



Agenda Date: 12/17/08
Agenda Item: 8J

STATE OF NEW JERSEY
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102
www.nj.gov/bpu

CLEAN ENERGY

IN THE MATTER OF CUSTOMER ON-SITE
RENEWABLE ENERGY (CORE) PROGRAM
- CLARIFICATION OF 10kW CAP ON
RESIDENTIAL REBATES

ORDER OF CLARIFICATION

) DOCKET NO. EO04121550

(SERVICE LIST ATTACHED)

BY THE BOARD:

On February 9, 1999, the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq. ("EDECA") was signed into law. EDECA established requirements to advance energy efficiency and renewable energy in New Jersey through the societal benefits charge ("SBC"), at N.J.S.A. 48:3-60(a)(3). EDECA further empowered the Board of Public Utilities ("Board") to initiate a proceeding and cause to be undertaken a comprehensive resource analysis of energy programs. This proceeding is currently referred to as the comprehensive energy efficiency ("EE") and renewable energy ("RE") resource analysis. After notice, opportunity for public comment, public hearing, and consultation with the New Jersey Department of Environmental Protection ("NJDEP"), within eight months of initiating the proceeding and every four years thereafter, the Board would determine the appropriate level of funding for EE and Class I RE programs (now collectively called New Jersey's Clean Energy Program) that provide environmental benefits above and beyond those provided by standard offer or similar programs in effect as of February 9, 1999.

As required by EDECA, the Board initiated its first comprehensive EE and RE resource analysis proceeding in 1999. At the conclusion of this proceeding, the Board issued its initial order, dated March 9, 2001, Docket Nos. EX99050347 et al. (March 9th Order). The March 9th Order set funding levels for the years 2001 through 2003, established the programs to be funded and budgets for those programs.

By Order dated May 7, 2004, Docket Nos. EX03110946 and EX04040276, the Board initiated its second comprehensive EE and RE resource analysis proceeding and established a procedural schedule for the determination of the funding levels, allocations and programs for the years 2005 through 2008. By Order dated December 23, 2004, Docket No. EX04040276, the Board concluded its proceeding, set funding levels for the years 2005 through 2008, and approved 2005 programs and budgets. The Board approved funding levels of \$140 million for 2005, \$165 million for 2006, \$205 million for 2007 and \$235 million for 2008.

Among the programs approved by the Board in its March 9th Order was the Customer-Sited Clean Energy Generation Program, which has carried on and is now known as the Customer On-Site Renewable Energy ("CORE") Program. The CORE Program provides rebates to customers that install renewable energy systems. Through a series of orders issued since the program's first approval in 2001, the Board has established and revised CORE program rebate levels, policies, and procedures.

By Order dated February 13, 2006 in the above referenced docket ("February 13th Order"), the Board approved a number of changes to CORE Program policies and procedures including establishment of a cap on the rebate available to a residential customer. Specifically, the February 13th Order stated:

The Board **HEREBY DIRECTS** the Office of Clean Energy to limit residential single family CORE rebate applications to the first 10 kW of project capacity, and create an exemption process for farms, non-profit organizations (including, but not limited to, houses of worship) and multifamily dwellings on residential rates.

Subsequent to this policy change, on October 19, 2006, Honeywell International, Inc. ("Honeywell") was awarded a contract to manage the Board's residential energy efficiency programs and renewable energy programs.

Honeywell submits compliance filings to the Board on an annual basis that set out program descriptions and budgets. By Summary Order dated January 2, 2008 and Order dated March 31, 2008, Docket No. EX04040276, the Board approved 2008 programs and budgets for New Jersey's Clean Energy Program ("NJCEP"). These Orders approved Honeywell's 2008 compliance filing. Honeywell's approved 2008 compliance filing modified CORE program rebates for wind projects from a capacity-based rebate to a performance-based rebate, where the rebate was based on the expected generation of the wind system and not the capacity of the system. This change was intended to provide a larger rebate to more efficient wind systems that generate more electricity than less efficient wind systems.

The performance-based wind rebates included in Honeywell's 2008 compliance filing set rebates at \$3.20 per annual kWh for the first 16,000 kWh and \$0.50 per annual kWh above 16,000, up to a maximum of 750,000 kWh. It did not include a cap for residential systems. The transition from a capacity-based rebate to a performance-based rebate for wind systems has raised a number of issues related to the applicability of the 10 kW cap to residential wind systems since wind rebates are no longer based on kW of capacity.

