As filed with the Securities and Exchange Commission on January 29, 2018

> Registration No. 333-205829 Registration No. 333-209777

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

ARCONIC INC. (Exact name of registrant as specified in its charter)

Delaware (State of Incorporation) 25-0317820 (I.R.S. Employer Identification No.)

390 Park Avenue New York, New York 10022-4608 (Address of principal executive office, including zip code)

RTI INTERNATIONAL METALS, INC. EMPLOYEE SAVINGS AND INVESTMENT PLAN RTI BARGAINING UNIT EMPLOYEE SAVINGS AND INVESTMENT PLAN RTI EMPLOYEE SAVINGS & INVESTMENT PLAN (Full Title of Plans)

Katherine H. Ramundo Executive Vice President, Chief Legal and Compliance Officer and Secretary 390 Park Avenue, New York, New York 10022-4608 (212) 836-2731 (Name, Address and Telephone Number, Including Area Code, of Agent for Service)

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

Large accelerated filer <u>ü</u>

Accelerated filer \Box

Non-accelerated filer \Box (Do not check if a smaller reporting company) Smaller reporting company \Box

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

On December 31, 2017 (the "Effective Date"), Arconic Inc., a Pennsylvania corporation ("Arconic Pennsylvania" or, prior to the Reincorporation (as defined below), the "Company," and formerly known as Alcoa Inc.) merged with and into Arconic Inc., a Delaware corporation ("Arconic Delaware" or, following the Reincorporation, the "Company") in order to effect the change of the Company's jurisdiction of incorporation from Pennsylvania to Delaware (the "Reincorporation"). The shareholders of Arconic Pennsylvania approved the Reincorporation at a special meeting of shareholders held on November 30, 2017. Arconic Delaware is deemed to be the successor issuer of Arconic Pennsylvania under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

The common stock, par value \$1.00 per share, of Arconic Pennsylvania (the "Arconic Pennsylvania Common Stock") was listed for trading on the New York Stock Exchange and traded under the symbol "ARNC." As of the Effective Date, this symbol, without interruption, represents shares of common stock, par value \$1.00 per share, of Arconic Delaware (the "Arconic Delaware Common Stock"). There was no change in the Exchange Act File Number assigned by the Securities and Exchange Commission (the "Commission") as a result of the Reincorporation.

This Post-Effective Amendment No. 1 incorporates by reference the contents of the earlier Registration Statements on Form S-8 filed by Arconic Pennsylvania with the Commission on July 23, 2015 (File No. 333-205829), and on February 26, 2016 (File No. 333-209777) (collectively, the "Registration Statements"), registering 1,041,575 shares of Arconic Pennsylvania Common Stock, and an indeterminate number of plan interests, to be issued to participants in the RTI International Metals, Inc. Employee Savings and Investment Plan, RTI Bargaining Unit Employee Savings and Investment Plan and RTI Employee Savings & Investment Plan (the "Plans").

Effective after the close of business on December 31, 2016, the Company terminated the Plans. Thereafter, all assets were distributed from the Plans' accounts. The offering of Arconic Pennsylvania Common Stock (and any related shares of Arconic Delaware Common Stock) and plan interests under the Plans has terminated. This Post-Effective Amendment No. 1 to the Registration Statements on Form S-8 is being filed to deregister 290,764 shares of Arconic Pennsylvania Common Stock (and any related shares Common Stock) and plan interests that were registered under the Registration Statements. Such shares of Arconic Pennsylvania Common Stock (and any related shares of Arconic Delaware Common Stock) remain unissued under the Plans.

SIGNATURES

The Registrant. 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-8 and has duly caused this Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, the State of New York, on this 29th day of January 2018.

ARCONIC INC. (Registrant)

By

/s/ Paul Myron Paul Myron Vice President and Controller (Principal Accounting Officer)

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Charles P. Blankenship, Jr. Charles P. Blankenship, Jr.	Chief Executive Officer; Director (Principal Executive Officer)	January 29, 2018
/s/ Ken Giacobbe Ken Giacobbe	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	January 29, 2018
/s/ Paul Myron Paul Myron	Vice President and Controller (Principal Accounting Officer)	January 29, 2018

Arthur D. Collins, Jr., Rajiv L. Gupta, Sean O. Mahoney, E. Stanley O'Neal, John C. Plant, Julie G. Richardson, Patricia F. Russo and Ulrich R. Schmidt, each as a Director, on January 29, 2018, by Katherine H. Ramundo, their attorney-in-fact.

/s/ Katherine H. Ramundo

Katherine H. Ramundo Attorney-in-fact The Plans. Pursuant to the requirements of the Securities Act of 1933, the trustees (or other persons who administer the Plans) have duly caused this Post-Effective Amendment to be signed on their behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on January 29, 2018.

RTI International Metals, Inc. Employee Savings and Investment Plan RTI Bargaining Unit Employee Savings and Investment Plan RTI Employee Savings & Investment Plan

By:	/s/ Vas Nair
	Vas Nair, Member, Arconic Inc.
	Benefits Management Committee
By:	/s/ Brian Redmond
	Brian Redmond, Member, Arconic Inc.
	Benefits Management Committee
By:	/s/ Scott M. Zahorchak
	Scott M. Zahorchak, Member, Arconic Inc.
	Benefits Management Committee