

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT

under the

SECURITIES ACT OF 1933

Pepco Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or
organization)

52-2297449

(I.R.S. Employer Identification Number)

**701 Ninth Street, N.W.
Washington, D.C. 20068**

(Address, including zip code, of registrant's principal executive offices)

Pepco Holdings, Inc. Retirement Savings Plan

(Full title of the plan)

**Ellen Sheriff Rogers
Vice President and Secretary
Pepco Holdings, Inc.
701 Ninth Street, N.W.
Washington, D.C. 20068
(202) 872-3526**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to Be Registered | Amount to Be Registered | Proposed Maximum Offering Price per Share | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee |
|---|----------------------------|---|---|-------------------------------|
| Common Stock, \$0.01 par value (1) | 5,000,000 (2) | \$23.275 (3) | \$116,375,000 (3) | \$12,452.13 |

- (1) In addition, pursuant to Rule 416(c) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate amount of plan participation interests to be offered or sold pursuant to the Pepco Holdings, Inc. Retirement Savings Plan.
 - (2) Pursuant to Rule 416(a) under the Securities Act, the number of shares of common stock, par value \$0.01 per share, of Pepco Holdings, Inc. ("Common Stock") registered hereby is subject to adjustment to prevent dilution resulting from a stock dividend, stock split, recapitalization or other similar transaction that results in an increase in the number of the outstanding shares of Common Stock.
 - (3) Calculated in accordance with Rule 457(c) and (h)(2) under the Securities Act based on the average of the high and low sales prices per share of the Common Stock on January 26, 2006, as reported by the New York Stock Exchange. In accordance with Rule 457(h)(2) under the Securities Act, no separate fee is required with respect to the plan participation interests.
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EXPLANATORY NOTE

The Pepco Holdings, Inc. Retirement Savings Plan, established effective January 1, 2006, is an amalgam of, and accordingly is the successor to, the following plans:

- (i) the Potomac Electric Power Company Savings Plan for Bargaining Unit Employees,
- (ii) the Retirement Savings Plan for Management Employees (formerly the Potomac Electric Power Company Savings Plan for Exempt Employees), which was, in turn, a successor by merger to the Potomac Electric Power Company Savings Plan for Non-Bargaining Unit, Non-Exempt Employees,
- (iii) the Conectiv Savings and Investment Plan, and
- (iv) the Atlantic Electric 401(k) Savings and Investment Plan - B

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by Pepco Holdings, Inc. (the "Registrant") with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are incorporated in this Registration Statement by reference:

- (a) The Annual Report on Form 10-K of the Registrant for the year ended December 31, 2004;
- (b) The Quarterly Reports on Form 10-Q of the Registrant for the quarters ended March 31, June 30, and September 30, 2005;
- (c) The Current Reports on Form 8-K of the Registrant, dated January 10, 2005, January 24, 2005, January 28, 2005 (solely with respect to the information set forth in Item 5.03 and Exhibit 3 thereof), April 1, 2005, April 19, 2005, April 28, 2005, June 3, 2005, June 9, 2005, July 22, 2005, November 16, 2005, December 9, 2005, December 19, 2005; January 18, 2006 (solely with respect to the information set forth in Item 8.01 as filed); and January 30, 2006;
- (d) The description of the Common Stock set forth in the Registrant's Registration Statement on Form 8-A filed on August 7, 2001, pursuant to Section 12 of the Exchange Act, including any amendments or reports updating such description;
- (e) The Annual Report on Form 11-K of the Potomac Electric Power Company Savings Plan for Bargaining Unit Employees for the fiscal year ended June 30, 2005;
- (f) The Annual Report on Form 11-K of the Retirement Savings Plan for Management Employees for the fiscal year ended June 30, 2005;
- (g) The Annual Report on Form 11-K of the Conectiv Savings and Investment Plan for the fiscal year ended December 30, 2004; and
- (h) The Annual Report on Form 11-K of the Atlantic Electric 401(k) Savings and Investment Plan - B for the fiscal year ended December 30, 2004.

