

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

FORM S-8
REGISTRATION STATEMENT

Under
The Securities Act of 1933

ALCOA INC.

(Exact name of registrant as specified in its charter)

Pennsylvania
 (State of Incorporation)

25-0317820
 (I.R.S. Employer Identification No.)

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

ALCOA SAVINGS PLAN FOR BARGAINING EMPLOYEES
ALCOA SAVINGS PLAN FOR NON-BARGAINING EMPLOYEES
ALCOA SAVINGS PLAN FOR SUBSIDIARY AND AFFILIATE EMPLOYEES
 (Full Titles of Plans)

J. Michael Schell
Executive Vice President – Business Development and Law/Chief Compliance Officer
390 Park Avenue
New York, New York 10022-4608
 (Name and address of agent for service)
Telephone number of agent for service (212) 836-2680

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

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)(2)(3)	Proposed Maximum Offering Price Per Share (4)	Proposed Maximum Aggregate Offering Price (4)	Amount of Registration Fee(5)
Alcoa Inc. common stock, \$1.00 par value	15,000,000 shares	\$27.96	\$419,400,000	\$16,482.42

- (1) In addition, pursuant to Rule 416(c) under the Securities Act of 1933, as amended, this Registration Statement also covers an indeterminate number of interests to be offered or sold pursuant to the Plans described herein.
- (2) Pursuant to Rule 416(a), this Registration Statement also covers additional securities that may be offered as a result of stock splits, stock dividends or similar transactions.
- (3) The number of shares of common stock of Alcoa Inc. (“Alcoa”), par value \$1.00 per share (“Common Stock”), to be registered is to be allocated to the Plans described herein as follows: 5,500,000 shares to the Alcoa Savings Plan for Bargaining Employees, 7,100,000 shares to the Alcoa Savings Plan for Non-Bargaining Employees and 2,400,000 shares to the Alcoa Savings Plan for Subsidiary and Affiliate Employees.
- (4) Estimated solely for the purpose of calculating the registration fee, based on the average of the high and low prices of shares of the Common Stock reported on the New York Stock Exchange on September 5, 2008.
- (5) Pursuant to Rule 457(p) under the Securities Act of 1933, as amended, the total filing fee due for this Registration Statement (\$16,482.42) is offset by an unused filing fee of \$5,223.41 remaining available out of the total filing fee of \$22,156 previously paid by Alcoa under Registration Statement No. 333-142669 on Form S-4 initially filed by Alcoa with the Commission on May 7, 2007, as amended on June 7, 2007, and withdrawn on July 12, 2007. No securities were issued under Registration Statement No. 333-142669.

The contents of the earlier Registration Statements on Form S-8 filed by Alcoa with the Securities and Exchange Commission on March 15, 2000 (File No. 333-32516), as amended to date, on June 24, 2003 (File No. 333-106411), as amended to date, on September 20, 2005 (File No. 333-128445), as amended to date, and on September 26, 2007 (File No. 333-146330), relating to the Alcoa Savings Plan for Bargaining Employees, the Alcoa Savings Plan for Non-Bargaining Employees, and the Alcoa Savings Plan for Subsidiary and Affiliate Employees (the "Plans"), are incorporated by reference in this Registration Statement. This incorporation is made under General Instruction E of Form S-8 regarding the registration of additional securities of the same class as other securities for which there has been filed a Registration Statement on Form S-8 relating to the same employee benefit plan.

This Registration Statement is being filed to register an additional 15,000,000 shares of Common Stock, together with an indeterminate number of plan interests, for offer and sale under the Alcoa Savings Plan for Bargaining Employees, the Alcoa Savings Plan for Non-Bargaining Employees and the Alcoa Savings Plan for Subsidiary and Affiliate Employees, of which 5,500,000 shares, 7,100,000 shares and 2,400,000 shares, respectively, are being allocated to such plans.

With this filing, the following respective number of shares of Common Stock, as adjusted for the 2-for-1 stock split effective June 9, 2000, are allocated to the Plans from the aggregate amount originally registered under Registration Statement No. 333-32516, as amended to date, Registration Statement No. 333-106411, as amended to date, Registration Statement No. 333-128445, as amended to date, Registration Statement No. 333-146330 and this Registration Statement:

<u>Plan Name</u>	<u>Shares</u>
Alcoa Savings Plan for Bargaining Employees	19,360,000
Alcoa Savings Plan for Non-Bargaining Employees	31,204,327
Alcoa Savings Plan for Subsidiary and Affiliate Employees	6,900,000

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The Securities and Exchange Commission (SEC) allows Alcoa to “incorporate by reference” in this Registration Statement the information in the documents that it files with the SEC, which means that Alcoa can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this Registration Statement, and information in documents that Alcoa files later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this Registration Statement. Alcoa incorporates by reference in this Registration Statement the documents listed below and any future filings that it or the Plans may make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the “Exchange Act”) until all of the securities that may be offered by this Registration Statement are sold, except that Alcoa is not incorporating by reference, in any case, any documents or information deemed to have been furnished and not filed in accordance with SEC rules.

