price shall be equal to the current market price of the common shares immediately preceding the Effective Date of such transaction.

The following table shows what the make whole premium would be for each hypothetical Stock Price and Effective Date set forth below, expressed as additional common shares per Cdn\$1,000 principal amount of Debentures. For the avoidance of doubt, the Company shall not be obliged to pay the make whole premium otherwise than by issuance of common shares upon conversion, subject to the provisions relating to adjustment of the conversion price in certain circumstances and following the completion of certain types of transactions described under "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Conversion Privilege" in the accompanying prospectus.

Make Whole Premium Upon A Cash Change Of Control

(Number Of Additional Common Shares Per Cdn\$1,000 Debenture)

| Effective Date | Stock Price | | | | | | | | | | | |
|----------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ | Cdn\$ |

The actual Stock Price and Effective Date may not be set forth on the table, in which case:

if the actual Stock Price on the Effective Date is between two Stock Prices on the table or the actual Effective Date is between two Effective Dates on the table, the make whole premium will be determined by a straight-line interpolation between the make whole premiums set forth for the two Stock Prices and the two Effective Dates on the table based on a 365-day year, as applicable;

if the Stock Price on the Effective Date exceeds Cdn\$ per common share, subject to adjustment as described below, the make whole premium will be zero; and

Table of Contents

if the Stock Price on the Effective Date is less than Cdn\$ per common share, subject to adjustment as described below, the make whole premium will be zero.

The Stock Prices set forth in the first row of the table above will be adjusted as of any date on which the conversion price of the Debentures is adjusted. The adjusted Stock Prices will equal the Stock Prices applicable immediately preceding such adjustment multiplied by a fraction, the denominator of which is the conversion price immediately preceding the adjustment giving rise to the Stock Price adjustment and the numerator of which is the conversion price as so adjusted. The number of additional common shares constituting the make whole premium set forth in the table above will be adjusted in the same manner as the number of conversion shares issuable upon an adjustment of the conversion price as set forth under "Description of Debt Securities Debt Securities Issued under the Canadian Indenture Conversion Privilege" in the accompanying prospectus, other than as a result of an adjustment of the conversion price by adding the make whole premium as described above.

Listing

There is currently no trading market for the Debentures. We have applied to list the Debentures on the TSX. We have also applied to list the common shares issuable upon conversion of the Debentures on the TSX and the NYSE under the symbols "ATP" and "AT", respectively. These listings will be subject to the Company fulfilling all of the listing requirements of the TSX and the NYSE.

Governing Law

Each of the Indenture and the Debentures will be governed by, and construed in accordance with, the laws of the Province of Ontario and the federal laws of Canada applicable therein applicable to contracts executed and to be performed entirely in such Province, *provided that* with respect to the U.S. Trustee for the Indenture, the laws of the State of New York shall apply. The Indenture shall also incorporate and be governed by the provisions of the United States Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"), that are required to be part of and to govern indentures qualified under the Trust Indenture Act. If any provision of the Indenture limits, qualifies or conflicts with another provision that is required to be included in the Indenture by any of the provisions of the Trust Indenture Act, such required provision of the Trust Indenture Act shall prevail but only to the extent of such limitation, qualification or conflict. The exercise, performance or discharge by the Canadian Trustee of any of its rights, powers, duties or responsibilities under the Indenture or the Debentures shall be construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable thereto. Under the Indenture, the Company irrevocably attorns to the jurisdiction of the courts of the Province of Ontario.

DESCRIPTION OF COMMON SHARES

See "Description of Common Shares" in the accompanying prospectus for a description of the general terms and provisions of our common shares.

Table of Contents

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of the principal Canadian federal income tax considerations generally applicable under the Income Tax Act (Canada) and the regulations thereunder (the "Tax Act") to a holder who acquires all of the interest in the Debentures (including the entitlement to all payments of interest and principal) as beneficial owner pursuant to the offering and who, for the purposes of the Tax Act and the Canada-United States Income Tax Convention (the "Canadian Treaty"), at all relevant times (a) is a resident of the United States and not resident, or deemed to be resident, in Canada, (b) holds the Debentures and will hold the common shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures as capital property, (c) deals at arm's length with the Company, each of the underwriters and any transferee resident or deemed to be resident in Canada to whom the holder disposes of Debentures, and (d) does not use or hold and is not deemed to use or hold the Debentures or the common shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures in connection with a trade or business that the prospective purchaser carries on, or is deemed to carry on, in Canada at any time (a "U.S. Holder"). For the purpose of the Tax Act, related persons (as defined therein) are deemed not to deal at arm's length, and it is a question of fact whether persons not related to each other deal at arm's length. Special rules which are not discussed in this summary may apply to a U.S. Holder that is an insurer carrying on an insurance business in Canada and elsewhere and to an "authorized foreign bank" (as defined in the Tax Act), and, accordingly, such persons should consult their own tax advisors. This summary is not applicable to a U.S. Holder that is a "specified shareholder" as defined in subsection 18(5) of the Tax Act of the Company or that does not deal at arm's length for purposes of the Tax Act with a "specified shareholder" of the Company. Generally, for this purpose, a "specified shareholder" includes a shareholder that owns or is deemed to own, either alone or together with persons with which the shareholder does not deal at arm's length for purposes of the Tax Act, shares of the capital stock of the Company that either (i) give the shareholder 25% or more of the votes that could be cast at an annual meeting of the shareholders or (ii) have a fair market value of 25% or more of the fair market value of all of the issued and outstanding shares of the capital stock of the Company. Such U.S. Holders should consult their own tax advisors.

Limited liability companies ("LLCs") that are not taxed as corporations pursuant to the provisions of the Code do not qualify as resident in the U.S. for purposes of the Canadian Treaty. Under the Canadian Treaty, a resident of the U.S. who is a member of such an LLC and is otherwise eligible for benefits under the Canadian Treaty may generally be entitled to claim benefits under the Canadian Treaty in respect of such person's share of the income, profits or gains derived through the LLC.

The Canadian Treaty includes limitation on benefits rules that restrict the ability of certain persons who are resident in the U.S. for purposes of the Canadian Treaty to claim any or all benefits under the Canadian Treaty. U.S. Holders should consult their own tax advisors with respect to their eligibility for benefits under the Canadian Treaty, having regard to these rules.

This summary is of a general nature only and is based upon the facts set out herein and the accompanying prospectus, the provisions of the Tax Act, the Canadian Treaty and the current published administrative policies and assessing practices of the CRA, all in effect as of the date hereof. This summary is based on the assumption that the Debentures and the common shares

Table of Contents

issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures will at all relevant times be listed on the Toronto Stock Exchange. This summary takes into account all specific proposals to amend the Tax Act publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof. There can be no assurance that any such proposals will be implemented in their current form or at all. This summary does not otherwise take into account or anticipate any changes in law or in the administrative policies and assessing practices of the CRA, whether by legislative, governmental or judicial decision or action, and does not take into account provincial, territorial or foreign tax legislation or considerations, which may differ significantly from those discussed herein.

This summary is not exhaustive of all possible Canadian federal tax considerations applicable to an investment in Debentures. Moreover, the Canadian tax consequences of acquiring, holding or disposing of Debentures or common shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures will vary depending on the U.S. Holder's particular circumstances. Accordingly, this summary is of a general nature only and is not intended to be, and should not be interpreted as, legal or tax advice to any prospective purchaser and no representation with respect to the tax consequence to any particular U.S. Holder is made. Prospective investors should consult their own tax advisor with respect to the Canadian tax consequences of an investment in Debentures based on their particular circumstances.

Prospective investors may also be subject to certain Canadian provincial or territorial tax consequences as a result of acquiring, holding or disposing of Debentures or common shares issuable on the conversion, redemption, purchase for cancellation or maturity of the Debentures. Accordingly, prospective investors are urged to consult with their tax advisors for advice with respect to Canadian provincial or territorial tax consequences of an investment in Debentures based on their particular circumstances.

Debentures

Taxation of Interest on Debentures

A U.S. Holder will generally not be subject to Canadian withholding tax in respect of amounts paid or credited or deemed to have been paid or credited by the Company as, on account or in lieu of payment of, or in satisfaction of, interest or principal on the Debentures. See "Risk Factors Withholding tax."

However, a U.S. Holder who transfers or is deemed to transfer a Debenture to a resident of Canada for purposes of the Tax Act should consult its own tax advisor with respect to the tax consequences of such transfer.

Exercise of Conversion Privilege

Generally, a U.S. Holder that converts a Debenture into common shares pursuant to its right of conversion under the terms of the Debenture and only receives common shares on such conversion (other than cash delivered in lieu of a fraction of a common share pursuant to an administrative practice of the CRA), will be deemed not to have disposed of the Debenture and, accordingly, will not be considered to realize a capital gain (or capital loss) upon such conversion.

Table of Contents

Upon the conversion by a Holder of a Debenture into common shares, any payment representing interest accrued from the date of the last payment of interest to the date of conversion, or any deemed payment of interest, will be subject to the Canadian federal income tax considerations described above under "Taxation of Interest on Debentures".

Common Shares

Dividends on Common Shares

Dividends paid or credited on the common shares, or deemed under the Tax Act to be paid or credited on the common shares, to a U.S. Holder will generally be subject to Canadian withholding tax at the rate of 25%, unless the rate is reduced under the provisions of an applicable tax treaty. Under the Canadian Treaty, the withholding tax rate in respect of a dividend paid or credited to a U.S. Holder who is the beneficial owner of the dividend and is entitled to full benefits under the Canadian Treaty is generally reduced to 15%.

Disposition of Debentures and Common Shares

A U.S. Holder will not be subject to tax under the Tax Act in respect of any capital gain realized by such U.S. Holder on a disposition of a Debenture or a common share, as the case may be, unless the Debenture or common shares constitutes "taxable Canadian property" (as defined in the Tax Act) of the U.S. Holder at the time of disposition and the U.S. Holder is not entitled to relief under an applicable tax treaty. Where the common shares are listed on a designated stock exchange for purposes of the Tax Act (which currently includes both the TSX and NYSE) at a particular time the Debentures and the common shares will not constitute taxable Canadian property to a U.S. Holder at such time unless at any particular time during the sixty-month period that ends at that time: (a) (i) the U.S. Holder, (ii) persons with whom the U.S. Holder did not deal at arm's length, (iii) partnerships in which the U.S. Holder or a person described in (ii) holds a membership interest directly or indirectly through one or more partnerships, or (iv) any combination of the persons and partnerships described in (i) through (iii), owned 25% or more of any class or series of shares of the capital stock of the Company; and (b) such common shares derived, directly or indirectly, more than 50% of their fair market value from one or any combination of (i) real or immovable property situated in Canada, (ii) "Canadian resource properties" (as defined in the Tax Act), (iii) "timber resource properties" (as defined in the Tax Act), and (iv) options or interests in respect of property described in (i), (ii) and (iii). In certain other circumstances set out in the Tax Act, Debentures and/or common shares which are not otherwise taxable Canadian property may be deemed to constitute taxable Canadian property.

In the event that the Debentures or the common shares constitute or are deemed to constitute taxable Canadian property to any U.S. Holder, the Canadian Treaty (or other applicable tax treaty or convention) may exempt the U.S. Holder from tax under the Tax Act in respect of the disposition thereof, provided the value of such common shares is not derived principally from real property situated in Canada (as may be defined in the applicable tax treaty or convention). U.S. Holders whose common shares or Debentures may be taxable Canadian property should consult with their own tax advisors for advice having regard to their particular circumstances.

Table of Contents

CERTAIN MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of material U.S. federal income tax considerations that may be relevant to the purchase, ownership and disposition of Debentures and the common shares into which the Debentures may be converted. This summary is based on provisions of the Internal Revenue Code of 1986, as amended, applicable Treasury regulations, laws, regulations, rulings and decisions now in effect, all of which are subject to change, possibly with retroactive effect. This summary deals only with U.S. holders (defined below) that will hold the Debentures or common shares as capital assets and that purchased the Debentures on original issuance at their "issue price" (the first price at which a substantial portion of the Debentures is sold for cash to persons other than bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). This summary does not address all aspects of U.S. federal income taxes relevant to holders of a Debenture or common share, and does not address tax considerations applicable to investors that may be subject to special tax rules, such as banks, regulated investment companies, tax-exempt entities, insurance companies, dealers in securities or currencies, traders in securities electing to mark to market, persons that will hold Debentures as a position in a "straddle" or conversion transaction, or as part of a "synthetic security" or other integrated financial transaction, entities taxed as partnerships or the partners therein, persons subject to the alternative minimum tax, U.S. expatriates, or persons that have a "functional currency" other than the U.S. dollar.

This summary addresses only U.S. federal income tax consequences, and does not address the state, local, foreign tax laws or the Medicare tax on net investment income. Investors should consult their own tax advisors in determining the tax consequences to them of holding Debentures under such tax laws, as well as the application to their particular situation of the U.S. federal income tax considerations discussed below.

As used herein, a "U.S. holder" is a beneficial owner of a Debenture or common share received upon conversion of a Debenture that is, for U.S. federal income tax purposes, a citizen or resident of the United States or a domestic corporation or that otherwise is subject to United States federal income taxation on a net income basis in respect of the Debenture. A "non-U.S. holder" is a beneficial owner of a Debenture or common share received upon conversion of a Debenture that is an individual, corporation, estate or trust that is not a U.S. holder.

Under recently enacted legislation, U.S. holders that use an accrual method of accounting for tax purposes generally will be required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements. The application of this rule thus may require the accrual of income earlier than would be the case under the general tax rules described below, although the precise application of this rule is unclear at this time. This rule generally will be effective for tax years beginning after December 31, 2017 or, for debt instruments issued with original issue discount, for tax years beginning after December 31, 2018. U.S. holders that use an accrual method of accounting should consult with their tax advisors regarding the potential applicability of this legislation to their particular situation.

Table of Contents

U.S. Holders

Payments of Interest on the Debentures

Although there is no statutory, judicial or administrative authority that directly addresses the characterization of the instruments with the precise terms of the Debentures for U.S. federal income tax purposes, we intend to take the position that the Debentures will be treated as debt for U.S. federal income tax purposes.

Stated interest on a Debenture generally will be includible in the income of a U.S. holder as ordinary income at the time the interest is received or accrued, in accordance with the U.S. holder's method of accounting for U.S. federal income tax purposes. The amount of interest income realized by a U.S. holder that uses the cash method of tax accounting will be the U.S. dollar value of the Canadian dollar payment based on the exchange rate in effect on the date of receipt regardless of whether the payment in fact is converted into U.S. dollars. A U.S. holder that uses the accrual method of accounting for tax purposes will accrue interest income on the Debenture in Canadian dollars and translate the amount accrued into U.S. dollars based on the average exchange rate in effect during the interest accrual period (or portion thereof within the U.S. holder's taxable year), or, at the accrual basis U.S. holder's election, at the spot rate of exchange on the last day of the accrual period (or the last day of the taxable year within such accrual period if the accrual period spans more than one taxable year), or at the spot rate of exchange on the date of receipt, if this date is within five business days of the last day of the accrual period. A U.S. holder that makes this election must apply it consistently to all debt instruments from year to year and cannot change the election without the consent of the IRS. A U.S. holder that uses the accrual method of accounting for tax purposes will recognize foreign currency gain or loss, as the case may be, on the receipt of an interest payment made with respect to the Debenture if the exchange rate in effect on the date the payment is received differs from the rate applicable to a previous accrual of that interest income. This foreign currency gain or loss will be treated as ordinary income or loss but generally will not be treated as an adjustment to interest income received on the Debenture. It is anticipated, and this discussion assumes, that the Debentures will be issued with no more than a *de minimis* amount of original issue discount (as defined in applicable Treasury regulations). If, however, the Debentures are issued for an amount less than the principal amount and the difference is more than a *de minimis* amount, a U.S. holder will be required to include the difference in income as original issue discount in accordance with a constant-yield method. A U.S. holder is urged to consult its own tax advisor in the event the Debentures are issued with original issue discount.

