

ALCOA INC.
Form S-4/A
May 18, 2015
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As filed with the Securities and Exchange Commission on May 15, 2015

Registration No. 333-203275

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

Amendment No. 1
to
Form S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ALCOA INC.
(Exact Name of Registrant as Specified in its Charter)

| | | |
|---|--|--|
| Pennsylvania (State or other jurisdiction of | 3350 (Primary Standard Industrial | 25-0317820 (I.R.S. Employer |
| incorporation or organization) | Classification Code Number) 390 Park Avenue | Identification Number) |

New York, New York 10022-4608

212-836-2600

(Address, including Zip Code, and Telephone Number, including Area Code, of Registrant's Principal Executive Offices)

Audrey Strauss, Esq.

Executive Vice President, Chief Legal Officer and Secretary

Alcoa Inc.

390 Park Avenue

New York, New York 10022-4608

(212) 836-2731

(Name, Address, including Zip Code, and Telephone Number, including Area Code, of Agent for Service)

With Copies to:

Chad Whalen, Esq.

**General Counsel and Senior Vice
President**

RTI International Metals, Inc.

**1550 Coraopolis Heights Road, Fifth
Floor**

Pittsburgh, Pennsylvania 15108-2973

Ronald C. Chen, Esq.

Wachtell, Lipton, Rosen & Katz

51 West 52nd Street

New York, New York 10019

(212) 403-1000

Lyle G. Ganske, Esq.

Jones Day

North Point

901 Lakeside Avenue

Cleveland, Ohio 44114

(216) 586-3939

(412) 893-0026

Approximate date of commencement of the proposed sale of the securities to the public: As soon as practicable after this Registration Statement becomes effective and upon completion of the merger described in the enclosed document.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, 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 of 1933, as amended, 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(d) 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. "

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. (Check one):

| | | | |
|-------------------------|-------------------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input checked="" type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file an amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such dates as the Commission, acting pursuant to said Section 8(a), may determine.

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Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This document shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

PRELIMINARY SUBJECT TO COMPLETION DATED MAY 15, 2015

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

Dear RTI Shareholder:

On March 8, 2015, RTI International Metals, Inc. and Alcoa Inc. agreed to a strategic business combination in which RTI will merge with Alcoa. If the merger is completed, RTI shareholders will have the right to receive 2.8315 shares of Alcoa common stock for each share of RTI common stock held immediately prior to the merger plus an amount of cash in lieu of fractional shares of Alcoa common stock. Based on current information, an aggregate amount of approximately 89.6 million shares of Alcoa common stock is estimated to be delivered to holders of shares of RTI common stock and equity based awards at the closing of the merger, representing approximately 7% of the shares of Alcoa common stock expected to be outstanding immediately following the merger.

RTI will hold an annual meeting where you will be asked to vote to approve a proposal to adopt the merger agreement. RTI shareholders will also be asked to approve (i) a proposal to elect nine directors of RTI; (ii) a proposal to ratify the appointment of PricewaterhouseCoopers LLP as RTI's independent registered public accounting firm for 2015; (iii) a proposal to approve, on an advisory (non-binding) basis, the compensation of RTI's named executive officers; (iv) a proposal to approve, on an advisory (non-binding) basis, the compensation that certain executive officers of RTI may receive in connection with the merger pursuant to existing agreements or arrangements with RTI; and (v) a proposal to adjourn the RTI annual meeting, if necessary or appropriate, to solicit additional proxies in favor of the RTI merger proposal.

The annual meeting of RTI shareholders will be held on _____, 2015 at _____, at _____ a.m. Eastern Daylight Time.

The market value of the merger consideration will fluctuate with the market price of Alcoa common stock and will not be known at the time RTI's shareholders vote on the merger. Alcoa common stock is currently quoted on the New York Stock Exchange under the symbol AA. On March 6, 2015, the last full trading day before the public announcement of the merger agreement, the closing share price of Alcoa common stock was \$14.48 as reported on the New York Stock Exchange. On _____, 2015 the last practicable trading day before the date of this proxy statement/prospectus, the closing share price of Alcoa common stock was \$ _____ per share as reported on the New York Stock Exchange. RTI urges you to obtain current market quotations for Alcoa common stock.

The merger is intended to be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. RTI stockholders generally are not expected to recognize any gain or loss on the exchange of shares of RTI common stock for shares of Alcoa common stock, but will recognize gain on any cash received in lieu of fractional shares of Alcoa common stock.

Your vote is important. Among other conditions, RTI and Alcoa cannot complete the merger unless RTI's shareholders adopt the merger agreement. Adoption of the merger agreement requires the affirmative vote of the holders of two-thirds of the outstanding shares of RTI common stock entitled to vote. **Regardless of whether you plan to attend the annual meeting, please take the time to vote your shares in accordance with the instructions contained in this proxy statement/prospectus.**

RTI's board of directors determined that the merger, the merger agreement and the transactions contemplated by the merger agreement are advisable and in the best interests of RTI and its shareholders and has unanimously approved the merger and the merger agreement. RTI's board of directors unanimously recommends that RTI shareholders vote FOR adoption of the merger agreement, FOR the directors proposal, FOR the accountant proposal, FOR the compensation proposal, FOR the merger-related compensation proposal and FOR the adjournment proposal, if necessary or appropriate, to solicit additional proxies in favor of the approval of the merger agreement.

This proxy statement/prospectus describes the annual meeting, the merger, the documents related to the merger and other related matters. **Please carefully read this entire proxy statement/prospectus, including Risk Factors, beginning on page 17, for a discussion of the risks relating to the proposed merger.** You also can obtain information about RTI and Alcoa from documents that each of RTI and Alcoa have filed with the Securities and Exchange Commission.

If you have any questions concerning the merger, RTI shareholders should please contact Dan Crookshank, Director Investor Relations, Westpointe Corporate Center One, 1550 Coraopolis Heights Road, Fifth Floor, Pittsburgh, Pennsylvania 15108-2973 at (412) 893-0084.

Dawne S. Hickton
Vice Chair, President, and Chief Executive Officer
RTI International Metals, Inc.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the securities to be issued in the merger or determined if this proxy statement/prospectus is accurate or adequate. Any representation to the contrary is a criminal offense.

The date of this proxy statement/prospectus is _____, 2015, and it is first being mailed or otherwise delivered to RTI shareholders on or about _____, 2015.

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RTI INTERNATIONAL METALS, INC.

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

To Our Fellow Shareholders:

You are cordially invited to attend the RTI International Metals, Inc. (the Company) 2015 Annual Meeting of Shareholders on , 2015 at , at a.m. Eastern Daylight Time. At the meeting, all holders of the Company s common stock at the close of business on , 2015, will be entitled to vote on the following matters:

a proposal to adopt the Agreement and Plan of Merger, dated as of March 8, 2015, by and among the Company, Alcoa Inc. and Ranger Ohio Corporation, pursuant to which Ranger Ohio Corporation will merge with and into the Company and the Company will become a wholly owned subsidiary of Alcoa Inc. as more fully described in the attached proxy statement/prospectus;

election of the nine directors nominated by the Company s board of directors;

a proposal to ratify the appointment of PricewaterhouseCoopers LLP as the Company s independent registered public accounting firm for 2015;

a non-binding advisory vote to approve compensation of the Company s named executive officers as disclosed in these materials;

a non-binding advisory vote to approve compensation that the Company s named executive officers may receive in connection with the merger pursuant to existing agreements or arrangements with the Company;

a proposal to approve the adjournment of the annual meeting, if necessary or appropriate, to solicit additional proxies in favor of the approval of the merger agreement; and

conduct other business if properly raised.

Only Company shareholders of record at that time are entitled to notice of, and to vote at, the annual meeting, or any adjournment or postponement of the annual meeting. In order for the merger to be adopted, the holders of at least two-thirds of the shares of Company common stock outstanding and entitled to vote must vote in favor of approval of the proposal to adopt the merger agreement. **Regardless of whether you plan to attend the annual meeting, please vote as soon as possible. If you hold stock in your name as a shareholder of record, please complete, sign, date and return the accompanying proxy card in the enclosed postage-paid return envelope, or call the toll-free telephone number or use the Internet as described in the instructions included with your proxy card or voting instruction card. If you hold your stock in street name through a bank or broker, please follow the instructions on the voting instruction card furnished by the record holder. RTI and Alcoa cannot complete the merger**

unless the Company's common shareholders adopt the merger agreement. Failure to vote will have the same effect as voting against the merger.

The enclosed proxy statement/prospectus provides a detailed description of the merger, the merger agreement and related matters. RTI urges you to read the proxy statement/prospectus, including any documents incorporated in the proxy statement/prospectus by reference, and its appendices carefully and in their entirety. If you have any questions concerning the merger or the proxy statement/prospectus, would like additional copies of the proxy statement/prospectus or need help voting your shares of Company common stock, please contact the Company's proxy solicitor, Georgeson Inc., 480 Washington Blvd., 26th Floor, Jersey City, New Jersey 07310 at (800) 733-6198 (toll free).

The Company's board of directors has unanimously approved the merger and the merger agreement and unanimously recommends that Company shareholders vote FOR approval of the merger agreement, FOR the directors proposal, FOR the accountant proposal, FOR the compensation proposal, FOR the merger-related compensation proposal and FOR the adjournment proposal, if necessary or appropriate, to solicit additional proxies in favor of approval of the merger agreement.

**BY ORDER OF THE BOARD OF
DIRECTORS,**

Loretta L. Benec
Secretary

, 2015

Only shareholders of record on , 2015, may vote at the meeting.

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REFERENCES TO ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about Alcoa and RTI from documents filed with or furnished to the Securities and Exchange Commission (the SEC) that are not included in or delivered with this proxy statement/prospectus. You can obtain any of the documents filed with or furnished to the SEC by Alcoa or RTI, as the case may be, at no cost from the SEC's website at <http://www.sec.gov>. You may also request copies of these documents, including documents incorporated by reference in this proxy statement/prospectus, at no cost by contacting either Alcoa or RTI, as the case may be, at the following addresses:

Alcoa Inc.

390 Park Avenue

New York, New York 10022-4608

Attention: Investor Relations

Telephone: (212) 836-2674

RTI International Metals, Inc.

1550 Coraopolis Heights Road, Fifth Floor

Pittsburgh, Pennsylvania 15108-2973

Attention: Secretary

Email: request@rtiintl.com

Telephone: (844) 784-4685

You will not be charged for any of these documents that you request. RTI shareholders requesting documents must do so by _____, 2015, in order to receive them before the annual meeting.

In addition, if you have questions about the merger or the annual meeting, need additional copies of this proxy statement/prospectus or need to obtain proxy cards or other information related to the proxy solicitation, you may contact Georgeson Inc., RTI's proxy solicitor, at the following address and telephone numbers:

Georgeson Inc.

480 Washington Blvd., 26th Floor

Jersey City, New Jersey 07310

(800) 733-6198 (toll free)

See **Where You Can Find More Information** beginning on page 158 for more details.

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QUESTIONS AND ANSWERS ABOUT THE MERGER AND THE RTI ANNUAL MEETING

The following are some questions that you may have regarding the merger and the RTI annual meeting, and brief answers to those questions. RTI and Alcoa urge you to read carefully the remainder of this proxy statement/prospectus because the information in this section does not provide all the information that might be important to you with respect to the merger and the RTI annual meeting. Additional important information is also contained in the documents incorporated by reference into this proxy statement/prospectus. See **Where You Can Find More Information** beginning on page 158.

References in this proxy statement/prospectus to **RTI** refer to RTI International Metals, Inc., an Ohio corporation, and, unless the context otherwise requires, to its affiliates. References in this proxy statement/prospectus to **Alcoa** refer to Alcoa Inc., a Pennsylvania corporation, and, unless the context otherwise requires, to its consolidated subsidiaries.

Q: What am I being asked to vote on at the RTI annual meeting?

A: Alcoa and RTI have entered into an Agreement and Plan of Merger, dated as of March 8, 2015, which is referred to as the merger agreement, pursuant to which Alcoa has agreed to acquire RTI. Under the terms of the merger agreement, Ranger Ohio Corporation (a wholly owned subsidiary of Alcoa) will merge with and into RTI and RTI will become a wholly owned subsidiary of Alcoa, which is referred to as the merger. RTI's shareholders are being asked to adopt the merger agreement and the transactions it contemplates, including the merger. RTI's shareholders may be asked to adopt the adjournment of the annual meeting, if necessary or appropriate, to solicit additional proxies in favor of the adoption of the merger agreement, which is referred to as the adjournment proposal.

In addition to the merger agreement proposal and, if necessary or appropriate, the adjournment proposal, RTI shareholders will be asked to approve the following proposals at the annual meeting:

election of the nine directors nominated by the RTI's board of directors, which is referred to as the RTI directors proposal;

a proposal to ratify the appointment of PricewaterhouseCoopers LLP (PwC), as RTI's independent registered public accounting firm for 2015, which is referred to as the RTI accountant proposal;

a non-binding advisory vote to approve compensation of RTI's named executive officers as disclosed in these materials, which is referred to as the RTI compensation proposal;

a non-binding advisory vote to approve compensation that RTI's named executive officers may receive in connection with the merger pursuant to existing agreements or arrangements with RTI, which is referred to as the RTI merger-related compensation proposal.

Q: How does RTI s board of directors recommend that I vote at the annual meeting?

