YPF SOCIEDAD ANONIMA Form SC 13D/A May 20, 2011

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

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934 (Amendment No. 6 to Amended and Restated Schedule 13D)*

YPF SOCIEDAD ANÓNIMA (Name of Issuer)

CLASS D SHARES (PAR VALUE PS. 10 PER SHARE) (Title of Class of Securities)

> 984245100 (CUSIP Number)

Miguel Ángel Devesa del Barrio Repsol YPF, S.A. Paseo de la Castellana, 278—280 28046 Madrid, Spain Tel: (011-34) 91 314-2821

With a copy to:

Nicholas A. Kronfeld, Esq. Davis Polk & Wardwell LLP 450 Lexington Avenue New York, NY 10017 Tel: (212) 450-4000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 19, 2011 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. o

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Exchange Act") or otherwise subject to the liabilities of that section of the Exchange Act but shall be subject to all other provisions of the Exchange Act (however, see the Notes).

(Continued on following pages)

CUSIP No. 984245100 13D Page 2 of 11 Pages NAME OF REPORTING PERSONS REPSOL YPF, S.A. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) o (b) o 3 SEC USE ONLY SOURCE OF FUNDS (see instructions) NOT APPLICABLE CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) o CITIZENSHIP OR PLACE OF ORGANIZATION KINGDOM OF SPAIN 7 SOLE VOTING POWER 229,013,064 CLASS D SHARES 8 SHARED VOTING POWER NUMBER OF SHARES BENEFICIALLY OWNED BY NOT APPLICABLE **EACH REPORTING PERSON** WITH SOLE DISPOSITIVE POWER 229,013,064 CLASS D SHARES 10 SHARED DISPOSITIVE POWER NOT APPLICABLE AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 229,013,064 CLASS D SHARES 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROV	I(11)
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58.24% OF CLASS D SHARES

14 TYPE OF REPORTING PERSON (see instructions)

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Item 1. Security and Issuer

Repsol YPF, S.A. ("Repsol") hereby amends and supplements its report on Schedule 13D, as last amended on May 6, 2011 (as heretofore amended and restated, the "Schedule 13D"), with respect to the Class D Shares, nominal value PS. 10 per share (the "Class D Shares"), of YPF Sociedad Anónima, an Argentine corporation (the "Issuer" or the "Company"). The principal executive offices of the Issuer are located at Macacha Güemes 515, C1106BKK Ciudad Autónoma de Buenos Aires, Argentina. Unless otherwise indicated, capitalized terms used in this Amendment No. 6 (the "Amendment"), but not defined herein, shall have the meaning assigned to such terms in the Schedule 13D.

Item 2. Identity and Background

Item 2 of the Schedule 13D is hereby amended and supplemented by the following information:

On May 3, 2011, as previously reported on Repsol's Amended and Restated Schedule 13D/A dated May 6, 2011, Petersen Energía Inversora, S.A.U. ("PEISA"), as assignee of the option rights (the "Second Option") under the Second Option Agreement, dated as of February 21, 2008 (the "Second Option Agreement"), previously held by Mr. Enrique Eskenazi, Mr. Sebastián Eskenazi, Mr. Matías Eskenazi Storey and Mr. Ezequiel Eskenazi Storey, delivered to Repsol written notice of its exercise of the Second Option and on May 4, 2011, Repsol acknowledged and accepted such exercise (such notice and acceptance, the "Second Option Exercise Notice"). The Second Option provides PEISA, as assignee, the right to purchase from Repsol Class D shares or American Depositary Shares of the Issuer representing up to 10.0% in the aggregate of the outstanding capital stock of the Issuer.

The exercise of the Second Option resulted in the purchase by PEISA and the sale by Repsol of restricted American Depositary Shares representing 39,331,279 Class D shares of the Issuer, at a price of USD \$33.1551 per Class D Share (determined in accordance with the formula contained in the Second Option Agreement), or USD \$1,304,032,488 in the aggregate pursuant to a stock purchase and sale agreement dated May 19, 2011 (the "Stock Purchase and Sale Agreement"). Pursuant to Repsol's financing undertaking in the Second Option Agreement and request by PEISA in the Second Option Exercise Notice for Repsol to finance USD \$625,935,594 of the aggregate exercise price to be paid by PEISA to Repsol, Repsol entered into a seller credit agreement with PEISA, as borrower, and the Bank of New York Mellon, as collateral agent (the "Seller Credit Agreement"), to provide a loan of approximately USD \$625,935,594 in order to partially finance the aggregate exercise price.

