



STATE OF NEW JERSEY
Board of Public Utilities
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CLEAN ENERGY

IN THE MATTER OF NEW JERSEY'S CLEAN)
ENERGY PROGRAM 2010 PROTOCOLS TO)
MEASURE RESOURCE SAVINGS) ORDER
DOCKET NO. EO09120975

Cynthia Holland, Deputy Attorney General, for the Staff of the New Jersey Board of Public Utilities

BY THE BOARD:

Background and Procedural History

On February 9, 1999, the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et al. (EDECA or the Act) was signed into law. The Act 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 to initiate a proceeding and cause to be undertaken a comprehensive resource analysis of energy programs, currently referred to as the comprehensive energy efficiency (EE) and renewable energy (RE) resource analysis (CRA). 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 called New Jersey's Clean Energy Program or NJCEP) that provide environmental benefits above and beyond those provided by standard offer or similar programs in effect as of February 9, 1999.

By Order dated September 30, 2008, Docket No. EO07030203, the Board concluded its third CRA proceeding and set funding levels for the years 2009 through 2012. By Order dated January 8, 2009, Docket No. EO07030203, the Board approved 2009 programs and budgets. By Order dated August 7, 2009, Docket No. EO07120961 (August 7, 2009 Order), the Board approved a document entitled *Protocols to Measure Resource Savings* (Protocols) dated June 2009. This document represents the most recent version of the Protocols approved by the Board and is used by the program managers to estimate energy savings and renewable energy generation.

The Protocols include algorithms for measuring energy and other resource savings that result from implementation of New Jersey's Clean Energy Program. The Protocols require updating from time to time as baselines against which energy savings are measured and changed due to upgrades in energy codes or appliance efficiency standards. Likewise the updating is necessary when programs are added or changed or changes occur in the assumptions used to measure resource savings. In this Order the Board considers proposed modifications to the Protocols based on recommendations in a recent impact evaluation report discussed below.

Proposed Revisions to Protocols

In 2007 the Board retained the services of KEMA Inc. ("KEMA") to perform an impact evaluation of the NJCEP. The impact evaluation assessed actual, post installation, energy savings or renewable energy generation and compared the results to the energy saving of renewable energy generation estimates that result from the Protocols. KEMA assessed measures installed in 2006 or earlier. The impact evaluation measured the algorithms, inputs and baseline assumptions in the Protocols. The evaluation also assessed the gross and net savings. KEMA submitted its final impact evaluation report to the Board in September 2009. The report recommended numerous changes to the Protocols including modifying or updating the algorithms, inputs and baseline assumptions based on the results of its evaluation of post installation energy savings and renewable energy generation.

Prior to submitting its final report, KEMA prepared draft impact evaluation reports which were posted on the NJCEP website and circulated to the Energy Efficiency ("EE") and Renewable Energy ("RE") Committees of the New Jersey Clean Energy Council. The Office of Clean Energy ("OCE") solicited comments on the draft reports that were considered by KEMA prior to issuing its final report. By Order dated October 8, 2009, Docket No. EO09060460 ("October 8, 2009 Order"), the Board found that additional input from stakeholders was necessary prior to considering any changes to the Protocols and that a process must be set in place for obtaining input on the impact evaluation report and on proposed modifications to the Protocols recommended by KEMA and others. The October 8, 2009 Order announced a hearing would be held in Newark, New Jersey on November 6, 2009 and set a November 7, 2009 deadline for submission of written comments. The hearing was later postponed until November 13, 2009 and the deadline for submission of written comments was also extended to November 13, 2009 in response to a request from Rate Counsel. Notice of these changes was distributed to the clean energy listserves.

Rutgers Center for Energy, Economic and Environmental Policy (CEEPP) was engaged by the Board to provide certain services related to the evaluation of New Jersey's Clean Energy Program, including updating the Protocols. CEEPP prepared a redlined version of the Protocols that included all of the recommended changes to the Protocols from KEMA. The OCE circulated the redlined draft of the Protocols prepared by CEEPP to all of the entities that submitted comments on the draft KEMA reports including the Department of the Public Advocate, Division of Rate Counsel (Rate Counsel), the State's electric and natural gas utilities, the New Jersey Utilities Association (NJUA) and the Market Managers, Honeywell and TRC. The OCE held an informal stakeholders meeting on November 5, 2009 to discuss the redlined draft of the Protocols and to attempt to resolve any issues related to the proposed changes. The OCE, CEEPP, Rate Counsel, the utilities, the NJUA, and the Market Managers participated in the informal stakeholders meeting.

The OCE was able to reach an informal consensus regarding the vast majority of the proposed changes to the Protocols. CEEEP prepared a revised redlined draft of the Protocols that incorporated the changes agreed to at the November 5th stakeholders meeting which was circulated on November 10, 2009. Many of the comments discussed below were based upon the November 10th draft of the Protocols. A hearing was held on November 13, 2009. Representatives of CEEEP, Rate Counsel, the utilities, and Locus Energy spoke at the hearing.