The vast majority of applications submitted during the first few years of the CORE program were for solar projects. Honeywell's 2008 compliance filing included a number of changes intended to stimulate the development of wind and biomass projects including establishment of a separate budget for wind and biomass systems and transitioning to a performance-based rebate for wind systems.

Honeywell developed a performance-based rebate structure for wind systems designed in a manner that resulted in the maximum rebate for the first rebate tier being roughly equivalent to the rebate a 10 kW wind project would have received under the old capacity-based rebate structure. For example, a 10 kW system operating at an 18% capacity factor, which is reasonable for a wind system along the New Jersey shore, would generate 16,000 kWh and be eligible for a rebate of \$51,200. Under the old capacity-based rebate structure, a 10 kW wind

system would have received a \$50,000 rebate regardless of the level of annual generation. Using the new rebate structure, a 10kW system at a 30% capacity factor, which is also within the realm of possibility, would produce 27,000 kWh, and the rebate would increase by \$4,400 or from \$51,200 to \$55,600. The \$0.50 incentive for generation above 16,000 kWh was intended to provide a small additional incentive to the more efficient systems.

On November 10, 2008 the Board published a request for comments on two questions: 1) whether the applicability of the 10 kW cap to residential wind systems is appropriate or should be modified in light of ongoing and future requests for rebate; and 2) whether the applicability of the 10 kW cap to combinations of renewable energy technologies is appropriate or a different cap per renewable technology should be established.

Comments were received from Island Wind, Greenwords, Alternative Energy Associates, James S. Finne, PE and Marianne L. McGarrity, Skylands Renewable Energy, LLC, and New Jersey Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel"), and Steven Einreinhofer.

Summary of Comments

Island Wind suggests eliminating production or capacity caps for residential wind because wind development already has many barriers/restrictions. Greenwords proposes eliminating the 10kW cap because it creates a disincentive to investment in more efficient technologies; makes achieving the Energy Master Plan ("EMP") targets for residential wind energy more difficult; and discourages the market introduction and expansion of hybrid renewable technologies. Alternative Energy Associates proposes either raising or eliminating the capacity cap for residential wind. If a cap must exist, the commenter proposes establishing an additional funding tier of \$1.00 (\$1.50/kWh) for a tier it proposes creating for 10kW through 25kW. James S. Finne, PE and Marianne L. McGarrity comment that 23 kW of photovoltaic capacity or 20 kW of inland wind capacity need to be installed to satisfy all the energy needs of an average home. They suggest: 1) making all rebates performance based; 2) allowing larger inland wind installations in the residential sector; and 3) limiting the utility buy-back of excessive energy production from privately owned renewable generators. Steven Einreinhofer stated that wind rebates should be capped at a customer's 12-month consumption rather than at 10 kW, urging the greater dependence of wind energy on rebates for financing.

Skylands Renewable Energy, LLC proposes capping wind energy installations at the net metering limit of on-site consumption. The commenter claims that a 10 kW residential cap on CORE applicable across all renewable energy technologies will create a significant barrier to development of wind energy and place at risk achievement of the 200 MW EMP target for residential wind by the end of 2020. In the commenter's view, wind technology needs separate rebate consideration because: 1) there are more restrictive zonal and municipal requirements for wind than for solar PV; 2) solar is more ubiquitous than wind, and in fact many inland areas in NJ are marginal as a wind energy resource; and 3) the structure of wind project costs makes larger projects more cost-efficient.

Rate Counsel supports the 10 kW cap for wind energy rebates and also Staff's proposed performance-based levels for wind technology, which Rate Counsel believes would result in rebate levels comparable to the rebate levels under a capacity-oriented approach. The commenter also proposes that rebates be given on per-technology basis. Rate Counsel believes that setting rebate caps for mixed technologies on a total on-site basis would reduce the incentives to maximize "scope economies" for multiple renewable technologies installed in

one location. In the commenter's view, rebates should be set without reference to an on-site total. Mr. Einreinhofer made a similar argument against a combined cap.

Staff Recommendations

Applied Energy Group ("AEG") was engaged by the Board to provide Program Coordinator services for New Jersey's Clean Energy program. AEG recently became aware that Honeywell has issued rebate approval letters or pre-approval letters to several residential wind projects with an installed capacity in excess of 10 kW. The Office of Clean Energy ("OCE") believes that the Board's February 13th Order requires clarification regarding the applicability of the 10kW cap for residential wind systems in the context of a performance-based rebate.

The majority of the commenters recommended that the Board not impose a cap on residential wind systems based on a concern that caps would inhibit the development of residential wind systems. Others proposed specific caps for consideration.

