
**UNITED STATES
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 No.)

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

(Address of principal executive offices) (Zip Code)

**PEPCO HOLDINGS, INC. 2012 LONG-TERM
INCENTIVE PLAN**

(Full title of the plan)

JANE K. STORERO

Vice President, Secretary and Assistant Treasurer

Pepco Holdings, Inc.

701 Ninth Street, N.W.

Washington, D.C. 20068

(202) 872-2000

(Name and address of agent for service)

(Telephone number, including area code, of agent for service)

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"/>

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title 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, par value \$0.01(1)	8,000,000	\$ 18.73	\$149,840,000(2)	\$17,171.66

- (1) Pursuant to Securities Act Rule 416, this Registration Statement shall be deemed to cover additional shares of common stock, par value \$0.01 per share (“Common Stock”), of Pepco Holdings, Inc. (the “Company”) to be offered or issued in connection with any stock splits, stock dividends or similar transactions, whether pursuant to the terms of the Pepco Holdings, Inc. 2012 Long-Term Incentive Plan or otherwise.
- (2) Estimated solely for purposes of calculating the amount of the registration fee pursuant to Securities Act Rule 457(c) and Rule 457(h)(1), based upon the average of the high and low prices of the Common Stock on the New York Stock Exchange as of May 15, 2012.
-
-

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

Pepco Holdings, Inc. (the “Registrant”) is filing this registration statement on Form S-8 (the “Registration Statement”) in order to register 8,000,000 shares of common stock, par value \$.01 per share (“Common Stock”), under the Pepco Holdings, Inc. 2012 Long-Term Incentive Plan (the “Plan”).

The documents containing the information required in Part I of the Registration Statement will be sent or given to each participant in the Plan as specified by Rule 428(b)(1) promulgated by the Commission under the Securities Act. Such documents are not being filed with the Commission but constitute, along with the documents incorporated by reference into this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, a prospectus that meets the requirements of Section 10(a) of the Securities Act.

Item 2. Registrant Information and Employee Plan Annual Information.

Upon written or oral request by a participant in the Plan, the Registrant will provide to such participant, without charge, any document incorporated by reference in Item 3 of Part II of this Registration Statement, which is incorporated by reference into the Section 10(a) prospectus, and any document required to be delivered to a participant in the Plan pursuant to Rule 428(b) promulgated by the Commission under the Securities Act. All requests should be directed to Jane K. Storero, Vice President, Secretary and Assistant Treasurer, of the Registrant, at 701 Ninth Street, N.W., Washington, D.C. 20068, telephone number (202) 872-2000.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, as filed with the Commission, are incorporated by reference in this Registration Statement by the Registrant and the Plan, as appropriate.

(a) the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, as filed with the Commission on February 24, 2012, and as amended by Amendment No. 1 thereto on Form 10-K/A, as filed with the Commission on March 5, 2012;

(b) all other documents filed by the Registrant with the Commission pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), since December 31, 2011; and

(c) the description of the Registrant's Common Stock contained in the Registrant's Registration Statement under the Securities Exchange Act of 1934, as amended, on Form 8-A (Commission File No. 001-31403) filed with the Commission on July 23, 2002 pursuant to Section 12(b) of the Exchange Act, and any filing with the Commission by the Registrant which serves to amend such registration statement.

All documents filed by the Registrant and the Plan pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement and prior to the filing of a post-effective amendment, which indicates that all securities offered 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 part of this Registration Statement from the date of the filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Kirk J. Emge, Esq., the Registrant's Senior Vice President and General Counsel, provided an opinion, filed herewith as Exhibit 5.1, in connection with the securities being registered in the Registration Statement and is currently eligible to participate in the Plan. As of May 15, 2012, Mr. Emge beneficially owned 64,895 shares of Common Stock and held 13,637 time-based restricted stock units of the Company.

Item 6. Indemnification of Directors and Officers.

Pursuant to the authority conferred by Section 102 of the General Corporation Law of the State of Delaware, as amended (the "DGCL"), Article VI, Section A of the Registrant's Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), contains provisions which eliminate personal liability of members of its board of directors for violations of their fiduciary duty of care. Neither the DGCL nor the Certificate of Incorporation, however, limits the liability of a director for breaching his or her duty of loyalty, failing to act in good faith, engaging in intentional misconduct or knowingly violating a law, paying a dividend or approving a stock repurchase under circumstances where such payment or repurchase is not permitted under the DGCL, or obtaining an improper personal benefit. Article VI, Section A of the Certificate of Incorporation provides that the limitation of liability shall continue after a director has ceased to occupy such position as to acts or omissions occurring during such director's term or terms of office, and that no amendment, repeal or modification of such Article VI shall apply to or have any effect on the liability or alleged liability of any director of the Registrant for or with respect to any acts or omissions of such director occurring prior to such amendment, repeal or modification.