The foregoing transactions are herein referred to as the "PEISA Transaction". Closing of the PEISA Transaction occurred on May 19, 2011. The foregoing summary of the PEISA Transaction contained in this Item 2 is qualified in its entirety by reference to the Second Option Agreement filed as Exhibit 7.05 to Repsol's Amended and Restated Schedule 13D/A dated February 22, 2008, the Stock Purchase and Sale Agreement and the Seller Credit Agreement attached as Exhibits 99.22 and 99.23, respectively, and incorporated by reference herein.

The name, business address, present principal occupation or employment and citizenship of each director and executive officer of Repsol is set forth on Schedule A attached hereto.

During the last five years, none of Repsol and, to the best of Repsol's knowledge, the persons listed on Schedule A attached hereto, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject, to federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

This Amendment relates to the transactions in the Class D Shares entered into by Repsol as described in Item 2 above and Item 4 below. Repsol is not purchasing any shares of the Issuer.

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Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is hereby amended and supplemented by the second and third paragraphs under Item 2 above.

Except as set forth herein, Repsol does not have any plans or proposals that relate to or would result in any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

Item 5(a) of the Schedule 13D is hereby amended and supplemented by the following information:

As a result of its sale of approximately 10.0% of the outstanding capital stock of the Issuer to PEISA described under Item 2 above, Repsol beneficially owns, for the purpose of Rule 13d-3 promulgated under the Exchange Act, 229,013,064 Class D Shares, representing approximately 58.24% of the Issuer's outstanding Class D Shares.

Except as set forth herein, none of Repsol, and, to the best of its knowledge, any persons named in Schedule A hereto owns beneficially any shares of the Issuer.

Item 5(b) of the Schedule 13D is hereby amended and supplemented by the following information:

Repsol has sole power to vote and to dispose of 229,013,064 Class D Shares.

Item 5(c) of the Schedule 13D is hereby amended and supplemented by the following information:

Other than the transactions described in Item 2 of this Amendment, the transactions in the Class D Shares of the Issuer effected by Repsol or, to the knowledge of Repsol, any person named in Schedule A, since the filing of Repsol's Amendment No. 5 to the Schedule 13D with the Securities and Exchange Commission on May 6, 2011 are listed in Schedule B.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Except for the contracts, arrangements, understandings or relationships (legal or otherwise) described in this Schedule 13D and the matters contemplated above in Item 4 and described below in this Item 6, to the best knowledge of Repsol, there are no contracts, arrangements, understandings or relationships (legal or otherwise), including, but not limited to, transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, between Repsol and/or the persons enumerated in Schedule A, and any other person, with respect to any securities of the Issuer, including any securities pledged or otherwise subject to a contingency the occurrence of which would give another person voting power or investment power over such securities other than standard default and similar provisions contained in loan agreements.

Stock Purchase and Sale Agreement

Under the terms of the Stock Purchase Agreement, Repsol sold to PEISA, and PEISA purchased from Repsol, an aggregate of 39,331,279 restricted American Depositary Shares representing 39,331,279 Class D shares of the Issuer, at a price of USD \$33.1551 per Class D Share or USD \$1,304,032,488 in the aggregate. The purchased American Depositary Shares have not been registered under the Securities Act of 1933, as amended (the "Securities Act") or any state securities laws in the United States, and may not be resold, pledged or otherwise transferred by PEISA except in a transaction that is exempt from or not subject to the registration requirements of the Securities Act or pursuant to an

effective registration statement. The Stock Purchase and Sale Agreement contains other customary terms and conditions, including representations and warranties by the parties thereto.

The foregoing description of the Stock Purchase and Sale Agreement does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Stock Purchase and Sale Agreement, which is attached hereto as Exhibit 99.22 and incorporated by reference herein.