Summary of Comments

Comments were submitted by Rate Counsel, the New Jersey Utilities Association ("NJUA"), the E Cubed Company, L.L.C. and Locus Energy. The following summarizes the written comments received and comments presented at the public hearing held on November 13, 2009 which was chaired by Commissioner Elizabeth Randall.

Rate Counsel raised several substantive issues regarding the proposed Protocols. Specifically, the Protocols contain a list of the uses for the Protocols including "Calculation of lost margin revenue recovery (as approved by the Board)." Rate Counsel objected to the inclusion of this item because it presumed Board approval of such recoveries and cited language from the August 7, 2009 Order approving the June 2009 Protocols that stated: "including a reference to the use of the Protocols to calculate lost margin revenues does not presume Board approval of such recovery" and "that in the event it approves such recovery, it is not bound to use these protocols in calculating any recovery." Rate Counsel's objection to this use of the Protocols to presumptively approve lost margin revenue recovery was previously raised and discussed in the August 7, 2009 Order.

Staff believes that Rate Counsel misinterprets the intent of the Board's August 7, 2009 Order. There, Staff disagreed with Rate Counsel's assessment of the Protocol's effect on lost margin revenue recovery approval. The Board explained in its findings that if it were to approve lost margin recovery, it was not bound by these Protocols in calculating such recovery. In addition, the Board found that using a consistent methodology to estimate energy savings and generation for all purposes is an important factor for keeping the language in the Protocols. August 7, 2009 Order p. 6. As stated in the August 7, 2009 Order, the words "as approved by the Board" were added to the June 2009 version of the Protocols to address Rate Counsel's initial concern. Staff believes that this reasoning continues to apply and this use of the Protocols should be retained.

Rate Counsel also submitted comments that addressed attribution and baseline issues. Regarding attribution, Rate Counsel agreed with KEMA's recommendation that the Protocols should no longer state that the net free riders and free drivers are assumed to be zero. Rate Counsel supported the language in the November 10th draft of the Protocols that addressed this issue by stating the Protocols estimate gross savings only.

Regarding baseline issues and KEMA's finding that additional work on spillover and free rider issues is incomplete, Rate Counsel noted that the OCE is currently coordinating with CEEEP to develop an evaluation plan. Rate Counsel stated that there is interplay between revisions to the Protocols and CEEEP's Draft 2009-2011 Evaluation and Research Plan. Noting that KEMA recommended additional focused analyses to improve Protocol values going forward, Rate Counsel stated its belief that these recommendations should be addressed as part of the impact evaluation follow-up research that it anticipates will be included in the final 2009-2011 Evaluation and Research Plan. Staff concurs with Rate Counsel that additional research to support and update the Protocols is required. Staff is currently coordinating with Rate Counsel

and other interested persons to work with CEEEP to develop a final evaluation plan. Rate Counsel also submitted a number of specific editorial comments which were addressed in the final draft of the Protocols.

The NJUA submitted comments on behalf of its energy utility members. The NJUA stated that the utilities are in general agreement with the recommendations made by KEMA and CEEEP as reflected in the November 10th draft of the proposed Protocols. There are, however, areas of the KEMA reports that the utilities believe require additional investigation and explanation, and thus should not be incorporated into the Protocols at this time. Specifically, the utilities raised concerns relative to the use of different methodologies between individual programs, in some instances yielding very different findings regarding similar equipment for those evaluations. The NJUA also raised concerns regarding the timeliness of some of the customer interviews conducted in connection with some of the evaluation reports. However, the NJUA notes that the proposed follow-up to the KEMA evaluations outlined at the November 5th meeting would allow the opportunity to develop more accurate data where needed.

The NJUA also submitted a number of specific comments which were incorporated into the final draft of the Protocols. The only change not accepted was NJUA's recommendation that the definition of "equivalent full load hours" be revised and included a proposed definition. Staff reviewed the proposed definition but considers the current definition clearer and more appropriate. Therefore, the definition of "equivalent full load hours" change recommended by the NJUA is not included in the final Protocol. The NJUA also requested clarification regarding the formula for calculating QIV savings. Specifically, the NJUA stated that the Protocols do not define an energy savings term and that it is not clear how kWh_p is computed. The algorithm for calculating QIV savings, which defines the energy savings term, is included on page 11 of the final Protocols and the kWh_p input to the algorithm is defined in the table on page 15.

Staff concurs with the general comments submitted by the NJUA and notes that the utilities are in general agreement with the November 10th draft of the Protocols which addresses the majority of the utilities issues. Staff agrees that there are yet unanswered questions as to the validity of some of the specific data findings contained in the KEMA report and as noted above, supports additional research related to many of the recommendations included in the KEMA impact evaluation report.