A: RTI s board of directors unanimously recommends that RTI shareholders vote FOR adoption of the merger agreement, FOR the RTI directors proposal, FOR the RTI accountant proposal, FOR the RTI compensation proposal, FOR the RTI merger-related compensation proposal and FOR the adjournment proposal, if necessary or appropriate, to solicit additional proxies in favor of the adoption of the merger agreement.

Q: When and where is the RTI annual meeting?

A: The annual meeting of RTI shareholders will be held on _____, 2015 at _____, at _____ a.m. Eastern Daylight Time.

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Q: What do I need to do now?

A: After you have carefully read this proxy statement/prospectus and have decided how you wish to vote your shares, please vote your shares promptly so that your shares are represented and voted at the annual meeting. If you hold stock in your name as a shareholder of record, you must complete, sign, date and mail your proxy card in the enclosed postage-paid return envelope as soon as possible, or call the toll-free telephone number or use the Internet as described in the instructions included with your proxy card or voting instruction card. If you hold your stock in street name through a bank or broker, you must direct your bank or broker to vote in accordance with the instructions you have received from your bank or broker. Street name shareholders who wish to vote at the annual meeting will need to obtain a proxy form from the institution that holds their shares.

Q: What constitutes a quorum for the annual meeting?

A: The presence at the annual meeting, in person or by proxy, of holders of a majority of the outstanding shares of RTI common stock entitled to vote at the annual meeting will constitute a quorum for the transaction of business. All shares of RTI common stock, whether present in person or represented by proxy, including abstentions and broker non-votes, will be treated as present for purposes of determining the presence or absence of a quorum for all matters voted on at the RTI annual meeting. A broker non-vote occurs under stock exchange rules when a broker is not permitted to vote on a matter without instructions from the beneficial owner of the shares and no instruction is given.

Q: What is the vote required to approve each proposal at the RTI annual meeting?

A: Adoption of the merger agreement requires the affirmative vote of the holders of two-thirds of the outstanding shares of RTI common stock as of the close of business on _____, 2015, the record date for the annual meeting.

Under Ohio law and RTI's Code of Regulations, the nine director candidates receiving the greatest number of votes for election will be elected to RTI's board of directors.

Ratification of the appointment of PwC as RTI's independent registered public accounting firm for 2015 requires the favorable vote of a majority of the votes cast.

The result of the shareholder vote on compensation of RTI's named executive officers is not binding on RTI. Approval of the compensation proposal requires the favorable vote of the majority of the votes cast. RTI's board of directors will not be required to act in response to the results of the vote, as the ultimate decision regarding RTI's named executive officers' compensation remains with RTI's Compensation Committee.

Approval of the merger-related compensation proposal requires the favorable vote of the majority of the votes cast. The result of the shareholder vote on the merger-related compensation of RTI's named executive officers is not binding on RTI.

Approval of the adjournment proposal requires the affirmative vote of the holders of a majority of shares of RTI common stock entitled to vote on, and voting for or against or expressly abstaining with respect to, such proposal at

the annual meeting, even if less than a quorum.

Q: Why is my vote important?

A: If you do not vote, it will be more difficult for RTI to obtain the necessary quorum to hold RTI's annual meeting. In addition, your failure to vote or failure to instruct your bank or broker how to vote will have the

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same effect as a vote against adoption of the merger agreement. The merger agreement must be adopted by the holders of two-thirds of the outstanding shares of RTI common stock entitled to vote at the annual meeting. RTI's board of directors unanimously recommends that you vote to adopt the merger agreement.

Q: If my shares of common stock are held in street name by my bank or broker, will my bank or broker automatically vote my shares for me?

A: No. Your bank or broker cannot vote your shares without instructions from you. You should instruct your bank or broker as to how to vote your shares in accordance with the instructions provided to you. Please check the voting form used by your bank or broker.

Q: What if I abstain from voting or fail to instruct my bank or broker?

A: If you fail to vote or mark **ABSTAIN** on your proxy, or fail to instruct your bank or broker with respect to the merger agreement proposal, it will have the same effect as a vote **AGAINST** such proposal.

If you mark **ABSTAIN** on your proxy with respect to the directors proposal, the accountant proposal, the compensation proposal or the merger-related compensation proposal, it will have no effect on the proposal. The failure to instruct your bank or broker with respect to the directors proposal, the compensation proposal or the merger-related compensation proposal will result in shares not being voted and will have no effect on the proposal. However, the failure to instruct your bank or broker with respect to the accountant proposal will allow your bank or broker to exercise its discretion with respect to the approval of the accountant proposal.

If you mark **ABSTAIN** on your proxy with respect to the adjournment proposal, it will have the same effect as a vote **AGAINST** the proposal. The failure to vote or failure to instruct your bank or broker with respect to the adjournment proposal, however, will have no effect on the adjournment proposal.

Q: Can I attend the annual meeting and vote my shares in person?

A: Yes. All holders of RTI common stock as of the record date, including shareholders of record and shareholders who hold their shares through banks, brokers, nominees or any other holder of record, are invited to attend the annual meeting. RTI shareholders of record can vote in person at the annual meeting. If you are not a shareholder of record, you must obtain a proxy executed in your favor, from the record holder of your shares, such as a broker, bank or other nominee, to be able to vote in person at the annual meeting. If you plan to attend the annual meeting, you must hold your shares in your own name or have a letter from the record holder of your shares confirming your ownership. In addition, you must bring a form of personal photo identification with you in order to be admitted. RTI reserves the right to refuse admittance to anyone without proper proof of share ownership and without proper photo identification. The use of cameras, sound recording equipment, communications devices or any similar equipment during the annual meeting is prohibited without RTI's express written consent.

Q: Can I change my vote?

A: Yes. You may revoke any proxy at any time before it is voted by (1) signing and returning a proxy card with a later date, (2) delivering a written revocation letter to RTI's corporate secretary, (3) voting again by telephone or the Internet or (4) attending the annual meeting in person, notifying the corporate secretary and voting by ballot at the annual meeting. Attendance at the annual meeting will not automatically revoke your proxy. A revocation or later-dated proxy received by RTI after the vote will not affect the vote. The RTI corporate secretary's mailing address is Secretary, Westpointe Corporate Center One, 1550 Coraopolis Heights Road, Fifth Floor, Pittsburgh, Pennsylvania 15108-2973. If you hold your stock in street name through a bank or broker, you should contact your bank or broker to revoke your proxy.

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Q: What are the U.S. federal income tax consequences of the merger to RTI shareholders?

A: The merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the Code), and holders of RTI common stock are not expected to recognize any gain or loss for United States federal income tax purposes on the exchange of shares of RTI common stock for shares of Alcoa common stock in the merger, except with respect to any cash received instead of fractional shares of Alcoa common stock. See the section entitled **Material U.S. Federal Income Tax Consequences of the Merger** beginning on page 136.

Q: Do I have appraisal rights in connection with the merger?

A: No. Under Ohio law, holders of RTI common stock are not entitled to any dissenters' rights of appraisal in connection with the merger. See the section entitled **The Merger RTI Shareholders Do Not Have Dissenters Appraisal Rights in the Merger** beginning on page 116.

Q: If I am an RTI shareholder, should I send in my RTI stock certificates now?

A: No. Please do not send in your RTI stock certificates with your proxy. After the merger, an exchange agent designated by Alcoa will send you instructions for exchanging RTI stock certificates for the merger consideration. See **The Merger Agreement Conversion of Shares; Exchange of Certificates** beginning on page 121.

Q: What should I do if I hold my shares of RTI common stock in book-entry form?

A: You are not required to take any specific actions if your shares of RTI common stock are held in book-entry form. After the completion of the merger, shares of RTI common stock held in book-entry form will automatically be exchanged for shares of Alcoa common stock in book-entry form and cash to be paid instead of fractional shares of Alcoa common stock.

Q: May I place my RTI stock certificate(s) into book-entry form prior to the merger?

A: Yes, RTI stock certificates may be placed into book-entry form prior to the merger. For more information, please contact Computershare at (800) 622-6757.

Q: Whom may I contact if I cannot locate my RTI stock certificate(s)?

A:

If you are unable to locate your original RTI stock certificate(s), you should contact Computershare at (800) 622-6757.

Q: When do you expect to complete the merger?

A: RTI and Alcoa expect to complete the merger within two to five months of the date of this preliminary proxy statement/prospectus. However, RTI and Alcoa cannot assure you when or if the merger will occur. RTI and Alcoa must first obtain the approval of RTI shareholders at the annual meeting and the necessary regulatory approvals.

Q: Whom should I call with questions?

A: If you have any questions concerning the merger or this proxy statement/prospectus, would like additional copies of this proxy statement/prospectus or need help voting your shares of RTI common stock, please contact: Georgeson Inc., RTI's proxy solicitor, at (800) 733-6198 (toll free).

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SUMMARY

This summary highlights selected information from this proxy statement/prospectus. It may not contain all of the information that is important to you. RTI and Alcoa urge you to carefully read the entire proxy statement/prospectus, including the appendices, and the other documents referred to herein in order to fully understand the merger. See **Where You Can Find More Information on page 158. Each item in this summary refers to the page of this proxy statement/prospectus on which that subject is discussed in more detail.**

In the Merger, RTI Shareholders Will Have the Right to Receive 2.8315 Shares of Alcoa Common Stock Per Share of RTI Common Stock (page 83)

RTI and Alcoa are proposing the merger of a subsidiary of Alcoa with and into RTI, with RTI continuing its existence as the surviving corporation and as a direct wholly owned subsidiary of Alcoa. If the merger is completed, you will have the right to receive 2.8315 shares of Alcoa common stock for each share of RTI common stock you hold immediately prior to the merger. Alcoa will not issue any fractional shares of Alcoa common stock in the merger. Each RTI shareholder who would otherwise be entitled to a fractional share, or fractional shares, of Alcoa common stock will instead receive an amount in cash based on prevailing prices of Alcoa common stock following the effective time of the merger.

Example: If you hold 100 shares of RTI common stock, you will have the right to receive 283 shares of Alcoa common stock and a cash payment instead of the 0.15 shares of Alcoa common stock that you otherwise would have received (i.e., 100 shares x 2.8315 = 283.15 shares).

The merger agreement governs the merger. The merger agreement is included in this proxy statement/prospectus as Annex A. Please read the merger agreement carefully. All descriptions in this summary and elsewhere in this proxy statement/prospectus of the terms and conditions of the merger are qualified by reference to the merger agreement.

RTI's Board of Directors Unanimously Recommends That RTI Shareholders Vote FOR Adoption of the Merger Agreement (page 91)

RTI's board of directors determined that the merger, the merger agreement and the transactions contemplated by the merger agreement are advisable and in the best interests of RTI and its shareholders and has unanimously approved the merger agreement. RTI's board of directors unanimously recommends that RTI shareholders vote FOR adoption of the merger agreement. For the factors considered by RTI's board of directors in reaching its decision to approve the merger agreement, see the section entitled **The Merger RTI's Reasons for the Merger; Recommendation of the RTI Board of Directors** beginning on page 91.

Barclays Capital Inc. Has Provided an Opinion to RTI's Board of Directors Regarding the Exchange Ratio to be Offered to the Holders of RTI Common Stock (page 96 and Annex B)

In connection with the proposed transaction, RTI engaged Barclays Capital Inc. (Barclays) to act as financial advisor to RTI in connection with a potential sale of the company. At the RTI board of directors meeting on March 8, 2015, Barclays rendered its oral opinion and delivered its written opinion to the board of directors of RTI that, as of such date and based upon and subject to the qualifications, limitations and assumptions stated in its opinion, the exchange ratio of 2.8315 shares of Alcoa common stock per share of RTI common stock to be offered to the shareholders of RTI common stock pursuant to the merger agreement was fair, from a financial point of view, to the shareholders of RTI.

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The full text of Barclays' written opinion, dated as of March 8, 2015, is attached as Annex B to this proxy statement/prospectus. Barclays' written opinion sets forth, among other things, the assumptions made, procedures followed, factors considered and limitations upon the review undertaken by Barclays in rendering its opinion. You are encouraged to read the opinion carefully in its entirety. This summary is qualified in its entirety by reference to the full text of the opinion. Barclays' opinion is addressed to the board of directors of RTI, addresses only the fairness, from a financial point of view, of the exchange ratio to be offered to the shareholders of RTI and does not constitute a recommendation to any shareholder of RTI as to how such shareholder should vote with respect to the proposed transaction or any other matter. Barclays was not requested to opine as to, and its opinion does not in any manner address, RTI's underlying business decision to proceed with or effect the proposed transaction or the likelihood of the consummation of the proposed transaction.

For further information, please see the discussion under the caption **The Merger Opinion of Barclays Capital Inc.** beginning on page 96.

What Holders of RTI Equity-Based Awards Will Receive (page 119)

Stock options: Each RTI stock option (whether vested or unvested) will be converted at the closing into an option to purchase, on the same terms and conditions (including with respect to vesting), the number of Alcoa common shares (rounded down to the nearest whole share) equal to the number of RTI common shares subject to such option multiplied by the exchange ratio, at an exercise price per Alcoa share (rounded up to the nearest whole cent) equal to the exercise price per RTI share subject to such option divided by the exchange ratio.

Performance share awards: The number of shares of RTI common stock subject to outstanding RTI performance share awards (RTI PSAs) will be fixed at the closing based on the deemed level of achievement of the performance targets applicable to RTI PSAs. Each RTI PSA granted in 2013, which by its terms vests at the closing, will be converted into the right to receive the merger consideration in respect of each RTI common share underlying such award. Each RTI PSA granted in 2014 or 2015 will be converted into an award (which for the avoidance of doubt will not be subject to any further performance-based vesting) covering shares of Alcoa common stock by multiplying the number of shares of RTI common stock subject to such RTI PSA by the exchange ratio (with the resulting number rounded down to the nearest whole share) and will continue to vest over time in accordance with its original service-vesting schedule.

