

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**Post-Effective Amendment No. 1
to
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)

**Potomac Electric Power Company Savings Plan for Exempt Employees
Potomac Electric Power Company Savings Plan for Bargaining Unit
Employees
Potomac Electric Power Company Savings Plan for Non-Bargaining Unit,
Non-Exempt Employees**

(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)

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 is being filed to amend the registration statement (the "Registration Statement") on Form S-8 (File No. 333-96687), pursuant to which Pepco Holdings, Inc. (the "Registrant") registered 3,000,000 shares of its common stock, \$0.01 par value per share ("Common Stock"), and an indeterminate amount of plan interests, for offer and sale pursuant to (i) the Potomac Electric Power Company Savings Plan for Exempt Employees (the "Exempt Plan"), (ii) the Potomac Electric Power Company Savings Plan for Non-Bargaining Unit, Non-Exempt Employees (the "Non-Bargaining Plan") and (iii) the Potomac Electric Power Company Savings Plan for Bargaining Unit Employees (the "Bargaining Unit Plan").

On December 31, 2004, the Non-Bargaining Plan merged with and into the Exempt Plan which was renamed as the Pepco Holdings, Inc. Retirement Savings Plan for Management Employees (the "Management Plan"). Effective January 1, 2006, the Registrant (i) established the Pepco Holdings, Inc. Retirement Savings Plan (the "Retirement Savings Plan"), which is an amalgam of, and accordingly a successor to, several plans administered by the Registrant, including (1) the Management Plan and (2) the Bargaining Unit Plan and (ii) has filed a new registration statement under the Securities Act of 1933, as amended, registering shares of Common Stock and plan participation interests issuable under the Retirement Savings Plan. Accordingly, no additional shares of Common Stock or plan participation interests will be offered and sold pursuant to the Registration Statement.

Accordingly, in accordance with its undertaking to remove from registration, by means of a post-effective amendment, any of the registered securities that remain unsold at the termination of the offering, the Registrant hereby amends the Registration Statement to remove from registration an aggregate of 2,008,065 shares of Common Stock and an indeterminate amount of plan participation interests.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits

24 Power of Attorney*

* Filed herewith

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 this Post-Effective Amendment No. 1 to Registration Statement and has duly caused this Post-Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Washington, District of Columbia, on this 31st 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 Post-Effective Amendment No. 1 to 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 31, 2006
<u>/s/ JOSEPH M. RIGBY</u> Joseph M. Rigby	Senior Vice President and Chief Financial Officer (principal financial officer)	January 31, 2006
<u>/s/ RONALD K. CLARK</u> Ronald K. Clark	Vice President and Controller (principal accounting officer)	January 31, 2006
<u>* EDMUND B. CRONIN, JR.</u> Edmund B. Cronin, Jr.	Director	January 31, 2006
<u>* JACK B. DUNN</u> Jack B. Dunn, IV	Director	January 31, 2006
<u>* TERENCE C. GOLDEN</u> Terence C. Golden	Director	January 31, 2006

<u>Signature</u>	<u>Title</u>	<u>Date</u>
* <u>GEORGE F. MACCORMACK</u> George F. MacCormack	Director	January 31, 2006
* <u>RICHARD B. MCGLYNN</u> Richard B. McGlynn	Director	January 31, 2006
_____ Floretta D. McKenzie	Director	
* <u>LAWRENCE C. NUSSDORF</u> Lawrence C. Nussdorf	Director	January 31, 2006
* <u>PETER F. O'MALLEY</u> Peter F. O'Malley	Director	January 31, 2006
* <u>FRANK K. ROSS</u> Frank Ross	Director	January 31, 2006
* <u>PAULINE A. SCHNEIDER</u> Pauline A. Schneider	Director	January 31, 2006
* <u>WILLIAM T. TORGERSON</u> William T. Torgerson	Director	January 31, 2006

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

The Plans: Pursuant to the requirements of the Securities Act of 1933, the Plan Administrator of the Plans has duly caused this Post-Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Washington, District of Columbia, on this 31st day of January, 2006.

PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN
FOR MANAGEMENT EMPLOYEES

POTOMAC ELECTRIC POWER COMPANY SAVINGS
PLAN FOR BARGAINING UNIT EMPLOYEES

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

Index to Exhibits

<u>Exhibit Number</u>	<u>Description</u>
24	Power of Attorney