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Public Service Commission of the District of Columbia
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Washington, D.C. 20005
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September 23, 2009

VIA HAND DELIVERY

Cynthia Brock-Smith
Secretary to the Council
Council of the District of Columbia
1350 Pennsylvania Avenue, NW
Washington, D.C. 20004

RECEIVED
2009 SEP 23 P 2:55
DISTRICT OF COLUMBIA
PUBLIC SERVICE COMMISSION

Re: Report on Solar, Renewable and Home Improvement Financing

Dear Ms. Brock-Smith:

Attached is the Public Service Commission of the District of Columbia's ("Commission") Report on Solar, Renewable and Home Improvement Financing ("Report"), which is filed in accordance with Section 213 of the District of Columbia's Clean and Affordable Energy Act of 2008. Specifically, this section requires the Commission to file a report with the Council on the feasibility of implementing mechanisms to make long-term affordable financing available to energy consumers to purchase: a) renewable energy generating systems; and b) home and business improvements that increase the energy efficiency of buildings. In addition, the Report should also examine how the electric and gas companies' billing systems can be used to collect payments from individuals that purchase renewable generation or energy efficiency systems.

Thank you. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Betty Ann Kane".

Betty Ann Kane
Chairman

Attachment (1)

cc: The Honorable Richard E. Morgan, Commissioner, Public Service Commission
The Honorable Lori Murphy Lee, Commissioner, Public Service Commission
The Honorable Vincent C. Gray, Chairman, Council of the District of Columbia
The Honorable Kwame R. Brown At-Large Councilmember
The Honorable Michael A. Brown, At- Large Councilmember
The Honorable David Catania, At-Large Councilmember
The Honorable Phil Mendelson At-Large Councilmember
The Honorable Jim Graham, Councilmember Ward 1
The Honorable Jack Evans, Councilmember Ward 2
The Honorable Mary M. Cheh, Councilmember Ward 3
The Honorable Muriel Bowser, Councilmember Ward 4
The Honorable Harry Thomas, Jr., Councilmember Ward 5
The Honorable Tommy Wells, Councilmember Ward 6
The Honorable Yvette Alexander, Councilmember Ward 7
The Honorable Marion Barry, Councilmember Ward 8
Dorothy Wideman, Commission Secretary

Public Service Commission

of the

District of Columbia

**Report on Solar, Renewable and Home
Improvement Financing**

September 23, 2009

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Attachment A: Details of Parties' Comments

Attachment B: Energy Programs Consortium Press Release

Attachment C: Montgomery County Enabling Legislation and Program Summary

Attachment D: Federal Tax Credit Qualifying Measures

EXECUTIVE SUMMARY

Section 213 of the Clean and Affordable Energy Act of 2008 (“CAEA” or “Act”) requires the Commission: 1) to investigate mechanisms that would make long-term affordable financing available to District customers that purchase renewable energy generating systems or home and business improvements that increase energy efficiency; and 2) to examine how the electric and gas companies’ billing systems can be used to collect payments from individuals that purchase renewable generating or energy efficiency systems. The CAEA also requires the Commission to issue a report, including findings, on the feasibility of implementing the proposals specified in the Act. The Commission submits this Report on Solar, Renewable and Home Improvement Financing (“Report”), in fulfillment of that directive.

On December 24, 2008, the Commission issued Order No. 15148, which opened Formal Case No. 1068 for the purpose of investigating consumers’ potential long-term financing options. Order No. 15148 also directed PEPCO, Washington Gas Light Company (“WGL”) and the Office of Public Counsel (“OPC”) (along with other interested parties) to file comments or responses to twenty-two (22) issues in the form of “Directed Questions” to the parties. The parties’ comments cover a range of issues involving three (3) central components of any financing program: 1) the funding source(s); 2) the structure of the financing program or mechanism; and 3) the appropriate administrative agent. Parties’ comments also include references to plans and practices in several states and jurisdictions.

Section I of this Report provides background information concerning the Commission’s investigation in Formal Case No. 1068. Section II examines the parties’ positions with respect to funding sources. Section III discusses potential types of financing programs or mechanisms. Section IV reviews the parties’ comments with respect to potential administrative agents. Finally, Section V presents the Commission’s major findings with respect to each of the above areas, and offers two (2) straw-man proposals involving alternative financing approaches for the Council’s consideration:

- Option A: An Interest-Rate Buy-Down on Third-party Bank Loans; and
- Option B: A Low-Interest Loan Program Originating with Public Funds.