Restricted shares: With respect to each outstanding award of restricted RTI common stock subject to vesting, repurchase or other lapse restrictions, such restrictions will, by their terms, lapse at closing and such award will be converted into the right to receive the merger consideration with respect to each RTI common share subject to such award.

Restricted stock unit awards: Each outstanding RTI restricted stock unit award (an RTI RSU) will be converted into a restricted stock unit award covering shares of Alcoa common stock by multiplying the number of shares of RTI common stock subject to such RTI RSU by the exchange ratio (with the resulting number rounded down to the nearest whole share) and will continue to vest over time in accordance with its original service-vesting schedule.

RTI Will Hold Its Annual Meeting on _____, 2015 (page 21)

The annual meeting of RTI shareholders will be held on _____, 2015 at _____, at _____ a.m. Eastern Daylight Time. At the meeting, all holders of the RTI's common stock at the close of business on _____, 2015, will be asked to:

approve the adoption of the Agreement and Plan of Merger, dated as of March 8, 2015, by and among RTI, Alcoa Inc. and Ranger Ohio Corporation, pursuant to which Ranger Ohio Corporation will merge

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with and into RTI and RTI will become a wholly owned subsidiary of Alcoa Inc. as more fully described in the attached proxy statement/prospectus;

elect nine directors nominated by RTI's board of directors;

ratify the appointment of PwC, as RTI's independent registered public accounting firm for 2015;

approve (on a non-binding advisory basis) compensation of RTI's named executive officers as disclosed in these materials;

approve (on a non-binding advisory basis) compensation that RTI's named executive officers may receive in connection with the merger pursuant to existing agreements or arrangements with RTI; and

approve the adjournment of the annual meeting, if necessary or appropriate, to solicit additional proxies in favor of the approval of the merger agreement.

Only holders of record at the close of business on _____, 2015, will be entitled to vote at the annual meeting. Each share of RTI common stock is entitled to one vote on each proposal to be considered at the RTI annual meeting. As of the record date, there were _____ shares of RTI common stock entitled to vote at the annual meeting. As of the record date, directors and executive officers of RTI and their affiliates owned and were entitled to vote _____ shares of RTI common stock, representing approximately _____% of the shares of RTI common stock outstanding on that date. RTI currently expects that its directors and executive officers will vote their shares in favor of the merger agreement proposal, the RTI directors proposal, the accountant proposal, the RTI compensation proposal, the RTI merger-related compensation proposal and the adjournment proposal, although none of them has entered into any agreements obligating them to do so.

To adopt the merger agreement, holders of two-thirds of the outstanding shares of RTI common stock entitled to vote at the annual meeting must vote in favor of approving the adoption of the merger agreement. Because approval is based on the affirmative vote of two-thirds of the shares outstanding, your failure to vote, failure to instruct your bank or broker with respect to the proposal to approve the adoption of the merger agreement, or abstention will have the same effect as a vote against approval of the merger agreement.

Under Ohio law and RTI's Code of Regulations, the nine director candidates receiving the greatest number of votes for election will be elected to RTI's board of directors. RTI shareholders may cast their votes for or withhold with respect to each nominee. RTI common shares as to which the authority to vote is withheld will not be counted toward the election of the individual nominees specified on the form of proxy. Abstentions will have no effect on the outcome of the vote. Consistent with RTI's Governance Guidelines, any nominee who fails to receive more votes cast for than withheld for his or her election to the board of directors must irrevocably tender his or her resignation. The failure to instruct your bank or broker with respect to the RTI directors proposal will result in your shares not being counted in determining the number of shares necessary for approval.

Ratification of the appointment of PwC as RTI's independent registered public accounting firm for 2015 requires the favorable vote of a majority of the votes cast. An abstention does not represent a vote cast, and as such has no effect on the advisory vote.

Approval of the RTI compensation proposal and the RTI merger-related compensation proposal requires, in each case, the favorable vote of a majority of the votes cast. The result of the shareholder votes on the RTI compensation proposal and the RTI merger-related compensation proposal are not binding on RTI. An abstention does not represent an advisory vote cast, and as such has no effect on the advisory vote. The failure to instruct your bank or broker with respect to the RTI compensation proposal or the RTI merger-related compensation proposal will result in your shares not being counted in determining the number of shares necessary for approval.

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Approval of the adjournment proposal requires the affirmative vote of the holders of a majority of shares of RTI common stock entitled to vote on, and voting for or against or expressly abstaining with respect to, such proposal at the annual meeting, even if less than a quorum. Because approval of the adjournment proposal is based on the affirmative vote of a majority of shares voting or expressly abstaining at the annual meeting, abstentions will have the same effect as a vote against this proposal. The failure to vote or failure to instruct your bank or broker with respect to the adjournment proposal, however, will have no effect on the adjournment proposal.

The Merger Is Intended to Be Tax-Free to Holders of RTI Common Stock as to the Shares of Alcoa Common Stock They Receive (page 137)

The merger is intended to be treated as a reorganization within the meaning of Section 368(a) of the Code, and it is a condition to RTI's obligation to complete the merger that RTI receive a legal opinion to that effect. Accordingly, the merger generally will be tax-free to a holder of RTI common stock for United States federal income tax purposes as to the shares of Alcoa common stock he or she receives in the merger, except for any gain or loss that may result from the receipt of cash instead of fractional shares of Alcoa common stock that such holder of RTI common stock would otherwise be entitled to receive.

The United States federal income tax consequences described above may not apply to all holders of RTI common stock. Your tax consequences will depend on your individual situation. Accordingly, RTI strongly urges you to consult your tax advisor for a full understanding of the particular tax consequences of the merger to you.

RTI's Officers and Directors Have Financial Interests in the Merger That Differ from Your Interests (page 107)

In considering the RTI board of directors' recommendation to vote for the proposal to approve the adoption of the merger agreement, RTI shareholders should be aware that the directors and executive officers of RTI have interests in the merger that are different from, or in addition to, the interests of RTI shareholders generally and that may create potential conflicts of interest. The RTI board of directors was aware of these interests and considered them, among other matters, in evaluating and negotiating the merger agreement and approving the merger, and in recommending the approval of the merger agreement by RTI shareholders.

For a complete description of these interests, see **The Merger Interests of RTI's Directors and Executive Officers in the Merger** beginning on page 107.

RTI Shareholders Do Not Have Dissenters' Appraisal Rights in the Merger (page 116)

Appraisal rights are statutory rights that, if applicable under law, enable shareholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to shareholders in connection with the extraordinary transaction. Appraisal rights are not available in all circumstances, and exceptions to these rights are provided under the Ohio Revised Code. Because both RTI's and Alcoa's common stock is listed on the New York Stock Exchange, RTI's shareholders do not have dissenters' appraisal rights in the merger with respect to their shares of RTI common stock.

Conditions That Must Be Satisfied or Waived for the Merger to Occur (page 130)

Currently, RTI and Alcoa expect to complete the merger within two to five months of the date of this preliminary proxy statement/prospectus. As more fully described in this proxy statement/prospectus and in the merger agreement, the completion of the merger depends on a number of conditions being satisfied or, where legally permissible, waived. These conditions include, among others, approval of the merger agreement by RTI's shareholders and the receipt of certain required regulatory approvals.

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RTI and Alcoa cannot be certain when, or if, the conditions to the merger will be satisfied or waived, or that the merger will be completed.

Termination of the Merger Agreement (page 132)

Either RTI or Alcoa may decide to terminate the merger agreement if the RTI shareholders fail to adopt the merger agreement at the annual meeting.

In addition, RTI and Alcoa may mutually agree in writing to terminate the merger agreement before completing the merger, even after the RTI shareholders adopt the merger agreement.

In addition, either RTI or Alcoa may decide to terminate the merger agreement, even after the RTI shareholders adopt the merger agreement, if:

an injunction has been entered permanently prohibiting the consummation of the merger and such injunction has become final and nonappealable, but the right to terminate the agreement in this circumstance will not be available to a party if the injunction is due to the failure of that party to perform any of its obligations under the merger agreement;

the merger has not been completed by December 8, 2015, if (i) the failure to complete the merger by that date is not caused by the terminating party's material breach of the merger agreement and (ii) the other party has not filed (and is not then pursuing) an action seeking specific performance as permitted by the merger agreement; or

the other party breaches the merger agreement in a way that would grant the party seeking to terminate the agreement the right not to consummate the merger, unless the breach is capable of being cured (and is cured) within 30 days following receipt of written notice of such breach (provided that the terminating party is not then in material breach of the merger agreement).

In addition, Alcoa, prior to the adoption of the merger agreement by the RTI shareholders, may terminate the merger agreement if RTI's board of directors:

changes, qualifies, withholds, withdraws or modifies, in a manner adverse to Alcoa, its recommendation that RTI shareholders vote to adopt the merger agreement (or publicly proposes to do so);

takes any formal action or makes any recommendation or public statement in connection with a tender offer or exchange offer (other than a recommendation against such offer or a customary stop, look and listen communication); or

adopts, approves or recommends to RTI shareholders an alternative acquisition proposal (or publicly proposes to do so).

In addition, Alcoa, prior to the adoption of the merger agreement by the RTI shareholders, may terminate the merger agreement if RTI materially breaches its non-solicitation obligations or obligations with respect to other acquisition proposals set forth in the merger agreement.

In addition, RTI, prior to the adoption of the merger agreement by the RTI shareholders, may terminate the merger agreement if (i) RTI's board of directors authorizes RTI to enter into a definitive agreement with respect to a superior proposal and (ii) RTI enters into such definitive agreement, in each case subject to complying in all material respects with the non-solicitation obligations and obligations with respect to other acquisition proposals set forth in the merger agreement.

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Termination Fee (page 133)

If the merger agreement is terminated under certain circumstances, including circumstances involving a change in recommendation by RTI's board of directors, RTI may be required to pay Alcoa a termination fee of \$50 million. The termination fee could discourage other companies from seeking to acquire or merge with RTI.

Regulatory Approvals Required for the Merger (page 116)

RTI and Alcoa have agreed to use their reasonable best efforts to obtain all regulatory approvals required to complete the transactions contemplated by the merger agreement. Alcoa and RTI have filed applications and notifications to obtain the required regulatory approvals. In particular, Alcoa and RTI have filed all notifications and filings required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), and all notifications and filings required by the European Commission pursuant to Council Regulation 139/2004 of the European Union, as amended.

Although RTI and Alcoa do not know of any reason why RTI and Alcoa cannot obtain the required regulatory approvals in a timely manner, RTI and Alcoa cannot be certain when or if RTI and Alcoa will obtain them.

Board of Directors and Executive Officers of Alcoa Following Completion of the Merger (page 107)

The directors of RTI and its subsidiaries will resign as of the effective time of the merger. The composition of Alcoa's board of directors and executive officers is not anticipated to change in connection with the completion of the merger.

The Rights of RTI Shareholders Will Change as a Result of the Merger (page 142)

The rights of RTI shareholders will change as a result of the merger due to differences in Alcoa's and RTI's governing documents. The rights of RTI shareholders are governed by Ohio law, and by RTI's articles of incorporation and code of regulations, each as amended to date (which is referred to as RTI's articles of incorporation and code of regulations, respectively). Upon the completion of the merger, the rights of RTI shareholders will be governed by Pennsylvania law, Alcoa's articles of incorporation and bylaws (which is referred to as Alcoa's articles of incorporation and bylaws, respectively).

This proxy statement/prospectus contains descriptions of the material differences in shareholder rights under each of the Alcoa and RTI governing documents.

Information about the Companies (page 45)

Alcoa

Alcoa is a global leader in lightweight metals engineering and manufacturing. Alcoa's multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications. Alcoa is also the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Sales of primary aluminum and alumina represent approximately 40% of Alcoa's revenues.

Alcoa operates in 30 countries. The United States and Europe generated 51% and 27%, respectively, of Alcoa's sales in 2014. Alcoa is incorporated under the laws of the Commonwealth of Pennsylvania and headquartered in New York, New York.

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Alcoa's principal executive offices are located at 390 Park Avenue, New York, New York 10022-4608. The telephone number of its investor relations office is (212) 836-2674, and the telephone number of the office of the secretary is (212) 836-2732.

Additional information about Alcoa and its subsidiaries is included in documents incorporated by reference in this proxy statement/prospectus. See **Where You Can Find More Information** on page 158.

RTI

RTI is a leading producer and global supplier of titanium mill products, and a manufacturer of fabricated titanium and specialty metal components for the international aerospace, defense, energy, medical device, and other consumer and industrial markets. It is a successor to entities that have been operating in the titanium industry since 1951. RTI first became publicly traded on the New York Stock Exchange in 1990 under the name RMI Titanium Co. and the symbol RTI, and was reorganized into a holding company structure in 1998 under the name RTI International Metals, Inc.

RTI's principal executive offices are located at Westpointe Corporate Center One, 1550 Coraopolis Heights Road, Fifth Floor, Pittsburgh, Pennsylvania 15108-2973 and RTI's telephone number is (412) 893-0026. RTI's website can be accessed at <http://www.rtiintl.com>. Information contained in RTI's website does not constitute part of, and is not incorporated into, this proxy statement/prospectus.

