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VIA HAND DELIVERY

Hon. Jaclyn Brilling
Secretary
State of New York Public
Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: Case 03-E-0188 – Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard

Dear Secretary Brilling:

Enclosed is an original, along with five copies, of the comments of FuelCell Energy, Inc. in response to the notice published in the New York State Register on October 1, 2008, I.D. No. PSC-40-08-00007-P, in the above referenced proceeding.

Please have the extra copy of the comments time-stamped and returned to our messenger. Please do no hesitate to contact me if you have any questions or concerns.

Very truly yours,

FuelCell Energy, Inc.

John A. Franceschina / MHB

John A. Franceschina

JAF/mhb
Enclosures

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard

Case 03-E-0188

COMMENTS OF FUELCELL ENERGY, INC.

Dated: November 14, 2008

FUELCELL ENERGY, INC.
105 Maxess Road, Suite S124
Melville, New York 11747

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PRELIMINARY STATEMENT

FuelCell Energy, Inc. ("FCE") hereby submits these comments in response to the notice published in the New York State Register on October 1, 2008, I.D. No. PSC-40-08-00007-P, to increase the New York State Public Service Commission's ("Commission") Renewable Portfolio Standard[1] ("RPS") program's target level of photovoltaics and other on-peak resources in high-cost areas. In its notice and accompanying proposal ("Proposal"), the Commission seeks comments on whether changes are necessary to the RPS program to expand the development of renewable resources beyond upstate New York, where they have predominately been located. The Commission is also considering whether a targeted program to increase the level of photovoltaics and other on-peak renewable resources should include locating the resource in particular load pockets and networks of Consolidated Edison Company of New York, Inc.'s ("Con Edison") service territory.

For the reasons discussed herein, FCE supports a new RPS tier that focuses on developing renewable resources in high-cost areas such as New York City ("City"). FCE also recommends that for the new RPS tier to be successful in New York City, that it should encourage developing renewable resources that are able to provide both energy and capacity. Further, given the energy demands of New York City, FCE recommends that any City RPS tier that is created provide an incentive for renewable resources that operate as combined heat and power ("CHP") facilities.

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[1] Case 03-E-0188, Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard.

FACTUAL BACKGROUND

The Commission commenced the RPS proceeding on February 19, 2003.[2] In instituting the RPS proceeding, the Commission was adopting the policy of then-Governor George E. Pataki to increase the quantity of electricity generated from renewable resources in New York from 19 percent (2004 level) to 25 percent by 2013. The RPS proceeding's express purpose was to explore and implement an RPS designed to encourage the increased use of renewable resources in New York State.[3]

In designing the RPS, the Commission recognized that renewable energy sources "provide ancillary benefits such as increased fuel diversity and energy security, the potential for economic development . . . and reduced environmental impacts."[4] The Commission determined that these benefits are of sufficient importance to merit "a certain level of support to facilitate" the expansion of renewable energy sources, despite the incremental cost of renewable energy as compared to energy from non-renewable sources.[5] The RPS aims to "provide sufficient financial incentives for the development of renewable resources," allowing them to compete more effectively with traditional energy sources.[6]

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[2] Case 03-E-0188, supra, "Order Instituting Proceeding" (issued: February 19, 2003) ("RPS Instituting Order").

[3] RPS Instituting Order, pp. 1-2.

[4] Id., at 3.

[5] Id., at 2–3.

[6] Id., at 3.

The RPS program is administered by the New York State Energy Research and Development Authority ("NYSERDA"). Eligibility to participate in the NYSERDA-administered RPS program is through a main-tier and a customer-sited tier.[7] The main-tier is typically populated with medium to large scale generation projects whereas the customer-sited tier is comprised of behind-the-meter technologies.[8] Main-tier projects traditionally compete against one another on a kWh price premium basis where the goal has been to acquire the greatest amount of energy at the lowest incremental cost.[9] Projects within the customer-sited tier are not generally economically competitive when compared with main-tier projects, owing to smaller size and the cost associated with installation closer to the energy use. Main-tier projects have traditionally received significantly more funding from the RPS program through NYSERDA than customer-sited projects.