Sale, Exchange, Redemption, or Other Taxable Disposition of Debentures

Except as provided below under " Conversion of Debentures," a U.S. holder generally will recognize gain or loss upon the sale, exchange, redemption or other taxable disposition of a Debenture equal to the difference between the U.S. holder's amount realized (less accrued but unpaid interest, which will be treated as described above under " Payments of Interest on the Debentures") and the U.S. holder's adjusted tax basis in the Debenture. A U.S. holder's adjusted tax basis in a Debenture generally will be equal to the amount that the U.S. holder paid for the Debenture. Any gain or loss recognized on a taxable disposition of a Debenture will be capital gain or loss. If, at the time of the sale, exchange, redemption or other taxable disposition of a Debenture, a U.S. holder held the Debenture for more than one year, the gain or loss will be

Table of Contents

long-term capital gain or loss. Otherwise, the gain or loss will be short-term capital gain or loss. Long-term capital gains realized by a non-corporate U.S. holder are generally eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Conversion of Debentures

Cash settlement

If a U.S. holder receives solely cash in exchange for Debentures upon conversion, the U.S. holder's gain or loss will be determined in the same manner as if the U.S. holder disposed of the Debentures in a taxable disposition, as described above under " Sale, Exchange, Redemption, or Other Taxable Disposition of Debentures."

Physical settlement

If a U.S. holder receives solely common share upon conversion (other than cash in lieu of a fractional share of common share) in exchange for Debentures, the conversion will not be a taxable event except that (1) the receipt of cash in lieu of a fractional share of common share will result in capital gain or loss, measured by the difference between the cash received in lieu of the fractional share and the U.S. holder's tax basis in the fractional share, and (2) the fair market value of common share received with respect to accrued interest will be taxed as a payment of interest, as described above under " Payments of Interest on the Debentures."

A U.S. holder's tax basis in the common share received upon a conversion of a Debenture (other than a common share received with respect to accrued interest, but including any basis allocable to a fractional share) will equal the tax basis of the Debenture that was converted. A U.S. holder's tax basis in the common share received with respect to accrued interest will equal the fair market value of the stock received. A U.S. holder's tax basis in a fractional share will be determined by allocating the U.S. holder's tax basis in the common share between the common share received upon conversion and the fractional share, in accordance with their respective fair market values.

The U.S. holder's holding period for the common share received will include its holding period for the Debenture converted, except that the holding period of any common share received with respect to accrued interest will commence on the day after the date of receipt.

Adjustments to the Conversion Rate of the Debentures

The conversion rate of the Debentures will be adjusted in certain circumstances, as described in "Description of the Debentures Conversion Privilege". Adjustments (or failures to make adjustments) that have the effect of increasing a U.S. holder's proportionate interest in our assets or earnings may in some circumstances result in a deemed distribution to a U.S. holder for U.S. federal income tax purposes. However, adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing the dilution of the interest of the holders of the Debentures (such as in the case of a stock split) will generally not be deemed to result in a constructive distribution of shares. Certain of the possible adjustments provided in the Debentures may not qualify as being pursuant to a bona fide reasonable adjustment formula. For example, without limitation, a taxable constructive distribution would result if the conversion rate were adjusted as a result of taxable dividends paid to holders of our

Table of Contents

common shares, and may result if a holder receives a right to additional shares as a result of a make whole fundamental change.

Constructive distributions on a Debenture that are taxable to a U.S. holder are includible in its income as a dividend to the extent of our current and accumulated earnings and profits as determined under U.S. federal income tax principles, then as a tax-free return of capital to the extent of the U.S. holder's tax basis in the Debenture, and thereafter as capital gain from the sale or exchange of such Debenture as described below under "Sale, Exchange, Redemption, or Other Taxable Disposition of Common Shares," even though the holder has not received any cash or property as a result of such adjustments. We are required to report to the Internal Revenue Service (the "IRS") and to holders the amount of such a deemed distribution. Generally, a U.S. holder's tax basis in the Debentures will be increased to the extent of any such deemed distribution treated as a dividend. It is not clear whether the dividends received deduction generally available to corporate recipients of dividends or the preferential tax rates generally applicable to non-corporate U.S. recipients of dividends would apply to such a constructive distribution. A U.S. holder should consult its own tax advisor as to whether such constructive distributions are eligible for the preferential rates of U.S. federal income tax applicable in respect of dividends received or the dividends received deduction.

Possible Effect of Consolidation or Merger on the Debentures

In certain situations, we may consolidate with, merge into, or transfer all or substantially all of our assets to another entity as described above under "Description of the Debentures Debt Securities under the Canadian Indenture Repurchase upon a Change of Control". Depending on the circumstances, a change in the obligor of the Debentures as the result of a consolidation, merger or transfer could result in a deemed taxable exchange to a U.S. holder, and the modified Debenture could be treated as newly issued at that time, potentially resulting in the recognition of taxable gain or loss by a U.S. holder. A U.S. holder should consult its own tax advisor regarding the consequences to it of a consolidation, merger or transfer.

Distributions on Common Shares

The gross amount of distributions paid by the Company out of current or accumulated earnings and profits (as determined for U.S. federal income tax purposes) with respect to the common shares (including the amount of any Canadian taxes withheld) generally will be taxed as ordinary dividend income at the time of receipt by a U.S. holder. The dividends generally will be treated as foreign-source income and will not be eligible for the dividends-received deduction available to domestic corporations. Distributions in excess of current and accumulated earnings and profits will be treated as a non-taxable return of capital to the extent of the U.S. holder's basis in its common shares and thereafter as capital gain. U.S. holders should consult their own tax advisors with respect to the appropriate U.S. federal income tax treatment of any distribution received from the Company. The amount of any dividend paid in Canadian dollars will equal the U.S. dollar value of the Canadian dollars received calculated by reference to the exchange rate in effect on the date the dividend is received by a U.S. holder regardless of whether the Canadian dollars are converted into U.S. dollars on such date. If such a dividend is converted into U.S. dollars on the date of receipt, a U.S. holder generally should not be required to recognize foreign currency gain or loss in respect of the dividend income. If the Canadian dollars received in the

Table of Contents

distribution are not converted into U.S. dollars on the date of receipt, a U.S. holder of the common shares will have a basis in the Canadian dollars equal to its U.S. dollar value on the date of receipt. Any gain or loss recognized upon a subsequent conversion or other disposition of the Canadian dollars will be treated as U.S.-source ordinary income or loss for foreign tax credit limitation purposes.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual and certain other non-corporate U.S. holders may be subject to reduced rates of taxation if our shares are readily tradable on an established securities market in the United States. Treasury Department guidance indicates that because our common shares are listed on the NYSE, the common shares are considered readily tradable on an established securities market in the United States.

With certain exceptions as described below and subject to the discussion in the last paragraph of this section, the Canadian withholding tax that is imposed on distributions with respect to the common shares will be treated as a foreign income tax that is eligible (subject to generally applicable limitations and conditions under U.S. tax laws) for credit against a U.S. holder's federal income tax liability or, at the U.S. holder's election, for deduction in computing the holder's taxable income. If a refund of the tax withheld is available under the laws of Canada or under the Treaty, the amount of tax withheld that is refundable will not be eligible for such credit against a U.S. holder's U.S. federal income tax liability (and will not be eligible for the deduction against a U.S. holder's U.S. federal taxable income). The use of foreign tax credits is subject to complex rules and limitations. Generally, the total amount of allowable foreign tax credits in any year cannot exceed the U.S. holder's regular U.S. tax liability for the year attributable to foreign-source taxable income. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. Dividend income generally will constitute "passive category" income, or in the case of certain U.S. holders, "general category" income. In addition, foreign tax credits may not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions in securities. holders are urged to consult their tax advisor concerning their eligibility for benefits under the Treaty, whether, and to what extent, a foreign tax credit will be available, and, if so, whether to claim a credit or deduction.

Canadian withholding taxes must be translated into U.S. dollars using the exchange rate in effect on the day the taxes were paid (in the case of cash basis and electing accrual basis holders) or at the average exchange rate for the year of accrual (in the case of accrual basis holders who have not made such an election). Any such election will apply for the taxable year in which it is made and all subsequent taxable years, unless revoked with the consent of the IRS.

It is possible that we are, or at some future time will be, at least 50% owned by U.S. persons. Dividends paid by a foreign corporation that is at least 50% owned by U.S. persons may be treated as U.S.-source income (rather than foreign-source income) for foreign tax credit purposes to the extent the foreign corporation has more than an insignificant amount of U.S.-source income. The effect of this rule may be to treat a portion of any dividends we pay as U.S.-source income. Treatment of the dividends as U.S.-source income in whole or in part may limit a U.S. holder's ability to claim a foreign tax credit for the Canadian withholding taxes payable in respect of the dividends. Subject to certain limitations, the Code permits a U.S. holder entitled to benefits under the U.S.-Canadian income tax treaty to elect to treat any Company dividends as foreign-

Table of Contents

source income for foreign tax credit purposes. U.S. holders should consult their own tax advisors about the desirability of making, and the method of making, such an election.

Sale, Exchange, Redemption, or Other Taxable Disposition of Common Shares

A U.S. holder generally will recognize capital gain or loss upon the sale, exchange or other disposition of a common share equal to the difference between the amount of cash and the fair market value of any property received upon the disposition, and the U.S. holder's adjusted tax basis in such common share. Any such capital gain or loss will be long-term capital gain or loss if the U.S. holder's holding period for such common share exceeds one year. Long-term capital gains of a non-corporate U.S. holder are generally eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

A U.S. holder's tax basis in the common shares will generally be their U.S. dollar cost. The U.S. dollar cost of common shares purchased with Canadian dollars will generally be the U.S. dollar value of the purchase price on the date of purchase, or the settlement date for the purchase in the case of shares traded on an established securities market (as defined in the applicable Treasury Regulations) that are purchased by a cash basis U.S. holder (or an accrual basis U.S. holder that so elects). The amount realized on a sale or other disposition of the common shares for an amount in Canadian dollars will be the U.S. dollar value of this amount on the date of sale or disposition. On the settlement date, the U.S. holder will recognize U.S.-source foreign currency gain or loss (taxable as ordinary income or loss) equal to the difference (if any) between the U.S. dollar value of the amount received based on the exchange rates in effect on the date of sale or other disposition and the settlement date. However, in the case of shares traded on an established securities market that are sold by a cash basis U.S. holder (or an accrual basis U.S. holder that so elects), the amount realized will be based on the exchange rate in effect on the settlement date for the sale, and no exchange gain or loss will be recognized at that time. If an accrual basis U.S. holder makes an election described above, it must be applied consistently from year to year and cannot be revoked without the consent of the IRS.

Disposition of Foreign Currency

Foreign currency received as interest on a Debenture or as dividend on common shares issuable upon conversion of the Debenture, or on the sale or other disposition of a Debenture or common shares issuable upon conversion of the Debenture, will have a tax basis equal to its U.S. dollar value at the time the interest or dividend is received or at the time of the sale or other disposition. Foreign currency that is purchased will generally have a tax basis equal to the U.S. dollar value of the foreign currency on the date of purchase. Any gain or loss recognized on a sale or other disposition of foreign currency (including its use to purchase Debentures or an exchange for U.S. dollars) generally will be U.S. source ordinary income or loss.

Specified Foreign Financial Assets

Individual U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of \$50,000 are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which may include Debentures issued in certificated form) that are not held

Table of Contents

in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the Debentures, including the application of the rules to their particular circumstances.

Information Reporting and Backup Withholding

Payments in respect of the Debentures and common shares that are paid within the United States or through certain U.S.-related financial intermediaries are generally subject to information reporting, unless the holder is an exempt recipient. Payments to a non-exempt recipient may also be subject to backup withholding, unless the holder (1) provides an accurate taxpayer identification number and certifies that it is not subject to backup withholding or (2) otherwise establishes an exemption from backup withholding. The amount of any backup withholding from a payment to a U.S. or non-U.S. holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

Table of Contents**UNDERWRITING**

We are offering the Debentures in this prospectus supplement through the underwriters named below. RBC Dominion Securities Inc. is the sole book-running manager of this offering. Subject to the terms and conditions contained in an underwriting agreement between us and the underwriters, we have agreed to issue and sell, and the underwriters have severally agreed to purchase, as principals, on the closing date, being January , 2018 or such other date as may be agreed upon by us and the underwriters, but in any event not later than February , 2018, an aggregate of Cdn\$ principal amount of Debentures. Subject to certain conditions, the underwriters have agreed to purchase, and we have agreed to sell to them, the aggregate principal amount of Debentures indicated in the following table:

| Underwriters | Amount of Debentures |
|------------------------------|-----------------------------|
| RBC Dominion Securities Inc. | Cdn\$ |
| | |
| | |
| Total | Cdn\$ |

The Company has granted an option to the underwriters to purchase up to an additional Cdn\$ aggregate principal amount of Debentures at the price to the public, less the underwriting discount. The underwriters may exercise this option at any time up to 30 days after the date of the closing of the offering of Debentures to cover any over-allotments. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase an additional aggregate principal amount of Debentures proportionate to such underwriter's initial proportionate commitment reflected in the table above. Any Debentures issued or sold under the option will be issued and sold on the same terms and conditions as the other Debentures sold in this offering.

The underwriters are committed to take and pay for all of the Debentures being offered (other than those covered by the over-allotment option described above), if any are taken. Each of the underwriters may terminate its obligations under the underwriting agreement at its discretion upon the occurrence of certain stated events, including: (i) an inquiry, action, suit, investigation or other proceeding (whether formal or informal) is commenced, announced or threatened or any order or ruling is issued under or pursuant to any relevant statute or by any federal, provincial, state, municipal or other governmental department, commission, court, board, bureau, agency or instrumentality or any third party, including, without limitation, the TSX, the NYSE or any securities regulatory authority (other than any such inquiry, action, suit, investigation or other proceeding or order relating solely to any of the underwriters) or there is any change of law, or interpretation or administration thereof, which, in the reasonable opinion of such underwriter, acting in good faith, (a) operates to prevent or restrict the trading in the common shares or the Debentures, or adversely impacts the distribution or the marketability of the Debentures, or materially and adversely affects or will materially and adversely affect the market price or value of the common shares or the Debentures, or (b) operates to prevent, suspend, hinder, delay, restrict or otherwise materially adversely affect the transactions contemplated in the underwriting agreement; (ii) there should develop, occur or come into effect or existence any event, action,

Table of Contents

state, condition or major financial occurrence of national or international consequence, acts of terrorism, hostility, war or like event or escalation thereof or other calamity or crisis, or any governmental action, law, regulation, inquiry or other occurrence of any nature which, in the reasonable opinion of such underwriter, materially adversely affects or may materially adversely affect the financial markets in Canada or the United States or the business, operations or affairs of the Company and its subsidiaries taken as a whole or the market price or value of the Debentures or the common shares; or (iii) there shall occur any material change (actual, imminent or reasonably expected) in the business, affairs, operations, assets, liabilities (contingent or otherwise), capital or ownership of the Company and its subsidiaries taken as a whole, howsoever caused, or there should be discovered any previously undisclosed material fact (other than a material fact related solely to any of the underwriters) or there should occur a change (other than a change related solely to any of the underwriters) in a material fact contained in the Canadian short form base shelf prospectus and related prospectus supplement or this prospectus supplement and the accompanying prospectus, in each case which, in the opinion of such underwriter, acting reasonably, could be expected to result in the purchasers of a material number of the Debentures exercising their right under Canadian securities laws to withdraw from or rescind their purchase thereof or their right to sue for damages in respect thereof or which has or could reasonably be expected to have a material adverse effect on the market price or value of the common shares or the Debentures. The underwriters propose to offer the Debentures to the public initially at the offering price and in the principal amount, respectively, specified on the cover page of this prospectus supplement. After the underwriters have made a reasonable effort to sell all of the Debentures offered hereby at the offering price and in the principal amount, respectively, specified on the cover page of this prospectus supplement, the price per Debenture for the Debentures may be decreased and may be further changed from time to time to amounts not greater than those set forth on the cover page of this prospectus supplement. The compensation realized by the underwriters will be decreased by the amount that the aggregate price paid by the purchasers of the Debentures is less than the amount paid by the underwriters to us. To the extent any Debentures are offered in the United States through certain of the underwriters, such Debentures will be so offered, either directly or indirectly, through the respective U.S. broker-dealer affiliates of such underwriters.