Additional information about RTI and its subsidiaries is included in documents incorporated by reference in this proxy statement/prospectus. See **Where You Can Find More Information** on page 158.

Table of Contents**SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF ALCOA**

The following table presents selected historical consolidated financial data of Alcoa for the periods and at the dates indicated. The historical consolidated financial information (except for shipments and realized prices) for Alcoa for each of the years in the five-year period ended December 31, 2014 is derived from the audited consolidated financial statements of Alcoa as of and for each of the five years ended December 31, 2014. The historical consolidated financial information (except for shipments and realized prices) for Alcoa as of and for the three months ended March 31, 2015 and 2014 has been derived from unaudited interim consolidated financial statements of Alcoa. The data should be read in conjunction with Alcoa's consolidated financial statements, the notes to the consolidated financial statements and the information in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Alcoa's Annual Report on Form 10-K for the year ended December 31, 2014 and Quarterly Report on Form 10-Q for the three months ended March 31, 2015, which are incorporated by reference in this proxy statement/prospectus. See **Where You Can Find More Information** on page 158 for instructions on how to obtain the information that has been incorporated by reference.

(dollars in millions, except per-share amounts and realized prices;

shipments in thousands of metric tons [kmt])

| | For the three months ended | | For the year ended December 31, | | | | |
|---|----------------------------|-----------|---------------------------------|------------|-----------|-----------|-----------|
| | March 31, 2015 | 2014 | 2014 | 2013 | 2012 | 2011 | 2010 |
| Sales | \$ 5,819 | \$ 5,454 | \$ 23,906 | \$ 23,032 | \$ 23,700 | \$ 24,951 | \$ 21,013 |
| Amounts attributable to Alcoa common shareholders: | | | | | | | |
| Income (loss) from continuing operations | \$ 195 | \$ (178) | \$ 268 | \$ (2,285) | \$ 191 | \$ 614 | \$ 262 |
| Loss from discontinued operations | | | | | | (3) | (8) |
| Net income (loss) | \$ 195 | \$ (178) | \$ 268 | \$ (2,285) | \$ 191 | \$ 611 | \$ 254 |
| Earnings per share attributable to Alcoa common shareholders: | | | | | | | |
| Basic: | | | | | | | |
| Income (loss) from continuing operations | \$ 0.15 | \$ (0.16) | \$ 0.21 | \$ (2.14) | \$ 0.18 | \$ 0.58 | \$ 0.25 |
| Loss from discontinued operations | | | | | | (0.01) | |
| Net income (loss) | \$ 0.15 | \$ (0.16) | \$ 0.21 | \$ (2.14) | \$ 0.18 | \$ 0.57 | \$ 0.25 |
| Diluted: | | | | | | | |
| Income (loss) from continuing operations | \$ 0.14 | \$ (0.16) | \$ 0.21 | \$ (2.14) | \$ 0.18 | \$ 0.55 | \$ 0.25 |
| Loss from discontinued operations | | | | | | | (0.01) |

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| | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Net income (loss) | \$ 0.14 | \$ (0.16) | \$ 0.21 | \$ (2.14) | \$ 0.18 | \$ 0.55 | \$ 0.24 |
| Shipments of alumina (kmt) | 2,538 | 2,649 | 10,652 | 9,966 | 9,295 | 9,218 | 9,246 |
| Shipments of aluminum products (kmt) | 1,091 | 1,156 | 4,794 | 4,994 | 5,197 | 5,037 | 4,757 |
| Alcoa's average realized price per metric ton of primary aluminum | \$ 2,420 | \$ 2,205 | \$ 2,405 | \$ 2,243 | \$ 2,327 | \$ 2,636 | \$ 2,356 |
| Cash dividends declared per common share | \$ 0.03 | \$ 0.03 | \$ 0.12 | \$ 0.12 | \$ 0.12 | \$ 0.12 | \$ 0.12 |
| Total assets | \$ 35,694 | \$ 35,605 | \$ 37,399 | \$ 35,742 | \$ 40,179 | \$ 40,120 | \$ 39,293 |
| Total debt | \$ 8,817 | \$ 7,747 | \$ 8,852 | \$ 8,319 | \$ 8,829 | \$ 9,371 | \$ 9,165 |
| Cash provided from (used for) operations | \$ (175) | \$ (551) | \$ 1,674 | \$ 1,578 | \$ 1,497 | \$ 2,193 | \$ 2,261 |
| Capital expenditures | \$ 247 | \$ 209 | \$ 1,219 | \$ 1,193 | \$ 1,261 | \$ 1,287 | \$ 1,015 |

Table of Contents**SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF RTI**

The following table presents selected historical consolidated financial data of RTI for the periods and at the dates indicated. The historical consolidated financial information for RTI for each of the years in the five-year period ended December 31, 2014 is derived from the audited consolidated financial statements of RTI as of and for each of the five years ended December 31, 2014. The historical consolidated financial information for RTI as of and for the three months ended March 31, 2015 and 2014 has been derived from unaudited interim consolidated financial statements of RTI. The data should be read in conjunction with RTI's consolidated financial statements, the notes to the consolidated financial statements and the information in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in RTI's Annual Report on Form 10-K for the year ended December 31, 2014 and Quarterly Report on Form 10-Q for the three months ended March 31, 2015, which are incorporated by reference in this proxy statement/prospectus. See **Where You Can Find More Information** on page 158 for instructions on how to obtain the information that has been incorporated by reference.

(dollars in thousands, except per share data)

| | Three Months Ended | | Years Ended December 31, | | | | |
|--|--------------------|------------|--------------------------|------------|------------|------------|------------|
| | March 31, 2015 | 2014 | 2014 | 2013 | 2012(3) | 2011 | 2010 |
| Income Statement Data: | | | | | | | |
| Net sales | \$ 198,492 | \$ 174,545 | \$ 793,579 | \$ 783,273 | \$ 699,987 | \$ 488,352 | \$ 398,163 |
| Operating income | 12,164 | 1,617 | 70,327 | 62,015 | 47,417 | 23,382 | 14,423 |
| Income (loss) before income taxes | 3,424 | (5,405) | 41,738 | 22,796 | 29,138 | 7,793 | 12,182 |
| Net income (loss) from continuing operations | 4,533 | (3,816) | 31,701 | 15,657 | 13,453 | (2,308) | (18,122) |
| Basic earnings (loss) per share continuing operations | \$ 0.15 | \$ (0.13) | \$ 1.03 | \$ 0.51 | \$ 0.44 | \$ (0.08) | \$ (0.61) |
| Diluted earnings (loss) per share continuing operations | \$ 0.15 | \$ (0.13) | \$ 1.03 | \$ 0.51 | \$ 0.44 | \$ (0.08) | \$ (0.61) |

| | March 31, | | December 31, | | | | |
|---------------------------------|------------|------------|--------------|------------|------------|------------|------------|
| | 2015 | 2014 | 2014(1) | 2013(2) | 2012(3) | 2011 | 2010 |
| Balance Sheet | | | | | | | |
| Data: | | | | | | | |
| Working capital | \$ 705,621 | \$ 772,189 | \$ 698,578 | \$ 791,143 | \$ 472,084 | \$ 586,965 | \$ 638,519 |
| Total assets | 1,568,745 | 1,500,343 | 1,565,694 | 1,505,545 | 1,220,092 | 1,100,996 | 1,089,606 |
| Long-term debt | 461,152 | 434,209 | 456,657 | 430,300 | 198,337 | 186,981 | 178,107 |
| Total shareholders equity | 792,866 | 767,602 | 795,480 | 773,974 | 708,239 | 694,640 | 696,529 |

(1)

In 2014, the outstanding principal amount of 3.000% Convertible Senior Notes due 2015 (the 2015 Notes) was reclassified to current portion of long-term debt. The 2015 Notes are due in December 2015.

- (2) RTI issued the \$402.5 million aggregate principal amount of 1.625% Convertible Senior Notes due 2019 (the 2019 Notes), and repurchased approximately \$115.6 million of the then outstanding \$230 million aggregate principal amount 2015 Notes in April 2013.
- (3) In 2012, RTI acquired RTI Remmele Engineering, Inc. and RTI Remmele Medical, Inc.

Table of Contents**COMPARATIVE PER SHARE DATA**

The below table sets forth selected historical as reported and unaudited pro forma per share information of Alcoa and RTI.

As Reported Per Share Information of Alcoa and RTI. The as reported per share information of each of Alcoa and RTI below is derived from the audited financial statements as of, and for the year ended, December 31, 2014 and the unaudited financial statements as of, and for the three months ended, March 31, 2015 for each such company.

Pro Forma Combined Per Share Information of Alcoa. The unaudited pro forma combined per share information of Alcoa below gives effect to the merger under the acquisition method of accounting, as if the merger had been effective on January 1, 2014, and assuming that 2.8315 shares of Alcoa common stock had been issued in exchange for each (i) outstanding share of RTI common stock, (ii) issuable share of RTI common stock related to its two outstanding series of convertible senior notes and (iii) issuable share of RTI common stock related to its compensatory equity awards that either could be issued prior to the completion of the merger or become entitled to receive the merger consideration. This unaudited pro forma combined per share information also provides for the consideration of an after-tax estimate for additional depreciation expense due to a step-up in asset basis and a reduction in interest expense related to RTI's two outstanding series of convertible senior notes. The unaudited pro forma combined per share information of Alcoa is derived from the audited financial statements, as adjusted for the applicable pro forma adjustments, as of, and for the year ended, December 31, 2014 and the unaudited financial statements, as adjusted for the applicable pro forma adjustments, as of, and for the three months ended, March 31, 2015 for Alcoa and RTI.

The unaudited pro forma combined per share information of Alcoa does not purport to represent the actual results of operations and financial position that Alcoa would have achieved had the companies been combined during the year ended December 31, 2014 or the three months ended March 31, 2015 or to project the future results of operations and financial position that Alcoa may achieve after the merger.

Equivalent Pro Forma Per Share Information of RTI. The unaudited equivalent pro forma per share amounts of RTI below are calculated by multiplying the unaudited pro forma combined per share amounts of Alcoa by the exchange ratio (2.8315 shares of Alcoa common stock for each share of RTI common stock) so that the per share amounts are equated to the respective values for one share of RTI common stock.

Generally. You should read the below information in conjunction with the selected historical financial information included elsewhere in this proxy statement/prospectus and the historical financial statements of Alcoa and RTI and related notes that are incorporated into this proxy statement/prospectus by reference. See **Selected Historical Consolidated Financial Data of Alcoa**, **Selected Historical Consolidated Financial Data of RTI** and **Where You Can Find More Information** beginning on pages 12, 13 and 158, respectively, of this proxy statement/prospectus.

| Per common share data | As Reported | | Pro Forma | |
|--|-------------|---------|-------------------|-------------------|
| | Alcoa | RTI | Alcoa Combined | RTI Equivalent |
| For the year ended December 31, 2014 | | | | |
| Income from continuing operations basic | \$ 0.21 | \$ 1.03 | \$ 0.21 | \$ 0.59 |
| Income from continuing operations diluted(1) | \$ 0.21 | \$ 1.03 | \$ 0.21 | \$ 0.59 |
| Cash dividends(2) | \$ 0.12 | | \$ 0.12 | \$ 0.34 |
| As of December 31, 2014 | | | | |

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| | | | | |
|--|---------|----------|---------|----------|
| Book value(3) | \$ 9.07 | \$ 25.89 | \$ 9.45 | \$ 26.76 |
| For the three months ended March 31, 2015 | | | | |
| Income from continuing operations basic | \$ 0.15 | \$ 0.15 | \$ 0.13 | \$ 0.37 |
| Income from continuing operations diluted(1) | \$ 0.14 | \$ 0.15 | \$ 0.13 | \$ 0.37 |
| Cash dividends(2) | \$ 0.03 | | \$ 0.03 | \$ 0.08 |
| As of March 31, 2015 | | | | |
| Book value(3) | \$ 8.43 | \$ 25.75 | \$ 8.85 | \$ 25.06 |

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- (1) The Alcoa pro forma combined income from continuing operations diluted per share amount excludes the potential dilution from RTI compensatory equity awards outstanding that will remain outstanding subsequent to the merger (see **The Merger Agreement** beginning on page 118 of this proxy statement/prospectus for additional information).
- (2) The Alcoa pro forma combined cash dividends per share is the same as the as reported amount because no change in dividend policy is expected as a result of the merger.
- (3) Book value per share is calculated by dividing total shareholders equity (excluding preferred stock) by the number of common shares outstanding at the end of the period.

Table of Contents**CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

Some of the statements contained or incorporated by reference in this proxy statement/prospectus contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements about the financial condition, results of operations, earnings outlook and prospects of Alcoa, RTI and the combined company following the proposed transaction and statements for the period following the completion of the merger. Words such as anticipates, believes, feels, expects, estimates, seeks, strives, plan, outlook, forecast, position, target, mission, assume, achievable, potential, strategy, goal, aspirations, remain, maintain, trend, objective and variations of such words and similar expressions, or future or conditional verbs such as will, would, should, could, might, can, may or similar expressions, as they relate to Alcoa, RTI, the transaction or the combined company following the transaction often identify forward-looking statements.

These forward-looking statements are predicated on the beliefs and assumptions of each of Alcoa management and RTI management based on information known to management as of the date of this proxy statement/prospectus and do not purport to speak as of any other date. Forward-looking statements may include descriptions of the expected benefits and costs of the transaction; forecasts of revenue, earnings or other measures of economic performance, including statements of profitability, business segments and subsidiaries; management plans relating to the transaction; the expected timing of the completion of the transaction; the ability to complete the transaction; the ability to obtain any required regulatory, shareholder or other approvals; any statements of the plans and objectives of management for future or past operations, products or services, including the execution of integration plans; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing.