The OCE believes that rebates for residential wind systems should be set in a manner that provides sufficient financial incentives to allow for the development of residential wind systems while respecting the Board's clearly stated desire that incentives to residential customers be limited in consideration of the amount of funding the residential customer pays into the Clean Energy Program Fund through the Societal Benefit Charge (SBC). While some commenters have stated that the imposition of financial caps will make achieving the Energy Master Plan ("EMP") targets for residential wind energy more difficult, OCE believes the opposite is true. That is, if rebates are set at a level that provides sufficient incentive for the development of residential wind systems, capping the incentive to any individual customer will allow for the development of additional wind systems to more residential customers, given a limited budget.

Rate Counsel and Skylands Renewable Energy, LLC propose that rebates be given on per-technology basis. While OCE concurs with Rate Counsel's comment that "setting rebate caps for mixed technologies on a total on-site basis would reduce the incentives to maximize "scope economies" for multiple renewable technologies installed in one location", OCE believes this suggestion is inconsistent with the Board's desire to limit the total level of incentive provided to any individual residential customer.

James Finne and Marianne L. McGarrity suggested: 1) making all rebates performance based; 2) allowing larger inland wind installations in the residential sector; and 3) limiting the utility buy-back of excessive energy production from privately owned renewable generators. OCE notes that significant discussion has taken place in recent RE Committee meetings regarding these issues. While making all rebates performance based has merit and was discussed extensively, given the significant reduction in solar rebate levels implemented in 2009, OCE did not recommend this change at this time. OCE's recommendation set out below allows for residential wind systems in excess of 10 kW.

Although solar installations made up the majority of rebate applications at the time the Board issued its Order limiting residential rebates to 10 kW, the OCE believes the intent of the Board's February 13th Order was to create a maximum dollar amount available to any one residential customer so that the limited rebate dollars would spread to more customers. Therefore, the OCE recommends a modification to the residential wind cap that limits the amount any one customer can receive while recognizing the specific challenges faced by residential wind systems.

Based on discussions with Honeywell, AEG, and several wind developers as well as review of the comments received, the OCE recommends that the cap for residential wind systems be clarified as \$51,200, which is the maximum rebate a system in the first rebate tier discussed above would receive (16,000 kWh x \$3.20 per annual kWh = \$51,200). As noted above, \$51,200 is approximately equal to the maximum rebate a 10kW residential wind system would have received under the old capacity-based rebate structure. The proposed cap would not be applicable to projects that were exempted from the residential cap as set out in the Board's February 13th Order. Specifically, it would not apply to farms, non-profit organizations (including, but not limited to, houses of worship) and multifamily dwellings on residential rates. The OCE further recommends that a notice be issued as soon as practicable clarifying that the maximum rebate for a residential wind system is \$51,200 effective with the date of the notice.

A second issue that requires clarification concerns whether the 10 kW residential cap is applicable per customer or per customer per technology. For example, if a residential customer installs both a wind system and a solar system, the question remains whether the 10 kW cap applies to the combined capacity of the two systems or to each technology individually. The OCE believes that the cap was established by the Board, in part, to ensure that the level of rebate received by any one residential customer was capped to spread the limited rebate dollars to as many customers as possible. Therefore, for a residential customer that installs multiple renewable energy systems, the OCE recommends that the cap be clarified as follows:

1. Residential solar, biomass and fuel cell systems are capped at 10 kW.
2. Systems that combine solar, biomass or fuel cell technologies are capped at 10 kW in aggregate.
3. Rebates for residential wind systems are capped at \$51,200.
4. Rebates for residential renewable energy systems that combine wind with any other renewable energy technology are capped at \$51,200.

Honeywell has informed the OCE that it has issued rebate approval letters or pre-application confirmation of estimated rebate letters for several residential wind systems that exceed \$51,200. Honeywell believed the February 13th Order only applied to solar projects and utilized the rebate levels in its Board-approved 2008 compliance filing, which did not include a cap for residential wind systems. OCE notes that while the Board's February 13th Order established a cap of 10 kW for residential systems, the Board's Order approving Honeywell's 2008 compliance filing created some degree of uncertainty regarding the applicability of the residential cap to residential wind systems. OCE believes Honeywell acted in good faith reliance on the Board's Orders in issuing rebate approval letters or pre-application confirmation of estimated rebate letters to residential wind systems that exceed \$51,200. Therefore, OCE recommends that such projects be grandfathered from the residential cap as clarified herein provided they comply with all other CORE program requirements.

