

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 11-K

TRANSITION REPORT

Pursuant to Section 15(d) of the
Securities Exchange Act of 1934

For the Transition Period from December 31, 2005 to January 13, 2006

ATLANTIC ELECTRIC 401(K) SAVINGS AND INVESTMENT PLAN - B
(Full title of plan)

PEPCO HOLDINGS, INC.
(Name of issuer of securities held pursuant to the plan)

701 NINTH STREET, N.W.
WASHINGTON, D. C. 20068
(Address of principal executive office)

Atlantic Electric 401(k) Savings and Investment Plan - B - Final

Financial Statements and Supplemental Schedule

**As of January 13, 2006 and December 30, 2005 and for the period
December 31, 2005 to January 13, 2006**

**Atlantic Electric 401(k) Savings and Investment Plan - B - Final
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For the period December 31, 2005 to January 13, 2006**

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- * Other supplemental schedules required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosures under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

Report of Independent Registered Public Accounting Firm

*To the Plan Administrator of the
Atlantic Electric 401(k) Savings and Investment Plan - B*

We have audited the accompanying statements of net assets available for benefits of the Atlantic Electric 401(k) Savings and Investment Plan - B (the Plan), as of January 13, 2006 and December 30, 2005, and the related statement of changes in net assets available for benefits for the period December 31, 2005 to January 13, 2006. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of January 13, 2006 and December 30, 2005, and the changes in its net assets available for benefits for the period December 31, 2005 to January 13, 2006 in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule H, line 4(j) - Schedule of Reportable Transactions for the period December 31, 2005 to January 13, 2006 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental information is the responsibility of the Plan's management. The supplemental information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Mitchell & Titus LLP

Washington, DC
July 12, 2006

Atlantic Electric 401(k) Savings and Investment Plan - B - Final
Statements of Net Assets Available for Benefits
As of

	January 13, 2006	December 30, 2005
Investments		
Cash	\$ -	\$ 6,246
Investments, at fair value	-	56,553,962
Participant loans	-	1,637,891
Total investments	-	58,198,099
 Receivables		
Participant contributions	-	70,307
Employer contributions	-	15,054
Total receivables	-	85,361
 Net assets available for benefits	 \$ -	 \$ 58,283,460

The accompanying notes are an integral part of these financial statements.

Atlantic Electric 401(k) Savings and Investment Plan - B - Final
Statement of Changes in Net Assets Available for Benefits
For the Period December 31, 2005 to January 13, 2006

Additions

Participant contributions	\$ 108,162
Employer contributions	30,459
Interest income	5,736
Dividend income	31,092
Net appreciation in fair value of investments	<u>1,124,900</u>
Total additions	<u>1,300,349</u>

Deductions

Benefits paid to participants	(462,016)
Plan Merger Transfers	(59,121,593)
Administrative fees	<u>(200)</u>
Total deductions	<u>(59,583,809)</u>
Net decrease	(58,283,460)
Net assets available for benefits, at beginning of period	<u>58,283,460</u>
Net assets available for benefits, at end of the period	<u>\$ -</u>

The accompanying notes are an integral part of these financial statements.

Atlantic Electric 401(k) Savings and Investment Plan - B - Final

Notes to Financial Statements

For the Period December 31, 2005 to January 13, 2006

1. Description of Plan

General

The following description of the Atlantic Electric 401(k) Savings and Investment Plan - B (the "Plan"), a defined contribution plan, provides only general information. Participants should refer to the Plan document for a more comprehensive description of the Plan's provisions. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"). T. Rowe Price Trust Company ("T. Rowe Price") serves as the Plan's trustee.

Plan Merger - Effective January 13, 2006

In August 2005, an amendment was approved to merge the Plan and three other existing Pepco Holdings, Inc. ("PHI") Savings Plans into a single Plan with Vanguard as the trustee and recordkeeper. In October 2005, amendments were approved to structure the plans with a single Master Plan and five sub plans (Management, Local 1900, Local 1238, Local 1307, Local 210 and Local 210-5). Further, the amendments 1) redefined the Plan year as a calendar year, January 1 through December 31; 2) provided immediate eligibility to part time employees working more than 20 hours per week; 3) increased contribution maximums to 65% of base salary, pre-tax or after-tax or any combination thereof; 4) allowed matching funds on after tax contributions; 5) added tax delinquencies to the list of hardship causes and removed "other withdrawals" from the hardship rules; 6) increased the maximum number of loans a participant can have from two to four; and 7) allowed for periodic partial post-retirement withdrawals. Also, in 2005 as part of the integration of all PHI Savings Plans, the Investment Committee approved a new list of investment options. The options eliminated four of the five T. Rowe Price investment funds and replaced them with: 1) six age-based target retirement funds; 2) nine core funds including PHI Common Stock Fund and a Stable Value Fund; and, 3) fifty-one other investment funds available through a mutual fund window. These amendments became effective January 13, 2006.