The forward-looking statements contained or incorporated by reference in this proxy statement/prospectus reflect the view of management as of this date with respect to future events and are subject to risks and uncertainties. Should one or more of these risks materialize or should underlying beliefs or assumptions prove incorrect, actual results could differ materially from those anticipated by the forward-looking statements or historical results. Factors that could cause or contribute to such differences include, but are not limited to, (1) the matters set forth under **Risk Factors** beginning on page 17; (2) the possibility that expected benefits may not materialize in the timeframe expected or at all, or may be more costly to achieve; (3) that the transaction may not be timely completed, if at all; (4) that prior to the completion of the transaction or thereafter, Alcoa's and RTI's respective businesses may not perform as expected due to transaction-related uncertainty or other factors; (5) that the parties are unable to successfully implement integration strategies; (6) that required regulatory, shareholder or other approvals are not obtained or other closing conditions are not satisfied in a timely manner or at all; (7) reputational risks and the reaction of the companies' customers to the transaction; (8) diversion of management time on merger-related issues; and (9) those factors referenced in Alcoa's and RTI's filings with the SEC.

For any forward-looking statements made in this proxy statement/prospectus or in any documents incorporated by reference into this proxy statement/prospectus, Alcoa and RTI claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on these statements, which speak only as of the date of this proxy statement/prospectus or the date of any document incorporated by reference in this proxy statement/prospectus. Alcoa and RTI do not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date the forward-looking statements are made. All subsequent written and oral forward-looking statements concerning the merger or other matters addressed in this proxy statement/prospectus and attributable to Alcoa, RTI or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this proxy statement/prospectus.

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RISK FACTORS

*In addition to general investment risks and the other information contained in or incorporated by reference into this proxy statement/prospectus, including the matters addressed under the heading **Cautionary Statement Regarding Forward-Looking Statements** on page 16 and the matters discussed under the caption **Risk Factors** in the Annual Reports on Forms 10-K filed by Alcoa and RTI, respectively, for the year ended December 31, 2014, as updated by other reports filed with the SEC, you should carefully consider the following risk factors in deciding how to vote on the merger agreement proposal.*

Because the exchange ratio is fixed and the market price of Alcoa common stock will fluctuate, RTI shareholders cannot be sure of the market value of the merger consideration they will receive.

Upon completion of the merger, each share of RTI common stock will be converted into 2.8315 shares of Alcoa common stock, plus cash in lieu of any fractional shares. Because the exchange ratio is fixed, the value of the shares of Alcoa common stock that will be issued to you in the merger will depend on the market price of Alcoa common stock at the time the shares are issued. There will be no adjustment to the fixed number of shares of Alcoa common stock that will be issued to you based upon changes in the market price of Alcoa common stock or RTI common stock prior to the closing. Neither Alcoa nor RTI is permitted to terminate the merger agreement or resolicit the vote of RTI shareholders solely because of changes in the market price of either company's stock.

The market price of Alcoa common stock at the time the merger is completed may vary from the market price of Alcoa common stock on the date the merger agreement was executed, on the date of this proxy statement/prospectus and on the date of the RTI annual meeting as a result of various factors that are beyond the control of Alcoa and RTI, including but not limited to general market and economic conditions, changes in each of RTI's and Alcoa's respective businesses, operations and prospects, and regulatory considerations. In addition to the adoption of the merger agreement by RTI shareholders, completion of the merger is subject to receipt of required regulatory approvals and satisfaction of other conditions that may not occur until after the RTI annual meeting. Therefore, at the time of the RTI annual meeting you will not know the precise value of the consideration you will receive at the effective time of the merger. You should obtain current market quotations for shares of Alcoa common stock and for shares of RTI common stock.

The market price of Alcoa common stock after the merger may be affected by factors different from those affecting the shares of Alcoa or RTI currently.

Upon completion of the merger, holders of RTI common stock will become holders of Alcoa common stock. Alcoa's business differs from that of RTI, and, accordingly, the results of operations of the combined company and the market price of the combined company's shares of common stock may be affected by factors different from those currently affecting the independent results of operations of each of Alcoa and RTI. For a discussion of the businesses of Alcoa and RTI and of certain factors to consider in connection with those businesses, see the documents incorporated by reference in this proxy statement/prospectus and referred to under **Where You Can Find More Information** beginning on page 158.

Regulatory approvals may not be received, may take longer than expected or impose conditions that are not presently anticipated.

Before the merger may be completed, RTI and Alcoa must obtain various approvals from regulatory authorities. These regulators may impose conditions on the completion of the merger or require changes to the terms of the merger. Such conditions or changes could have the effect of delaying completion of the merger or imposing additional costs on

Alcoa following the merger. See **The Merger Regulatory Approvals Required for the Merger** beginning on page 116.

Table of Contents**Combining the two companies may be more difficult, costly or time-consuming than expected.**

Alcoa and RTI have operated and, until the completion of the merger, will continue to operate, independently. The success of the merger will depend, in part, on RTI and Alcoa's ability to successfully combine the businesses of Alcoa and RTI. To realize these anticipated benefits, after the completion of the merger, Alcoa expects to integrate RTI's business into its own. It is possible that the integration process could result in the loss of key employees, the disruption of each company's ongoing businesses or inconsistencies in standards, controls, procedures and policies that adversely affect the combined company's ability to maintain relationships with customers and employees or to achieve the anticipated benefits of the merger. The loss of key employees could adversely affect Alcoa's ability to successfully conduct its business in the markets in which RTI now operates, which could have an adverse effect on Alcoa's financial results and the value of its common stock. If Alcoa experiences difficulties with the integration process, the anticipated benefits of the merger may not be realized fully or at all, or may take longer to realize than expected. There also may be business disruptions that cause RTI to lose customers or cause customers to move their business to competing companies. Integration efforts between the two companies will also divert management attention and resources. These integration matters could have an adverse effect on each of RTI and Alcoa during this transition period and for an undetermined period after consummation of the merger.

Alcoa may fail to realize the cost savings estimated for the merger.

Alcoa estimates that it will achieve cost savings from the merger when the two companies have been fully integrated. While Alcoa continues to be comfortable with these expectations as of the date of this proxy statement/prospectus, it is possible that the estimates of the potential cost savings could turn out to be incorrect. The cost savings estimates also assume Alcoa's ability to combine the businesses of Alcoa and RTI in a manner that permits those cost savings to be realized. If the estimates turn out to be incorrect or Alcoa is not able to combine successfully the two companies, the anticipated cost savings may not be fully realized or realized at all, or may take longer to realize than expected.

The fairness opinion rendered to the board of directors of RTI by its financial advisor was based on the financial analyses performed by RTI's financial advisor, which considered factors such as market and other conditions then in effect, and financial forecasts and other information made available to RTI's financial advisor, as of the date of its fairness opinion. As a result, the fairness opinion does not reflect changes in events or circumstances after the date of the fairness opinion. RTI has not obtained, and does not expect to obtain, an updated fairness opinion from its financial advisor reflecting changes in circumstances that may have occurred between signing the merger agreement and the completion of the merger.

The fairness opinion rendered to the board of directors of RTI by Barclays was provided in connection with, and at the time of, the board of directors' evaluation of the merger and the merger agreement. Barclays' fairness opinion was based on the financial analyses performed, which considered factors such as market and other conditions then in effect, and financial forecasts and other information made available to Barclays, as of the date of its opinion, which may have changed, or may change, after the date of the fairness opinion. RTI has not obtained an updated fairness opinion as of the date of this proxy statement/prospectus from Barclays and RTI will not obtain an updated fairness opinion prior to the completion of the merger. Changes in the operations and prospects of RTI or Alcoa, general market and economic conditions and other factors that may be beyond the control of RTI and Alcoa, and on which the fairness opinion was based, may alter the value of RTI or Alcoa or the prices of shares of RTI common stock or Alcoa common stock by the time the merger is completed. The fairness opinion does not speak as of any date other than the date of the fairness opinion. The fairness opinion is included as Annex B to this proxy statement/prospectus. For a description of the fairness opinion that RTI received from its financial advisor, please refer to **The Merger Opinion of Barclays Capital Inc.** on page 96. For a description of the other factors considered by RTI's board of directors in determining to approve the merger, please refer to **The Merger RTI's Reasons for the Merger; Recommendation of**

the RTI Board of Directors on page 91.

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The shares of Alcoa common stock to be received by RTI shareholders as a result of the merger will have different rights from the shares of RTI common stock they currently hold.

Following completion of the merger, holders of RTI common stock will no longer be shareholders of RTI, an Ohio corporation, but will instead be shareholders of Alcoa, a Pennsylvania corporation. The rights associated with RTI common stock are different from the rights associated with Alcoa common stock. See the section of this proxy statement/prospectus entitled **Comparison of Shareholders Rights** beginning on page 142.

RTI shareholders will have a reduced ownership and voting interest after the merger and will exercise less influence over management.

RTI shareholders currently have the right to vote in the election of the RTI board of directors and on other matters affecting RTI. When the merger occurs, each RTI shareholder that receives shares of Alcoa common stock will become a shareholder of Alcoa with a percentage ownership of the combined organization that is much smaller than the shareholder's percentage ownership of RTI. Because of this, RTI shareholders will have less influence on the management and policies of Alcoa than they now have on the management and policies of RTI.

RTI will be subject to business uncertainties and contractual restrictions while the merger is pending.

Uncertainty about the effect of the merger on employees and customers may have an adverse effect on RTI. These uncertainties may impair RTI's ability to attract, retain and motivate key personnel until the merger is completed, and could cause customers and others that deal with RTI to seek to change existing business relationships with RTI. Retention of certain employees by RTI may be challenging while the merger is pending, as certain employees may experience uncertainty about their future roles with RTI. If key employees depart because of issues relating to the uncertainty and difficulty of integration or a desire not to remain with RTI, RTI's business following the merger could be harmed. See the section entitled **The Merger Agreement Covenants and Agreements** beginning on page 124 of this proxy statement/prospectus for a description of the restrictive covenants applicable to RTI.

Termination of the merger agreement could negatively impact RTI.

If the merger agreement is terminated, there may be various consequences. For example, RTI's businesses may have been impacted adversely by the failure to pursue other beneficial opportunities due to the focus of management on the merger, without realizing any of the anticipated benefits of completing the merger, or the market price of RTI common stock could decline to the extent that the current market price reflects a market assumption that the merger will be completed. If the merger agreement is terminated and RTI's board of directors seeks another merger or business combination, RTI shareholders cannot be certain that RTI will be able to find a party willing to pay the equivalent or greater consideration than that which Alcoa has agreed to pay in the merger. In addition, if the merger agreement is terminated under certain circumstances, including circumstances involving a change in recommendation by RTI's board of directors, RTI may be required to pay Alcoa a termination fee of \$50 million.

The directors and executive officers of RTI have interests and arrangements that may have influenced their decisions to support or recommend that you adopt the merger agreement.

Some of the interests of the directors and executive officers of RTI are different from those of RTI common shareholders in general, and directors and officers of RTI are participants in arrangements that are different from, or in addition to, those of RTI common shareholders. These interests are described in more detail in the section of this proxy statement/prospectus entitled **The Merger Interests of RTI's Directors and Executive Officers in the Merger** beginning on page 107.

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RTI shareholders do not have dissenters appraisal rights in the merger.

Appraisal rights are statutory rights that, if applicable under law, enable shareholders to dissent from an extraordinary transaction, such as a merger, and to demand that the corporation pay the fair value for their shares as determined by a court in a judicial proceeding instead of receiving the consideration offered to shareholders in connection with the extraordinary transaction. RTI's shareholders are not entitled to any appraisal rights in connection with the merger. See the sections of this proxy statement/prospectus entitled **The Merger RTI Shareholders Do Not Have Dissenters Appraisal Rights in the Merger** beginning on page 116 and **Comparison of Shareholders Rights Rights of Dissenting Shareholders** beginning on page 152.

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THE RTI ANNUAL MEETING

This section contains information for RTI shareholders about the annual meeting that RTI has called to allow its shareholders to consider and adopt the merger agreement and other proposals set forth herein. RTI is mailing this proxy statement/prospectus to you, as a RTI shareholder, on or about _____, 2015. Together with this proxy statement/prospectus, RTI is also sending to you a notice of the annual meeting of RTI shareholders and a form of proxy card that RTI's board of directors is soliciting for use at the annual meeting and at any adjournments or postponements of the annual meeting.

This proxy statement/prospectus is also being furnished by Alcoa to RTI shareholders as a prospectus in connection with the issuance of shares of Alcoa common stock upon completion of the merger.

Date, Time and Place of Meeting

The annual meeting will be held _____, 2015 at _____, at _____ a.m. Eastern Daylight Time.

Matters to Be Considered

At the annual meeting of shareholders, you will be asked to consider and vote upon the following matters:

a proposal to adopt the merger agreement and the transactions it contemplates;

election of the nine directors nominated by the RTI board of directors;

a proposal to ratify the appointment of PwC as RTI's independent registered public accounting firm for 2015;

a non-binding advisory vote to approve compensation of RTI's named executive officers as disclosed in these materials;

a non-binding advisory vote to approve compensation that certain executive officers of RTI may receive in connection with the merger pursuant to existing agreements or arrangements with RTI; and

a proposal to approve the adjournment of the annual meeting, if necessary or appropriate, to solicit additional proxies in favor of the approval of the merger agreement.