BACKGROUND ON FUELCELL ENERGY, INC.

FCE is a leading provider of stationary, direct fuel cells that are able to provide base load generation using natural gas, biogas and other non-fossil based fuels as its fuel source. Using a non-combustion, electrochemical process FCE is able to convert fuel to energy that provides a 24/7 supply of clean, efficient energy. FCE's technology also offers the additional advantage of cogeneration (i.e., combined heat and power). FCE has products

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[7] Case 03-E-0188, supra, "Order Regarding Retail Renewable Portfolio Standard" (issued: September 24, 2004), pp. 7-9 ("RPS 2004 Order").

[8] Id.

[9] Id.

that range in size from 300 kW to 2.8 MW. Additionally, multiple fuel cells can be combined to provide larger power output for applications ranging up to 50 MW.

With more than $530 million invested to-date in its technology and product development, FCE has acquired significant and unparallel experience in the fuel cell arena. With its extensive research and development and product development experience, FCE continually strives to install its technology to solve some of the most complex and important energy matters of our time. FCE has more than 20-years experience in fuel cell development and currently employs 450 people worldwide. Additionally, FCE has installed more than 60 units at sites around the world, including two in New York State.[10] Approximately 30% of FCE's fuel cell power plant content is manufactured at Ascension Industries in North Tonawanda, New York.

[10] FCE has installed a 250 kW unit at the Sheraton Hotel on 7th Avenue in New York City. This unit provides a significant percentage of the hotel's electricity and heating requirements. Additionally, FCE has installed a 250 kW unit at the State University of New York (SUNY) Syracuse School of Environmental Sciences and Forestry (ESF). This unit provides electricity and heat to several buildings on campus.

POINT I

THE COMMISSION SHOULD ESTABLISH A SEPARATE RPS TIER FOR NEW YORK CITY TO ACCELERATE DEVELOPMENT OF RENEWABLE RESOURCES

The RPS proceeding was created with a goal of increasing New York State's renewable energy generation to 25% by 2013.[11] Since the RPS proceeding was instituted, the program has made significant progress towards reaching this goal. Significantly, however, the majority of projects that have been funded utilizing RPS funds have been located primarily in upstate New York.[12] To effectively address the need for renewable resources in the City, the Commission should develop a separate RPS tier for this express purpose. As discussed above, under the RPS program's current design there is a main-tier and customer-sited tier. Eligibility and funding opportunities under these existing tiers do not provide a means for the RPS program to develop significant renewable resources in New York City.

To address this situation, FCE supports a new RPS tier that will be designed to address the unique characteristics of New York City. As an initial matter, Con Edison

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[11] RPS Instituting Order, p. 2.

[12] Proposal, p. 1 (It is also significant to recognize the inequity that exists between the collection of funds from Con Edison ratepayers and projects that are completed in New York City. As an example, in a March 2008 report NYSERDA reported that Con Edison contributes 49.9% of total System Benefit Charge ("SBC") funds but that only 41.3% of SBC expenditures occurred within Con Edison's service territory. Additionally, for 2009 it is forecasted that Con Edison will collect $35.2 million from its customers for the RPS program where the total collected for the RPS from all utilities in the State is estimated at $82.6 million, making Con Edison's customer's contribution to the RPS program 42.6%. (2004 RPS Order, Appendix E)).

ratepayers contribute a significant portion of the funding for the RPS program and a much smaller portion of those funds are allocated to projects located in New York City. The establishment of a separate New York City RPS tier will assist in alleviating this inequity. Additionally, the current design of the RPS program does not encourage the development of projects in New York City. For example, the majority of funds collected through the RPS program are used for main-tier projects. As noted above, main-tier projects "consist primarily of medium to large scale electric generation facilities that we expect to compete against each other on a kWh price premium for RPS funding."[13]

As projects in the main-tier are evaluated based on a kWh price premium, it is anticipated that few, if any, projects will be developed in New York City. The higher cost of designing and building projects in the City, combined with the increased complexity of interconnecting to Con Edison's distribution system make these projects unable to compete on a kWh basis with projects located elsewhere in the State. For the reasons stated above and in the remaining comments, development of a separate RPS tier for New York City is required to increase the amount of renewable resources located within Con Edison's service territory.