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Seller Credit Agreement

Pursuant to the terms of the Seller Credit Agreement, Repsol loaned PEISA USD \$625,935,594 in order to partially finance the aggregate exercise price to be paid by PEISA to Repsol. The loan matures on May 15, 2021 or the immediately preceding business day if such date is not a business day. Principal payments are required to be made at certain periodic intervals commencing in 2016 until the maturity date. The loan bears an interest rate per annum equal to 7.4% at any time prior to (and including) November 21, 2016 and thereafter at a rate equal to 6.5% per annum. Upon the occurrence and during the continuance of a payment default under the Seller Credit Agreement, an additional interest rate of 2% per annum applies.

The Seller Credit Agreement also contains other customary terms and conditions.

The foregoing description of the Seller Credit Agreement does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Seller Credit Agreement, which is attached hereto as Exhibit 99.23 and incorporated by reference herein.

Item 7. Material to be Filed as Exhibits

Item 7 is hereby amended to add the following exhibits:

- 99.22 Stock Purchase and Sale Agreement, dated as of May 19, 2011, among Repsol YPF, S.A., Caveant S.A., Repsol YPF Capital, S.L., Repsol Exploración, S.A., Petersen Energía Inversora, S.A.U. and Petersen Energía, S.A.U.
- 99.23 Seller Credit Agreement, dated as of May 19, 2011, among Petersen Energía Inversora, S.A.U., as borrower, Repsol YPF, S.A., as seller, and the Bank of New York Mellon, as collateral agent.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 20, 2011

Repsol YPF, S.A.

By: /s/ Miguel Ángel Devesa del Barrio

Name: Miguel Ángel Devesa del

Barrio

Title: Chief Financial Officer

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SCHEDULE A

DIRECTORS AND EXECUTIVE OFFICERS OF REPSOL YPF, S.A.

The name, business address, title, present principal occupation or employment of each of the directors and executive officers of Repsol YPF, S.A. ("Repsol"), are set forth below. Unless otherwise indicated, the business address of each such person is Paseo de la Castellana, 278—280, 28046 Madrid, Spain. Unless otherwise indicated, each occupation set forth opposite an individual's name refers to Repsol. Unless otherwise indicated below, all of the persons listed below are citizens of Spain.

Name and Business or Home Address and Citizenship

Position with Repsol YPF, S.A and Present Principal Occupation

Directors

Antonio Brufau Niubó

Chairman and Director, Member and Chairman of the Delegate Committee (Comisión Delegada) and Chief Executive Officer of Repsol YPF, S.A.

Vice-Chairman of Gas Natural SDG, S.A. and Chairman of YPF, S.A. and Foundation Repsol; Member of the European Round Table of Industrialists (ERT), the Advisory Board of CEIM Conferederación Empresarial de Madrid (CEOE), the Asociación Española de Directivos, Foundation CEDE (Confederación Española de Directivos y Ejecutivos), Foundation Instituto Ildefons Cerdá and the Círculo de Economía, and Chairman of Consorcio Interinstitucional GLOBALleida.

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Luis F. del Rivero Asensio

1st Vice-Chairman and Director, nominated for membership by Sacyr Vallehermoso, S.A., and Member of the Delegate Committee (Comisión Delegada) of Repsol YPF, S.A.

Executive Chairman of Sacyr Vallehermoso, S.A.; Chairman of Vallehermoso División Promoción, S.A. and Director of Testa Inmuebles en Renta, Sacyr, S.A.U. and Valoriza Gestión, S.A.

Isidre Fainé Casas

2nd Vice-Chairman and Director, nominated for membership by Criteria Caixa Corp. (Caja de Ahorros y Pensiones de Barcelona "la Caixa" Group), and Member of the Delegate Committee (Comisión Delegada) of Repsol YPF, S.A.

Chairman of "la Caixa", Criteria CaixaCorp, S.A., CECA (Confederación Española de Cajas de Ahorros) and Foundation "la Caixa"; Vice Chairman of Abertis

Infraestructuras, Sociedad General de Aguas de Barcelona and Telefónica; Director of Banco BPI and Grupo Financiero Inbursa; and Director of The Bank East of Asia, Limited.

