

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

Post-Effective Amendment No. 1
To Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ATLANTIC POWER CORPORATION

(Exact name of registrant as specified in its charter)

British Columbia, Canada
 (State or other jurisdiction of
 incorporation or organization)

4900
 (Primary Standard Industrial
 Classification Code Number)

55-0886410
 (I.R.S. Employer
 Identification No.)

3 Allied Drive, Suite 220
Dedham, Massachusetts 02026
(617) 977-2400

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

James J. Moore, Jr.
President and Chief Executive Officer
Atlantic Power Corporation
3 Allied Drive, Suite 220
Dedham, Massachusetts 02026
(617) 977-2400

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Jeffrey S. Levy, Esq.
 Senior Vice President – General Counsel
 Atlantic Power Corporation
 3 Allied Drive, Suite 220
 Dedham, Massachusetts 02026
 Tel: (617) 977-2400

Craig B. Brod, Esq.
Pamela L. Marcogliese, Esq.
 Cleary Gottlieb Steen & Hamilton LLP
 One Liberty Plaza
 New York, New York 10006
 Tel: (212) 225-2000

William Gorman, Esq.
Jonathan O' Connor, Esq.
 Goodmans LLP
 Bay Adelaide Center
 333 Bay Street, Suite 3400
 Toronto, Ontario, Canada M5H 2S7
 Tel: (416) 979-2211

Approximate date of commencement of proposed sale to the public: Not applicable (no more issuances).

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☒

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☒

Non-accelerated filer ☐

(Do not check if smaller reporting company)

Smaller reporting company ☐

DEREGISTRATION OF UNSOLD SECURITIES

On February 28, 2014, Atlantic Power Corporation (the "Company") filed a registration statement on Form S-3 (the "Registration Statement") with the Securities and Exchange Commission relating to 5,000,000 common shares, no par value (the "Common Shares"), issuable under the Company's Dividend Reinvestment Plan (the "Plan"). The Company terminated the Plan on or about February 9, 2016, and no further Common Shares will be issued under the Plan. Accordingly, the Company is filing this Post-effective Amendment No. 1 to the Registration Statement to deregister all of the Company's remaining Common Shares that remain unissued under the Plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post- E ffective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dedham , Commonwealth of Massachusetts , on this 9th day of February, 2016.

ATLANTIC POWER CORPORATION

By: /s/ Terrence Ronan
Terrence Ronan
Chief Financial Officer

Note: No other person is required to sign this Post-effective Amendment No. 1 to Registration Statement in reliance upon Rule 478 under the Securities Act of 1933.