The Debentures will be issued in "book-entry only" form and must be purchased or transferred through a CDS participant (a "CDS Participant"). At closing, we will cause global certificates representing the Debentures being offered to be delivered to, and registered in the name of, CDS or its nominee. All rights of holders of the Debentures must be exercised through, and all payments or other property to which such holder is entitled will be made or delivered by, CDS or the CDS Participant through which the holder of Debentures holds such Debentures. Each person who acquires Debentures will receive only a customer confirmation of purchase from the underwriter or registered dealer from or through which the Debentures are acquired in accordance with the practices and procedures of that underwriter or registered dealer. The practices of registered dealers may vary, but generally customer confirmations are issued promptly after execution of a customer order. CDS is responsible for establishing and maintaining book-entry accounts for its CDS Participants having interests in the Debentures.

We expect that delivery of the Debentures will be made against payment therefor on the closing date of this offering specified on the cover page of this prospectus supplement, which

Table of Contents

is four business days following the date of pricing of the Debentures (this settlement cycle being referred to as "T+4"). Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade their Debentures on the date of pricing the Debentures or the next following business day will be required, by virtue of the fact that the Debentures initially will settle in T+4, to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of the Debentures who wish to trade their Debentures prior to the closing date should consult their own advisor.

Commissions and Discounts

The following table shows the per Cdn\$1,000 principal amount Debenture and total underwriting discounts and commissions to be paid to the underwriters by us. These amounts shown assume both no exercise and full exercise of the underwriters' over-allotment option:

| | No Exercise | | Full Exercise | |
|---------------|--------------------|----|----------------------|----|
| Per Debenture | Cdn\$ | 40 | Cdn\$ | 40 |
| Total | Cdn\$ | | Cdn\$ | |

We estimate that the total expenses of this offering payable by us, not including the underwriting discounts and commissions will be approximately Cdn\$.

Lock-Up

Subject to certain exceptions, we and our senior officers and directors have agreed with the underwriters, not to create, allot, authorize, offer, issue, secure, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise lend, transfer or dispose of any common shares or any securities convertible into or exercisable or exchangeable for any common shares, including convertible debentures, or enter into any swap or other arrangement that transfers to another any of the economic consequences of ownership of our common shares, or any securities convertible into or exercisable or exchangeable for our common shares, including convertible debentures, or agree to or announce any intention to effect any of the foregoing, for a period of 90 days from the closing of this offering without the prior written consent of RBC Dominion Securities Inc., on behalf of the underwriters, which consent may not be unreasonably withheld; except in each case for (i) the Debentures, (ii) as may be granted, issued or delivered under our security based compensation arrangements, or (iii) issuances upon the conversion of outstanding convertible debentures.

Indemnification and Contribution

We have agreed to indemnify the underwriters and their affiliates and controlling persons against certain liabilities. If we are unable to provide this indemnification, we have agreed to contribute to the payments the underwriters, their affiliates and controlling persons may be required to make in respect of those liabilities.

Table of Contents

Listing

There is currently no trading market for the Debentures. We have applied to list the Debentures and the common shares issuable upon the conversion of the Debentures on the TSX, which listing will be subject to the Company fulfilling all of the listing requirements of the TSX. We have also applied to list the common shares issuable upon conversion of the Debentures on the NYSE. Listing will be subject to the Company fulfilling all of the listing requirements of the TSX and the NYSE. Our outstanding common shares are listed on the TSX under the symbol "ATP" and on the NYSE under the symbol "AT".

Price Stabilization, Short Positions and Passive Market Making

In connection with the offering of the Debentures, the underwriters or their respective affiliates may purchase and sell the Debentures in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales, including purchases pursuant to the over-allotment option. Short sales involve the sale by the underwriters of a greater number of Debentures than they are required to purchase in the offering. Stabilizing transactions consist of certain bids or purchases made for the purpose of preventing or retarding a decline in the market price of the Debentures while the offering is in progress. The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the other underwriters a portion of the underwriting discount received by it because an underwriter has repurchased Debentures sold by or for the account of such underwriter in stabilizing or short covering transactions. Any of these activities may cause the price of the Debentures to be higher than the price that otherwise would exist in the open market in the absence of such transactions. These transactions may be effected in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time. Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Debentures. In addition, neither we nor any of the underwriters make any representation that any of the underwriters will engage in such transactions, or that such transactions, once begun, will not be discontinued without notice.

Pursuant to policy statements of certain Canadian securities regulators, the underwriters may not, throughout the period of distribution, bid for or purchase the Debentures. The foregoing restriction is subject to exceptions, on the condition that the bid or purchase is not engaged in for the purpose of creating actual or apparent active trading in, or raising the price of, any of the Debentures. These exceptions include bids or purchases permitted under the Universal Market Integrity Rules of the Investment Industry Regulatory Organization of Canada relating to market stabilization and passive market making activities and bids or purchases made for and on behalf of a customer where the order was not solicited during the period of distribution. Under the first mentioned exception, in connection with this offering, the underwriters may effect transactions that stabilize or maintain the market price of the Debentures at levels other than those which might otherwise prevail in the open market. Those transactions, if commenced, may be interrupted or discontinued at any time.

Table of Contents

Other Relationships

Certain of the underwriters and their affiliates have in the past provided, are currently providing and may in the future from time to time provide, investment banking and other financing, trading, banking, research, transfer agent and trustee services to us or our subsidiaries, for which they have in the past received, and may currently or in the future receive, customary fees and expenses. RBC Dominion Securities Inc., and are affiliates of banks that are part of a syndicate of lenders that has provided a US\$700 million senior secured term loan (the "Term Loan Facility") and US\$200 million senior secured revolving credit facility (the "Revolving Facility") to us. As of December 31, 2017, there was approximately US\$540 million outstanding under the Term Loan Facility and no amounts outstanding under the Revolving Facility. The Company has granted a security interest over certain of its assets to the lenders under the Term Loan Facility and the Revolving Facility.

LEGAL MATTERS

Certain legal matters relating to the issue and sale in Canada of the securities offered hereby will be passed upon for us by Goodmans LLP, Toronto, Ontario, and MLT Aikins LLP, Vancouver, British Columbia, and for the underwriters by Blake, Cassels & Graydon LLP, Toronto, Ontario. Certain legal matters as to the federal law of the United States of America and the law of the State of New York will be passed upon for us by Cleary Gottlieb Steen & Hamilton LLP, New York, New York. Paul, Weiss, Rifkind, Wharton & Garrison LLP, New York, New York, is acting as U.S. counsel to the underwriters in connection with this offering.

S-44

Table of Contents

PROSPECTUS

\$250,000,000

**Common Shares
Debt Securities
Warrants
Subscription Receipts
Units**

Atlantic Power Corporation (the "Company") may offer and issue from time to time, in any combination: (i) common shares of the Company; (ii) debt securities of the Company; (iii) warrants exercisable to acquire common shares and/or other securities of the Company; (iv) subscription receipts exchangeable for common shares and/or other securities of the Company; or (v) securities comprised of one or more of common shares, debt securities, warrants and/or subscription receipts offered together as a unit. We will provide specific terms of the securities which we may offer in supplements to this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest. Securities may be sold for U.S. dollars or Canadian dollars.

Our common shares trade on the Toronto Stock Exchange (the "TSX") under the symbol "ATP" and on the New York Stock Exchange (the "NYSE") under the symbol "AT." The applicable prospectus supplement will contain information, where applicable, regarding the listing of the securities covered by such prospectus supplement.

The securities may be offered directly by us, through agents designated from time to time by us or to or through underwriters or dealers. If any agents, dealers or underwriters are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections entitled "About This Prospectus" and "Plan of Distribution" for more information.

Investing in our securities is speculative and involves risk. See "Risk Factors" on page 6 before you make your investment decision.

Neither the Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is December 19, 2017.

Table of Contents

TABLE OF CONTENTS

| | |
|---|-----------|
| <u>About this Prospectus</u> | <u>3</u> |
| <u>Where You Can Find More Information</u> | <u>3</u> |
| <u>Our Company</u> | <u>4</u> |
| <u>Cautionary Note Regarding Forward-Looking Statements</u> | <u>4</u> |
| <u>Risk Factors</u> | <u>6</u> |
| <u>Use of Proceeds</u> | <u>6</u> |
| <u>Ratio of Earnings to Fixed Charges</u> | <u>6</u> |
| <u>Supplemental Canadian Disclosure</u> | <u>7</u> |
| <u>Description of Common Shares</u> | <u>11</u> |
| <u>Description of Debt Securities</u> | <u>14</u> |
| <u>Description of Warrants</u> | <u>30</u> |
| <u>Description of Units</u> | <u>31</u> |
| <u>Description of Subscription Receipts</u> | <u>31</u> |
| <u>Plan of Distribution</u> | <u>31</u> |
| <u>Legal Matters</u> | <u>33</u> |
| <u>Experts</u> | <u>33</u> |

We are responsible for the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement, any applicable free writing prospectus and, for prospective purchasers in Canada, the applicable Canadian prospectus that we prepare or authorize. We have not authorized anyone to provide you with any other information, and we take no responsibility for any other information that others may provide you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus, the applicable prospectus supplement or the applicable Canadian prospectus is accurate as of any date other than the date of the applicable document.

Table of Contents

About this Prospectus

This prospectus is part of a shelf registration statement that we have filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this process, we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer.

Each time we offer to sell securities, we will provide a supplement to this prospectus that will contain specific information about the terms of that offering. The prospectus supplement will describe the specific terms of that offering. The prospectus supplement may also add to, update or change the information contained in this prospectus. Please carefully read this prospectus and the applicable prospectus supplement together with the information contained in the documents we refer to under the heading "Where You Can Find More Information."

As used in this prospectus, the terms "Atlantic Power," the "Company," "we," "our" and "us" refer to Atlantic Power Corporation, together with those entities owned or controlled by Atlantic Power Corporation, unless the context indicates otherwise. Unless otherwise noted, all references to "C\$," "Cdn\$" and "Canadian dollars" are to the lawful currency of Canada and all references to "\$," "US\$" and "U.S. dollars" are to the lawful currency of the United States. This prospectus includes our trademarks and other trade names identified herein. All other trademarks and trade names appearing in this prospectus are the property of their respective holders.

Where You Can Find More Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to the public from the SEC's website at <http://www.sec.gov> and on our website at <http://www.atlanticpower.com>. Atlantic Power's SEC file number is 001-34691. We have included the SEC's web address and our web address as inactive textual references only. Our website is not incorporated into, and does not constitute a part of, this prospectus or any other report or documents we file with or furnish to the SEC.

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. Information that is furnished, rather than filed, on our Current Reports on Form 8-K is not incorporated by reference in this registration statement and prospectus. We incorporate by reference the documents listed below, filings that we will make after the date of filing the initial registration statement and prior to the effectiveness of the registration statement and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"):

our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 2, 2017;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 4, 2017;

our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed with the SEC on August 3, 2017;

our Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed with the SEC on November 9, 2017;

Table of Contents

our annual Proxy Statement on Schedule 14A relating to our annual meeting of shareholders, filed with the SEC on April 28, 2017;

our Current Reports on Form 8-K filed with the SEC on June 20, 2017 and August 28, 2017, except, in any such cases, the portions furnished and not filed pursuant to Item 7.01 or otherwise; and

the description of the Company's common shares contained in the Company's Registration Statement on Form 10, filed with the SEC on July 21, 2010.

You may request a copy of these filings, any exhibits we have specifically incorporated by reference as an exhibit in this prospectus and our Canadian securities filings at no cost by writing us at Atlantic Power Corporation, 3 Allied Drive, Suite 220, Dedham, Massachusetts 02026, USA, Attention: Corporate Secretary, or by calling us at (617) 977-2400.

Our Company

Atlantic Power Corporation owns and operates a diverse fleet of power generation and infrastructure assets in the United States and Canada. Our power generation projects sell electricity to utilities and other large commercial customers largely under long-term power purchase agreements ("PPAs"), which seek to minimize exposure to changes in commodity prices. Our power generation projects in operation have an aggregate electric generating capacity on a gross ownership basis of approximately 1,793 megawatts (or "MW") in which our net ownership basis is approximately 1,440 MW. Our current portfolio consists of interests in 22 operational power generation projects across nine states in the United States and two provinces in Canada. Eighteen of the projects are currently operational, totaling 1,633 MW on a gross ownership basis and 1,280 MW on a net ownership basis. The remaining four projects, all in Ontario, are not operational, three due to revised contractual arrangements with the off taker and the other, Tunis, has a forward-starting 15-year contractual agreement that will commence before June 2019. Eighteen of our power generation projects are majority-owned and directly operated and maintained by us.

Our common shares trade on the TSX under the symbol "ATP" and on the NYSE under the symbol "AT."

Our registered office is located at 215-10451 Shellbridge Way, Richmond, British Columbia, Canada V6X 2W8 and our headquarters is located at 3 Allied Drive, Suite 220, Dedham, Massachusetts 02026 USA. Our telephone number is (617) 977-2400 and the address of our website is www.atlanticpower.com. Our website is included in this prospectus as an inactive textual reference only. Other than specific documents incorporated by reference, information on our website is not incorporated into this prospectus or our other securities filings and does not form a part of this prospectus.

Cautionary Note Regarding Forward-Looking Statements

This prospectus, the applicable prospectus supplement, the documents incorporated by reference in this prospectus, and other written or oral statements made from time to time by the Company may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Canadian securities laws. Statements in this prospectus and the documents incorporated by reference herein that are not historical facts are hereby identified as forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act and Section 21E of the Exchange Act and forward-looking information within the meaning defined under applicable Canadian securities legislation (collectively, "forward-looking statements").

Forward-looking statements generally can be identified by the use of words such as "outlook," "objective," "may," "will," "expect," "intend," "estimate," "anticipate," "believe," "should," "plans,"

Table of Contents

"continue" or similar expressions suggesting future outcomes or events. Examples of such statements include, but are not limited to, statements with respect to the following:

our ability to generate sufficient cash flow to service our debt obligations or implement our business plan, including financing internal or external growth opportunities;

the outcome or impact of our business strategy to increase our intrinsic value on a per-share basis through disciplined management of our balance sheet and cost structure and investment of our discretionary cash in a combination of organic and external growth projects, acquisitions, and repurchases of debt and equity securities;

our ability to renew or enter into new PPAs on favorable terms or at all after the expiration of our current agreements;

our ability to meet the financial covenants under our existing credit facilities and other indebtedness;

expectations regarding maintenance and capital expenditures; and

the impact of legislative, regulatory, competitive and technological changes.