Under Option A, DDOE and banks would work together to provide lower interest loans to residential and small commercial customers. Under Option B, loan repayments are tied to the owners’ property taxes. Specifically, loans would be paid back over 15 years through an increase in the owners’ property taxes. Option A does not include this type of loan payback mechanism. Initially, American Recovery and Reinvestment Act of 2009 (“ARRA”) funds would be used to finance all program costs in either option. The Commission will pursue any follow-up actions as directed by the Council after its review of this Report.

I. Introduction

Section 213 of the Clean and Affordable Energy Act of 2008 (“CAEA” or “Act”) requires the Commission to open an investigation into mechanisms that would make long-term affordable financing available to District customers that purchase (1) renewable energy generating systems, including solar thermal and solar photovoltaic panels and geothermal heating and cooling systems; and (2) home and business improvements that increase energy efficiency of buildings, including weatherizing, adequate insulation, efficient doors and windows, and central air conditioning.¹ The CAEA also requires the Commission to examine how the electric and gas companies’ billing systems can be used to collect payments from individuals that purchase renewable generating or energy efficiency systems. The CAEA further indicates that within 60 days after the close of the record of the investigation, the Commission shall issue a report, including findings, on the feasibility of implementing the proposals specified in the Act. While the Commission has not yet decided to close the record in this investigation, we believe an informational report should be submitted to the Council at this time.

On December 24, 2008, the Commission issued Order No. 15148, which opened a formal investigation with respect to consumers’ long-term financing options, consistent with the CAEA. Order No. 15148 also directed PEPCO, WGL and OPC (along with other interested parties) to file comments/responses to twenty-two (22) issues in the form of “Directed Questions” to the parties.² Subsequently, OPC filed a motion³ seeking an extension of time to file comments, which the Commission granted in Order No. 15195 (issued on February 20, 2009).⁴ PEPCO, WGL and OPC were the only parties to file comments.⁵

¹ The Clean and Affordable Energy Act of 2008, D.C. Law 17-250, § 213 (2008).

² *Formal Case No. 1068, In the Matter of the Investigation into Long-Term Financing Mechanisms for Consumers to Purchase Renewable and Solar Energy Systems in Accordance with the Clean and Affordable Energy Act of 2008*; and *Formal Case No. 945, In the Matter of the Investigation into Electric Service Market Competition and Regulatory Practices (“Formal Case No. 1068”)*, Order No. 15148, rel. December 24, 2008.

³ *Formal Case No 1068*, Motion of the Office of the People’s Counsel for Extension of Time to File Comments, filed February 11, 2009.

⁴ *Formal Case No. 1068*, Order No. 15195, rel. February 20, 2009.

⁵ See *Formal Case No. 1068*, Response of the Potomac Electric Power Company to the Issues Set Forth in Commission Order No. 15148, Issued on December 24, 2008, Concerning Affordable Financing Options for Consumer Purchase of Renewable Energy Generating Systems and Energy Efficiency Improvements, filed February 23, 2009 (“PEPCO’s Comments”); Comments of the Office of the People’s Counsel, filed March 25, 2009 (“OPC’s Comments”); and Comments of Washington Gas Light Company, filed March 25, 2009 (“WGL’s Comments”).

Prior to the deadline for reply comments, the District Department of the Environment (“DDOE”) filed a motion for an extension of time to file reply comments.⁶ The Commission granted the motion in Order No. 15268 dated May 18, 2009.⁷ Reply comments were filed by OPC and DDOE.⁸

In Sections II through IV, we summarize parties’ comments and reply comments involving three (3) primary subjects: (1) Funding Sources; (2) Programs/Mechanisms; and (3) Administrative Agent.⁹ We also include our findings and observations on each of these subjects, within the applicable section. Section V concludes the report by presenting two (2) straw-man proposals for the Council’s consideration. The Commission will pursue follow-up actions as directed by the Council.

II. Funding Sources

This section reviews the parties’ comments with respect to potential funding sources that could make long-term affordable financing available to District customers.