[13] RPS 2004 Order, p. 7.

POINT II

THE NEED FOR ADDITIONAL RENEWABLE GENERATION IS THE GREATEST IN NEW YORK CITY

Unlike many other parts of New York State, New York City's peak demand for energy and its electricity consumption have been increasing and are forecasted to increase even further in the future. Recently, New York City forecasted that its peak electricity demand will increase by 29% by 2030.[14] Additionally, it is forecasted that total electricity consumption may increase by as much as 44% by 2030.[15] Given the forecasted increases in peak demand and electricity consumption, there is an immediate need to implement measures to address New York City's energy requirements, including the development of renewable resources. Utilizing RPS funds, specifically those collected from Con Edison ratepayers, will aid in ensuring that renewable resources are included in the new generation that is developed to meet the City's increasing demand.

Recognizing the impact that renewable resources can have in the City's long-term planning, the City proposed as part of its PlaNYC 2030 the development of a minimum of 800 MW of clean distributed generation by 2030.[16] Significantly, the City, working with Con Edison, has commenced a study of areas and networks within the City where installation of clean Distributed Generation ("DG") will not adversely impact network reliability or

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[14] New York City PlaNYC 2030, p. 102 (summer peak demand is forecasted to increase from 11,400 MW (2005) to 14,700 MW (2030).

[15] Id. (electricity consumption is forecasted to increase from 50,000,000 MWH (2005) to 72,000,000 MWH (2030).

[16] Id., at 111

power quality.[17] Additionally, the installation of DG at select locations on Con Edison's distribution system will allow the utility to eliminate or defer the need for costly transmission and distribution ("T&D") projects and upgrades, thereby allowing the utility to defer passing these costs on to its ratepayers.

POINT III

A SUCCESFUL RPS PROGRAM IN A HIGH-COST, DENSELY POPULATED, URBAN ENVIRONMENT REQUIRES ADDITIONAL INCENTIVES FOR DEVELOPMENT OF KEY TECHNOLOGIES

The RPS program provides a list of eligible technologies that are able to participate in the main- and customer-sited tiers. Each of the eligible technologies includes various advantages and disadvantages, specifically for those that will be located in New York City. Of particular significance for a renewable resource that will be located in New York City is the ability to provide both energy and capacity. As discussed above, given the increasing peak demand and electricity consumption in New York City, it is increasingly significant that renewable generators be able to provide both energy and capacity.

While recognizing the need for a diversified portfolio of renewable resources to be located within New York City, there is also a need to encourage technologies that are able to assist in addressing system constraints. For example, there is a need to develop renewable resources within New York City that are able to offer the ability to meet demand independently of when their fuel source might be available (e.g., solar, wind and tidal). In

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[17] Id.

order to encourage the development of these technologies, FCE recommends that any City RPS tier that is created include an additional incentive for renewable resources that offers both energy and capacity.

Additionally, given the significant advantages that can be realized from renewable resources that produce combined heat and power, FCE recommends that an incentive be provided for these resources that are located within the City so there development will also be encouraged. CHP generators are even more efficient than traditional renewable resources as they utilize the waste heat from electric generation to create heating, cooling, and hot water. From such efficiencies, CHP facilities can produce twice as much energy for the same amount of fuel used by other generators. Accordingly, for the reasons herein, if the Commission develops a new RPS tier for New York City, there should also be incentives for renewable resources that provide energy and capacity and/or combined heat and power.

CONCLUSION

For the reasons stated herein, the Commission should establish a new RPS tier dedicated to the development of renewable resources in New York City. Additionally, recognizing the increased value that accompanies renewable resources located within New York City that are able to provide energy and capacity and/or serve as a combined heat and power facility, the Commission should establish funding incentives that encourage renewable resources with these additional benefits.

Dated: November 14, 2008
Albany, New York

Respectfully submitted,

Moshe H. Bonder

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