Such forward-looking statements reflect our current expectations regarding future events and operating performance and speak only as of the date such statement is made. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as may be required by applicable law. Such forward-looking statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, the Company's future growth potential, its results of operations, future cash flows, the continued performance and business prospects and opportunities of the Company and its projects, third party projections of regional fuel and electric capacity and energy prices, the completion of certain transactions, the Company's ability to continue to develop and grow, the Company's future levels of indebtedness, and the tax laws as currently in effect remaining unchanged and the current general regulatory environment and economic conditions remaining unchanged. Many of these risks and uncertainties can affect our actual results and could cause our actual results to differ materially from those expressed or implied in any forward-looking statement made by us or on our behalf.

Forward-looking statements involve significant risks and uncertainties, 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. In addition, a number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors included in the filings we make from time to time with the SEC and the risk factors listed under "Cautionary Statement Regarding Forward-Looking Information" and described under "Item 1A. Risk Factors" in our most recent Annual Report on Form 10-K, and subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. The impact of any one factor on a particular piece of forward-looking information is not determinable with certainty as such factors are interdependent upon other factors, and management's course of action would depend upon its assessment of the future considering all information then available.

Our business is both highly competitive and subject to various risks. Should any risk factor affect the Company in an unexpected manner, or should assumptions underlying the forward-looking information prove incorrect, the actual results or events may differ materially from the results or events predicted. Unless otherwise indicated, forward-looking information does not take into account the effect that transactions or non-recurring or other special items announced or occurring after the date it is provided may have on the business of the Company. All of the forward-looking information reflected in this prospectus and the documents incorporated by reference herein are qualified by these cautionary statements.

Table of Contents

Risk Factors

Investing in our securities is speculative and involves risk. Before making an investment decision with respect to the securities offered by this prospectus, you should carefully consider the risks, uncertainties and additional information (i) set forth in our most recent Annual Report on Form 10-K, any subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and (ii) contained in any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see "Where You Can Find More Information." Although we discuss key risks in our periodic reports filed with the SEC and in any applicable prospectus supplement used in connection with an offering of our securities, new risks may emerge in the future, which may prove to be important. Our subsequent filings with the SEC may contain amended and updated discussions of significant risks to our business and financial performance. We cannot predict future risks or estimate the extent to which they may affect our financial performance.

No Market for Debt Securities, Warrants, Subscription Receipts or Units

There is currently no market through which debt securities, warrants, subscription receipts or units that may be offered under this prospectus and any prospectus supplement may be sold, and purchasers of such securities may not be able to resell such securities. No assurance can be given that an active or liquid trading market for the debt securities, warrants, subscription receipts or units will develop or, if developed, that such market will be sustained. This may affect the pricing of the debt securities, warrants, subscription receipts and units in the secondary market, the transparency and availability of trading prices and the liquidity of such securities. The public offering prices of the debt securities, warrants, subscription receipts and units may be determined by negotiation between the Company and underwriters based on several factors and may bear no relationship to prices at which such securities will trade in the public market subsequent to such offering. See "Plan of Distribution."

Use of Proceeds

Unless otherwise described in an applicable prospectus supplement, we intend to use the net proceeds of any sale of securities offered by this prospectus for working capital and other general corporate purposes, which may include the repayment or refinancing of outstanding indebtedness and the financing of future acquisitions. We will have significant discretion in the use of any net proceeds. The net proceeds may be invested temporarily in interest-bearing accounts and short-term interest-bearing securities until they are used for their stated purpose. We may provide additional information on the use of the net proceeds from the sale of the offered securities in an applicable prospectus supplement relating to the offered securities.

Ratio of Earnings to Fixed Charges

The following table sets forth our ratios of earnings to fixed charges for the periods indicated calculated on the basis of the U.S. GAAP financial statements incorporated by reference in this prospectus. For this purpose, "earnings" consists of earnings from continuing operations and distributed income of equity investees, excluding income taxes, non-controlling interests share in earnings and fixed

Table of Contents

charges, other than capitalized interest, and "fixed charges" consists of project-level interest expense and corporate level interest expense.

| | Nine Months Ended September 30, | | Year Ended December 31, | | | |
|------------------------------------|------------------------------------|-------------------|-------------------------|-------------------|-------------------|-------------------|
| | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
| Ratio of Earnings to Fixed Charges | NM ⁽¹⁾ | NM ⁽¹⁾ | NM ⁽¹⁾ | NM ⁽¹⁾ | NM ⁽¹⁾ | NM ⁽¹⁾ |

(1)

Ratios of less than one-to-one are presented as "NM" or not meaningful. For purposes of computing this ratio of earnings to fixed charges, fixed charges consist of project-level interest expense and corporate level interest expense. Earnings consist of earnings from continuing operations and distributed income of equity investees, excluding income taxes, non-controlling interests share in earnings and fixed charges, other than capitalized interest. Earnings were insufficient to cover fixed charges as the loss before taxes was \$65.1 million for the nine months ended September 30, 2017, \$81.7 million, \$53.8 million, \$103.6 million, \$26.6 million and \$135.2 million for the years ended December 31, 2016, 2015, 2014, 2013 and 2012, respectively. These amounts are the additional earnings that would be necessary to result in a one-to-one ratio.

Supplemental Canadian Disclosure

The following information under "Currency and Exchange Information," "Prior Sales," "Trading Price and Volume," "Consolidated Capitalization" and "Earnings Coverage Ratios" is included solely for the purposes of complying with the requirements of applicable securities laws in each of the provinces of Canada in which this prospectus is filed.

Currency and Exchange Rate Information

The business of many of the Company's power generation projects, described under "Our Company" above, is conducted in major markets in the United States and their revenues and expenses are denominated, earned and incurred primarily in U.S. dollars. The reporting currency used in the Company's financial statements is U.S. dollars. The following table sets forth, for each period indicated: (i) the high and low noon, or high and low average daily, exchange rates during such period; (ii) the average noon or daily exchange rates for such period; and (iii) the noon or average daily exchange rate at the end of such period, for one U.S. dollar, expressed in Canadian dollars, as quoted by the Bank of Canada. As of May 1, 2017, the Bank of Canada no longer publishes updated data for exchange rates published under previous methodologies, including daily noon and closing rates, as well as high and low rates. As a result, the exchange rates presented for the nine months ended September 30, 2017 are based on the Bank of Canada's new methodology that calculates an average daily exchange rate. On December 18, 2017, the daily average exchange rate as quoted by the Bank of Canada was US\$1.00 = Cdn\$1.2865.

| | Nine Months Ended September 30 | | | Twelve Months Ended December 31 | | |
|------------|-----------------------------------|----------------|----------------|------------------------------------|----------------|--|
| | 2017 (Average Daily) | 2016 (Noon) | 2016 (Noon) | 2015 (Noon) | 2014 (Noon) | |
| High | Cdn\$ 1.3743 | Cdn\$ 1.4589 | Cdn\$ 1.4589 | Cdn\$ 1.3990 | Cdn\$ 1.1643 | |
| Low | Cdn\$ 1.2128 | Cdn\$ 1.2544 | Cdn\$ 1.2544 | Cdn\$ 1.1728 | Cdn\$ 1.0614 | |
| Average | Cdn\$ 1.3074 | Cdn\$ 1.3218 | Cdn\$ 1.3248 | Cdn\$ 1.2787 | Cdn\$ 1.1045 | |
| Period End | Cdn\$ 1.2480 | Cdn\$ 1.3117 | Cdn\$ 1.3427 | Cdn\$ 1.3840 | Cdn\$ 1.1601 | |

Source: Bank of Canada

Table of Contents**Prior Sales**

During the 12-month period before the date of this prospectus, the Company has not issued any securities, or issued any securities that are convertible or exchangeable into securities, other than the following issuances of common shares pursuant the Company's long-term incentive plan (the "LTIP"):

| Date | Price Per Common Share | | Number of Common Shares |
|-----------|------------------------|------|-------------------------|
| 3/1/2017 | US\$ | 2.38 | 579,609 |
| 4/30/2017 | US\$ | 2.51 | 4,950 |
| 5/12/2017 | US\$ | 2.41 | 6,710 |
| 6/23/2017 | US\$ | 2.48 | 7,943 |
| 6/30/2017 | US\$ | 2.40 | 31,808 |
| 8/18/2017 | US\$ | 2.46 | 10,296 |
| 8/29/2017 | US\$ | 2.43 | 14,163 |

Trading Price and Volume

The common shares began trading on the TSX on December 2, 2009, under the trading symbol "ATP" and on the NYSE on July 23, 2010 under the trading symbol "AT". The following tables show the monthly range of high and low prices per common share and the total volume of common shares traded on the TSX and the NYSE during the 12-month period before the date of this prospectus. On December 18, 2017, being the last day on which the common shares traded prior to the date of this prospectus, the closing price of the common shares on the TSX and on the NYSE was Cdn\$3.07 and US\$2.35, respectively.

| TSX Date | High | | Low | | Volume |
|-----------------------|-------|------|-------|------|-----------|
| December 2016 | Cdn\$ | 3.64 | Cdn\$ | 3.31 | 1,497,008 |
| January 2017 | Cdn\$ | 3.54 | Cdn\$ | 3.02 | 2,118,444 |
| February 2017 | Cdn\$ | 3.15 | Cdn\$ | 2.97 | 832,618 |
| March 2017 | Cdn\$ | 3.60 | Cdn\$ | 3.06 | 1,433,782 |
| April 2017 | Cdn\$ | 3.62 | Cdn\$ | 3.30 | 908,292 |
| May 2017 | Cdn\$ | 3.45 | Cdn\$ | 3.11 | 1,044,463 |
| June 2017 | Cdn\$ | 3.45 | Cdn\$ | 3.05 | 1,226,724 |
| July 2017 | Cdn\$ | 3.15 | Cdn\$ | 2.87 | 930,428 |
| August 2017 | Cdn\$ | 3.19 | Cdn\$ | 2.87 | 1,072,341 |
| September 2017 | Cdn\$ | 3.12 | Cdn\$ | 2.88 | 964,005 |
| October 2017 | Cdn\$ | 3.23 | Cdn\$ | 3.00 | 909,582 |
| November 2017 | Cdn\$ | 3.29 | Cdn\$ | 2.98 | 979,386 |
| December 1 - 18, 2017 | Cdn\$ | 3.26 | Cdn\$ | 3.04 | 660,495 |

Table of Contents

| NYSE Date | | High | | Low | Volume |
|-----------------------|------|-------|------|------|-----------|
| December 2016 | US\$ | 2.725 | US\$ | 2.50 | 1,817,510 |
| January 2017 | US\$ | 2.65 | US\$ | 2.30 | 1,129,412 |
| February 2017 | US\$ | 2.40 | US\$ | 2.25 | 959,570 |
| March 2017 | US\$ | 2.70 | US\$ | 2.30 | 1,845,607 |
| April 2017 | US\$ | 2.70 | US\$ | 2.45 | 1,029,920 |
| May 2017 | US\$ | 2.55 | US\$ | 2.30 | 1,086,044 |
| June 2017 | US\$ | 2.55 | US\$ | 2.35 | 2,150,450 |
| July 2017 | US\$ | 2.425 | US\$ | 2.30 | 1,187,233 |
| August 2017 | US\$ | 2.50 | US\$ | 2.30 | 1,174,928 |
| September 2017 | US\$ | 2.50 | US\$ | 2.35 | 1,455,027 |
| October 2017 | US\$ | 2.55 | US\$ | 2.40 | 1,087,040 |
| November 2017 | US\$ | 2.55 | US\$ | 2.35 | 1,210,863 |
| December 1 - 18, 2017 | US\$ | 2.55 | US\$ | 2.35 | 1,428,394 |

The Series C Debentures issued pursuant to the trust indenture dated as of December 17, 2009 (the "Original Indenture") between the Company and Computershare Trust Company of Canada (the "Canadian Debenture Trustee"), as supplemented by the second supplemental indenture dated July 5, 2012 between the Company and the Canadian Debenture Trustee and as further supplemented by the sixth supplemental indenture dated March 22, 2013 between the Company and the Canadian Debenture Trustee, were listed for trading on the TSX on July 5, 2012, under the trading symbol "ATP.DB.U". The following table shows the monthly range of high and low prices per Cdn\$100 principal amount of Series C Debentures and total monthly volumes traded on the TSX during the period before the date of this prospectus. No Series C Debentures were traded on the TSX on December 18, 2017. On December 15, 2017, being the last day on which the Series C Debentures traded prior to the date of this prospectus, the closing price of the Series C Debentures on the TSX was Cdn \$100.25 per Cdn \$100 principal amount of such debentures.

| Date | | High | | Low | Volume |
|-----------------------|-------|--------|-------|--------|--------|
| December 2016 | Cdn\$ | 99.21 | Cdn\$ | 98.49 | 9,600 |
| January 2017 | Cdn\$ | 99.31 | Cdn\$ | 98.75 | 4,780 |
| February 2017 | Cdn\$ | 100.11 | Cdn\$ | 99.40 | 4,730 |
| March 2017 | Cdn\$ | 100.51 | Cdn\$ | 99.90 | 3,080 |
| April 2017 | Cdn\$ | 100.55 | Cdn\$ | 100.05 | 10,750 |
| May 2017 | Cdn\$ | 101.00 | Cdn\$ | 100.25 | 5,290 |
| June 2017 | Cdn\$ | 100.56 | Cdn\$ | 100.20 | 6,530 |
| July 2017 | Cdn\$ | 101.00 | Cdn\$ | 100.12 | 2,230 |
| August 2017 | Cdn\$ | 100.35 | Cdn\$ | 100.30 | 2,690 |
| September 2017 | Cdn\$ | 100.53 | Cdn\$ | 100.20 | 3,840 |
| October 2017 | Cdn\$ | 100.30 | Cdn\$ | 99.75 | 5,140 |
| November 2017 | Cdn\$ | 100.50 | Cdn\$ | 100.21 | 5,470 |
| December 1 - 18, 2017 | Cdn\$ | 100.51 | Cdn\$ | 100.21 | 610 |

The Series D Debentures issued pursuant to the Original Indenture, as supplemented by the fourth supplemental indenture dated November 29, 2012 among the Company, the Canadian Debenture Trustee and Computershare Trust Company, N.A. (the "U.S. Debenture Trustee") and as further supplemented by the fifth supplemental indenture dated December 11, 2012 among the Company, the Canadian Debenture Trustee and the U.S. Debenture Trustee, were listed for trading on the TSX on December 11, 2012, under the trading symbol "ATP.DB.D". The following table shows the monthly range of high and low prices per Cdn\$100 principal amount of Series D Debentures and total monthly volumes traded on the TSX during the period before the date of this prospectus. On December 18, 2017, being the last day on which the Series D Debentures traded prior to the date of

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

Table of Contents

this prospectus, the closing price of the Series D Debentures on the TSX was Cdn\$100.45 per Cdn\$100 principal amount of such debentures.

