



Agenda Date: 9/30/14
Agenda Item: 8C

STATE OF NEW JERSEY
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

CLEAN ENERGY

IN THE MATTER OF NATURALLY BEAUTIFUL PLANT)
PRODUCTS, LLC – REQUESTING EXEMPTION FROM)
THE PAY FOR PERFORMANCE PROGRAM)
REQUIREMENTS)
ORDER
DOCKET NO. QO14070799

Party of Record:

David Vande Vrede, Petitioner

BY THE BOARD:

BACKGROUND

This matter concerns a petition appealing the denial of a measure to be included in a Pay for Performance ("P4P" program) rebate through New Jersey's Clean Energy Program (NJCEP). Naturally Beautiful Plant Products LLC ("Petitioner" or "Naturally Beautiful") is requesting an exemption to the program requirement that all light emitting diodes (LEDs) eligible to receive an incentive and to be included in the projected energy savings of the project be listed on the ENERGY STAR® or DesignLights Consortium® ("DLC") qualified program lists.

Located in Belvidere, New Jersey, Naturally Beautiful is a 210,702 sq. ft. facility consisting of two warehouses, an office and multiple greenhouses. Naturally Beautiful has been located at this facility for over 11 years. Petitioner is planning to expand the property. There are three new condensing boilers that provide heating to Warehouse 1, the Office, Greenhouse 1 and Greenhouse 3(a-e). The rest of the facility is heated by overhead furnaces. There are several areas for improvement; however the largest savings will come from the installation of thermal overhead curtains in the greenhouses, as well as LED lighting upgrades.

On April 18, 2013, Petitioner submitted an application to the Pay for Performance – Existing Buildings Program to install thermal overhead curtains, replace fan motors and upgrade lighting to new LEDs. Concerning the lighting upgrades, Petitioner seeks to install LEDs specific to its needs in horticulture to promote plant growth. Such LEDs may reduce energy usage for Naturally Beautiful; however, are not listed on the Program's qualified products list.

In December 2013, Petitioner was informed by TRC, P4P Program Manager, that the specified lighting in the application did not qualify under the NJCEP program guidelines and denied Petitioner's request for an exemption from P4P program guidelines.

On December 20, 2013, Petitioner requested an exemption to the P4P lighting requirements from Applied Energy Group ("AEG"). AEG serves as the Program Coordinator for the NJCEP and, pursuant to the Board of Public Utilities' ("Board") Informal Dispute Resolution Process, resolves disputes and/or appeals of decisions made by NJCEP Program Managers. Following its review, AEG upheld the P4P Program Manager's denial, finding that TRC had correctly interpreted and applied the P4P program guidelines.

On July 29, 2014, Petitioner filed the instant petition, seeking a P4P program exemption from the Board. Petitioner reasoned that its proposed lighting meets the intent of the P4P program requirements by greatly reducing lighting energy usage per square foot using high-quality equipment. Petitioner further offered to seek Electrical Testing Labs certification of its proposed lighting, a certification Petitioner acknowledges as being uncommon in the industry, in an effort to come as close as possible to meeting the P4P program requirements.

Pending further review, the denial of Petitioner's proposed LEDs from the complement of items for which the P4P incentive is sought would still result in a 17% projected energy savings rather than a 20.4% energy savings, with a qualifying incentive of an estimated \$186,683 as opposed to \$274,310.

DISCUSSION AND FINDINGS

LED lighting is a relatively new measure and many new products have been introduced into the marketplace over the past several years. The program has regularly added new LED products to the list of measures eligible for prescriptive incentives. For any new technology, the program evaluates and sets qualification requirements to offer incentives based on a number of factors. These factors include, but are not limited to, product maturity, sustainability, energy savings, warranty, safety and market potential. There are several approaches to the evaluation of products for which the program provides incentives; ranging from very limited program requirements, to third party qualified product listings, to performing independent product testing. The program has utilized third party qualified products lists (e.g. Consortium for Energy Efficiency, ENERGY STAR and DesignLights Consortium) to establish minimum program requirements while not incurring the significant costs associated with individual product testing.

Based on lessons learned in the adoption of compact fluorescent technology, the U.S. Department of Energy ("USDOE") recognized early in LED product development that addressing these issues was a key component to rapid technology adoption. In an effort to provide an unbiased performance review of LED technology, USDOE developed the CALiPER (Commercially Available LED Product Evaluation and Reporting) program designed to issue reports that addressed a variety of LED product performance claims including manufacturer stated efficiency versus actual results and expected performance versus common lighting technologies. The performance of an LED can be affected by many factors including thermal and electrical design, intended use versus actual use, and LED chip and driver quality. In many cases, the manufacturer specifications did not match the testing data and underperformed. CALiPER testing in 2007 indicated "less than 15% of the products had light output claims within

30% of tested values.¹ While this number improved in later tests, over 30% of LED products tested in 2012 failed to meet manufacturer output claims within 10%.²

In addition to the CALiPER reports, the USDOE recently issued a report titled "Solid-State Lighting (SSL): Early Lessons Learned on the Way to Market – January 2014." The purpose of the report is to identify actions taken by the DOE and others to identify issues, challenges and new lessons that have been learned in the early stages of the SSL (LED) market introduction³. The report cites a number of topics related to the performance and reliability of LED technology necessitating the need for rigorous testing requirements and qualified product lists. The report goes on to conclude "It is not clear how long such programs will be necessary, as the LED lighting market continues to evolve and mature. Continued rapid change in the technology, product offerings, and integrated systems indicate objective third-party information will continue to be needed for at least the next 5 years."

