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.)

201 Isabella Street, Alcoa Corporate Center, Pittsburgh, Pennsylvania 15212-5858 (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)

Lawrence R. Purtell
Executive Vice President and General Counsel
390 Park Avenue
New York, New York 10022-4608
(Name and address of agent for service)

Telephone number of agent for service (212) 836-2650

CALCULATION OF REGISTRATION FEE

	Amount to be	Proposed Maximum Offering Price	Proposed Maximum Aggregate	Amount of
Title of Securities to be Registered	Registered(1)(2)(3)	Per Share(4)	Offering Price(4)	Registration Fee
Alcoa Inc. common stock, \$1.00 par value	4,000,000 shares	\$26.545	\$106,180,000	\$12,497.39

- 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 to be registered is to be allocated to the plans described herein as follows: 3,500,000 shares to the Alcoa Savings Plan for Bargaining Employees and 500,000 shares to the Alcoa Savings Plan for Non-Bargaining Employees. No additional shares are being allocated by this Registration Statement 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 Registrant's common stock reported on the New York Stock Exchange on September 19, 2005.

The contents of the earlier Registration Statements on Form S-8 filed by Alcoa Inc. ("Alcoa") with the Securities and Exchange Commission on March 15, 2000 (File No. 333-32516) and on June 24, 2003 (File No. 333-106411), each as amended to date, 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 4,000,000 shares of common stock, par value \$1.00 per share ("Common Stock"), of Alcoa, together with an indeterminate number of plan interests, for offer and sale under the Alcoa Savings Plan for Bargaining Employees and the Alcoa Savings Plan for Non-Bargaining Employees, of which 3,500,000 shares and 500,000 shares, respectively, are being allocated to such plans. No additional shares of Common Stock are being allocated by this Registration Statement to the Alcoa Savings Plan for Subsidiary and Affiliate Employees.

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

Plan Name	Shares
Alcoa Savings Plan for Bargaining Employees	8,360,000
Alcoa Savings Plan for Non-Bargaining Employees	15,104,327
Alcoa Savings Plan for Subsidiary and Affiliate Employees	4,000,000

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 any information that is not deemed to be filed under those sections or that is furnished under either Item 2.02 or Item 7.01 of any Current Report on Form 8-K.

- Alcoa's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 and the Plans' Annual Report on Form 11-K for the fiscal year ended December 31, 2004;
- Alcoa's Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2005 and June 30, 2005; and
- Alcoa's Current Reports on Form 8-K filed on January 5, 2005, January 14, 2005, March 23, 2005, April 21, 2005, April 25, 2005, May 19, 2005, May 27, 2005, June 22, 2005, June 23, 2005 and September 20, 2005.

Alcoa will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above, except for exhibits to those documents, unless the exhibits are specifically incorporated by reference into those 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 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

The validity of the Common Stock to be issued in connection with the Plans will be passed upon by Thomas F. Seligson, Esq., Counsel of Alcoa. Mr. Seligson is paid a salary by Alcoa, is a participant in various benefit plans offered by Alcoa to employees of Alcoa generally and beneficially owns, or has rights to acquire, an aggregate of less than 1% of Alcoa's outstanding Common Stock.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Alcoa has purchased a directors and officers liability insurance policy with an aggregate limit of \$200 million for liability of directors and officers. 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, 2005 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

Exhibit Number	Description
(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 for the quarter ended June 30, 2000).
(4)(b)	By-laws of Alcoa, as amended (incorporated by reference to Exhibit 4(b) to Alcoa's Post-Effective Amendment No. 2 to Registration Statement No. 333-32516 and Registration Statement No. 333-106411 on Form S-8, filed October 14, 2003).
(5)	Opinion of Thomas F. Seligson, Counsel of Alcoa.
(15)	Letter regarding unaudited interim financial information.
(23)(a)	Consent of PricewaterhouseCoopers LLP.
(23)(b)	Consent of Counsel (included as part of Exhibit 5).
(24)	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, 2004).

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 20th day of September, 2005.