Juan Abelló Gallo

Director, nominated for membership by Sacyr Vallehermoso, S.A., Member of the Strategy, Investment and Corporate Social Responsibility Committee of Repsol YPF, S.A.

Chairman of Torreal and Alcaliber (representing Nueva Compañía de Inversiones); Vice-Chairman of Sacyr Vallehermoso (representing Nueva Compañía de Inversiones) and CVNE (representing Austral, B.V.); and Director of Zed Worldwide (representing Nueva Compañía de Inversiones).

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Paulina Beato Blanco

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors, and member of the Audit and Control Committee of Repsol YPF, S.A.

Advisor to the Iberoamerican Secretary General (Secretaría General Iberoamericana), professor for Economic Analysis in various universities and member of a special board for promoting the Knowledge Society in Andalusia.

Artur Carulla Font

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors, Member of the Delegate Committee (Comisión Delegada) and Chairman of the Nomination and Compensation Committee of Repsol YPF, S.A. He has been appointed Lead Independent Director of the Board of Directors of Repsol YPF in accordance with the provisions of the ByLaws and of the Regulations of the Board of Directors.

Chairman of Agrolimen and its affiliated companies Affinity Petcare, Preparados Alimenticios (Gallina Blanca Star), Biocentury, The Eat Out Group and Reserva Mont-Ferrat; Director and Secretary of Arbora & Ausonia, Quercus Capital Riesgo, S.G.E.C.R and Consorcio de Jabugo; Member of the Regional Board of Telefónica in Catalonia; Member of the Advisory Boards of EXEA Empresarial and Roca Junyent; Vice-Chairman of Círculo de Economía and Foundation ESADE: Member of IAB (International Advisory Board) of the Generalitat de Catalunya, Foundation Lluis Carulla, Management Board of Instituto de la Empresa Familiar, Foundation MACBA (Museo de Arte Contemporaneo de Barcelona) and of FUOC (Fundación para la Universitat Abierta de Cataluña).

Luís Carlos Croissier Batista

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors and Member of the Strategy, Investment and Corporate Social Responsibility Committee of Repsol YPF, S.A.

Director of Adolfo Dominguez, Testa Inmuebles en Renta,

Eolia Renovables de Inversiones SCR, Grupo Copo de Inversiones and Sole Director of Eurofocus Consultores. Director, Independent outside director as determined in

accordance with the Bylaws and the Regulations of the Board of Directors and Chairman of the Audit and Control

Committee of Repsol YPF, S.A.

Ángel Durández Adeva

Director of Gestevisión Telecinco; Member of the Advisory Board of Exponencial-Agencia de Desarrollos Audiovisuales, Ambers & Co and FRIDE (Foundation for the international relations and the foreign development); Chairman of Arcadia Capital and Información y Control de Publicaciones; Member of Foundation Germán Sánchez Ruipérez and Foundation Independiente and Vicepresident of Foundation Euroamérica.

Javier Echenique Landiríbar

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors, Member of the Delegate Committee (Comisión Delegada), and of the Audit and Control Committee of Repsol YPF, S.A.

Vice-Chairman of Banco Sabadell, Director of Telefónica Móviles México, Actividades de Construcción y Servicios (ACS), Grupo Empresarial Ence and Celistics, L.L.C.; Delegate of the Board of Telefónica in the Basque region; Member of the Advisory Board of Telefónica Spain; Member of Foundation Novia Salcedo and Círculo de Empresarios Vascos.

Mario Fernández Pelaz

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors and member of

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the Nomination and Compensation Committee. Chairman of BBK (Bilbao Bizkaia Kutxa).

María Isabel Gabarró Miquel

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors, Member of the Nomination and Compensation Committee and Member of the Strategy, Investment and Corporate Social Responsibility Committee.

Registered on the Bar of Notaries of Barcelona; Member of the Sociedad Económica Barcelonesa de Amigos del País.

Jose Manuel Loureda Mantiñán Director, nominated for membership by Sacyr Vallehermoso, S.A., Member of the Nomination and Compensation Committee and of the Strategy, Investment and Corporate Social Responsibility Committee of Repsol YPF, S.A.