In connection with these changes, effective January 13, 2006, all assets in the Plan were merged into the Pepco Holdings, Inc. Retirement Savings Plan and are reflected on the Statement of Changes in Net Assets Available for Benefits as Plan Merger Transfers.

Contributions

All full-time bargaining unit employees of Atlantic City Electric Company (the "Company"), a wholly-owned subsidiary of Pepco Holdings, Inc., are eligible to participate in the Plan. Additionally, any employee who is not a regular full-time employee shall be eligible to participate upon completion of 1,000 hours of service during the twelve consecutive month period, or if such employee does not complete 1,000 hours of service during the twelve month period, during a subsequent Plan year.

Atlantic Electric 401(k) Savings and Investment Plan - B - Final

Notes to Financial Statements

For the Period December 31, 2005 to January 13, 2006

Employees may contribute up to 50 percent of base pay. Upon enrollment in the Plan, a participant may direct employee contributions in any of six investment options, which includes four mutual funds, one common/collective trust and the PHI Common Stock Fund. The tax savings portion of participant contributions (up to 6 percent of an employee's base pay) is matched by the Company at a rate of 50 percent not to exceed 3 percent of the employee's compensation. The Company's matching contributions are invested in the T. Rowe Price Stable Value Fund ("TRP Stable Value Fund"). Effective January 1, 2005, the Plan discontinued a provision that allowed employees who elected to invest in PHI's common stock and held the common stock for one year to receive an additional contribution of PHI's common stock equal to 15 percent of the participant's original contribution. At January 13, 2006 and December 30, 2005, there were no amounts included in the PHI Common Stock Fund that had not yet been in the Plan for the one year holding period.

Payment of Benefits

Benefits from the tax savings portion of the Plan can be withdrawn upon the attainment of age 59-1/2, retirement, separation from service, death or in special financial hardship situations. Distributions of a participant's account may be made in a lump sum cash payment or in regular installments over a fixed period with certain limitations stated in the Plan. Hardship withdrawals must be approved. After making a hardship withdrawal, a participant is prohibited from making before and after tax contributions for a period of six months.

Participant Accounts

Individual accounts are maintained for each of the Plan's participants to reflect the participant's share of the Plan's income (losses), the participant's and the Company's contributions, and the participant's loan, if applicable. Such allocations are based on participant earnings or account balances, as defined.

Vesting

Upon enrollment in the Plan, participants are fully vested at all times in all amounts held in their accounts.

Termination of Plan

Although it has not expressed any intent to do so, the Company has the right to terminate the Plan in whole or in part at any time for any reason.

Administration Fees

Certain professional fees and administrative expenses incurred in connection with the Plan are paid by the Company. The facilities of the Company are used by the Plan at no charge. Loan processing fees are paid by the participants and deducted from Plan assets.

Participant Loans

Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50 percent of their account balance. Loan terms range from one to five years and up to fifteen years for the purchase of a primary residence. The loans are secured by the balance in the participant's account and bear interest at a rate commensurate with local prevailing rates as determined quarterly by the Plan Administrator. Principal and interest is paid ratably through weekly payroll deductions. A participant may pre-pay a loan at any time without penalty.

Atlantic Electric 401(k) Savings and Investment Plan - B - Final

Notes to Financial Statements

For the Period December 31, 2005 to January 13, 2006

2. Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared under the accrual basis of accounting.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. Shares of registered investment companies' mutual funds are valued at quoted market prices which represent the net asset value of shares held by the Plan at year end. The carrying value of participant loans approximates fair value. Common stock is valued at closing price on its principal exchange; shares of common/collective trusts are valued at net asset value.

Purchases and sales of investments are recorded on the trade-date. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date.

The Plan presents in the Statement of Changes in Net Assets Available for Benefits the net appreciation (depreciation) in the fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments.

Payment of Benefits

Benefits are recorded when paid.

Contributions

Participants' contributions are recorded in the period of the related payroll deductions. The Company's matching contributions are recorded in the period of the related participants' contributions.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the Plan's management to make estimates and assumptions that affect the reported amounts in the financial statements. Such estimates include those regarding fair value. Actual results could differ from those estimates.