| Date | High | Low | Volume |
|-----------------------|--------------|--------------|--------|
| December 2016 | Cdn\$ 100.25 | Cdn\$ 97.00 | 12,610 |
| January 2017 | Cdn\$ 100.26 | Cdn\$ 99.50 | 13,120 |
| February 2017 | Cdn\$ 100.98 | Cdn\$ 99.77 | 9,210 |
| March 2017 | Cdn\$ 100.76 | Cdn\$ 100.25 | 5,900 |
| April 2017 | Cdn\$ 100.99 | Cdn\$ 100.40 | 10,290 |
| May 2017 | Cdn\$ 101.50 | Cdn\$ 100.50 | 9,825 |
| June 2017 | Cdn\$ 102.26 | Cdn\$ 100.25 | 10,310 |
| July 2017 | Cdn\$ 102.00 | Cdn\$ 100.26 | 4,145 |
| August 2017 | Cdn\$ 100.87 | Cdn\$ 100.00 | 10,800 |
| September 2017 | Cdn\$ 101.25 | Cdn\$ 100.38 | 4,930 |
| October 2017 | Cdn\$ 100.90 | Cdn\$ 100.40 | 6,350 |
| November 2017 | Cdn\$ 102.50 | Cdn\$ 100.35 | 8,335 |
| December 1 - 18, 2017 | Cdn\$ 101.18 | Cdn\$ 100.26 | 4,370 |

Consolidated Capitalization

The following table presents the cash and cash equivalents and consolidated capitalization of the Company as of September 30, 2017: (i) on an actual basis; and (ii) on an as adjusted basis to give effect to the repayment by the Company on October 13, 2017 of the term loan at the Company's Piedmont project (the "Piedmont Loan") and termination of the related interest rate swap agreements (the "Swap Agreements") with cash on hand.

| | As of September 30, 2017 | |
|---|--------------------------|----------------------------|
| | Actual | As adjusted |
| | (unaudited) | |
| | (in thousands of US\$) | |
| Cash and cash equivalents: | 122,374 | 58,289 ⁽²⁾ |
| Debt: | | |
| Series C Debentures | 42,532 | 42,532 |
| Series D Debentures | 64,888 | 64,888 |
| Senior unsecured notes | 168,273 | 168,273 |
| Current portion of senior secured term loan facility | 92,500 | 92,500 |
| Senior secured term loan facility | 470,228 | 470,228 |
| Current portion of project-level debt | 63,958 | 9,400 |
| Project-level debt | 24,185 | 24,185 |
| Total debt: | 926,564 | 872,006 |
| Shareholders' equity: | | |
| Common shares, no par value per share, unlimited authorized shares, 115,211,976, shares issued and outstanding, actual; 115,211,976 shares issued and outstanding, as adjusted ⁽¹⁾ | 1,274,336 | 1,274,336 |
| Preferred shares issued by a subsidiary company | 215,157 | 215,157 |
| Accumulated other comprehensive loss | (132,303) | (132,303) |
| Retained deficit | (1,117,321) | (1,127,674) ⁽³⁾ |
| Total shareholder's equity | 239,869 | 229,516 |
| Total capitalization | 1,166,433 | 1,101,522 |

- (1) Excludes (i) 8,050,306 shares issuable upon conversion, redemption, purchase for cancellation or maturity of the Company's outstanding convertible debentures, and (ii) 2,884,574 unvested notional shares granted under the terms of the LTIP.

Table of Contents

- (2) Cash and cash equivalents includes adjustments for the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as related refinancing costs.
- (3) Retained deficit includes adjustments for expenses related to the repayment of the Piedmont Loan and termination of the Swap Agreements, as well as a write down of related deferred financing costs.

Other than as set out above, there have been no material changes in share and loan capital of the Company, on a consolidated basis, since September 30, 2017.

Earnings Coverage Ratios

The earnings coverage ratios set forth below have been prepared on the basis of the U.S. GAAP financial statements incorporated by reference in this prospectus. Earnings coverage is equal to net income before interest expense on all long-term debt and income taxes, divided by interest expense on long-term debt. The calculations below have been adjusted to account for the repayment of debt on the Piedmont Loan which occurred subsequent to September 30, 2017.

In accordance with the presentation and measurement requirements of U.S. GAAP, the Company's interest requirements for all long term debt, including the current portion, amounted to approximately US\$108.7 million and approximately US\$69.8 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively. The Company's loss before interest and income tax for the 12 months ended December 31, 2016 and September 30, 2017, respectively, was approximately US\$21.8 million and US\$26.1 million. Accordingly, the earnings coverage ratios for each of the 12 months ended December 31, 2016 and the 12 months ended September 30, 2017 are less than one-to-one. The additional earnings required to achieve an earnings coverage ratio of 1.0 would have been approximately US\$130.5 million and approximately US\$95.9 million for the 12 months ended December 31, 2016 and September 30, 2017, respectively.

The earnings coverage ratios and the interest requirements do not give effect to the issuance of any debt securities that may be issued pursuant to any prospectus supplement since the aggregate principal amounts and the terms of such debt securities are not presently known. Earnings coverage ratios will be provided as required in the applicable prospectus supplement(s) with respect to the issuance of debt securities pursuant to this prospectus.

Description of Common Shares

The following summary description sets forth some of the general terms and provisions of our common shares. Because this is a summary description, it does not contain all of the information that may be important to you. For a more detailed description of our common shares, you should refer to the provisions of our Articles of Continuance, which we refer to as our "Articles."

Common Shares

Our Articles authorize an unlimited number of common shares. On December 18, 2017, 115,211,976 of our common shares were issued and outstanding.

Our common shares are listed on the TSX under the symbol "ATP" and on the NYSE under the symbol "AT." Holders of our common shares are entitled to receive dividends as and when declared by our board of directors and are entitled to one vote per common share on a vote by poll, or one vote per person present who is a shareholder or a proxy holder for a vote by show of hands, in each case with respect to all matters to be voted on at meetings of shareholders. We are limited in our ability to pay dividends on our common shares by restrictions under the *Business Corporations Act* (British Columbia), which we refer to as the "BC Act," relating to our solvency before and after the payment

Table of Contents

of a dividend. Holders of our common shares have no statutory preemptive, conversion or redemption rights and are not subject to further assessment by us.

Upon our voluntary or involuntary liquidation, dissolution or winding up, the holders of common shares are entitled to share ratably in the remaining assets available for distribution, after payment of liabilities.

Pursuant to our Articles and the provisions of the BC Act, certain actions that may be proposed by us require the approval of our shareholders. We may, by special resolution and subject to our Articles, increase our authorized capital by such means as creating shares with or without par value or increasing the number of shares with or without par value. We may, by special resolution and subject to the BC Act, alter our Articles to subdivide, consolidate, change from shares with par value to shares without par value or from shares without par value to shares with par value or change the designation of all or any of our shares. We may also, by special resolution and subject to the BC Act, alter our Articles to create, define, attach, vary, or abrogate special rights or restrictions to any shares. Under the BC Act and our Articles, a special resolution is a resolution passed at a duly-convened meeting of shareholders by not less than two-thirds of the votes cast in person or by proxy at the meeting, or a written resolution consented to by all shareholders who would have been entitled to vote at the meeting of shareholders.

Certain Provisions of our Articles and the BC Act

We are governed by the BC Act. Our Articles contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise.

Advance Notice Procedures

Under the BC Act, shareholders may make proposals for matters to be considered at the annual general meeting of shareholders. Such proposals must be sent to us in advance of any proposed meeting by delivering a timely written notice in proper form to our registered office. The notice must include information on the business the shareholder intends to bring before the meeting. These provisions could have the effect of delaying until the next shareholder meeting shareholder actions that are favored by the holders of a majority of our outstanding voting securities. Our Articles establish an advance notice procedure for "special business" and shareholder proposals to be brought before a meeting of shareholders. For special business, advance notice describing the special business to be discussed at the meeting must be provided and that notice must include any documents to be approved or ratified as an addendum or state that such document will be available for inspection at our records office or other reasonably accessible location. Shareholders at an annual meeting may not consider proposals or nominations that are not specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a shareholder of record on the record date for the meeting or a proxyholder who is entitled to vote at the meeting.

We also have adopted an advance notice policy (the "Advance Notice Policy"), which requires advance notice to the Company in circumstances where nominations of persons for election to the board of directors are made by shareholders other than pursuant to: (i) a proposal made in accordance with the BC Act; or (ii) a requisition of the shareholders made in accordance with the BC Act. Among other things, the Advance Notice Policy fixes a deadline by which shareholders must submit director nominations to the corporate secretary of the Company prior to any annual or special meeting of shareholders and sets forth the specific information that a shareholder must include in such notice for an effective nomination to occur. Pursuant to the Advance Notice Policy, no person will be eligible for election as a director of the Company unless nominated in accordance with the provisions of the Advance Notice Policy.

Table of Contents

Shareholder Requisitioned Meeting

Under the BC Act, shareholders holding in the aggregate $\frac{1}{20}$ of our outstanding common shares may request the directors to call a general meeting of shareholders to deal with matters that may be dealt with at a general meeting, including election of directors. If the directors do not call the meeting within the timeframes specified in the BC Act, the shareholder can call the meeting and we must reimburse the costs.

Removal of Directors and Increasing Board Size

Under our Articles, directors may be removed by shareholders by passing an ordinary resolution of a simple majority of shareholders with the right to vote on such resolution. Further, under our Articles and subject to the BC Act, the directors may appoint additional directors up to one-third of the directors elected by the shareholders.

Canadian and U.S. Securities Laws

We are a reporting issuer in each of the provinces and territories of Canada and therefore subject to the securities laws in each such province and territory. Canadian securities laws require reporting of share purchases and sales by shareholders acquiring beneficial ownership of, or the power to exercise control or direction over, 10% or more of our common shares, including certain prescribed public disclosure of their intentions for their holdings. Canadian securities laws also govern how any offer to acquire 20% or more of our equity or voting shares must be conducted. The foregoing is a limited and general summary of certain aspects of applicable securities law in the provinces and territories of Canada, all in effect as of the date hereof. This summary is not a comprehensive description of relevant or applicable considerations regarding such requirements and, accordingly, is not intended to be, and should not be interpreted as, legal advice to any prospective purchaser and no representation with respect to such requirements to any prospective purchaser is made. Prospective investors should consult their own Canadian legal advisors with respect to any questions regarding securities law in the provinces and territories of Canada.

We are not considered a "foreign private issuer" as defined in Rule 405 of Regulation C under the Securities Act and Rule 3b-4 of the Exchange Act and, as a consequence, the beneficial ownership reporting requirements of the Exchange Act will apply to our shareholders. Prospective investors should consult their own U.S. legal advisors with respect to any questions regarding the securities law of the United States.

Indemnification of Directors and Officers

Under the BC Act, we may indemnify a present or former director or officer or a person who acts or acted at our request as a director or officer of another corporation or one of our affiliates, and his or her heirs and personal representatives, against all costs, charges and expenses, including legal and other fees and amounts paid to settle an action or satisfy a judgment, actually and reasonably incurred by him or her including an amount paid to settle an action or satisfy a judgment in respect of any legal proceeding or investigative action to which he or she is made a party by reason of his or her position and provided that the director or officer acted honestly and in good faith with a view to the best interests of Atlantic Power Corporation or such other corporation, and, in the case of a criminal or administrative action or proceeding, had reasonable grounds for believing that his or her conduct was lawful. Other forms of indemnification may be made with court approval.

In accordance with our Articles, we shall indemnify every director or former director, or may, subject to the BC Act, indemnify any other person. We have entered into indemnity agreements with our directors and executive officers, whereby we have agreed to indemnify the directors and officers to the extent permitted by our Articles and the BC Act.

Table of Contents

Our Articles permit us, subject to the limitations contained in the BC Act, to purchase and maintain insurance on behalf of any present or former director, employee or agent of the Company and certain other persons. We currently maintain three insurance policies under which our directors and officers are insured, within the limits and subject to the limitations of the policies, against certain expenses in connection with the defense of, and certain liabilities that might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been such directors or officers.

Transfer Agent and Registrar

Computershare Investor Services Inc. and Computershare Trust Company, N.A. serve as our transfer agents and registrars for our common shares.

Description of Debt Securities

We may offer unsecured debt securities in one or more series which may be senior or subordinated and which may be convertible into another security.

The following description briefly sets forth certain general terms and provisions of the debt securities. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to the debt securities, will be described in the applicable prospectus supplement. We may issue subordinated debt securities in one or more series under an Ontario law indenture, dated as of December 17, 2009, between us and Computershare Trust Company of Canada, as Canadian trustee, as supplemented by a fourth supplemental indenture, dated as of November 29, 2012, among us, the Canadian trustee and Computershare Trust Company, N.A., as U.S. trustee (together with the Canadian trustee, the "Indenture Trustees"). We also may issue senior debt securities in one or more series under a New York law indenture to be entered into between us and one or more trustees to be named in the indenture. We use the term "indentures" to refer to both the Canadian indenture and the New York indenture, and we use the term "trustee" to refer to the trustees under either indenture, as applicable. The indentures are qualified under the Trust Indenture Act of 1939, as amended (the "TIA"). The terms of the debt securities will include those set forth in the applicable indenture and those made a part of the indenture by the TIA. The Canadian indenture and form of the New York indenture are exhibits to the registration statement of which this prospectus forms a part. You should read the summary below, the applicable prospectus supplement and the provisions of the applicable indenture and supplemental indenture, if any, in their entirety before investing in our debt securities.

The aggregate principal amount of debt securities that may be issued under the indentures is unlimited. The prospectus supplement relating to any series of debt securities that we may offer will contain the specific terms of the debt securities. These terms may include the following:

the title and aggregate principal amount of the debt securities and any limit on the aggregate principal amount;

whether the debt securities will be senior or subordinated;

any applicable subordination provisions for any subordinated debt securities;

the maturity date(s) or method for determining same;

the interest rate(s) or the method for determining same;

the dates on which interest will accrue or the method for determining dates on which interest will accrue and dates on which interest will be payable and whether interest shall be payable in cash or additional securities;

Table of Contents

whether the debt securities are convertible or exchangeable into other securities and any related terms and conditions;

redemption or early repayment provisions;

authorized denominations;

if other than the principal amount, the principal amount of debt securities payable upon acceleration;

place(s) where payment of principal and interest may be made, where debt securities may be presented and where notices or demands upon the company may be made;

whether such debt securities will be issued in whole or in part in the form of one or more global securities and the date as which the securities are dated if other than the date of original issuance;

amount of discount or premium, if any, with which such debt securities will be issued;

any covenants applicable to the particular debt securities being issued;

any additions or changes in the defaults and events of default applicable to the particular debt securities being issued;

the guarantors of each series, if any, and the extent of the guarantees (including provisions relating to seniority, subordination, security and release of the guarantees), if any;

the currency, currencies or currency units in which the purchase price for, the principal of and any premium and any interest on, such debt securities will be payable;

the time period within which, the manner in which and the terms and conditions upon which the holders of the debt securities or the company can select the payment currency;

our obligation or right to redeem, purchase or repay debt securities under a sinking fund, amortization or analogous provision;

our obligation or right to redeem, purchase or repay debt securities under a sinking fund, amortization or analogous provision;

any restriction or conditions on the transferability of the debt securities;

provisions granting special rights to holders of the debt securities upon occurrence of specified events;

Edgar Filing: ATLANTIC POWER CORP - Form 424B5

additions or changes relating to compensation or reimbursement of the trustee of the series of debt securities;

additions or changes to the provisions for the defeasance of the debt securities or to provisions related to satisfaction and discharge of the indenture;

whether and under what circumstances we will pay additional amounts to non-Canadian holders in respect of any tax assessment or government charge, and, if so, whether we will have the option to redeem the debt securities rather than pay such additional amounts;

provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture and the execution of supplemental indentures for such series; and

any other terms of the debt securities (which terms shall not be inconsistent with the provisions of the TIA, but may modify, amend, supplement or delete any of the terms of the indenture with respect to such series debt securities).