- Alcoa’s Annual Report on Form 10-K for the fiscal year ended December 31, 2007 and the Plans’ Annual Report on Form 11-K for the fiscal year ended December 31, 2007;
- Alcoa’s Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2008 and June 30, 2008;
- Alcoa’s Current Reports on Form 8-K filed on January 18, January 28, March 3, May 13, June 11, July 15, July 22 and September 3, 2008; and
- The description of Alcoa’s Common Stock contained in Alcoa’s Registration Statement on Form S-3ASR (File No. 333-149623), filed March 10, 2008.

Alcoa will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above which have been or will be incorporated by reference into this Registration Statement (including exhibits specifically incorporated by reference in these documents). Requests for copies should be addressed to:

Alcoa Inc.
Attention: Investor Relations
390 Park Avenue
New York, New York 10022-4608
Telephone: (212) 836-2674

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Alcoa has purchased a directors and officers liability insurance policy with an aggregate limit of \$250 million for liability of directors and officers. Effective June 1, 2008, the aggregate limit was increased to \$350 million. The insurance also includes within that limit \$150 million of coverage, subject to a deductible, for reimbursement to Alcoa for indemnification provided to directors and officers. The policy has an expiration date of October 1, 2008 and provides liability insurance and reimbursement coverage for Alcoa, and its directors and officers that is permitted by the laws of Pennsylvania.

ITEM 8. EXHIBITS.

<u>Exhibit Number</u>	<u>Description</u>
4(a)	Articles of Incorporation of Alcoa, as amended (incorporated by reference to Exhibit 3(a) to Alcoa's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2000).
4(b)	By-laws of Alcoa, as amended (incorporated by reference to Exhibit 3 to Alcoa's Current Report on Form 8-K filed on September 20, 2007).
15	Letter regarding unaudited interim financial information.
23	Consent of Independent Registered Public Accounting Firm.
24(a)	Power of Attorney of certain directors of Alcoa (incorporated by reference to Exhibit 24 to Alcoa's Annual Report on Form 10-K for the year ended December 31, 2007).
24(b)	Power of Attorney of Alain J. P. Belda.

ITEM 9. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (i) and (ii) do not apply if the Registration Statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended), that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 6 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Pittsburgh, the Commonwealth of Pennsylvania, on this 8th day of September, 2008.

ALCOA INC.
(Registrant)

By /s/ Tony R. Thene
Tony R. Thene
Vice President and Controller
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Klaus Kleinfeld</u> Klaus Kleinfeld	President and Chief Executive Officer; Director (Principal Executive Officer)	September 8, 2008
<u>/s/ Charles D. McLane, Jr.</u> Charles D. McLane, Jr.	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	September 8, 2008
<u>/s/ Tony R. Thene</u> Tony R. Thene	Vice President and Controller (Principal Accounting Officer)	September 8, 2008

Alain J. P. Belda, Kathryn S. Fuller, Carlos Ghosn, Joseph T. Gorman, Judith M. Gueron, James W. Owens, Henry B. Schacht, Ratan N. Tata, Franklin A. Thomas and Ernesto Zedillo, each as a Director (constituting a majority of the Board of Directors), on September 8, 2008, by Donna C. Dabney, their attorney-in-fact.

/s/ Donna C. Dabney
Donna C. Dabney
Attorney-in-fact

The Plans. Pursuant to the requirements of the Securities Act of 1933, the Plans' Benefits Management Committee has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, the State of New York, on this 8th day of September, 2008.

Alcoa Inc. Benefits Management Committee

By: /s/ Regina Hitchery
Regina Hitchery, Member

By: /s/ Charles D. McLane, Jr.
Charles D. McLane, Jr., Member

By: /s/ J. Michael Schell
J. Michael Schell, Member

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
4(a)	Articles of Incorporation of Alcoa, as amended (incorporated by reference to Exhibit 3(a) to Alcoa's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2000).
4(b)	By-laws of Alcoa, as amended (incorporated by reference to Exhibit 3 to Alcoa's Current Report on Form 8-K filed on September 20, 2007).
15	Letter regarding unaudited interim financial information.
23	Consent of Independent Registered Public Accounting Firm.
24(a)	Power of Attorney of certain directors of Alcoa (incorporated by reference to Exhibit 24 to Alcoa's Annual Report on Form 10-K for the year ended December 31, 2007).
24(b)	Power of Attorney of Alain J. P. Belda.

