



A PHI Company

March 2, 2010

**VIA FEDERAL EXPRESS and  
ELECTRONIC MAIL**  
[kristi.izzo@bpu.state.nj.us](mailto:kristi.izzo@bpu.state.nj.us)

Kristi Izzo  
Secretary of the Board  
State of New Jersey  
Board of Public Utilities  
Two Gateway Center  
Newark, New Jersey 07102

**RE:** In the Matter of William C. Skye d/b/a Redskye Farms Net Metering  
Determination for Solar System by August 31, 2008  
BPU Docket No. EO08060410

Dear Secretary Izzo:

As directed by the New Jersey Board of Public Utilities (“BPU” or “Board”) in the Board’s Order dated February 3, 2009 in the above-referenced docket (the “Order”), Atlantic City Electric Company (“ACE” or the “Company”) is herewith providing the usage and generation data associated with Redskye Farms’ (“Redskye”) participation in the Board’s authorized pilot program. The Company is also providing comments concerning (a) its experiences in managing the Redskye pilot program and (b) the potential expansion of or changes to the pilot for additional customer participation.

In the Order, ACE was directed to provide aggregated on-site metering for Redskye. The pilot program eligibility for Redskye was limited to customer characteristics that included mixed residential and non-residential use renewable generation projects on a single agricultural property within ACE’s service territory by customers who have waited in a Customer On-Site Renewable Energy (“CORE”) program queue for rebate approval. The Company is aware of two (2) additional customers who meet the above criteria, and has indicated to those customers its willingness to include them in the pilot program.

Further, as required by the Order, the Company will accept other similarly situated customers to participate in the program who meet the eligibility criteria set forth above. As noted herein, however, the Company does not believe that the eligibility criteria for participation in the Redskye program should otherwise be modified.

**Wayne W. Barndt**  
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Regulatory Strategy and Policy

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Table 1 in **Appendix A** (attached) provides the usage data by meter location for Redskye from August 2008 through January 2010. Positive figures indicate usage; the negative numbers or credits indicate excess generation. Aggregating the usage data for each meter indicates that, in 12 of the last 18 months, the kWhs generated by the solar installations on two (2) of the Redskye meters exceeded the usage on all three (3) of the meters, resulting in a net credit kWh amount carried over to future billing months. As shown in Table 2 of Appendix A, most months indicate net excess generation as shown by the negative numbers.

As noted above, ACE opposes, other than as noted herein, any modification to the eligibility criteria for participation in the Redskye pilot. The current eligibility criteria for this pilot program are as follows:

1. mixed residential and non-residential use renewable generation projects;
2. all meters and renewable installation be located on a single agricultural property owned by a single entity within ACE's service territory; and
3. customers must be in a CORE program (or successor program) queue for rebate approval.

In addition, due to the cost to manually distributing excess generation to the meters involved in the pilot, the Company proposes limiting the number of eligible program meters to five (5) meters per customer. ACE will accept additional customers who meet the above criteria to participate in the pilot program.

Expanding the pilot program beyond the above criteria would unreasonably burden the Company's ability to calculate the bills for these customers, since all billing functions associated with this pilot program are manual operations. In addition, expanding the eligibility criteria beyond the scope of the pilot program could result in system reliability concerns.

### **Analysis**

Billing for Redskye is processed manually and takes approximately 30 minutes per month in addition to the time required to manually input the usage data for a typical Net Energy Metering ("NEM") customer. At a loaded labor rate of \$33.00 per hour, this results in an additional manual billing cost per customer of \$198.00 (30 minutes x 12 months x \$33.00).

In addition to concerns regarding the incremental costs of manually billing customers under this pilot program, the Company believes that there is the potential for system reliability failures that could occur if the eligibility criteria for participation in the pilot program are modified in a way that significantly increases customer eligibility. For Redskye, from January 2009 to December 2009, there was net excess generation of 5,534 kWh as shown in Table 2 of Appendix A. This type of excess generation can result in reliability issues on the Company's distribution system, potentially resulting in additional capital costs to handle the excess generation being forced on to the distribution system. These types of reliability issues are already a concern on certain distribution feeders in the Company's service territory.

Redskye has two (2) renewable systems that are adjacent to each other. Expanding the pilot to permit participation by multiple systems in close proximity to each other would result in a high concentration of renewables. The aggregation of customer meters encourages the sizing of systems in excess of load at the meter, exacerbating the excess generation issue. Excess generation on the distribution system presents challenges in controlling the voltage input fluctuations on these distribution lines. High saturation is not just a problem on the feeders, but can also become a problem on localized transformers. If voltage cannot be controlled, the next customer(s) down the line or on the same transformer will see high voltage, which is outside the allowable voltage bandwidth permitted by the BPU. New Jersey only allows +/- 4 % on a 120/240 volt service. During the light-load months of October to November and April to May, and if there is a high saturation of distributed generation on a feeder or transformer, controlling the voltage to within the allowable bandwidth becomes even more difficult. As can be seen in Table 2 of Appendix A, Redskye had the highest net excess generation during these light load-months. Even though Redskye is not presently located on an over-saturated feeder, ACE is already experiencing difficulties with high voltages on two (2) other feeders in its territory -- Pleasantville and Carl's Corner.

The requirement that participants in the pilot program be located on a single agricultural property owned by one entity helps to keep the manual billing issues manageable and limits the concentration of renewal generation, which then lessens the excess generation impact on distribution system reliability. Expansion of the criteria to a more densely populated environment would increase the probability of reliability issues on the distribution system.

