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September 30, 2010

Pepco Holdings, Inc.
701 Ninth Street, N.W.
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Ladies and Gentlemen:

I am Senior Vice President and General Counsel of Pepco Holdings, Inc., a Delaware corporation (the "Company"), and have acted as counsel to the Company in connection with the offer and sale by the Company of \$250,000,000 in aggregate principal amount of 2.70% Notes due October 1, 2015 (the "Notes") under and pursuant to:

(i) a Registration Statement on Form S-3 (Registration No. 333-169477) (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act"), which was automatically effective upon filing with the United States Securities and Exchange Commission (the "Commission") on September 20, 2010;

(ii) the base prospectus, dated as of September 20, 2010 (the "Base Prospectus");

(iii) the preliminary prospectus, consisting of the Base Prospectus, as supplemented by a prospectus supplement, dated September 27, 2010, with respect to the offer and sale of the Notes, filed with the Commission on September 27, 2010, pursuant to Rule 424(b) under the Act;

(iv) the final prospectus, dated September 27, 2010, consisting of the Base Prospectus, as supplemented by a prospectus supplement, dated September 27, 2010, with respect to the offer and sale of the Notes, filed with the Commission on September 28, 2010, pursuant to Rule 424(b) under the Act; and

(v) the Purchase Agreement, dated September 27, 2010, among the Company and Bank of America Securities LLC, RBS Securities Inc. and Scotia Capital (USA) Inc., for themselves and as representatives of the other underwriters named in Schedule A thereto (the "Purchase Agreement").

The Notes will be issued pursuant to an indenture, dated as of September 6, 2002 (the "Indenture"), between the Company and The Bank of New York Mellon (formerly The Bank of New York), as trustee.

In connection with this opinion, I, or my representatives, have examined originals, or copies that have been certified or otherwise identified to my or their satisfaction, of such other instruments, certificates, records and documents, and have reviewed such questions of law, as I have deemed necessary or appropriate for purposes of this opinion. In such examination, I or my representatives have assumed the genuineness of all signatures, the authenticity of all documents submitted to me or them as originals, and the conformity to the original documents of all documents submitted to me or them as copies to the authenticity of the originals of such latter documents. As to any facts material to my opinion, I have relied upon the aforesaid instruments, certificates, records and documents and inquiries of the Company's representatives.

Based upon the foregoing I am of the opinion that the Notes have been duly authorized for issuance and, when executed by the Company and authenticated by the Trustee in the manner provided in the Indenture and delivered against payment of the purchase price therefor set forth in the Purchase Agreement, will be duly and validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws of general applicability relating to or affecting creditors' rights and to general equity principles.

I hereby consent to the filing of this opinion as an exhibit to a Current Report on Form 8-K that will be incorporated by reference into the Registration Statement.

Very truly yours,

/s/ KIRK J. EMGE

Kirk J. Emge, Esq.