All documents filed by the Registrant and all documents filed by the Pepco Holdings, Inc. Retirement Savings Plan (the "Plan") pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this Registration Statement shall be deemed to be modified or superseded for

purposes of this Registration Statement to the extent that a statement contained in this Registration Statement or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this Registration Statement modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

EXPERTS

The consolidated financial statements, financial statement schedules and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Registration Statement by reference to the Annual Report on Form 10-K of Pepco Holdings, Inc. for the year ended December 31, 2004 and the financial statements incorporated in this Registration Statement by reference to the Annual Reports on Form 11-K of (1) the Potomac Electric Power Company Savings Plan for Bargaining Unit Employees for the year ended June 30, 2005, (2) the Retirement Savings Plan for Management Employees for the year ended June 30, 2005, (3) the Conectiv Savings and Investment Plan for the year ended December 30, 2004 and (4) the Atlantic Electric 401(k) Savings and Investment Plan - B for the year ended December 30, 2004 have been so incorporated in reliance on the reports of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the securities offered hereby has been passed upon for the Registrant by Kirk J. Emge, who is regularly employed by the Registrant as its Vice President -- Legal Services. Mr. Emge beneficially owns 15,055 shares of Common Stock and, under the Registrant's incentive compensation arrangements, has been granted options to purchase 15,300 shares of Common Stock.

Item 6. Indemnification of Directors and Officers.

Delaware law permits a corporation to include a provision in its certificate of incorporation eliminating or limiting the personal liability of each of its directors, but not an officer in his or her capacity as such, to the corporation and its stockholders for monetary damages for breach of fiduciary duty as a director, except that such provision cannot eliminate or limit the liability of a director for (1) any breach of the director's duty of loyalty to the corporation or its stockholders, (2) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) liability under section 174 of the Delaware General Corporation Law for unlawful payment of dividends or stock purchases or redemptions, or (4) any transaction from which the director derived an improper personal benefit. The Registrant's certificate of incorporation provides that the personal liability of the directors of the Registrant to

the Registrant and its stockholders for monetary damages shall be eliminated or limited to the fullest extent permissible under applicable law as may be amended from time to time.

Under Delaware law, a corporation is permitted to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that the person is or was an officer, director, employee or agent of the corporation or is or was serving at the request of the corporation as an officer, director, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such proceeding: (1) if the person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation; and (2) in the case of a criminal proceeding, the person had no reasonable cause to believe that his conduct was unlawful.

A corporation also is permitted to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to obtain a judgment in its favor by reason of the fact that the person is or was an officer, director, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorney's fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, provided that no such indemnification is permitted with respect to any claim, issue or matter as to which the person is found liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which the action or suit is brought determines the person is fairly and reasonably entitled to indemnification for such expenses as the court shall deem proper.

Under Delaware law, a corporation is required to indemnify any current or former director or officer of the corporation who is successful on the merits or otherwise in the defense of any action, suit or proceeding against such person by reason of the fact that the person is or was an officer, director, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses actually and reasonably incurred. Expenses incurred by an officer or director in defending civil, criminal, administrative or investigative proceedings may be paid by the corporation in advance of the final disposition of such proceedings upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that the person is not entitled to be indemnified by the corporation. Expenses incurred by former officers and directors or other employees or agents in defending such proceedings may be paid upon terms deemed appropriate by the corporation.