September 8, 2008

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Commissioners:

We are aware that our report dated April 21, 2008 on our review of interim financial information of Alcoa Inc. and its subsidiaries (the "Company") for the three-month period ended March 31, 2008 and 2007 and our report dated July 21, 2008 on our review of interim financial information of the Company for the three- and six-month periods ended June 30, 2008 and 2007 and included in the Company's quarterly report on Form 10-Q for the quarters ended March 31, 2008 and June 30, 2008 are incorporated by reference in this Registration Statement on Form S-8 dated September 8, 2008.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 15, 2008, except as it relates to the effects of the segment realignment discussed in Note D and Note Q, as to which the date is August 29, 2008, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in the 2007 Annual Report to Shareholders of Alcoa Inc. and its subsidiaries (the "Company"), which is incorporated by reference in the Company's Annual Report on Form 10-K for the year ended December 31, 2007. We also consent to the incorporation by reference of our report dated February 15, 2008 relating to the financial statement schedule, which appears in such Annual Report on Form 10-K. We also consent to the incorporation by reference of our report dated February 15, 2008, except as it relates to the effects of the segment realignment discussed in Note D and Note Q, as to which the date is August 29, 2008, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in the Current Report on Form 8-K dated September 3, 2008.

We also consent to the incorporation by reference in this Registration Statement of our report dated June 26, 2008 relating to the financial statements, which appears in the Annual Report of the Alcoa Savings Plan for Bargaining Employees, the Alcoa Savings Plan for Non-Bargaining Employees, and the Alcoa Savings Plan for Subsidiary and Affiliate Employees on Form 11-K for the year ended December 31, 2007.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania
September 8, 2008

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that the undersigned Director and Chairman of the Board and Chief Executive Officer of Alcoa Inc. (the "Company") hereby constitutes and appoints CHARLES D. MCLANE, JR., TONY R. THENE, PETER HONG and DONNA C. DABNEY, or any of them, his true and lawful attorneys-in-fact and agents, with full power of substitution, to do any and all acts and things and to execute any and all instruments that said attorneys-in-fact and agents, or any of them, may deem necessary or advisable or may be required:

(1) To enable the Company to comply with the Securities Exchange Act of 1934, as amended (the "1934 Act"), and any rules, regulations or requirements of the Securities and Exchange Commission (the "Commission") in respect thereof, in connection with the filing under the 1934 Act of the Company's Annual Report on Form 10-K for the year ended December 31, 2007 (the "2007 Annual Report"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of the undersigned in the capacity of Principal Executive Officer and/or Director of the Company to the 2007 Annual Report to be filed with the Commission and to any instruments or documents filed as part of or in connection with the 2007 Annual Report, including any amendments or supplements thereto;

(2) To enable the Company to comply with the Securities Act of 1933, as amended (the "1933 Act"), and any rules, regulations or requirements of the Commission in respect thereof, in connection with the registration under the 1933 Act during 2008 of the offer and sale or delivery of shares of common stock of the Company to be issued under the 2004 Alcoa Stock Incentive Plan (the "2004 Plan") or the Alcoa Stock Incentive Plan (the "Stock Incentive Plan"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of the undersigned in the capacity of Principal Executive Officer and/or Director of the Company to any registration statement on Form S-8, or on such other form as may be appropriate, to be filed with the Commission in respect of said shares and the 2004 Plan or the Stock Incentive Plan, or either of them, to any and all pre-effective amendments, post-effective amendments and supplements to any such registration statement, and to any instruments or documents filed as part of or in connection with any such registration statement or any such amendments or supplements thereto; and

(3) To enable the Company to comply with the 1933 Act, and any rules, regulations or requirements of the Commission in respect thereof, in connection with the registration under the 1933 Act during 2008 of the offer and sale or delivery of up to 15 million shares of common stock of the Company to be issued under the Company's employee savings plans (together with interests in such plans), including, without limitation, the Alcoa Savings Plan for Bargaining Employees, the Alcoa Savings Plan for Non-Bargaining Employees, the Alcoa Savings Plan for Subsidiary and Affiliate Employees, and employee savings plans sponsored by entities acquired by the Company from time to time (the "Plans"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of the undersigned in the capacity of Principal Executive Officer and/or Director of the Company to any registration statement on Form S-8, or on such other form as may be appropriate, to be filed with the Commission in respect of said shares and the Plans (or interests in such Plans), or any of them, to any and all pre-effective amendments, post-effective amendments and supplements to any such registration statement, and to any instruments or documents filed as part of or in connection with any such registration statement or any such amendments or supplements thereto; and

granting unto each of said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as the undersigned might or could do in person, and the undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents, or any of them, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has subscribed these presents this 18th day of January 2008.

/s/ Alain J. P. Belda

Alain J. P. Belda
Director and Chairman of the Board and
Chief Executive Officer