Table of Contents

We may sell the debt securities, including original issue discount securities, at par or at a substantial discount below their stated principal amount. Unless we inform you otherwise in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series or any other series outstanding at the time of issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of securities under the applicable indenture.

Material United States and Canadian federal income tax consequences and special considerations, if any, applicable to any such series will be described in the applicable prospectus supplement.

Debt Securities Issued under the Canadian Indenture

The following summary description sets forth some of the general terms and provisions of the Canadian indenture. Because this is a summary description, it does not contain all of the information that may be important to you and is qualified in its entirety by reference to the Canadian indenture, including the form of debt security attached thereto, and any supplement to the Canadian indenture under which debt securities are issued (each such series of debt securities, "Canadian Debt Securities").

General

Canadian Debt Securities issued under and pursuant to the provisions of the Canadian indenture, as supplemented by a supplement (each, a "supplemental indenture") will be issuable only in denominations of \$1,000 and integral multiples thereof, unless otherwise specified in such supplemental indenture. At the closing of the applicable offering, the Canadian Debt Securities will be available for delivery in book-entry form only through the facilities of CDS Clearing and Depository Services Inc. ("CDS"). Holders of beneficial interests in the Canadian Debt Securities will not have the right to receive physical certificates evidencing their ownership of Canadian Debt Securities except under certain circumstances described under "Description of Canadian Debt Securities Book Entry, Delivery and Form." No fractional Canadian Debt Securities will be issued.

The interest on the Canadian Debt Securities will be payable in lawful money of Canada, unless otherwise specified in the applicable supplemental indenture. Subject to any required regulatory approval and provided no event of default has occurred and is continuing, the Company shall have the option, to pay such interest by delivering a number of common shares to an agent for sale, in which event holders of the Canadian Debt Securities will be entitled to receive a cash payment equal to the interest owed from the proceeds of the sale of the requisite number of common shares by the agent. The Canadian indenture does not, and any supplemental indenture will not, contain a requirement for the Company to increase the amount of interest or other payments to holders of Canadian Debt Securities should the Company become required to withhold amounts in respect of income or similar taxes on payment of interest or other amounts.

The principal on the Canadian Debt Securities will be payable in lawful money of Canada, unless otherwise specified in the applicable supplemental indenture, or, at the option of the Company and subject to applicable regulatory approval, by delivery of common shares to satisfy in whole or in part its obligation to repay the principal under the Canadian Debt Securities as further described under "Description of Canadian Debt Securities Payment upon Redemption or Maturity" and "Description of Canadian Debt Securities Redemption and Purchase."

The Canadian Debt Securities will be direct obligations of the Company and will not be secured by any mortgage, pledge, hypothec or other charge and will be subordinated to other liabilities of the Company as described under "Description of Canadian Debt Securities Subordination."

The Canadian indenture does not, and any supplemental indenture will not, restrict the Company from incurring additional indebtedness for borrowed money or from mortgaging, pledging or charging

Table of Contents

its assets to secure any indebtedness. The Canadian Debt Securities will be transferable, and may be presented for conversion, at the principal offices of the Canadian trustee in Toronto, Ontario.

Conversion Privilege

The Canadian Debt Securities may, if so provided in the applicable supplemental indenture, be convertible at the holder's option into fully paid, non-assessable and freely-tradeable common shares at any time prior to the close of business on the earlier of the specified maturity date and the last business day immediately preceding the date specified by the Company for redemption of the Canadian Debt Securities, at a specified conversion price. No adjustment will be made for dividends or distributions payable on common shares issuable upon conversion; however, holders converting their Canadian Debt Securities shall be entitled to receive, in addition to the applicable number of common shares, accrued and unpaid interest in respect thereof for the period up to but excluding the date of conversion from the latest interest payment date. For certainty, such holder will not be entitled to interest in respect of the period commencing on the date of conversion until the next succeeding interest payment date, notwithstanding that such holder may have been a holder of Canadian Debt Securities on the record date for the payment of interest on such interest payment date.

Subject to the provisions thereof, the Canadian indenture provides for the adjustment of the conversion rights in certain events including: (i) the subdivision or consolidation of the outstanding common shares; (ii) the issue of common shares or securities convertible into common shares by way of stock dividend or other distribution; (iii) the issuance of options, rights or warrants to all or substantially all the holders of common shares entitling them to acquire common shares or other securities convertible into common shares at less than 95% of the then current market price of the common shares; and (iv) the distribution to all or substantially all holders of common shares of any securities or assets (other than cash dividends and equivalent dividends in securities paid in lieu of cash dividends in the ordinary course). Any supplemental indenture also may provide for the adjustment of the conversion rights in certain other events, including (x) the payment to all holders of common shares of cash or any other consideration in respect of an issuer bid for common shares by the Company to the extent that the cash and fair market value of any other consideration included in the payment per common share exceeds the current market price of the common shares on the date of expiry of such issuer bid; and (y) the payment of certain cash dividends to all or substantially all holders of common shares.

Provided the common shares are then listed on the TSX, the term "current market price" will mean the volume weighted average price of the common shares on the TSX for the 20 consecutive trading days ending on the fifth trading day preceding the date of the applicable event.

There will be no adjustment of the conversion price in respect of any event described in (ii), (iii) or (iv) above if, subject to prior regulatory approval, if required, the holders of the Canadian Debt Securities are allowed to participate as though they had converted their Canadian Debt Securities prior to the applicable record date or effective date. The Company will not be required to make adjustments in the conversion price unless the cumulative effect of such adjustments would change the conversion price by at least 1%. In the case of any reclassification of the common shares or a capital reorganization of the Company (other than as described in (i) or (ii) above) or in case of any amalgamation, arrangement or merger of the Company with or into any other entity, or in the case of any sale or conveyance of the properties and assets of the Company as, or substantially as, an entirety to any other entity, or a liquidation, dissolution or winding-up of the Company, the terms of the conversion privilege shall be adjusted so that each Canadian Debt Security shall, after such reclassification, capital reorganization, consolidation, amalgamation, arrangement or merger, sale or conveyance or liquidation, dissolution or winding-up or other similar transaction, be exercisable, in lieu of common shares, for the kind and amount of securities or property of the Company, or such continuing, successor or purchaser entity, as the case may be, which the holder thereof would have

Table of Contents

been entitled to receive as a result of such reclassification, capital reorganization, consolidation, amalgamation, arrangement or merger, sale or conveyance or liquidation, dissolution or winding-up or other similar transaction if on the effective date thereof it had been the holder of the number of common shares into which the Canadian Debt Security was convertible prior to the effective date of such reclassification, capital reorganization, consolidation, amalgamation, arrangement or merger, sale or conveyance or liquidation, dissolution or winding-up or other similar transaction. For example, if the Company were to sell all of its properties and assets for cash consideration, any Canadian Debt Securities that remain outstanding following such sale would then be convertible into cash, in an amount per common share otherwise issuable upon conversion of the Canadian Debt Security equal to the cash consideration per common share received by the holders of common shares pursuant to such sale.

No fractional common shares will be issued on any conversion of the Canadian Debt Securities, but in lieu thereof, the Company shall satisfy such fractional interest by a cash payment equal to the current market price of such fractional interest. Upon conversion, the Company may offer, and the converting holder may agree to, the delivery of cash for all or a portion of the Canadian Debt Securities surrendered in lieu of common shares.

Redemption and Purchase

The Canadian Debt Securities may not be redeemable by the Company on or before the date specified. See "Description of Canadian Debt Securities Repurchase Upon a Change of Control." During specified periods, the Canadian Debt Securities may be redeemed at the option of the Company, in whole at any time or in part from time to time, on not more than 60 days and not less than 30 days prior notice, at specified redemption price(s) with or without specified conditions, including, for example, that the volume weighted average price of the common shares on the TSX for the 20 consecutive trading days ending on the fifth trading day preceding the date on which notice of redemption is given is not less than a specified percentage of the conversion price.

In the case of redemption of less than all of the Canadian Debt Securities, the Canadian Debt Securities to be redeemed will be selected by the Indenture Trustees on a *pro rata* basis or in such other manner as such trustees deems equitable, subject to the consent of the TSX.

The Company will have the right to purchase Canadian Debt Securities in the market, by tender or by private contract subject to regulatory requirements; provided, however, that if an event of default (as described below) has occurred and is continuing, the Company will not have the right to purchase the Canadian Debt Securities by private contract.

Payment upon Redemption or Maturity

On redemption (the "Redemption Date") or on the maturity date, the Company will repay the indebtedness represented by the Canadian Debt Securities by paying to the Indenture Trustees in lawful money of Canada, unless another currency is specified in the applicable supplemental indenture, an amount equal to the redemption price or principal amount of the outstanding Canadian Debt Securities, together with accrued and unpaid interest thereon, respectively. The Company may, at its option, on not more than 60 days and not less than 40 days prior notice and subject to any required regulatory approvals, unless an event of default has occurred and is continuing, elect to satisfy its obligation to repay, in whole or in part, the principal amount of the Canadian Debt Securities which are to be redeemed or which have matured by issuing and delivering freely tradeable common shares to the holders of the Canadian Debt Securities. The number of common shares to be issued will be determined by dividing the principal amount of the Canadian Debt Securities which are to be redeemed or have matured by 95% of the current market price of the common shares on the Redemption Date or maturity date, as the case may be.

Table of Contents

No fractional common shares will be issued to holders of Canadian Debt Securities, but in lieu thereof, the Company shall satisfy such fractional interest by a cash payment equal to the current market price of such fractional interest.

The delivery of common shares to satisfy the Company's obligations under the Canadian Debt Securities may require regulatory approval, including filing a prospectus qualifying the distribution of such common shares or obtaining an exemptive relief order from the relevant Canadian securities regulators in the event that an exemption from the prospectus and registration requirements of applicable Canadian securities laws is not available at the time of the delivery of common shares. In addition, any issuance of common shares to satisfy the Company's obligations under the Canadian Debt Securities will be subject to the approval of the TSX and the NYSE (and any other exchange on which the common shares are listed at the relevant time).

Cancellation

All Canadian Debt Securities converted, redeemed or purchased will be cancelled and may not be reissued or resold.

Subordination

The payment of the principal of, and interest on, the Canadian Debt Securities will be subordinated in right of payment, in the circumstances referred to below and more particularly as set forth in the Canadian indenture, to the prior payment in full of all existing and future Senior Indebtedness (as defined below) of the Company, including our senior secured term loan facilities, senior secured revolving credit facilities and our medium term notes due June 23, 2036. "Senior Indebtedness" of the Company is defined in the Canadian indenture and includes: (a) indebtedness of the Company for borrowed money; (b) obligations of the Company evidenced by bonds, debentures, notes or other similar instruments; (c) obligations of the Company arising pursuant or in relation to bankers' acceptances, letters of credit and letters of guarantee (including payment and reimbursement obligations in respect thereof) or indemnities issued in connection therewith; (d) obligations of the Company under any swap, hedging or other similar contracts or arrangements; (e) obligations of the Company under guarantees, indemnities, assurances, legally binding comfort letters or other contingent obligations relating to the Senior Indebtedness or other obligations of any other person which would otherwise constitute Senior Indebtedness within the meaning of this definition, including the guarantee of the Company's revolving credit facility; (f) all indebtedness of the Company representing the deferred purchase price of any property including, without limitation, purchase money mortgages; (g) accounts payable to trade creditors; (h) all renewals, extensions and refinancing of any of the foregoing; and (i) all costs and expenses incurred by or on behalf of the holder of any Senior Indebtedness in enforcing payment or collection of any such Senior Indebtedness, including enforcing any security interest securing the same. The Canadian Debt Securities will be effectively structurally subordinate to claims of creditors (including trade creditors) of the Company's subsidiaries. As of September 30, 2017, we had an aggregate amount of \$731 million of Senior Indebtedness outstanding.

All Canadian Debt Securities issued under the Canadian indenture, including our two outstanding series of convertible unsecured subordinated debentures, will rank *pari passu* with each other (regardless of their actual date or terms of issue).

The Canadian indenture provides that in the event of any insolvency or bankruptcy proceedings, or any receivership, liquidation or reorganization or other similar proceedings relating to the Company, or to its property or assets, or in the event of any proceedings for voluntary liquidation, dissolution or other winding-up of the Company, whether or not involving insolvency or bankruptcy, or any marshalling of the assets and liabilities of the Company, then holders of Senior Indebtedness will receive payment in full before the holders of Canadian Debt Securities will be entitled to receive any

Table of Contents

payment or distribution of any kind or character, whether in cash, property or securities, which may be payable or deliverable in any such event in respect of any of the Canadian Debt Securities or any unpaid interest accrued thereon.

The Canadian indenture also provides that the Company will not make any payment, and the holders of the Canadian Debt Securities will not be entitled to demand, institute proceedings for the collection of, or receive any payment or benefit (including, without any limitation, by set-off, combination of accounts or otherwise in any manner whatsoever) on account of indebtedness represented by the Canadian Debt Securities at any time when a default or an event of default has occurred with respect to any Senior Indebtedness permitting a senior creditor to demand payment or accelerate the maturity thereof and the notice of such default or event of default has been given by or on behalf of holders of Senior Indebtedness to the Company or the Company otherwise has knowledge thereof, unless such notice has been revoked, such default or event of default has been cured or the Senior Indebtedness has been repaid or satisfied in full as defined in the Canadian indenture.

The Indenture Trustees and the Company will also be authorized (and obligated upon any request from certain holders of Senior Indebtedness) under the Canadian indenture to enter into subordination agreements on behalf of the holders of Canadian Debt Securities with any holder of Senior Indebtedness.

Repurchase upon a Change of Control

Upon the occurrence of a change of control of the Company, the holders of the Canadian Debt Securities will have the right to require the Company to repurchase their Canadian Debt Securities, in whole or in part at a price equal to 100% of the principal amount thereof (the "Offer Price") plus accrued and unpaid interest thereon. A change of control will be deemed to occur upon: (i) an acquisition by a person or group of persons acting jointly or in concert (within the meaning of the Securities Act (Ontario)) of ownership of, or voting control or direction over, 50% or more of the common shares; or (ii) the sale or other transfer of all or substantially all of the consolidated assets of the Company.

A change of control will not include a sale, merger, reorganization, or other similar transaction if the previous holders of the common shares hold at least 50% of the voting control in such merged, reorganized or other continuing entity.

If 90% or more of the aggregate principal amount of the Canadian Debt Securities outstanding on the date of the giving of notice of the change of control have been tendered for purchase following a change of control, the Company will have the right to redeem all the remaining Canadian Debt Securities on the purchase date, together with accrued and unpaid interest to such date. Notice of such redemption must be given to the Indenture Trustees by the Company within 10 days following expiry of the right to require repurchase after the change of control and, as soon as possible thereafter, by the Indenture Trustees to the holders of the Canadian Debt Securities not tendered for purchase.

The Canadian indenture contains notification provisions to the effect that:

the Company will promptly give written notice to the Indenture Trustees of the occurrence of a change of control and the Indenture Trustees will thereafter give to the holders of Canadian Debt Securities a notice of the change of control, the right of the holders of Canadian Debt Securities to require repurchase and the right of the Company to redeem untendered Canadian Debt Securities under certain circumstances; and

a holder of Canadian Debt Securities, to exercise the right to require repurchase following the change of control, must deliver to the Indenture Trustees, not less than five business days prior to the date which is 30 days after the date the Indenture Trustees delivers notice of the change

Table of Contents

of control to the holders of Canadian Debt Securities, written notice of the holder's exercise of the right to require repurchase, together with a duly endorsed form of transfer.