Section 145 of the DGCL provides for the indemnification of certain persons, including directors, officers and employees of a corporation, under certain circumstances. Article VI, Section B of the Certificate of Incorporation states that, with respect to an officer, director or employee of the Registrant, the Registrant shall

indemnify, and with respect to any other individual the Registrant may 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 or investigative, by reason of the fact that he or she, or the person of whom he or she is the legal representative, is, or was, a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, to the fullest extent authorized by the DGCL. Subject to the conditions and limitations contained in Article VI, Section B of the Certificate of Incorporation, such indemnification shall cover all expenses, liability and loss reasonably incurred or suffered by such person in connection with such action, suit or proceeding, and any such indemnification shall continue as to a person who has ceased to be a director, officer, employee or agent. The right to indemnification conferred in the Certificate of Incorporation shall include the right to be paid by the Registrant the expenses incurred in defending any such proceeding in advance of its final disposition upon delivery to the Registrant of an undertaking to repay all amounts so advanced if it shall ultimately be determined that the indemnified person is not entitled to be indemnified. The rights to indemnification and the payment of expenses incurred in defending a proceeding in advance of its final disposition conferred in Article VI, Section B of the Certificate of Incorporation, shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, bylaw, agreement, vote of stockholders or disinterested directors, or otherwise.

The Registrant maintains insurance, at its expense, to protect itself and any director, officer, employee or agent of the Registrant, or of another corporation, partnership, joint venture, trust or other enterprise, against any such expense, liability or loss, whether or not the Registrant would have the power to indemnify such person against such expense, liability or loss under the DGCL.

The Registrant may also enter into an indemnity or other similar agreement with any director, officer, employee or agent of the Registrant, or of another corporation, partnership, joint venture, trust or other enterprise, upon terms and conditions that the Registrant's Board of Directors deems appropriate, so long as the provisions of such agreement are not impermissible under applicable law.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit	Description of Exhibit	Reference
4.1	Restated Certificate of Incorporation	Exhibit 3.1 to the Registrant's Form 10-K, March 13, 2006.
4.2	Bylaws (2)	Exhibit 3 to the Registrant's Form 8-K, December 21, 2011.
5.1	Opinion of Kirk J. Emge, Esq.	Filed herewith.
10.1	Pepco Holdings, Inc. 2012 Long-Term Incentive Plan	Exhibit 10.29 to the Registrant's Form 10-K, February 24, 2012.
23.1	Consent of Kirk J. Emge, Esq. (included in Exhibit 5.1)	--
23.2	Consent of PricewaterhouseCoopers LLP	Filed herewith.
24.1	Power of Attorney (included on the signature page)	--

Item 9. Undertakings.

(a) 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;

(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 a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(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 (a)(1)(i) and (a)(1)(ii) 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 Exchange Act that are incorporated by reference in the registration statement.

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

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions referred to in Item 6 of Part II of this Registration Statement, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act 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 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 17th day of May, 2012.

PEPCO HOLDINGS, INC.

By: /s/ JOSEPH M. RIGBY

Joseph M. Rigby
Chairman, President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Kirk J. Emge, Frederick J. Boyle and Jane K. Storero, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documentation in connection therewith, with the Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to enable the Registrant to comply with the provisions of the Securities Act and all requirements of the Commission, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying all that each of the said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

May 17, 2012

/s/ JOSEPH M. RIGBY

Joseph M. Rigby
Chairman, President and Chief Executive Officer
(Principal Executive Officer)

May 17, 2012

/s/ FRED BOYLE

Frederick J. Boyle
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

May 17, 2012

/s/ RONALD K. CLARK

Ronald K. Clark
Vice President and Controller
(Principal Accounting Officer)

May 17, 2012

/s/ JACK DUNN

Jack B. Dunn, IV
Director

May 17, 2012

/s/ T. C. GOLDEN

Terence C. Golden
Director

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description of Exhibit</u>	<u>Reference</u>
4.1	Restated Certificate of Incorporation	Exhibit 3.1 to the Registrant's Form 10-K, March 13, 2006.
4.2	Bylaws (2)	Exhibit 3 to the Registrant's Form 8-K, December 21, 2011.
5.1	Opinion of Kirk J. Emge, Esq.	Filed herewith.
10.1	Pepco Holdings, Inc. 2012 Long-Term Incentive Plan	Exhibit 10.29 to the Registrant's Form 10-K, February 24, 2012.
23.1	Consent of Kirk J. Emge, Esq. (included in Exhibit 5.1)	--
23.2	Consent of PricewaterhouseCoopers LLP	Filed herewith.
24.1	Power of Attorney (included on the signature page)	--