### **Recommendations**

ACE is supportive of allowing similarly situated customers to participate in the Redskye pilot program. The Company strongly supports maintaining the current criteria for participation in this pilot program, namely, mixed residential and non-residential use renewable generation projects on a single agricultural property within ACE's service territory by customers who have waited in a CORE program queue for rebate approval. In addition, the Company proposes limiting the number of pilot program meters eligible for aggregation on any one property to five (5). This meter limitation does not impact Red Skye or either of the two (2) additional customers referenced above.

In the event the Board believes that a more substantial modification to the Redskye pilot program criteria should be considered or is warranted, the Company requests that it be provided with an appropriate opportunity to be heard further in this regard, and that it be permitted to present additional facts and arguments in support of its position with regard to any such program criteria modification.

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Please accept this letter for filing and return a "filed" copy to me in the self-addressed, postage-prepaid envelope provided.

Respectfully submitted,

  
Wayne W. Barndt

Enclosures

cc: Michael Winka  
Benjamin Scott Hunter

Appendix A

Table 1

Atlantic City Electric Pilot for RedSyke Farms Data for Billing Months August 2008 to January 2010					
<b>Account: GUMTREE CORNER RD</b>					
<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>	<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>	<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>
10-Jan	(1,649)	9-Jan	(1,387)	8-Jan	(187)
10-Feb		9-Feb	(1,806)	8-Feb	(292)
10-Mar		9-Mar	(1,942)	8-Mar	(338)
10-Apr		9-Apr	(2,222)	8-Apr	(417)
10-May		9-May	(2,412)	8-May	(390)
10-Jun		9-Jun	(2,355)	8-Jun	(400)
10-Jul		9-Jul	(2,998)	8-Jul	(263)
10-Aug		9-Aug	(1,720)	8-Aug	(722)
10-Sep		9-Sep	(2,418)	8-Sep	(2,553)
10-Oct		9-Oct	(1,557)	8-Oct	(1,917)
10-Nov		9-Nov	(1,423)	8-Nov	(1,825)
10-Dec		9-Dec	(1,404)	8-Dec	(1,357)
<b>Total</b>	<b>(1,649)</b>		<b>(23,644)</b>		<b>(10,661)</b>
<b>Account: WILLIS RD</b>					
<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>	<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>	<u>Billing Month</u>	<u>KWH Generated (KWH before Transfers)</u>
10-Jan	(208)	9-Jan	(208)	8-Jan	(9)
10-Feb		9-Feb	(296)	8-Feb	(262)
10-Mar		9-Mar	(311)	8-Mar	0
10-Apr		9-Apr	(382)	8-Apr	(689)
10-May		9-May	(398)	8-May	(378)
10-Jun		9-Jun	(397)	8-Jun	(275)
10-Jul		9-Jul	(369)	8-Jul	(402)
10-Aug		9-Aug	(376)	8-Aug	(128)
10-Sep		9-Sep	(333)	8-Sep	(190)
10-Oct		9-Oct	(354)	8-Oct	(276)
10-Nov		9-Nov	(233)	8-Nov	(317)
10-Dec		9-Dec	(210)	8-Dec	(212)
<b>Total</b>	<b>(208)</b>		<b>(3,867)</b>		<b>(3,138)</b>

<b>Account: RESIDENTIAL</b>					
<u>Billing Month</u>	<u>Usage On Residential Account</u>	<u>Billing Month</u>	<u>Usage On Residential Account</u>	<u>Billing Month</u>	<u>Usage On Residential Account</u>
10-Jan	2,626	9-Jan	1,311	8-Jan	
10-Feb		9-Feb	1,154	8-Feb	
10-Mar		9-Mar	1,145	8-Mar	
10-Apr		9-Apr	1,422	8-Apr	
10-May		9-May	1,970	8-May	
10-Jun		9-Jun	2,472	8-Jun	
10-Jul		9-Jul	1,095	8-Jul	
10-Aug		9-Aug	3,430	8-Aug	2,684
10-Sep		9-Sep	2,134	8-Sep	2,149
10-Oct		9-Oct	1,966	8-Oct	899
10-Nov		9-Nov	1,703	8-Nov	1,032
10-Dec		9-Dec	2,175	8-Dec	1,166
<b>Total</b>	<b>2,626</b>		<b>21,977</b>		<b>7,930</b>

**Netting of all 3 Billing Accounts for 18 months**

**Table 2**

<b>Month</b>	<b>Monthly Net</b>	<b>Month</b>	<b>Monthly Net</b>	<b>Month</b>	<b>Monthly Net</b>	<b>Total Net</b>
10-Jan	769	9-Jan	(284)	8-Jan		
10-Feb		9-Feb	(948)	8-Feb		
10-Mar		9-Mar	(1,108)	8-Mar		
10-Apr		9-Apr	(1,182)	8-Apr		
10-May		9-May	(840)	8-May		
10-Jun		9-Jun	(280)	8-Jun		
10-Jul		9-Jul	(2,272)	8-Jul		
10-Aug		9-Aug	1,334	8-Aug	1,834	
10-Sep		9-Sep	(617)	8-Sep	(594)	
10-Oct		9-Oct	55	8-Oct	(1,294)	
10-Nov		9-Nov	47	8-Nov	(1,110)	
10-Dec		9-Dec	561	8-Dec	(403)	
<b>Yearly Net</b>	<b>769</b>		<b>(5,534)</b>		<b>(1,567)</b>	<b>(6,332)</b>