The E Cubed Company submitted comments on behalf of the Joint Supporters, a voluntary association that includes manufacturers, distributors, and installers of micro combined heat and power ("micro-CHP") systems. The issues raised by E Cubed relate to program management and are not addressed as part of the Protocols. Staff will coordinate discussions with the Market Managers to further consider these comments.

Mr. Gabe Abbott of Locus Energy testified at the public hearing. Mr. Abbot requested "some sort of revenue rate monitoring solution not only to monitor the system to make sure that it's performing well, but to provide ancillary benefits like automated reporting." Staff understands that Mr. Abbott believes that metering should be required for all solar systems including those under 10 kW. Staff is exploring this option in the context of proposed modifications to the Renewable Portfolio Standards regulations being developed for consideration by the Board.

Discussion and Finding

The Board begins its review by considering the process which led to the revised Protocols now before the Board for review. The October 8, 2009 Order announced a hearing would be held in Newark, New Jersey on November 6, 2009 and set a November 7, 2009 deadline for submission of written comments. Interested stakeholders were later notified through the listserv of the change in the hearing date and received an additional opportunity to comment on the protocols. Therefore, the Board **HEREBY APPROVES**, as within time, Staff's request to postpone a hearing and Rate Counsel's request to extend the date for written comments to November 13, 2009.

The Board carefully considered KEMA's impact evaluation report and the public comments concerning a draft version of the report. In addition, the Board held a hearing to develop the record on this matter. Based on the KEMA's impact evaluation report, comments, and recommendations of Staff, the Board believes a revision of the Protocols is necessary. The Board **HEREBY FINDS** that the Protocols should be updated from time to time so that they are current with federal and State codes and standards are reflective of current technologies and building practices and other changes in the marketplace, including the addition of new NJCEP programs and program components, and are informed by any other changes in the assumptions used to measure resource savings. The Board **FURTHER FINDS** that the impact evaluation performed by KEMA assessed actual, post installation, energy savings or renewable energy generation and compared the results to the energy saving or renewable energy generation estimates that result from the Protocols.

Subsequent to the October 8, 2009 Order and, in addition to the November 13, 2009 hearing, the OCE conducted an open process and public process to solicit feedback from interested stakeholders. This process included the use of informal working groups. This process was ultimately successful in reaching a general consensus regarding proposed changes to the Protocols. The Board **HEREBY FINDS** that Staff solicited input from the public and circulated several revised drafts of the Protocols. The Board **FURTHER FINDS** that the November 10th draft of the Protocols prepared by CEEEP reflected the input of the participants in the process.

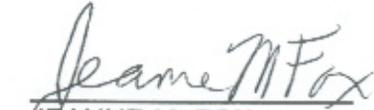
The Board appreciates stakeholder feedback regarding KEMA's impact evaluation report. The Board agrees with Staff's recommendations and approves of efforts to continue to develop and coordinate accurate energy savings and renewable generation estimates. The Board also agrees that Rate Counsel's concern that the Protocols presume lost margin revenue recovery approval is misplaced. As addressed in the August 7, 2009 Order, the Board retains the authority to decide whether to utilize the existing protocols or another methodology when calculating lost revenues. Therefore, the Board **HEREBY CONCLUDES** that including a reference to the use of Protocols for calculating lost margin revenue recovery does not presume Board approval of such recovery. The protocols have been modified to state that lost margin revenue recovery is subject to Board approval.

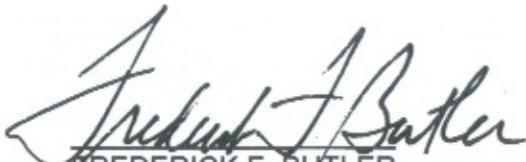
For the foregoing reasons, the Board **HEREBY FINDS** that the proposed Protocols include a reasonable methodology and are appropriate for estimating energy savings and renewable and distributed generation. The Board **HEREBY APPROVES** the *Protocols for Measuring Resource Savings* dated December 2009 for use commencing on January 1, 2010.

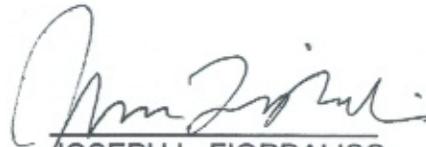
The Board **FURTHER FINDS** that ongoing program evaluation is necessary to support additional updates to the Protocols and **HEREBY DIRECTS** the OCE to continue coordinating the development of an evaluation plan.

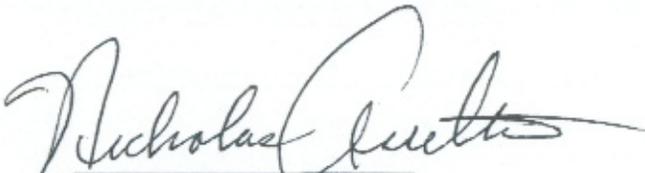
DATED: 12/17/08
December 17, 2009

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