The Company will comply with the requirements of Canadian securities laws and regulations and U.S. federal securities laws and regulations to the extent such laws and regulations are applicable in connection with the repurchase of the Canadian Debt Securities in the event of a change of control.

Cash Change of Control

In addition to the requirement for the Company to repurchase Canadian Debt Securities following a change of control, if a change of control occurs in which 10% or more of the consideration for the common shares in the transaction or transactions constituting a change of control consists of:

cash, other than cash payments for fractional common shares and cash payments made in respect of dissenter's appraisal rights;

equity securities that are not traded or intended to be traded immediately following such transactions on a stock exchange; or

other property that is not traded or intended to be traded immediately following such transactions on a stock exchange,

then subject to regulatory approvals, during the period beginning ten trading days before the anticipated date on which the change of control becomes effective and ending 30 days after the notice of change of control and offer to repurchase Canadian Debt Securities is delivered, holders of Canadian Debt Securities will be entitled to convert their Canadian Debt Securities, subject to certain limitations, and receive, in addition to the number of common shares they would otherwise be entitled to receive as set forth under "Description of Canadian Debt Securities Conversion Privilege" above, an additional number of common shares per \$1,000 principal amount of Canadian Debt Securities (the "Make Whole Premium Shares") to be specified in the applicable supplemental indenture. Any such additional conversion entitlement shall be subject to the change of control transaction having been completed. The Make Whole Premium Shares and the determination thereof will be adjusted in a similar manner as the conversion rate set forth above under "Description of Canadian Debt Securities Conversion Privilege".

The delivery of common shares to satisfy the Company's obligations under the Canadian Debt Securities may require regulatory approval, including filing a prospectus qualifying the distribution of such common shares or obtaining an exemptive relief order from the relevant Canadian securities regulators or the filing and effectiveness of a registration statement and filing of a related prospectus under the Securities Act with the SEC in the event that an exemption from the prospectus and registration requirements of applicable Canadian securities laws or U.S. securities laws is not available at the time of the delivery of common shares. In addition, any issuance of common shares to satisfy the Company's obligations under the Canadian Debt Securities will be subject to the approval of the TSX and the NYSE (and any other exchange on which the common shares are listed at the relevant time).

Modification

The rights of the Canadian Debt Security holders that have been or may be issued under the Canadian indenture or any supplemental indenture may be modified in accordance with the terms of the Canadian indenture. For that purpose, among others, the Canadian indenture contains certain provisions which make binding on all Canadian Debt Security holders resolutions passed at meetings of the Canadian Debt Security holders by votes cast thereat by holders of not less than $66\frac{2}{3}$ of the principal amount of the then outstanding Canadian Debt Securities present at the meeting or represented by proxy, or rendered by instruments in writing signed by the holders of not less than $66\frac{2}{3}\%$ of the principal amount of the then outstanding Canadian Debt Securities. In certain cases, the

Table of Contents

modification will, instead or in addition, require assent by the holders of the required percentage of each particularly affected series of debentures, as the case may be.

Under the Canadian indenture, certain amendments may be made to the Canadian indenture without the consent of the Canadian Debt Security holders, subject to the approval of the TSX, as required, for certain specified purposes, including the following:

to add to the covenants of the Company for the protection of the holders of Canadian Debt Securities or providing for additional events of default;

to make such provisions not inconsistent with the Canadian indenture as may be necessary or desirable with respect to matters or questions arising thereunder, including to make any modifications in the form of the Canadian Debt Securities which do not affect the substance thereof and which in the opinion of the Canadian Debenture Trustees (relying on an opinion of counsel), will not be prejudicial to the interests of the holders of Canadian Debt Securities; and

for any other purpose not inconsistent with the terms of the Canadian indenture, provided that, in the opinion of the Canadian Debenture Trustees (relying on an opinion of counsel), the rights of the holders of Canadian Debt Securities are in no way prejudiced thereby.

Further, the Company and the Canadian Debenture Trustees may without the consent of the Canadian Debt Security holders, by supplemental indenture or otherwise, make any changes or corrections in the Canadian indenture required for the purpose of curing or correcting any ambiguity or defective or inconsistent provisions or mistakes contained in the Canadian indenture or in any supplemental indenture, provided that in the opinion of the Canadian Debenture Trustees (relying on an opinion of counsel) the rights of the Canadian Debt Security holders and senior creditors are in no way prejudiced thereby.

Events of Default

The Canadian indenture provides that an event of default ("Event of Default") in respect of the Canadian Debt Securities will occur if certain events described in the Canadian indenture occur, including if any one or more of the following described events has occurred and is continuing with respect to the Canadian Debt Securities: (i) failure for 15 days to pay interest on the Canadian Debt Securities when due; (ii) failure to pay principal or premium, if any, on the Canadian Debt Securities, whether at maturity, upon redemption, by declaration or otherwise; or (iii) certain events of bankruptcy, insolvency or reorganization of the Company under bankruptcy or insolvency laws. If an Event of Default has occurred and is continuing, the Indenture Trustees may, in their discretion, and shall, upon the request of holders of not less than 25% in principal amount of the then outstanding Canadian Debt Securities, declare the principal of (and premium, if any) and interest on all outstanding Canadian Debt Securities to be immediately due and payable.

Offers for Canadian Debt Securities

The Canadian indenture contains provisions to the effect that if an offer is made for the Canadian Debt Securities which is a take-over bid for Canadian Debt Securities within the meaning of the Securities Act (Ontario) and not less than 90% of the Canadian Debt Securities (other than Canadian Debt Securities held at the date of the take-over bid by or on behalf of the offeror or associates or affiliates of the offeror) are taken up and paid for by the offeror, the offeror will be entitled to acquire the Canadian Debt Securities held by Canadian Debt Security holders who did not accept the offer on the terms offered by the offeror.

Table of Contents

Book Entry, Delivery and Form

Canadian Debt Securities will be issued in the form of fully registered global Canadian Debt Securities (the "Global Debentures") held by, or on behalf of, CDS or its successor (the "Depository"), as custodian for its participants.

All Canadian Debt Securities will be represented in the form of Global Debentures registered in the name of the Depository or its nominee. Purchasers of Canadian Debt Securities represented by Global Debentures will not receive Canadian Debt Securities in definitive form. Rather, the Canadian Debt Securities will be represented only in "book-entry only" form (unless the Company, in its sole discretion, elects to prepare and deliver definitive Canadian Debt Securities in fully registered form). Beneficial interests in the Global Debentures, constituting ownership of the Canadian Debt Securities, will be represented through book-entry accounts of institutions (including any relevant underwriters) acting on behalf of beneficial owners, as direct and indirect participants of the Depository (the "participants"). Each purchaser of a Canadian Debt Security represented by a Global Debenture will receive a customer confirmation of purchase from any underwriters or registered dealer from whom the Canadian Debt Security is purchased in accordance with the practices and procedures of the selling underwriters or registered dealer. The practices of registered dealers may vary, but generally customer confirmations are issued promptly after execution of a customer order. The Depository will be responsible for establishing and maintaining book-entry accounts for its participants having interests in Global Debentures.

If the Depository notifies the Company that it is unwilling or unable to continue as depository in connection with the Global Debentures, or if at any time the Depository ceases to be a clearing agency or otherwise ceases to be eligible to be a depository and the Company and the Indenture Trustees are unable to locate a qualified successor, or if the Company elects, in its sole discretion, to terminate the book-entry system, with the consent of the Indenture Trustees, or if under certain circumstances described in the Canadian indenture, an Event of Default has occurred, beneficial owners of Canadian Debt Securities represented by Global Debentures at such time will receive Canadian Debt Securities in registered and definitive form (the "Definitive Debentures").

Transfer and Exchange of Canadian Debt Securities

Transfers of beneficial ownership in Canadian Debt Securities represented by Global Debentures will be effected through records maintained by the Depository for such Global Debentures or its nominees (with respect to interests of participants) and on the records of participants (with respect to interests of persons other than participants). Unless the Company elects, in its sole discretion, to prepare and deliver Definitive Debentures, beneficial owners who are not participants in the Depository's book-entry system, but who desire to purchase, sell or otherwise transfer ownership of or other interests in Global Debentures, may do so only through participants in the Depository's book-entry system.

The ability of a beneficial owner of an interest in a Canadian Debt Security represented by a Global Debenture to pledge the Canadian Debt Security or otherwise take action with respect to such owner's interest in a Canadian Debt Security represented by a Global Debenture (other than through a participant) may be limited due to the lack of a physical certificate.

Registered holders of Definitive Debentures may transfer such Canadian Debt Securities upon payment of taxes or other charges incidental thereto, if any, by executing and delivering a form of transfer together with the Canadian Debt Securities to the registrar for the Canadian Debt Securities at its principal offices in Toronto, Ontario or such other city or cities as may from time to time be designated by the Company, whereupon new Canadian Debt Securities will be issued in authorized denominations in the same aggregate principal amount as the Canadian Debt Securities so transferred, registered in the names of the transferees. No transfer of a Canadian Debt Security will be registered

Table of Contents

on any interest payment date or during the five business days preceding an interest payment date on the Canadian Debt Securities or on any Redemption Date or during the five business days preceding the Redemption Date.

Payments

Payments of interest and principal on each Global Debenture will be made to the Depository or its nominee, as the case may be, as the registered holder of the Global Debenture. As long as the Depository or its nominee is the registered owner of a Global Debenture, such Depository or its nominee, as the case may be, will be considered the sole legal owner of the Global Debenture for the purposes of receiving payments of interest and principal on the Canadian Debt Securities and for all other purposes under the Canadian indenture and the Canadian Debt Securities. The record date for the payment of interest will be the fifth business day prior to the applicable interest payment date. Interest payments on Global Debentures will be made by electronic funds transfer or by cheque on the day interest is payable and delivered to the Depository or its nominee, as the case may be.

The Company understands that the Depository or its nominee, upon receipt of any payment of interest or principal in respect of a Global Debenture, will credit participants' accounts, on the date interest or principal is payable, with payments in amounts proportionate to their respective beneficial interest in the principal amount of such Global Debenture as shown on the records of the Depository or its nominee. The Company also understands that payments of interest and principal by participants to the owners of beneficial interests in such Global Debenture held through such participants will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name" and will be the responsibility of such participants. The responsibility and liability of the Company in respect of payments on Debentures represented by the Global Debenture is limited solely and exclusively, while the Canadian Debt Securities are registered in Global Debenture form, to making payment of any interest and principal due on such Canadian Debt Securities to the Depository or its nominee.

If Definitive Debentures are issued instead of or in place of Global Debentures, payments of interest on each Definitive Debenture will be made by electronic funds transfer, if agreed to by the holder of the Definitive Debenture, or by cheque dated the interest payment date and mailed to the address of the holder appearing in the register maintained by the registrar for the Canadian Debt Securities at least three days prior to the applicable interest payment date. Payment of principal at maturity will be made at the principal office of the paying agent in the City of Toronto (or in such other city or cities as may from time to time be designated by the Company) against surrender of the Definitive Debentures, if any.

Reports to Holders

The Company shall file with the Indenture Trustees copies of the Company's annual report and other documents that the Company is required to deliver to shareholders under applicable securities legislation.

Governing Law

Each of the Canadian indenture, any supplemental indenture and the Canadian Debt Securities will be governed by, and construed in accordance with, the laws of the Province of Ontario and the federal laws of Canada applicable therein applicable to contracts executed and to be performed entirely in such Province, provided that with respect to the US Trustee for the Canadian Indenture, the laws of the State of New York shall apply.

Table of Contents

Debt Securities Issued under the New York Indenture

The following summary description sets forth some of the general terms and provisions of the New York indenture. Because this is a summary description, it does not contain all of the information that may be important to you and is qualified in its entirety by reference to the New York indenture, including the form of debt security attached thereto, and any supplement to the New York indenture under which debt securities are issued (each such series of debt securities, "U.S. Debt Securities").

General

We may sell the U.S. Debt Securities, including original issue discount securities, at par or at a substantial discount below their stated principal amount. Unless we inform you otherwise in a prospectus supplement, we may issue additional U.S. Debt Securities of a particular series without the consent of the holders of such series outstanding at the time of issuance. Any such additional U.S. Debt Securities, together with all other outstanding debt securities of that series, will constitute a single series of securities under the New York indenture. Any taxes withheld or deducted from payments in respect of the U.S. Debt Securities and paid to the relevant tax authority shall be deemed to have been paid to the applicable holder. Unless we inform you otherwise in the applicable prospectus supplement, the U.S. Debt Securities will not be listed on any securities exchange.

We expect the U.S. Debt Securities to be issued in fully registered form without coupons and in denominations of \$2,000 and any integral multiples thereof. Subject to the limitations provided in the New York indenture and in the applicable prospectus supplement, U.S. Debt Securities that are issued in registered form may be transferred or exchanged at the corporate office of the trustee or the principal corporate trust office of the trustee, without the payment of any service charge, other than any tax or other governmental charge payable in connection therewith.

Global Securities

Unless we inform you otherwise in the applicable prospectus supplement, the U.S. Debt Securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depository identified in the applicable prospectus supplement. Global securities will be issued in registered form and in either temporary or definitive form. So long as the depository or its nominee is the registered owner of a global security, we and the relevant trustee will treat the depository as the sole owner or holder of the U.S. Debt Securities for purposes of the New York indenture, and we will pay principal of and interest, if any, on the U.S. Debt Securities to or as directed by the depository as the registered holder of the global securities. Unless and until it is exchanged in whole or in part for the individual U.S. Debt Securities, a global security may not be transferred except as a whole by the depository for such global security to a nominee of such depository or by a nominee of such depository to such depository or another nominee of such depository or by such depository or any such nominee to a successor of such depository or a nominee of such successor. The specific terms of the depository arrangement with respect to any U.S. Debt Securities of a series and the rights of and limitations upon owners of beneficial interests in a global security will be described in the applicable prospectus supplement.

Events of Default

Under the terms of the New York indenture, each of the following constitutes an event of default for U.S. Debt Securities unless it is either inapplicable to a particular series or it is specifically deleted or modified:

default for 30 days in the payment of any interest when due;

default in the payment of principal, or premium, if any, when due;

Table of Contents

default for 30 days in the payment of any sinking fund installment, if any, when due;

default in the performance, or breach, of any covenant or agreement in the New York indenture for 90 days after written notice;

default in the payment of any principal of any of our indebtedness for money borrowed (other than any indebtedness owing to any of our subsidiaries) in a principal amount in excess of \$50,000,000 (or the foreign currency equivalent at the time) at the stated final maturity thereof or the occurrence of any other default resulting in the acceleration prior to the stated maturity thereof, if such indebtedness is not discharged or such acceleration is not rescinded or annulled within 30 days after written notice to us by the trustee or to us and the trustee by the holders of not less than 25% in principal amount of the applicable series then outstanding, provided that the resulting event of default under the New York indenture with respect to such series will be deemed cured or waived, without any further action by us or any other person, if such other default is cured by us or waived by the holders of such indebtedness;

certain events of bankruptcy, insolvency or reorganization; and

any other event of default described in the applicable company order or supplemental indenture under which the series of U.S. Debt Securities is issued.

We will be required to furnish the trustee annually with an officer's certificate as to our compliance with all conditions and covenants under the New York indenture. The New York indenture provides that the trustee may withhold notice to you of any default, except in respect of the payment of the principal of, premium, if any, or interest on the U.S. Debt Securities, if it considers it in the interests of the holders of the U.S. Debt Securities to do so.