Recommendation of the RTI Board of Directors

RTI's board of directors determined that the merger, the merger agreement and the transactions contemplated by the merger agreement are advisable and in the best interests of RTI and its shareholders and has unanimously approved the merger and the merger agreement. RTI's board of directors unanimously recommends that RTI shareholders vote

FOR approval of the merger agreement, **FOR** the directors proposal, **FOR** the accountant proposal, **FOR** the compensation proposal, **FOR** the merger-related compensation proposal and **FOR** the adjournment proposal. See **The**

Merger RTI s Reasons for the Merger; Recommendation of the RTI Board of Directors on page 91 for a more detailed discussion of the RTI board of directors recommendation.

Record Date and Quorum

RTI s board of directors has fixed the close of business on _____, 2015, as the record date for determining the holders of RTI common stock entitled to receive notice of and to vote at the RTI annual meeting.

As of the record date, there were _____ shares of RTI common stock outstanding and entitled to vote at the RTI annual meeting held by approximately _____ holders of record. Each share of RTI common stock entitles the holder to one vote at the RTI annual meeting on each proposal to be considered at the RTI annual meeting.

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The presence at the annual meeting, in person or by proxy, of holders of a majority of the outstanding shares of RTI common stock entitled to vote at the annual meeting will constitute a quorum for the transaction of business. All shares of RTI common stock, whether present in person or represented by proxy, including abstentions and broker non-votes, will be treated as present for purposes of determining the presence or absence of a quorum for all matters voted on at the RTI annual meeting. A broker non-vote occurs under stock exchange rules when a broker is not permitted to vote on a matter without instructions from the beneficial owner of the shares and no instruction is given.

Shares Held by Officers and Directors

As of the record date, directors and executive officers of RTI and their affiliates owned and were entitled to vote _____ shares of RTI common stock, representing approximately _____ % of the shares of RTI common stock outstanding on that date. RTI currently expects that its directors and executive officers will vote their shares in favor of the merger agreement proposal, the directors proposal, the accountant proposal, the compensation proposal, the merger-related compensation proposal and the adjournment proposal, although none of them has entered into any agreements obligating them to do so. Approval of the merger agreement will require the affirmative vote of the holders of two-thirds of the outstanding shares of RTI common stock entitled to vote at the annual meeting. See **The Merger Interests of RTI's Directors and Executive Officers in the Merger** beginning on page 107.

Voting of Proxies; Incomplete Proxies

Each copy of this proxy statement/prospectus mailed to holders of RTI common stock is accompanied by a form of proxy with instructions for voting. If you hold stock in your name as a shareholder of record, you may vote in any one of the following three ways:

by Internet: go to the website shown on the enclosed proxy card;

by telephone: call the toll-free number shown on the enclosed proxy card (1-800-652-8683) and follow the voice prompts using a touch-tone telephone; or

by mail: sign and date each proxy card you receive and return it in the envelope provided. If you return a signed proxy card but do not mark the boxes showing how you wish to vote, your shares will be voted **FOR** all proposals as recommended by the RTI board of directors.

If you hold your stock in _____ street name through a bank or broker, you must direct your bank or broker to vote in accordance with the instructions you have received from your bank or broker.

Each share of the RTI's common stock is entitled to one vote per share. The specific votes required to approve each proposal is discussed at the end of each proposal as set forth in this proxy statement/prospectus. Common shares represented by properly executed and returned forms of proxy or properly authenticated voting instructions recorded through the Internet or by telephone will be voted for each proposal as set forth therein.

All shares represented by valid proxies (including those given by telephone or the Internet) that RTI receives through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card. If you make no specification on your proxy card as to how you want your shares voted before signing and returning it, your proxy will be voted **FOR** approval of the merger agreement, **FOR** the directors proposal, **FOR** the accountant

proposal, **FOR** the compensation proposal, **FOR** the merger-related compensation proposal and **FOR** the adjournment proposal. No matters other than the matters described in this proxy statement/prospectus are anticipated to be presented for action at the annual meeting or at any adjournment or postponement of the annual meeting.

RTI shareholders should not send RTI stock certificates with their proxy cards. After the merger is completed, holders of RTI common stock will be mailed a transmittal form with instructions on how to exchange their RTI stock certificates for the merger consideration.

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Shares Held in Street Name; Broker Non-Votes

Under stock exchange rules, banks, brokers and other nominees who hold shares of RTI common stock in street name for a beneficial owner of those shares typically have the authority to vote in their discretion on routine proposals when they have not received instructions from beneficial owners. However, banks, brokers and other nominees are not allowed to exercise their voting discretion with respect to the approval of matters determined to be non-routine, such as approval of the merger agreement proposal, without specific instructions from the beneficial owner. Broker non-votes are shares held by a broker, bank or other nominee that are represented at the RTI annual meeting, but with respect to which the broker or nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker does not have discretionary voting power on such proposal. It is expected that brokers, banks and other nominees will not have discretionary authority to vote on the merger agreement proposal, the RTI directors proposal, the RTI compensation proposal, the RTI merger-related compensation proposal or the adjournment proposal and, as a result, RTI anticipates that there will not be any broker non-votes cast in connection with these proposals. Therefore, if your broker, bank or other nominee holds your shares of RTI common stock in street name, your broker, bank or other nominee will vote your shares of RTI common stock only if you provide instructions on how to vote by filling out the voter instruction form sent to you by your broker, bank or other nominee with this proxy statement/prospectus.

Revocability of Proxies and Changes to a RTI Shareholder's Vote

If you hold stock in your name as a shareholder of record, you may revoke any proxy at any time before it is voted by (1) signing and returning a proxy card with a later date, (2) delivering a written revocation letter to RTI's corporate secretary, (3) voting again by telephone or the Internet, or (4) attending the annual meeting in person, notifying the corporate secretary, and voting by ballot at the annual meeting.

Any RTI shareholder entitled to vote in person at the annual meeting may vote in person regardless of whether a proxy has been previously given, but the mere presence (without notifying RTI's corporate secretary) of a RTI shareholder at the annual meeting will not constitute revocation of a previously given proxy.

Written notices of revocation and other communications about revoking your proxy should be addressed to:

Westpointe Corporate Center One

1550 Coraopolis Heights Road, Fifth Floor

Pittsburgh, Pennsylvania 15108-2973

Attention: Secretary

If your shares are held in street name by a bank or broker, you should follow the instructions of your bank or broker regarding the revocation of proxies.

Solicitation of Proxies

RTI will bear the entire cost of soliciting proxies from you. In addition to solicitation of proxies by mail, RTI will request that banks, brokers, and other record holders send proxies and proxy material to the beneficial owners of RTI common stock and secure their voting instructions. RTI will reimburse the record holders for their reasonable expenses in taking those actions. RTI has also made arrangements with Georgeson Inc. to assist it in soliciting proxies

and has agreed to pay them \$13,500 plus reasonable out-of-pocket expenses for these services. If necessary, RTI may use several of its regular employees, who will not be specially compensated, to solicit proxies from the RTI shareholders, either personally or by telephone, facsimile, letter or other electronic means.

Attending the Meeting

All holders of RTI common stock as of the record date, including shareholders of record and shareholders who hold their shares through banks, brokers, nominees or any other holder of record, are invited to attend the

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annual meeting. RTI shareholders of record can vote in person at the annual meeting. If you are not a shareholder of record, you must obtain a proxy executed in your favor, from the record holder of your shares, such as a broker, bank or other nominee, to be able to vote in person at the annual meeting. If you plan to attend the annual meeting, you must hold your shares in your own name or have a letter from the record holder of your shares confirming your ownership as of the record date. In addition, you must bring a form of personal photo identification with you in order to be admitted. RTI reserves the right to refuse admittance to anyone without proper proof of share ownership and without proper photo identification. The use of cameras, sound recording equipment, communications devices or any similar equipment during the annual meeting is prohibited without RTI's express written consent.

Assistance

If you have any questions concerning the merger or this proxy statement/prospectus, would like additional copies of this proxy statement/prospectus or need help voting your shares of RTI common stock, please contact Georgeson Inc., RTI's proxy solicitor:

Georgeson Inc.

480 Washington Blvd., 26th Floor

Jersey City, New Jersey 07310

(800) 733-6198 (toll free)

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CORPORATE GOVERNANCE

Business Ethics and Corporate Governance

Business Conduct and Ethics

RTI is committed to conducting business both ethically and legally. Ethical and legal conduct in all of RTI's business affairs is essential to RTI's future. RTI's Code of Ethical Business Conduct, adopted by the RTI board of directors, applies to all directors and employees of RTI, including all of RTI's executive and other officers, and its principles extend to those with whom RTI conducts business. RTI's Code of Ethical Business Conduct complies with the requirements of the New York Stock Exchange (the NYSE) and Securities and Exchange Commission (SEC) regulations.

RTI's Code of Ethical Business Conduct is posted under the Investor Relations link on RTI's website, www.rtiintl.com. Any amendments to RTI's Code of Ethical Business Conduct, or waivers of its application with respect to RTI's directors or executive officers, will be disclosed promptly on RTI's website. There were no waivers or significant amendments during 2014.

Corporate Governance Guidelines

RTI's Corporate Governance Guidelines (the Governance Guidelines) were adopted by the RTI board of directors to promote sound corporate citizenship. The Governance Guidelines, together with the charters for the RTI board committees, provide the framework for RTI's corporate governance. The Governance Guidelines, which comply with the requirements of the NYSE, address a number of topics, including: the size and role of the RTI board of directors; director resignations; non-employee director executive sessions; Board and committee meeting attendance; access to senior management and advisors; Board compensation; Board independence, composition, and membership criteria; Board and committee self-assessments; director orientation and continuing education; retirement age; and the RTI board of directors nomination process.

RTI's Governance Guidelines are posted under the Investor Relations link on RTI's website, www.rtiintl.com.

Director Education

RTI has educational presentations from time to time at Board and committee meetings, and RTI encourages its directors to attend educational seminars and conferences to enhance his or her knowledge of the role and responsibilities of directors. Any director who attends an educational seminar or conference may receive reimbursement from RTI for the reasonable costs incurred in connection with his or her attendance. All of the then-elected directors attended a formal continuing education session on corporate governance sponsored by RTI in October 2014. In addition, directors were given the opportunity to participate in online cybersecurity training that addressed topics such as e-mail security, passwords, smartphone security, social engineering and URL training.

The Board of Directors

The business and affairs of RTI are conducted under the general direction of the RTI board of directors. The RTI board of directors presently consists of ten members:

Daniel I. Booker, Jr.
Ronald L. Gallatin
Robert M. Hernandez
David P. Hess

Dawne S. Hickton
Edith E. Holiday
Jerry Howard
Bryan T. Moss

James A. Williams
Arthur B. Winkleblack

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The RTI board of directors met nine times during 2014. All of RTI's directors attended 75% or more of the total number of meetings of the RTI board of directors and of the committees on which they serve. The Chairman of the Board chairs the regularly-scheduled executive sessions of the non-management directors, and in the Chairman's absence, the chair of the Nominating/Corporate Governance Committee chairs the meeting.

Director Independence

Dawne S. Hickton was the only member of the RTI board of directors in 2014 who was also an officer and employee of RTI or its subsidiaries. The RTI board of directors reviewed existing director and director nominee independence in accordance with RTI's Governance Guidelines and applicable SEC and NYSE rules and listing standards relating to independence, including any transactions or relationships between each current director or nominee for director with RTI (either directly or as a partner, stockholder or officer of any organization that has a relationship with RTI). As a result of such review, the RTI board of directors determined that other than Ms. Hickton, all current directors (Daniel I. Booker, Jr., Ronald L. Gallatin, Robert M. Hernandez, David P. Hess, Edith E. Holiday, Jerry Howard, Bryan T. Moss, James A. Williams and Arthur B. Winkleblack) do meet RTI's Governance Guidelines and applicable NYSE requirements relating to board and committee independence.

Transactions with Related Parties

RTI is aware of no transactions with RTI involving over \$120,000 since the beginning of 2014 in which any of RTI's directors, director nominees, executive officers, five percent shareholders, or certain of their relatives (related parties) had or will have a direct or indirect material interest. RTI recognizes that transactions between RTI and its related parties can present potential or actual conflicts of interest and may create the appearance that decisions may not be based on considerations in the best interests of RTI.

As a result of Mr. Hess's assumption of the role of Senior Vice President, Aerospace Business Development for United Technologies Corporation (UTC) in January 2015, RTI has assessed RTI's transactions with subsidiaries of UTC. Several of RTI's subsidiaries sold products to UTC's subsidiaries, in an aggregate amount of approximately \$11.2 million, which constitutes less than 0.017% of the consolidated gross revenues of UTC in 2014. These contracts pre-date Mr. Hess's current role at UTC and the RTI board of directors does not believe Mr. Hess has a direct or indirect material interest in such transactions.

Although as a general matter, and in accordance with RTI's Code of Ethical Business Conduct and RTI's Conflict of Interest Policy (both of which are available under the Investor Relations link on RTI's website at www.rtiintl.com), RTI's preference is to avoid transactions in which any of RTI's related parties had or will have a direct or indirect material interest, RTI recognizes that, from time to time, such related party transactions may be contemplated. On an annual basis, RTI asks all non-union employees to review RTI's Code of Ethical Business Conduct and Conflict of Interest Policy and to certify their compliance with these policies in writing. In the event that RTI becomes aware, through this process or otherwise during the year, that a potential transaction with a related party is being contemplated, the matter would be reviewed and considered by executive management or by the RTI board of directors. Based on this review, a determination is made as to whether RTI would have a material interest in the transaction and whether such transaction could present potential or actual conflicts of interest or create the appearance that RTI's decisions are based on considerations other than the best interests of RTI and RTI's shareholders. Only related-party transactions that, in the business judgment of RTI's executive management or the RTI board of directors, as the case may be, are in the best interests of RTI should be approved or ratified, and all others should be rejected.