A. PEPCO’s Comments

PEPCO states affordable financing should be defined as “the availability of financing at reasonable terms to credit worthy consumers.” The District should subsidize financing rates for residential/small commercial installations, either in the form of rebates or low(er) cost loans. Loan programs for larger commercial customers are more problematic in nature and, in any event, larger customers usually have a greater ability to borrow funds at more attractive interest rates. Loans should originate with third party banks. Alternatively, the District could provide capital through available Sustainable Energy Trust Fund (“SETF”) funds, but PEPCO advocates that banks be relied upon to handle all loan transactions. SETF funding should be used to cover interest rate subsidies, and might also be used to cover a portion of bank-related administration expense. Utility borrowing costs are typically lower than the rates available to residential and small commercial consumers. If utility financing were to be employed, any resulting interest costs, administrative fees, etc. would have to be recovered through a distribution surcharge and/or base rates. Bad debt expense should be assigned to the entity responsible for determining credit eligibility.

PEPCO states that renewable energy credits (“RECs”) might be used as a potential financing option. However, PEPCO does not currently recommend this method

⁶ *Formal Case No. 1068*, District Department of the Environment’s Motion for Enlargement of Time to File Reply Comments, filed April 22, 2009.

⁷ *Formal Case No. 1068*, Order No. 15268, rel. May 18, 2009.

⁸ *Formal Case No. 1068*, Reply Comments of the Office of the People’s Counsel, filed April 24, 2009 (“OPC’s Reply”), and the District Department of the Environment’s Reply Comments in Response to Order No. 15148, filed May 26, 2008 (“DDOE’s Reply”).

⁹ The parties’ detailed comments are presented in Attachment A to this Report.

due to the difficulty of projecting forward REC prices. The program(s) in other jurisdictions that is most applicable to the District is likely to be one based on proposals in other PHI jurisdictions, notably Maryland. In Maryland, the program consists of the following: 1) an interest buy down to homeowners and small commercial customers on loans of up to fifteen years; 2) optional REC aggregation; and 3) a long-term renewable generator maintenance contract. Banks would typically provide the necessary capital, originate loans and process loan payments. The cost of the interest rate buy down would be funded via the existing SETF surcharge, another distribution bill assessment, or District general funds.

PEPCO claims that the 30% federal tax credit may increase the penetration rate of photovoltaics (among more affluent homeowners), but it does not completely address the need of long-term financing. The situation may change when the demand for corporate tax incentives increase, since leasing would likely become a more attractive/widely available option.

B. WGL's Comments

WGL claims that the definition of "affordable" varies with each potential borrower, depending on the customer's individual circumstances. WGL argues that a subsidized financing rate should only be provided in situations where an improvement makes economic sense, but the homeowner is financially unable to go forward with the improvement at the prevailing market rate. If a subsidized financing program is implemented, DDOE should qualify customers for the program. The SETF and EATF would be appropriate vehicles to fund the program. While the EATF was established to fund existing low-income programs, WGL alleges that the CAEA "authorizes the Commission to issue rules to modify the programs funded by the EATF."

Whether or not the cost of borrowing for utilities is cheaper than the rate available to consumers depends on the individual customer's credit profile. Moreover, the ratings impact on WGL's securities from financing renewable energy projects would depend on: a) the regulatory treatment of the outstanding loan balances; b) penalties for late payments; and c) other costs associated with consumer debt delinquency. If such costs were to become part of rate base and earn the same return as any other regulatory asset (without regulatory lag), there should be no theoretical impact on WGL's perceived creditworthiness. On the other hand, placing WGL at risk for exposure to consumer debt arising from customers' defaults could be detrimental to its ratings, and could raise WGL's cost of capital and thereby the cost of gas utility service to all customers.

While markets exist for the purchase/sale of RECs, WGL is unaware of any financial institutions that accept RECs as partial payment for loan or lease payments. In regard to the impact of the 30% federal tax credit, the Solar Energy Industries Association ("SEIA") forecasts that an extension of the Investment Tax Credit ("ITC") (for all customer segments) would promote a steep escalation in PV installations through 2016. However, typical residential PV installations in the District range from \$20,000 to \$40,000, and WGL states that it is not clear how such systems are paid for (e.g., out-of-