The Registrant's certificate of incorporation provides that the Registrant shall indemnify and advance expenses to any director, officer or employee of the Registrant, and may indemnify or advance expenses to any other person, who is, was or is threatened to be made a party to an action, suit or proceeding, whether civil, criminal, administrative or investigative, by

reason of his or her service as a director, officer, employee or agent of the Registrant or his or her service as a director, officer, employee or agent of another entity at the request of the Registrant, to the fullest extent permitted by applicable law; provided that in the case of an advancement of expenses, if required by the Delaware General Corporation Law, an undertaking is first delivered to the Registrant, by or on behalf of such director, officer, employee or agent, to repay all amounts so advanced if it is ultimately determined that the director, officer, employee or agent is not entitled to be indemnified under the certificate of incorporation.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

- 4.1 Restated Certificate of Incorporation of the Registrant *
- 4.2 Bylaws of the Registrant, as amended **
- 5 Opinion of Kirk J. Emge, Esq. ***
- 23.1 Consent of Independent Registered Public Accounting Firm ***
- 23.2 Consent of Kirk J. Emge, Esq. (included in Exhibit No. 5)
- 24 Power of Attorney ***

* Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, dated August 1, 2002.

** Incorporated by reference to Exhibit 3 to the Registrant's Current Report on Form 8-K, dated January 28, 2005.

*** Filed herewith.

The Registrant undertakes to submit the Plan and any amendments thereto to the Internal Revenue Service (the "IRS") in a timely manner and will make all changes required by the IRS in order to qualify the Plan under Section 401 of the Internal Revenue Code.

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:

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

(b) to reflect in the prospectus any facts or events arising after the effective date of this 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 this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total

dollar value of the 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 Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

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

provided, however, that paragraphs 1(a) and 1(b) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic 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 this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each 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.

The undersigned Registrant hereby undertakes that, for purposes of determining liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (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) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, 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 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, 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 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 1933 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 Washington, District of Columbia, on this 30th day of January, 2006.

PEPCO HOLDINGS, INC.

By: /s/ DENNIS R. WRAASE
Dennis R. Wraase
Chairman of the Board, President and
Chief Executive 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 dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|---|--------------------|
| <u>/s/ DENNIS R. WRAASE</u> Dennis R. Wraase | Chairman of the Board, President and Chief Executive Officer (principal executive officer) | January 30, 2006 |
| <u>/s/ JOSEPH M. RIGBY</u> Joseph M. Rigby | Senior Vice President and Chief Financial Officer (principal financial officer) | January 30, 2006 |
| <u>/s/ RONALD K. CLARK</u> Ronald K. Clark | Vice President and Controller (principal accounting officer) | January 30, 2006 |
| <u>* EDMUND B. CRONIN, JR.</u> Edmund B. Cronin, Jr. | Director | January 30, 2006 |
| <u>* JACK B. DUNN, IV</u> Jack B. Dunn, IV | Director | January 30, 2006 |
| <u>* TERENCE C. GOLDEN</u> Terence C. Golden | Director | January 30, 2006 |

Signature

*** GEORGE F. MACCORMACK**
George F. MacCormack

Title

Director

Date

January 30, 2006

* RICHARD B. MCGLYNN
Richard B. McGlynn

Director

January 30, 2006

Floretta D. McKenzie

Director

* LAWRENCE C. NUSSDORF
Lawrence C. Nussdorf

Director

January 30, 2006

* PETER F. O'MALLEY
Peter F. O'Malley

Director

January 30, 2006

* FRANK K. ROSS
Frank K. Ross

Director

January 30, 2006

* PAULINE A. SCHNEIDER
Pauline A. Schneider

Director

January 30, 2006

* WILLIAM T. TORGERSON
William T. Torgerson

Director

January 30, 2006

* By: /s/ ELLEN SHERIFF ROGERS, Attorney-in-Fact
Ellen Sheriff Rogers
Attorney-In-Fact

The Plan: Pursuant to the requirements of the Securities Act of 1933, the Plan Administrator of the Pepco Holdings, Inc. Retirement Savings Plan has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Washington, District of Columbia, on this 30th day of January, 2006.

PEPCO HOLDINGS, INC. RETIREMENT
SAVINGS PLAN

By: /s/ DENNIS R. WRAASE
Name: Dennis R. Wraase
Title: Chairman, Administrative Board

Index to Exhibits

| <u>Exhibit Number</u> | <u>Description</u> |
|----------------------------------|---|
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