Specifically, the OCE recommends that projects that have achieved a certain level of development be grandfathered from the recommended clarification. OCE recommends that any wind project that has received a rebate approval letter, or a pre-application confirmation of estimated rebate letter, remain eligible for the rebate set out in the approval or pre-application confirmation of estimated rebate letter. Further, Honeywell has indicated that one project would have received a pre-application confirmation of estimated rebate letter but that the file was misplaced and needed to be resubmitted. OCE recommends that this project be grandfathered as well and remain eligible for the rebate level it would have been eligible for if the pre-application confirmation of estimated rebate letter had been issued prior to the file being misplaced, provided the applicant complies with all other CORE program requirements.

Honeywell has also reported to the OCE that it has issued rebate approval letters to customers that installed renewable energy technologies where the combined capacity of the two systems exceeded 10kW. The OCE believe these projects should be grandfathered from this policy clarification. Therefore, the OCE recommends that these customers remain eligible for the rebate amount set out in the rebate approval letters for their applications provided all other program requirements are met.

Board Discussion and Findings

The Board **FINDS** that the plain language of the February 13th Order shows the Board's intent to limit the level of rebates available to all residential CORE rebate applicants, which made rebate dollars available to additional residential customers for CORE rebates. The Board **FINDS** that the transition, from a capacity-based wind rebate structure to a performance-based wind rebate structure, created some degree of confusion and the need to clarify the applicability of the 10kW residential cap. The Board **FINDS** that the maximum rebate available to a system in the first wind rebate tier (\$51,200) is approximately equal to the maximum rebate a 10kW residential wind system would have received under the capacity-based rebate structure. The Board **APPROVES** the OCE recommendation that the cap for residential wind systems be clarified as \$51,200 and **HEREBY CLARIFIES** the February 13th Order as follows:

Commencing effective with the date of this Order, residential wind systems will be limited to a rebate of \$51,200 regardless of the level of annual generation.

The Board **APPROVES** the OCE's recommendation to issue a notice clarifying that \$51,200 is the maximum rebate for a residential wind system and **DIRECTS** the OCE to issue the notice of clarification as soon as practicable. The cap is not applicable to projects that were exempted from the residential cap as set out in the Board's February 13th Order. Specifically, it is not applicable to farms, non-profit organizations (including, but not limited to, houses of worship) and multifamily dwellings on residential rates

The Board also **FINDS** that the February 13th Order required clarification to address instances where a residential customer installed renewable energy technologies that reached a combined capacity greater than 10kW. Consistent with the intent of the February 13th Order, the Board **HEREBY APPROVES** the OCE's recommendation and **CLARIFIES** the applicability of the 10kW cap as follows:

1. Residential solar, biomass and fuel cell systems are capped at 10 kW.
2. Systems that combine solar, biomass or fuel cell technologies are capped at 10 kW in aggregate.
3. Rebates for residential wind systems are capped at \$51,200.
4. Rebates for residential renewable energy systems that combine wind with any other renewable energy technology are capped at \$51,200

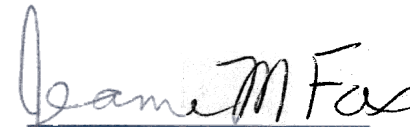
In addition, the Board **FINDS** that Honeywell, the market manager, issued rebate approval letters and pre-application confirmation of estimated rebate letters based on its Board-approved 2008 compliance filing, which did not include a cap for residential wind systems, and that Honeywell would have issued a pre-application confirmation of estimated rebate letter to one project had the initial application not been misplaced. The Board also **FINDS** that applicants have commenced project development and invested funds in reliance on these letters. The Board therefore **APPROVES** the OCE's recommendation to grandfather these projects from this

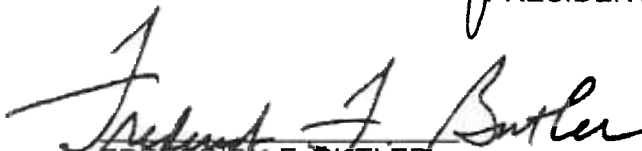
policy clarification. The Board **AUTHORIZES** Honeywell to honor the rebate levels set out in either the rebate approval or pre-application confirmation of estimated rebate letters, provided they are in compliance with all other applicable CORE requirements.

The Board further **FINDS** that Honeywell has issued rebate approval letters to customers that installed renewable energy technologies where the combined capacity of the two systems exceeded 10kW. The Board **APPROVES** the OCE recommendation that these projects should be grandfathered from this policy clarification. Thus, the Board **HEREBY AUTHORIZES** Honeywell to honor the rebate level set out in the rebate approval for this customer provided all other program requirements are met.

DATE: 2/19/09

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I HEREBY CERTIFY that the within
document is a true copy of the original
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