> Director of Sacyr Vallehermoso (as representative of Prilou), Chairman of Valoriza Gestión, S.A. and Hoteles Bisnet and Director of Vallehermoso División Promoción, S.A.U., Testa Inmuebles en Renta, Sacyr, S.A.U. and Somague S.G.P.S.

Juan María Nin Génova

Director, nominated for membership by Criteria Caixa Corp ("la Caixa" Group) and member of the Nomination and Compensation Committee and Chairman of the Strategy, Investment and Corporate Social Responsibility Committee of Repsol YPF, S.A.

President and CEO of "la Caixa"; Deputy Chairman of Foundation "la Caixa" and Criteria CaixaCorp; Member of the Board of Directors of SegurCaixa Holding, Gas Natural SDG, Banco BPI, Erste Group Bank, A.G. and Grupo Financiero Inbursa; Member of the Board of Governors of University of Deusto and Foundation ESADE Business School; Member of the Board of Directors of Círculo Ecuestre and APD (Asociación para el Progreso de la Dirección), Foundation Federico García Lorca and Foundation Council Spain-U.S.A.; Deputy Chairman of Foundation Council Spain-India; Member of the Economic Group of Spain-China Forum; Secretary of the Federació Catalana de Caixes d'Estalvi; Member of the Economic Policy Commission of the Barcelona Chamber of Commerce.

PEMEX Internacional España, S.A.

José Manuel Carrera Panizzo serves as representative of PEMEX Internacional España, S.A. (a related company of PEMEX) on the Board of Directors of Repsol YPF, S.A. Spanish law permits limited liability companies to serve as members of the Board of Directors. A company serving in such a capacity must appoint a natural person to represent it at the meetings of the Board of Directors. Director, Member of the Delegate Committee (Comisión Delegada) and of the Strategy, Investment and Corporate Social Responsibility Committee of Repsol YPF, S.A.

Administrative and Finance Director of P.M.I. Comercio Internacional, S.A. de C.V. and Managing Director of Pemex internacional España, S.A. and P.M.I. Holdings Petróleos España, S.L.

Citizen of: Mexico

Henri Philippe Reichstul

Director, Independent outside director as determined in accordance with the Bylaws and the Regulations of the Board of Directors and Member of the Delegate Committee (Comisión Delegada) of Repsol YPF, S.A.

Member of the Strategic Board of ABDIB, Director of Ashmore Energy Internacional, Member of Coinfra, Member of the Advisory Board of Lhoist do Brasil Ltda., Member of the Supervisory Board of Peugeot Citroen, Member of the International Advisory Board of Group Credit Agricole and Vice-Chairman of the Board of the Brazilian Foundation for Sustainable Development.

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Citizen of: Brazil

Luis Suárez de Lezo Mantilla Director, Member of the Delegate Committee (Comisión

Delegada), Secretary of the Board of Directors, Executive

Director and General Counsel of Repsol YPF, S.A.

Director of Gas Natural SDG, S.A., YPF and Repsol-Gas Natural LNG, Vice Chairman of Foundation Repsol and member of the Environment and Energy Commission of

the International Chamber of Commerce (ICC).

Name and Business or Home Address and

Citizenship

Position with Repsol YPF, S.A and Present Principal Occupation

Executive Officers (Who Are Not

Directors)

Miguel Martínez San Martín Chief Operating Officer

Pedro Fernández Frial Executive Managing Director of Downstream Nemesio Fernández-Cuesta Luca de Tena Executive Managing Director of Upstream

Group Managing Director of Human Resources

Cristina Sanz Mendiola

and Organization

Antonio Gomis Sáez

Deputy Executive Managing Director of YPF

Miguel Angel Devesa del Barrio

Chief Financial Officer

Group Managing Director of Communication and

Begoña Elices García

Head of Chairman's Office

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SCHEDULE B

TRANSACTIONS EFFECTED SINCE MAY 6, 2011

Transactions effected on the NYSE(1)

Date Buy/Sell Number of Shares Price per Share (U.S.\$) 05/13/2011 Sell 14,276 43.1604

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⁽¹⁾ Shows transactions effected since the filing of Amendment No. 5 to the Schedule 13D on May 6, 2011 through the date hereof.