RTI also circulates an annual questionnaire to each of RTI's non-employee directors, director nominees, and each executive officer of RTI in connection with the preparation of RTI's proxy statement. Completion of this questionnaire

allows RTI to review and address any actions that RTI should take with respect to any current or contemplated relationships each respondent may have with RTI's significant customers, service providers, suppliers, or other vendors, which RTI identifies by name in the questionnaire.

Table of Contents**Board Committees**

There are five principal committees of the RTI board of directors. Committee membership, the primary functions of each committee, and the number of meetings held during 2014 are described below.

| Name of Committee and Members | Primary Committee Functions | Number of Meetings |
|--------------------------------------|---|---------------------------|
| Audit Committee: | Assists the RTI board of directors in overseeing RTI's financial reporting process and systems of internal control over financial reporting | 9 |
| James A. Williams (Chairman) | | |
| Ronald L. Gallatin | Assists RTI with legal and regulatory compliance requirements and qualifications, and the evaluation of the independence and performance of RTI's internal auditors and independent registered public accounting firm | |
| Robert M. Hernandez | | |
| Arthur B. Winkleblack | Has direct responsibility for the appointment, compensation, retention, and oversight of RTI's independent registered public accounting firm | |
| | Periodic review of risk assessment as it relates to activities being contemplated or undertaken by management throughout the year | |
| | Submits the Audit Committee Report contained in the proxy statement | |
| Compensation Committee: | Reviews and approves RTI's compensation philosophy, including assessing the risks arising from RTI's compensation philosophy, policies, and practices | 6 |
| Daniel I. Booker (Chairman) | | |
| David P. Hess | Reviews and approves executive compensation programs, plans, and awards | |
| Edith E. Holiday | | |

Jerry Howard

Bryan T. Moss

Reviews and approves policies, principles, and procedures for selection and performance review of RTI's Chief Executive Officer (the CEO) and other top members of management

Reviews and recommends to the full Board employment agreements, severance arrangements, and change in control agreements for RTI's CEO and senior executives

Establishes goals and objectives for RTI's CEO and other top management, setting the compensation of executive officers and, together with the independent directors, setting the CEO's compensation, based on an evaluation of her performance

Determines whether to retain or terminate any compensation adviser (considering, among other things, the independence thereof)

Administers RTI's long-term incentive plans and equity plans

Reviews management's Compensation Discussion and Analysis (CD&A) and submits the Compensation Committee Report contained in this proxy statement/prospectus

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| Name of Committee and Members | Primary Committee Functions | Number of Meetings |
|--|--|---------------------------|
| Nominating/Corporate | Identifies individuals qualified to serve as directors | 5 |
| Governance Committee: | | |
| Edith E. Holiday (Chair) | Recommends to the RTI board of directors the appropriate size of the RTI board of directors and candidates for election to the RTI board of directors, including at the Annual Meeting, and to fill vacancies occurring on the RTI board of directors | |
| Daniel I. Booker | | |
| Robert M. Hernandez | | |
| | Oversees the evaluation process of the RTI board of directors | |
| | Reviews and evaluates RTI's director compensation | |
| | Develops and recommends to the RTI board of directors corporate governance principles applicable to RTI as well as conducts periodic reviews of such principles | |
| Executive Committee: | Assists the RTI board of directors in the discharge of its responsibilities | 0 |
| Robert M. Hernandez (Chairman) | | |
| Daniel I. Booker | Reports all actions taken by the Executive Committee at the RTI board of directors' next meeting | |
| Dawne S. Hickton | | |
| Strategic Transactions Committee: | Assists the RTI board of directors in the discharge of its responsibilities with respect to oversight of RTI's evaluation of potential strategic transaction opportunities and/or major financings that may be brought forth from time to time by management or the RTI board of directors | 0 |
| Robert M. Hernandez (Chairman) | | |
| Ronald L. Gallatin | | |
| Dawne S. Hickton | | |

Arthur B. Winkleblack

Audit Committee All members of RTI's Audit Committee meet the NYSE's rules and listing standards for audit committee independence. The RTI board of directors has determined that Messrs. Gallatin, Hernandez, Williams and Winkleblack are each qualified as an audit committee financial expert within the meaning of SEC regulations, and that each member of the Audit Committee has accounting or financial management expertise within the meaning of the listing standards of the NYSE. The Audit Committee may, subject to applicable law and the listing requirements of the NYSE, delegate its responsibilities to subcommittees, composed solely of Audit Committee members, as deemed appropriate. RTI's Audit Committee has adopted, and the RTI board of directors has approved, the Audit Committee charter, which may be accessed under the Investor Relations link on RTI's website, www.rtiintl.com.

Compensation Committee RTI's Compensation Committee discharges the RTI board of directors' duties concerning executive compensation. The Compensation Committee may, if appropriate, delegate matters within its responsibility to subcommittees composed of certain of its members. All members of RTI's Compensation Committee meet the NYSE's rules and listing standards for compensation committee independence. RTI's Compensation Committee has adopted, and the RTI board of directors has approved, a Compensation Committee charter, which may be accessed under the Investor Relations link on RTI's website, www.rtiintl.com.

For more information on the responsibilities and activities of RTI's Compensation Committee, including the committee's processes for determining executive compensation, see **Executive Compensation** beginning on page 48 of this proxy statement/prospectus.

Nominating/Corporate Governance Committee All members of RTI's Nominating/Corporate Governance Committee meet the NYSE's rules and listing standards for independence for purposes of the Nominating/Corporate Governance Committee. RTI's Nominating/Corporate Governance Committee has adopted, and the

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RTI board of directors has approved, a Nominating/Corporate Governance Committee charter, which may be accessed under the Investor Relations link on RTI's website, www.rtiintl.com.

Board Membership Selection Process

Board candidates are typically suggested by members of the Nominating/Corporate Governance Committee; however, it is the policy of the Nominating/Corporate Governance Committee to consider recommendations by shareholders, directors, officers, employees, and others as nominees for election as director. Recommendations, together with the nominee's qualifications and consent to be considered as a nominee, should be sent to RTI's Secretary, at the address set forth under the caption **Where You Can Find More Information** on page 158 of this proxy statement/prospectus, for presentation to the Nominating/Corporate Governance Committee.

The Nominating/Corporate Governance Committee annually reviews the skills and attributes of Board members and candidates for the RTI board of directors within the context of the current make-up of the full Board, which is premised on the concept that RTI's Board members should have individual backgrounds that, when combined, provide a diverse portfolio of experience and knowledge that will serve RTI's governance and strategic needs. Although the RTI board of directors does not have a specific diversity policy, candidates for Board service are considered on the basis of a range of criteria including the current composition of the RTI board of directors and the need to maintain a diversity of talents, genders, backgrounds, and perspectives. Further, candidates are evaluated as to their broad-based business knowledge and contacts, prominence, commitment to ethical and moral values, personal and professional integrity and sound reputation in their respective fields as well as a global business perspective and commitment to corporate citizenship. See **Other Matters Shareholder Proposals** on page 156 of this proxy statement/prospectus for additional information regarding director candidate submission procedures. Additional information concerning director candidates is contained in RTI's Governance Guidelines, which may be accessed under the Investor Relations link on RTI's website at www.rtiintl.com.

Board Leadership Structure

Mr. Hernandez serves as the independent Chairman of the RTI board of directors and has served in such position since RTI became publicly traded. Ms. Hickton currently serves as Vice Chair, President, and CEO. The RTI board of directors believes this is currently the most appropriate structure for RTI as it allows each person to focus on their respective roles; RTI's CEO can focus on the strategic direction of RTI and its day-to-day leadership and performance, while the Chairman can focus on providing guidance to RTI's CEO and setting the agenda and presiding over meetings of the full Board.

The RTI board of directors does not have a written policy on whether or not the roles of CEO and Chairman of the Board should be separate and, if they are to be separate, whether the Chairman of the Board should be selected from the non-employee directors or be an employee, as the RTI board of directors believes that it should be free to evaluate the current needs and interests of RTI and RTI's shareholders at any given point in time and to make changes appropriate for those facts and circumstances.

Board's Role in the Oversight of Risk Management

RTI's Audit Committee has been designated to lead the RTI board of directors' risk management responsibilities. Accordingly, in addition to its other duties, RTI's Audit Committee schedules time for periodic review of risk assessment as it relates to activities being contemplated or undertaken by management throughout the year. In this role, RTI's Audit Committee receives reports from management, internal audit, and other advisors, and regularly engages in serious and thoughtful discussion regarding RTI's risk management process and system, the nature of the

material risks RTI faces, and the adequacy of RTI's policies and procedures that are designed to respond to and mitigate perceived and potential risks. Although RTI's Audit Committee leads these efforts, risk management is also periodically reported on and discussed at the full Board level, and feedback is sought from each director as to the most significant risks faced by RTI. This is principally accomplished through submission of Audit Committee reports to the RTI board of directors and discussion with management.

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RTI's Audit Committee also leads the RTI board of directors' oversight of cybersecurity, and over the past two years, the Audit Committee has received regular reports on cybersecurity from the Chief Information Officer or the Director-Information Security at its quarterly meetings. In addition, the RTI board of directors has received cybersecurity reports from the Chief Information Officer and, in January 2015, attended a presentation on information security by the Assistant U.S. Attorney for the Western District of Pennsylvania, National Security Cyber Specialist. The Audit Committee of the RTI board of directors believes that these reports and training enable it to appropriately evaluate cybersecurity risks that impact, or have the potential to impact, RTI.

In addition to the formal risk management program, the RTI board of directors and Audit Committee encourage management to promote a corporate culture that is sensitive to and understands risk management, and incorporates risk management into RTI's overall corporate strategy as well as its day-to-day business operations. Additionally, RTI's risk management structure includes an ongoing effort to assess and analyze the most likely areas of future risk for RTI and to address them as part of its long-term planning process.

Compensation Committee Interlocks and Insider Participation

RTI's Compensation Committee currently consists of Messrs. Booker, Hess, Howard, Moss and Ms. Holiday. None of the current members of the Committee has ever been an officer or employee of RTI or any of its subsidiaries. None of RTI's executive officers serve or have served as a member of the RTI board of directors, Compensation Committee, or other board committee performing equivalent functions of any entity that has one or more executive officers serving as one of RTI's directors or on RTI's Compensation Committee.

SECURITY OWNERSHIP**Security Ownership of Certain Beneficial Owners**

The following table sets forth each person or entity known to RTI that may be deemed to have beneficial ownership of more than five percent of the outstanding common stock of RTI based on information publicly available as of May 15, 2015.

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership | Percent of Class |
|---|--|-------------------------|
| FMR LLC 245 Summer Street Boston, MA 02210 | 2,734,500(1) | 8.9% |
| BlackRock, Inc. 40 East 52nd Street New York, NY 10022 | 2,703,019(2) | 8.8% |
| Dimensional Fund Advisors LP Palisades West Building One 6300 Bee Cave Road Austin, TX 78746 | 2,582,134(3) | 8.4% |
| | 2,031,615(4) | 6.6% |

The Carlyle Group L.P.
1001 Pennsylvania Avenue NW
Suite 220 South
Washington, DC 20004

The Vanguard Group
100 Vanguard Boulevard
Malvern, PA 19355

1,989,748(5)

6.5%

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- (1) This information is based solely on the Schedule 13G/A filed with the SEC on November 10, 2014 by FMR LLC. The shares reported reflect the beneficial ownership of FMR LLC, certain of its subsidiaries including various investment companies advised by Fidelity Management & Research Company (Fidelity), a wholly owned subsidiary of FMR LLC and a registered investment adviser. Edward C. Johnson 3d, Chairman of FMR LLC, Abigail P. Johnson, Vice Chairman, CEO and President of FMR LLC, and FMR LLC, through its control of Fidelity and the funds each has sole power to dispose of the shares reported. Neither FMR LLC nor Edward C. Johnson 3d nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the funds, which power resides with the funds' boards of trustees. One investment company, Fidelity Small Cap Discovery Fund, reported beneficial ownership of 2,185,000 shares.
- (2) This information is based solely on the Schedule 13G/A filed with the SEC on January 22, 2015, by BlackRock, Inc., a parent holding company or control person of the following subsidiaries: BlackRock Fund Advisors; BlackRock Institutional Trust Company, N.A.; BlackRock Investment Management (Australia) Limited; BlackRock Asset Management Canada Limited; BlackRock Asset Management Ireland Limited; BlackRock Advisors (UK) Limited; BlackRock Advisors, LLC; BlackRock Investment Management, LLC; and BlackRock Investment Management (UK) Limited. Such filing indicates that BlackRock, Inc. has sole voting power over 2,638,096 shares and sole dispositive power over all 2,703,019 shares reported.
- (3) This information is based solely on the Schedule 13G/A filed with the SEC on February 5, 2015 by Dimensional Fund Advisors LP (Dimensional). Dimensional reports sole dispositive power over all such shares and sole voting power with respect to 2,489,196 of such shares.
- (4) This information is based solely on the Schedule 13G filed with the SEC on February 14, 2013 by The Carlyle Group L.P. Each of The Carlyle Group L.P., Carlyle Group Management L.L.C., Carlyle Holdings I GP Inc., Carlyle Holdings I GP Sub L.L.C., Carlyle Holdings I L.P., TC Group, L.L.C., TC Group Sub L.P., TC Group CSP II, L.L.C., and CSP II General Partner, L.P. report shared voting and dispositive power over all shares reported. Carlyle Strategic Partners II, L.P. reports shared voting and dispositive power over 1,963,371 of the shares reported, CSP II Coinvestment, L.P. reports shared voting and dispositive power over 68,244 of the shares reported.
- (5) This information is based solely on the Schedule 13G/A filed with the SEC on February 10, 2015 by the Vanguard Group, Inc. (Vanguard). Vanguard's wholly owned subsidiary, Vanguard Fiduciary Trust Company, is an investment manager for collective trust accounts and is the beneficial owner of 43,348 of the shares reported above. Vanguard's wholly owned subsidiary, Vanguard Investments Australia, Ltd., is an investment manager of Australian investment offerings and is the beneficial owner of 1,855 of the shares reported above. Vanguard reports sole dispositive power over 1,946,400 of such shares and shared dispositive power over 43,348 of such shares.