Effect of an Event of Default

If an event of default exists (other than an event of default in the case of certain events of bankruptcy), the trustee or the holders of not less than 25% in aggregate principal amount of a series of outstanding U.S. Debt Securities may declare the principal amount, or, if the U.S. Debt Securities are original issue discount securities, the portion of the principal amount as may be specified in the terms of that series, of and all accrued but unpaid interest on all outstanding U.S. Debt Securities of that series to be due and payable immediately, by a notice in writing to us, and to the trustee if given by holders. Upon that declaration the principal (or specified) amount will become immediately due and payable. However, at any time after a declaration of acceleration has been made, but before a judgment or decree for payment of the money due has been obtained, the event of default may, without further act, be deemed to have been waived and such declaration may, without further act, be deemed to have been rescinded and annulled subject to conditions specified in the New York indenture.

If an event of default in the case of certain events of bankruptcy, insolvency or reorganization exists, the principal amount of all U.S. Debt Securities outstanding under the New York indenture shall automatically, and without any declaration or other action on the part of the trustee or any holder of such outstanding debt, become immediately due and payable.

Subject to the provisions of the New York indenture relating to the duties of the trustee, if an event of default then exists, the trustee will be under no obligation to exercise any of its rights or powers under the New York indenture (other than the payment of any amounts on the U.S. Debt Securities furnished to it pursuant to the New York indenture) at your (or any other person's) request, order or direction, unless you have (or such other person has) offered to the trustee reasonable security or indemnity. Subject to the provisions for the security or indemnification of the trustee, the holders of a majority in aggregate principal amount of a series of outstanding U.S. Debt Securities have the right to direct the time, method and place of conducting any proceeding for any remedy available to the

Table of Contents

trustee, or exercising any trust or power conferred on the trustee in connection with the U.S. Debt Securities of that series.

Legal Proceedings and Enforcement of Right to Payment

You will not have any right to institute any proceeding in connection with the New York indenture or for any remedy under the New York indenture, unless you have previously given to the trustee written notice of a continuing event of default with respect to U.S. Debt Securities of that series. In addition, the holders of at least 25% in aggregate principal amount of a series of the outstanding U.S. Debt Securities must have made written request, and offered reasonable security or indemnity, to the trustee to institute that proceeding as trustee, and, within 60 days following the receipt of that notice, the trustee must not have received from the holders of a majority in aggregate principal amount of the outstanding U.S. Debt Securities of that series a direction inconsistent with that request, and must have failed to institute the proceeding. However, you will have an absolute and unconditional right to receive payment of the principal of, premium, if any, and interest on that debt security on or after the due dates expressed in the debt security and to institute a suit for the enforcement of that payment.

Modification and Waiver

Modification

We and the trustee will have the ability to modify and amend the New York indenture without the consent of the holders for certain specified purposes, including the following:

to add covenants and agreements or events of default that benefit holders;

to surrender any right or power given to us under the New York indenture;

to add, change or eliminate any restrictions on paying principal, provided such action does not have a material adverse effect on the relevant holders;

to change or eliminate any provision of the New York indenture, provided that, in the opinion of counsel, such change does not apply to any outstanding debt security;

to secure any series of debt securities or to add guarantors or co-obligors;

to cure any ambiguity or to correct or supplement any provision of the New York indenture that is defective or inconsistent with any other provision of the New York indenture or the offering documents related to the specific series of debt securities;

to make any change in any series of securities that, in the opinion of counsel, does not adversely affect in any material respect the rights of the holders of such securities; or

to prohibit the authentication and delivery of additional series of debt securities under the New York indenture.

We and the trustee will have the ability to modify and amend the New York indenture with the consent of the holders of a majority in aggregate principal amount of the outstanding U.S. Debt Securities of each series affected. However, no modification or amendment may, without the consent of the holder of each outstanding debt security affected:

extend the stated maturity of the principal of, or any installment of interest on, any outstanding debt security;

reduce the principal amount of or the interest on or any premium payable upon the redemption of any outstanding debt security;

Table of Contents

change the currency in which the principal amount of and premium, if any, or interest on any outstanding debt security is denominated or payable;

reduce the principal amount of an original issue discount security that would be due and payable upon a declaration of acceleration of the maturity thereof;

impair your right to institute suit for the enforcement of any payment on any outstanding debt security after the stated maturity or redemption date;

materially adversely affect the economic terms of any right to convert or exchange any outstanding debt security;

reduce the percentage of the holders of outstanding U.S. Debt Securities necessary to modify or amend the New York indenture or to waive compliance with certain provisions of the New York indenture or certain defaults and consequences of such defaults; or

modify any of these provisions or any of the provisions relating to the waiver of certain past defaults or certain covenants, except to increase the required percentage to effect such action or to provide that certain other provisions may not be modified or waived without the consent of all of the holders of the U.S. Debt Securities affected.

Waiver

The holders of a majority in aggregate principal amount of the outstanding U.S. Debt Securities of a series may, on behalf of the holders of all U.S. Debt Securities of that series, waive compliance by us with certain restrictive covenants of the New York indenture.

The holders of a majority in aggregate principal amount of the outstanding U.S. Debt Securities of a series may, on behalf of the holders of all U.S. Debt Securities of that series, generally waive any past default under the New York indenture and the consequences of such default. However, a default in the payment of the principal of, or premium, if any, or any interest on, any debt security of that series cannot be so waived.

Merger, Consolidation and Sale of Assets

We will not consolidate with or merge into any other entity or sell other than for cash or lease all or substantially all our assets to another entity, or purchase all or substantially all the assets of another entity, and no entity may consolidate with or merge into us, unless:

we will be the continuing entity in any merger or consolidation or the successor, transferee or lessee entity (if other than us) is a corporation organized and validly existing and expressly assumes our obligations relating to the U.S. Debt Securities;

immediately after such consolidation, merger, sale, lease or purchase, there exists no event of default, and no event which, after notice or lapse of time or both, would become an event of default; and

other conditions described in the New York indenture are met.

This covenant would not apply to a purchase by a subsidiary of all or substantially all of the assets of another entity.

Defeasance and Covenant Defeasance

The New York indenture provides that we may discharge all of our obligations with respect to any series of the U.S. Debt Securities at any time, and that we may also be released from our obligations under certain covenants and from certain other obligations, including obligations

imposed by a

Table of Contents

company order or supplemental indenture with respect to that series, if any, and elect not to comply with those sections and obligations without creating an event of default. Discharge under the first procedure is called "defeasance" and under the second procedure is called "covenant defeasance."

Defeasance or covenant defeasance may be effected only if:

we irrevocably deposit with the trustee money or U.S. government obligations or a combination thereof, as trust funds in an amount sufficient to pay and discharge each installment of principal of, premium, if any, and interest on, all outstanding U.S. Debt Securities of that series;

no event of default under the New York indenture has occurred and is continuing on the date of such deposit, other than an event of default resulting from the borrowing of funds and the grant of any related liens to be applied to such deposit; and

we deliver to the trustee an opinion of counsel to the effect that (i) the holders of the U.S. Debt Securities of that series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the deposit, defeasance and discharge or as a result of the deposit and covenant defeasance and (ii) the deposit, defeasance and discharge or the deposit and covenant defeasance will not otherwise alter those holders' U.S. federal income tax treatment of principal and interest payments on the U.S. Debt Securities of that series and, in the case of a defeasance, this opinion is accompanied by a ruling to that effect received from or published by the Internal Revenue Service.

Payment, Exchange and Transfer

We will designate a place of payment where you can receive payment of the principal of and any premium and interest on the U.S. Debt Securities or transfer the U.S. Debt Securities. Even though we will designate a place of payment, we may elect to pay any interest on the U.S. Debt Securities by mailing a check to the person listed as the owner of the U.S. Debt Securities in the security register or by wire transfer to an account designated by that person in writing not less than ten days before the date of the interest payment. There will be no service charge for any registration of transfer or exchange of the U.S. Debt Securities, but we may require you to pay any tax or other governmental charge payable in connection with a transfer or exchange of the U.S. Debt Securities.

Governing Law

The New York indenture and the U.S. Debt Securities shall be construed in accordance with and governed by the laws of the State of New York.

Concerning the Trustee

The trustee under the New York indenture has all the duties and responsibilities of an indenture trustee specified in the TIA. The trustee is not required to expend or risk its own funds or otherwise incur financial liability in performing its duties or exercising its rights and powers if it reasonably believes that it is not reasonably assured of repayment or adequate indemnity.

Under applicable Canadian law, a Canadian licensed trust company may be required to be appointed as co-trustee under the New York indenture or any supplement to the New York indenture under which U.S. Debt Securities are issued in connection with the issuance of any such U.S. Debt Securities offered for sale in Canada and in the United States pursuant to this prospectus and a prospectus supplement. In such circumstances, we may make an application to the appropriate Canadian regulatory authorities prior to such issuance for exemptions from this and other requirements of Canadian law applicable to the indentures. If such relief is not sought or obtained, the applicable legislative requirements will be complied with at the time of the applicable offering.

Table of Contents

Description of Warrants

We may issue warrants, including warrants to purchase debt securities or common shares, property or assets (including rights to receive payment in cash or securities based on the value, rate or price of one or more specified commodities, currencies, securities or indices) as well as other types of warrants. We may issue warrants independently or together with any other securities, and they may be attached to or separate from those securities. We will issue the warrants under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, that we will describe in the prospectus supplement relating to the warrants that we offer. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The prospectus supplement relating to any warrants that we may offer will contain the specific terms of the warrants. These terms will include some or all of the following:

the title of the warrants;

the securities, which may include debt securities or common shares, property or assets for which you may exercise the warrants;

the price or prices at which the warrants will be issued;

the number or principal amount of securities or amount of other property or assets that you may purchase upon exercise of each warrant;

currency, currencies, or currency units, if other than in U.S. dollars, in which the warrants are to be issued or for which the warrants may be exercised;

the procedures and conditions relating to the exercise of the warrants;

the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each other security;

the aggregate number of warrants;

any provisions for adjustment of the number or amount of securities, property or assets receivable upon exercise of the warrants or the exercise price of the warrants;

the price or prices at which the securities, property or assets purchasable upon exercise of the warrants may be purchased;

the date on and after which the warrants and the securities, property or assets purchasable upon exercise of the warrants will be separately transferable, if applicable;

a discussion of any material U.S. federal income tax or Canadian federal or provincial income tax considerations applicable to the exercise of the warrants;

the date on which the right to exercise the warrants will commence, and the date on which the right will expire;

the maximum or minimum number of warrants that may be exercised at any time;

information with respect to book-entry procedures, if any; and

any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

We will also describe in the applicable prospectus supplement any provisions for a change in the exercise price or expiration date of the warrants and the kind, frequency and timing of any notice to be given. You may exchange warrant certificates for new warrant certificates of different denominations

Table of Contents

and may exercise warrants at the corporate trust office of the warrant agent or any other office that we indicate in the applicable prospectus supplement. Prior to exercise, you will not have any of the rights of holders of the debt securities or common shares purchasable upon that exercise.

Description of Units

We may issue units consisting of one or more warrants, debt securities, common shares, subscription receipts or any combination of such of our securities (but not securities of third parties), as specified in a related prospectus supplement.

Description of Subscription Receipts

We may issue subscription receipts exchangeable for common shares and/or other securities of the Company, subject to compliance with applicable law. Each subscription receipt will entitle the holder to purchase for cash the amount of specified securities at the exercise price stated or determinable in the applicable prospectus supplement for the subscription receipts. We may issue subscription receipts independently or together with any offered securities. The subscription receipts may be attached to or separate from those offered securities. We will issue the subscription receipts under subscription receipt agreements to be entered into between us and a bank or trust company, as subscription receipt agent, all as described in the applicable prospectus supplement. The subscription receipt agent will act solely as our agent in connection with the subscription receipts and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of subscription receipts.

The prospectus supplement relating to any subscription receipts that we may offer will contain the specific terms of the subscription receipts.

Plan of Distribution

We may offer and sell the securities offered by this prospectus from time to time as follows:

to or through underwriters or dealers for resale;

directly to other purchasers;

through designated agents; or

through a combination of any of these methods of sale.

In some cases, we or dealers acting with us or on our behalf may also purchase securities and reoffer them to the public by one or more of the methods described above. This prospectus may be used in connection with any offering of the securities through any of these methods or other methods described in the applicable prospectus supplement.

The securities that we distribute by any of these methods may be sold to the public, in one or more transactions, at:

a fixed price or prices, which may be changed;

market prices prevailing at the time of sale;

prices related to prevailing market prices; or

negotiated prices.

In connection with the sale of securities, underwriters may receive compensation from us or from purchasers of the securities, for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or

Table of Contents

commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities may be deemed to be underwriters, and any discounts or commissions they receive from us, and any profit on the resale of the securities they realize may be deemed to be underwriting discounts and commissions under the Securities Act. Any such underwriter, dealer or agent will be identified, and any such compensation received will be described, in the applicable prospectus supplement.

Unless otherwise specified in the applicable prospectus supplement, each series of debt securities will be a new issue with no established trading market. We may elect to list any of the debt securities on an exchange, but are not obligated to do so. Any common shares sold pursuant to a prospectus supplement will be listed on the TSX and the NYSE, subject to official notice of issuance. It is possible that one or more underwriters may make a market in a series of the securities, but will not be obligated to do so and may discontinue any market making at any time without notice. Therefore, no assurance can be given as to the liquidity of the trading market for the securities.

If dealers are utilized in the sale of the securities, we may sell the securities to the dealers as principals or the dealers may act as our agents. If the dealers act as principal, they may then resell the securities to the public at varying prices to be determined by such dealers at the time of resale. The names of the dealers and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may enter into agreements with underwriters, dealers and agents who participate in the distribution of the securities which may entitle these persons to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such underwriters, dealers or agents may be required to make. Any agreement in which we agree to indemnify underwriters, dealers and agents against civil liabilities will be described in the applicable prospectus supplement.

In connection with an offering, the underwriters may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in an offering. Stabilizing transactions consist of certain bids or purchases made for the purpose of preventing or retarding a decline in the market price of the securities while an offering is in progress.

The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the underwriters have repurchased securities sold by or for the account of that underwriter in stabilizing or short-covering transactions.

These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the securities. As a result, the price of the securities may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on an exchange or automated quotation system, if the securities are listed on that exchange or admitted for trading on that automated quotation system, or in the over-the-counter market or otherwise.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain purchasers to purchase the securities from us at the public offering price stated in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a future date. These contracts will be subject to only those conditions stated in the prospectus supplement, and the prospectus supplement will state the commission payable to the solicitor of such offers.

Table of Contents

Underwriters, dealers and agents, and their respective affiliates and associates, may engage in transactions with or perform services for us in the ordinary course of business.

Legal Matters

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters as to the federal law of the United States of America and the law of the State of New York will be passed upon for us by Cleary Gottlieb Steen & Hamilton LLP, New York, New York. Certain legal matters as to Canadian law will be passed upon for us by MLT Aikins LLP, Vancouver, British Columbia and Goodmans LLP, Toronto, Ontario. Legal counsel to any underwriters or agents will be named in the applicable prospectus supplement and such counsel may pass upon legal matters for such underwriters or agents.

Experts

The consolidated financial statements and schedules of Atlantic Power Corporation as of December 31, 2016 and 2015 and for each of the years in the three-year period ended December 31, 2016 and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2016 have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Table of Contents

Cdn\$

% Series E Convertible Unsecured Subordinated Debentures Due 2025

Atlantic Power Corporation

Prospectus Supplement
January , 2018

Book-Running Manager

RBC CAPITAL MARKETS