Risks and Uncertainties

The Plan provides for various investment options in any combination of common stocks, mutual funds and common/collective trusts that invest in bonds, fixed income securities and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is at least reasonably possible that changes in risks in the near term could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits.

Atlantic Electric 401(k) Savings and Investment Plan - B - Final
Notes to Financial Statements
For the Period December 31, 2005 to January 13, 2006

3. Investments

Investments which exceed 5% of the Plan's assets at January 13 and December 30, are as follows:

	2006	2005
TRP Stable Value Fund	\$ -	\$ 19,955,058
Equity Income Fund	-	15,639,187
Equity Index Fund	-	13,872,272
Spectrum Growth Fund	-	4,586,178

For the period December 31, 2005 to January 13, 2006, the Plan's investments (including investments bought, sold and transferred during the period) appreciated in value by \$1,124,900 as follows:

Registered investment companies' mutual funds	\$ 1,114,602
PHI common stock	10,298
Total	<u>\$ 1,124,900</u>

4. Nonparticipant-Directed Investments

Information about the net assets and the significant components of the changes in net assets relating to the nonparticipant-directed investments is as follows:

	January 13, 2006	December 30, 2005
Net assets		
TRP Stable Value Fund	\$ -	\$19,955,058

Atlantic Electric 401(k) Savings and Investment Plan - B - Final
Notes to Financial Statements
For the Period December 31, 2005 to January 13, 2006

Changes in net assets for the period December 31, 2005 to January 13, 2006:

Contributions	\$ 96,776
Net loan activity	7,656
Interest income	2,757
Dividend income	31,092
Benefits paid to participants	(142,245)
Administrative fees	(58)
Net exchanges to participant-directed investments	359,691
Transfers to another Plan	(20,310,727)
Total	\$(19,955,058)

5. Tax Status

The Plan obtained its latest determination letter on October 9, 2003, in which the Internal Revenue Service stated that the Plan was in compliance with the applicable requirements of the Internal Revenue Code (IRC). The Plan has been amended since receiving the determination letter. However, the Company believes the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC.

6. Related Party Transactions

Certain Plan investments are shares of registered investment companies' mutual funds managed by T. Rowe Price. T. Rowe Price is the trustee as defined by the Plan; therefore, these transactions qualify as party-in-interest transactions.

Pepco Holdings, Inc., as the Plan sponsor, is a related party. Purchases and sales of PHI common stock were made during the year. The amount of PHI common stock included in Investments was zero and \$560,100 at January 13, 2006 and December 30, 2005, respectively.

In addition, participant loans are related party transactions.

Supplemental Schedule

Atlantic Electric 401(k) Savings and Investment Plan - B - Final**EIN#: 52-2297449, PLAN#: 003****Schedule H - Line 4(j)****Schedule of Reportable Transactions*****For the Period December 31, 2005 to January 13, 2006**

* Non-participant directed transactions or series of transactions in excess of 5 percent of the current value of the Plan's assets as of the beginning of the Plan year as defined in Section 2520.103-6 of the Department of Labor Rules and Regulations for Reporting and Disclosure under ERISA.

Identity of Party Involved	Description of Assets	Purchase Price	Selling Price	Historical Cost	Current Value of Asset on Transaction Date	Historical Gain/ Loss
T. Rowe Price	TRP Stable Value Fund Sales	\$ (20,359,997)	\$ (20,360,017)	\$ (20,359,997)	\$ (20,360,017)	\$ 20

Exhibits:

Exhibit 23 Consent of Independent Registered Public Accounting Firm - Filed herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrative Board has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

ATLANTIC ELECTRIC 401(K) SAVINGS
AND INVESTMENT PLAN - B

By: /s/ Dennis R. Wraase
Dennis R. Wraase, Chairman
Administrative Board

Date: July 12, 2006

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement of Pepco Holdings, Inc. on Form S-8 (File No. 333-131371) of our report dated July 12, 2006 relating to the statement of net assets available for benefits as of January 13, 2006 and December 30, 2005, and the statement of changes in net assets available for benefits for the period December 31 2005 to January 13, 2006 and the related supplemental Schedule H, line 4j - Schedule of Reportable Transactions for the period December 31, 2005 to January 13, 2006 which report appears in the January 13, 2006 report on Form 11-K of the Atlantic Electric 401(k) Savings and Investment Plan - B.

Washington, DC
July 12, 2006