Table of Contents**Security Ownership of Directors and Executive Officers**

The following table sets forth information concerning the beneficial ownership of RTI's common stock of each director and director nominee, by each executive officer named in the Summary Compensation Table, and by all directors and executive officers as a group. Beneficial ownership is a concept which takes into account shares as to which the named person has or shares voting and/or investment power, as well as shares that may be acquired within 60 days (such as by exercising vested stock options). Information is provided as of March 1, 2015.

| Name | Amount and Nature of Beneficial Ownership(1)(2)(3) | Percent of Class(9) |
|--|--|------------------------|
| Daniel I. Booker | 38,457 | * |
| Ronald L. Gallatin | 32,691 | * |
| Robert M. Hernandez | 84,186(4) | * |
| Dawne S. Hickton | 237,057 | * |
| Edith E. Holiday | 29,034 | * |
| Jerry Howard | 5,355 | * |
| David P. Hess | 1,611 | * |
| William T. Hull | 72,368 | * |
| Michael G. McAuley | 200 | * |
| James L. McCarley | 64,308(5) | * |
| Bryan T. Moss | 19,711(6) | * |
| Patricia A. O'Connell | 34,353(7) | * |
| Chad Whalen | 43,518 | * |
| James A. Williams | 22,896(8) | * |
| Arthur B. Winkleblack | 3,572 | * |
| All directors and executive officers as a group (14 persons)(10) | 654,964 | 2.3% |

* Indicates beneficial ownership of less than 1%.

- (1) Includes the following number of shares of common stock subject to stock options exercisable within 60 days of March 1, 2015 for the following persons: Dawne S. Hickton: 96,265; William T. Hull: 38,646; James L. McCarley: 28,554; and Chad Whalen: 25,756.
- (2) Includes the following number of restricted shares of RTI common stock for the following persons: Daniel I. Booker, 2,691; Ronald L. Gallatin, 2,691; Robert M. Hernandez, 4,305; Dawne S. Hickton, 28,963; Edith E. Holiday, 2,691; Jerry Howard, 2,691; David P. Hess, 1,611; William T. Hull, 6,811; Michael G. McAuley, 0; James L. McCarley, 12,691; Bryan T. Moss, 2,691; Chad Whalen, 4,586; James A. Williams, 2,691; Arthur Winkleblack, 2,691; Patricia A. O'Connell, 23,004.
- (3) Does not include the following number of shares of common stock subject to restricted stock units that are unvested as of March 1, 2015, and which will not vest within 60 days of March 1, 2015, for the following persons: Dawne S. Hickton, 25,770; Michael G. McAuley, 5,555; William T. Hull, 5,007; James L. McCarley, 9,534; and Chad Whalen, 4,814.
- (4) Includes for Mr. Hernandez 79,881 shares of common stock held in the Robert M. Hernandez Revocable Trust.
- (5) Does not include for Mr. McCarley 5,889 units (Units) reported to RTI and Mr. McCarley reflecting Mr. McCarley's interest in a unitized RTI common stock fund available to participants in the RTI International

Metals, Inc. Employee Savings and Investment Plan. Each Unit represents an unspecified number of shares of RTI common stock.

- (6) Includes for Mr. Moss 2,500 shares of common stock held in trust by Bryan T. Moss Premier Alliance LLP.
- (7) Ms. O'Connell's share ownership is presented as of December 31, 2014, and includes 23,004 restricted shares of common stock and 1,968 shares of common stock subject to stock options exercisable within 60 days of December 31, 2014. Ms. O'Connell ceased to be an employee of RTI as of January 31, 2015.

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- (8) Includes for Mr. Williams 4,065 shares of common stock held in an IRA.
- (9) There were 30,758,392 shares of RTI's common stock outstanding as of March 1, 2015. In accordance with the rules and regulations of the SEC, in computing the percentage ownership for each person listed, any shares which the listed person had the right to acquire within 60 days are deemed outstanding; however, shares which any other person had the right to acquire within 60 days are disregarded in the calculation. Therefore, the denominator used in calculating beneficial ownership among the persons listed may differ for each person.
- (10) The total for all directors and executive officers as a group does not include shares of common stock beneficially owned by Ms. O'Connell, who ceased being an executive officer as of January 31, 2015.

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RTI PROPOSALS

PROPOSAL NO. 1 RTI MERGER PROPOSAL

RTI is asking its shareholders to adopt the merger agreement and the transactions contemplated thereby (including the issuance of Alcoa voting common stock in the merger pursuant to the merger agreement). Holders of RTI common stock should read this proxy statement/prospectus carefully and in its entirety, including the annexes, for more detailed information concerning the merger agreement and the merger. A copy of the merger agreement is attached to this proxy statement/prospectus as Annex A.

After careful consideration, RTI's board of directors unanimously approved the merger agreement and declared the transactions contemplated thereby, including the merger, to be advisable and in the best interests of RTI and its shareholders. See **The Merger RTI's Reasons for the Merger; Recommendation of the RTI Board of Directors** on page 91 for a more detailed discussion of the RTI board of directors' recommendation.

Vote Required

Approval of the merger agreement requires the affirmative vote of the holders of two-thirds of the outstanding shares of RTI common stock entitled to vote at the annual meeting. You are entitled to one vote for each share of RTI common stock you held as of the record date. Because approval is based on the affirmative vote of two-thirds of shares outstanding, your failure to vote, failure to instruct your bank or broker with respect to the proposal to approve the adoption of the merger agreement, or an abstention will have the same effect as a vote against adoption of the merger agreement.

The RTI board of directors unanimously recommends that RTI shareholders vote FOR the RTI merger proposal.

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PROPOSAL NO. 2 ELECTION OF DIRECTORS

RTI's directors are elected for one-year terms. The RTI board of directors has nominated nine directors for election all of whom are current directors. A current director, Mr. Moss, is retiring from the RTI board of directors at the annual meeting of the RTI shareholders. Of the nine individuals who are nominees for election, one is a current RTI officer and the remaining eight are high-level current or former executives with significant professional experience. If any nominee is unable to stand for election, your proxy may be voted for another nominee designated by the RTI board of directors.

The professional and personal backgrounds, experiences, qualifications, attributes, and skills of each nominee, as set forth below, reflect the qualities that RTI seeks in its board members. In addition to the specific examples set forth below, the RTI board of directors and RTI believe that all nominees possess additional qualifications, attributes, and skills that lead the RTI board of directors to believe the nominee should serve as a director, including broad-based business and industry knowledge, commitment to ethical and moral values, personal and professional integrity, sound business judgment, and commitment to corporate citizenship.

Nominees for Director

DANIEL I. BOOKER

**Partner
Reed Smith LLP**

Age: 67
Director since 1995

(law firm)

Mr. Booker is a partner of the law firm of Reed Smith LLP. From 1992 until December 31, 2000, he was Managing Partner, or chief executive, of Reed Smith. He is Chairman of the Pittsburgh Parks Conservancy; a member of the Judicial Council of Pennsylvania; a director of the Pennsylvania Lawyers Fund for Client Security; and an officer or director of other business, community, and professional organizations. Mr. Booker served as a director of Océ USA Holding, Inc. from 2001-2012. He received an undergraduate degree from the University of Pittsburgh and a law degree from the University of Chicago. He is a member of the District of Columbia, Pennsylvania, and U.S. Supreme Court bars. In addition to Mr. Booker's legal experience, he brings to the RTI board of directors demonstrated leadership skills, both professionally as the former Managing Partner of a large law firm and through his service as chairman and director of various community and professional organizations.

RONALD L. GALLATIN
Retired Managing Director
Lehman Brothers Inc.

Age: 69
Director since 1996

(investment banking firm)

Mr. Gallatin served as a Managing Director of Lehman Brothers Inc., where he was a member of the firm's Operating Committee and its Director of Corporate Strategy and Product Development until his retirement on December 31, 1995. During his 24 years with Lehman, Mr. Gallatin had various senior roles in both its investment banking and capital markets divisions and was responsible for a series of financial innovations, most notably Zero Coupon Treasury Receipts, Money Market Preferred Stock, and Targeted Stock. A graduate of New York University, and both Brooklyn and New York University Law Schools, Mr. Gallatin has bachelor's, juris doctor, and master of laws

(taxation) degrees and is a Certified Public Accountant. Mr. Gallatin provides financing and investment banking experience, as well as strategic advice, as a result of his career on Wall Street and educational background. Mr. Gallatin also brings a sense of social responsibility and fiduciary leadership as demonstrated through his involvement with various charitable organizations.

Table of Contents**ROBERT M. HERNANDEZ**

Age: 70

Chairman of the Board of RTI

Director since 1990

On December 31, 2001, Mr. Hernandez retired as Vice Chairman and Chief Financial Officer and director of USX Corporation (USX) (NYSE: X). He was elected to this position on December 1, 1994. Mr. Hernandez had been elected Executive Vice President, Accounting & Finance and Chief Financial Officer and director of USX on November 1, 1991. He was Senior Vice President, Finance & Treasurer of USX from October 1, 1990, to October 31, 1991. Mr. Hernandez was President, U.S. Diversified Group of USX from June 1, 1989, to September 30, 1990, and in such role had responsibilities for USX's businesses not related to energy and steel. From January 1, 1987, until May 31, 1989, he was Senior Vice President and Comptroller of USX. Mr. Hernandez has his undergraduate degree from the University of Pittsburgh and his masters of business administration from the Wharton Graduate School of the University of Pennsylvania. He is Chairman of the Board of Trustees of the BlackRock Equity Bond Mutual Fund Complex; lead director of American Casualty Excess (ACE) Limited; and a director of Eastman Chemical Company (NYSE: EMN). Mr. Hernandez served as a director of TE Connectivity from June 2007 until March 2012. As a former executive officer of USX and one of RTI's original directors upon becoming publicly traded, he brings to the RTI board of directors a wealth of executive management and financial experience in the metals industry. Through his service as a director on various publicly-traded companies, Mr. Hernandez has considerable leadership, finance, and corporate governance experience.

DAVID P. HESS

Age: 59

Senior Vice President

Director since 2014

**United Technologies Corporation
(aerospace and building systems)**

In January 2015, Mr. Hess was appointed to the position of UTC Senior Vice President, Aerospace Business Development. In this newly created position, Mr. Hess works in collaboration with senior executives to strengthen relationships with key aerospace customers and partners, as well as in reviewing the corporation's aerospace portfolio and evaluating acquisition opportunities. Mr. Hess retired from United Technologies Corp. in January 2014 after a 35-year career that included serving as president of the corporation's Hamilton Sundstrand and Pratt & Whitney businesses. He was named Pratt & Whitney president in 2009 and was responsible for the company's global operations in the design, manufacture and service of aircraft engines, auxiliary and ground power units and small turbojet propulsion products. Previously, he served four years as president of Hamilton Sundstrand, the United Technologies Corp. business where he began his professional career in 1979. Mr. Hess is chairman of the International Aero Engines (IAE) Board of Directors, and a member of the Aerospace Industries Association Board of Governor's executive committee, where he served as board chairman in 2012. He also serves on the Board of Directors for Cytec Industries, Inc. (NYSE: CYT), a New Jersey-based specialty chemicals and material technology company. In addition, Mr. Hess serves on the boards of Hartford HealthCare, the National World War II Museum and other civic organizations. He holds a bachelor's degree in physics from Hamilton College and a bachelor's and master's degree in electrical engineering from Rensselaer Polytechnic Institute. He was awarded an MIT Sloan Fellowship in 1989 and earned a master's degree in management in 1990. Mr. Hess's extensive experience in the aerospace industry, particularly as the leader of an engine manufacturer, augments the RTI board of directors' knowledge of RTI's markets and customers.

DAWNE S. HICKTON

Age: 57

Vice Chair, President, and Chief Executive Officer

Director since 2007

Ms. Hickton has served as the Vice Chair, President, and Chief Executive Officer of RTI since October 2009 and as Vice Chair and CEO of RTI since 2007. From June 2005 to April 2007, she served as Senior Vice President of Administration and Chief Administrative Officer. In this capacity she managed the accounting, treasury, tax, business information systems, personnel, and legal functions of RTI. From April 1997 until June 2004, Ms. Hickton was Vice President and General Counsel. Also, prior to her tenure with RTI, Ms. Hickton was