To help customers identify products that will meet performance requirements and deliver persistent savings, most incentive programs across the country, including the P4P program, require that LED eligible measures must first be reviewed and certified as compliant with performance testing standards by DesignLights Consortium[®] or by the U.S. DOE as ENERGY STAR[®]. The DLC Qualified Products List ("QPL") was created in response to problems experienced with LED products that did not deliver the performance or savings promised. The DLC promotes quality, performance and energy efficient commercial sector lighting solutions through collaboration among its federal, regional, state, utility, and energy efficiency program members, luminaire manufacturers, lighting designers, and other industry stakeholders throughout the U.S. and Canada. Over 70 efficiency programs across North America use the QPL to reduce their program costs and risks.

TRC's compliance filing includes the following note in the table that sets out Commercial and Industrial prescriptive rebates: "LED Prescriptive Lighting – For incentive eligibility LED fixture must be listed on Energy Star or DesignLights Consortium qualified products list." In addition, the P4P program, which is the subject of the Naturally Beautiful petition, states: "LED fixture/products must be listed on ENERGY STAR[®] or DesignLights Consortium qualified products list."

For the reasons noted above, the decisions of the Program Manager and Program Coordinator should be upheld. It is important that the NJCEP continue to provide incentives only for products that have been certified by ENERGY STAR or DLC. To do otherwise, could result in the program providing incentives to products that underperform, are not safe, or do not produce the anticipated energy savings. In addition, neither the NJCEP has the capabilities to test or otherwise determine that products not certified by either ENERGY STAR or DLC will perform as anticipated, meet customers' needs or produce the anticipated energy savings. Lighting manufacturers have the ability to submit new products to either ENERGY STAR or DLC to obtain certification.

¹ DOE. 2007a. CALiPER Summary of Results: Round 1 of Product Testing. March 2007. Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy, Washington, DC.

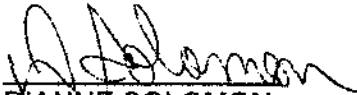
² DOE. 2012a. CALiPER Year in Review 2012. December 2012. Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy, Washington, DC.

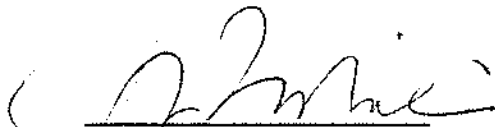
³ DOE. 2014a. Solid-State Lighting: Early Lessons Learned on the Way to Market. January 2014. Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy, Washington, DC.

Based on the facts and circumstances of this matter, the Board **CONCLUDES** that Petitioner is not entitled to an exemption for non-qualifying LEDs. Appropriate development, testing and certification for qualified measures are critical to New Jersey's Clean Energy Program. Therefore, the Board **HEREBY DENIES** Petitioner's request for an exception to the program requirement that all LED measures be ENERGY STAR or DesignLights Consortium certified.

DATED: 9/30/14

BOARD OF PUBLIC UTILITIES
BY:

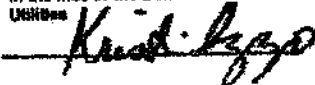

DIANNE SOLOMON
PRESIDENT


JOSEPH L. FIORDALISO
COMMISSIONER


MARY-ANNA HOLDEN
COMMISSIONER

ATTEST: 
KRISTI IZZO
SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities



IN THE MATTER OF NATURALLY BEAUTIFUL PLANT PRODUCTS, LLC - REQUESTING
EXEMPTION FROM THE PAY FOR PERFORMANCE PROGRAM REQUIREMENTS

DOCKET NO. Q014070799

SERVICE LIST

David Vande Vrede, Owner
Naturally Beautiful Plant Products, LLC
283 County Road 519
Belvidere, NJ 07823

Elizabeth Ackerman
Acting Director
Division of Economic Development and
Energy Policy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Sherri Jones
Division of Economic Development and
Energy Policy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Rachel Boylan, Esq.
Legal Specialist
Counsel's Office
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Allison E. Mitchell
Division of Economic Development and
Energy Policy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Kristi Izzo, Secretary
Office of the Secretary
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Brian DeLuca
TRC Solutions
Program Manager
900 Route 9 North, Suite 104
Woodbridge, NJ 07095

Carl Teter
TRC Solutions
Associate Vice President
900 Route 9 North, Suite 104
Woodbridge, NJ 07095

Carolyn McIntosh, DAG
Division of Law
Dept. of Law & Public Safety
124 Halsey Street
Post Office Box 45029
Newark, NJ 07101-45029