> ALCOA INC. (Registrant)

/s/ Charles D. McLane

Charles D. McLane, Jr. Vice President - Corporate Controller (Principal Accounting Officer)

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

Signature	Title	Date	
/s/ Alain J.P. Belda	Chairman of the Board and Chief Executive Officer; Director		
Alain J.P. Belda	(Principal Executive Officer)	,	
/s/ Richard B. Kelson	Executive Vice President and Chief Financial Officer		
Richard B. Kelson	(Principal Financial Officer)	September 20, 2005	
/s/ Charles D. McLane	Vice President - Corporate Controller		
Charles D. McLane, Jr .	(Principal Accounting Officer)	September 20, 2005	
Kathryn S. Fuller, Carlos Ghosn, Joseph T. Gorman, Judith M. Gueron, Klaus Kleinfeld, Henry B. Schacht, Franklin A. Thomas and Ernesto Zedillo, each as a Director (constituting a majority of the Board of Directors) on September 20, 2005, by Charles D. McLane, Ir., their attorney-in-fact			

Director (constituting a majority of the Board of Directors), on September 20, 2005, by Charles D. McLane, Jr., their attorney-in-fact.

/s/ Charles D. McLane

Charles D. McLane, Jr. 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 20th day of September, 2005.

Alcoa Inc. Benefits Management Committee

By: /s/ Regina Hitchery

Regina Hitchery, Member

By: /s/ Richard B. Kelson

Richard B. Kelson, Member

By: /s/ William B. Plummer

William B. Plummer, Member

By: /s/ Paul D. Thomas

Paul D. Thomas, Member

INDEX TO EXHIBITS

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5	Opinion of Thomas F. Seligson, Counsel of Alcoa.
15	Letter regarding unaudited interim financial information.
23(a)	Consent of PricewaterhouseCoopers LLP.
23(b)	Consent of Counsel (included in Exhibit 5).
24	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, 2004).

September 20, 2005

Alcoa Inc. 201 Isabella Street Pittsburgh, PA 15212-5858

Ladies and Gentlemen:

This opinion is furnished in connection with the registration by Alcoa Inc. (the "Company") pursuant to a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "1933 Act"), of an aggregate of 4,000,000 shares of common stock, \$1.00 par value, of the Company (the "Shares"), that are to be offered and sold by the Company through the Alcoa Savings Plan for Bargaining Employees and the Alcoa Savings Plan for Non-Bargaining Employees (collectively, the "Plans").

As a Counsel of the Company, I am of the opinion, based upon my familiarity with the affairs of the Company and upon my examination of the law and pertinent documents, that the Shares, when issued and sold pursuant to the Plans, will be legally issued, fully paid and non-assessable shares of common stock of the Company.

I hereby consent to the filing of this opinion with the Securities and Exchange Commission (the "Commission") as an Exhibit to the Registration Statement with respect to the Shares under the 1933 Act. In giving this consent, I do not admit that I am in the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission issued thereunder.

Very truly yours,

/s/ Thomas F. Seligson

Thomas F. Seligson Counsel September 20, 2005

Securities and Exchange Commission 100 F Street, NE Washington, D.C. 20549

Commissioners:

We are aware that our report dated April 27, 2005 on our review of interim condensed consolidated financial information of Alcoa Inc. and its subsidiaries (the "Company") for the three-month period ended March 31, 2005 and 2004 and our report dated July 28, 2005 on our review of the interim condensed consolidated financial information of the Company for the three-month and six-month periods ended June 30, 2005 and 2004 and included in the Company's quarterly report on Form 10-Q for the quarters ended March 31, 2005 and June 30, 2005 are incorporated by reference in this Registration Statement dated September 20, 2005.

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 18, 2005 relating to the financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in the 2004 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, 2004. We also consent to the incorporation by reference of our report dated February 18, 2005 relating to the financial statement schedule, which appears in such Annual Report on Form 10-K.

We also consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated June 3, 2005 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, 2004.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania September 20, 2005