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DEPARTMENT OF THE PUBLIC ADVOCATE
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August 5, 2009

Via Electronic Mail and Hand Delivery
Hon. Kristi Izzo, Secretary
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102

Re: In the Matter of the New Jersey Clean Energy Program - Acceptance of the Northeast Energy Efficiency Partnerships, Inc. (NEEP) March 2009 Report "An Energy Efficiency Strategy for New Jersey Achieving the 2020 Master Plan Goals"
BPU Docket No. EO08040271

Dear Secretary Izzo:

Enclosed please find an original and ten copies of supplemental comments submitted on behalf of the Department of the Public Advocate, Division of Rate Counsel, in connection with the above-captioned matter. The enclosed comments address the cost benefit analysis section of NEEP's report. Copies of the comments are being provided to all parties by electronic mail and hard copies will be provided upon request to our office.

We are enclosing one additional copy of the testimony. Please stamp and date the extra copy as "filed" and return it to our courier.

Thank you for your consideration and assistance.

Respectfully submitted,

RONALD K. CHEN
PUBLIC ADVOCATE

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Commissioner Elizabeth Randall
Commissioner Nicholas V. Asselta
Service List (via electronic mail)

Supplemental Comments of the

New Jersey Department of the Public Advocate,

Division of Rate Counsel, addressing

An Energy Efficient Strategy for New Jersey Achieving

the 2020 Master Plan Goals, March 2009

Prepared by the Northeast Energy Efficiency Partnerships, Inc.

BPU Dkt. No. EO08040271

August 5, 2009

Introduction

The within comments address Northeast Energy Efficiency Partnerships, Inc. ("NEEP") report commissioned by the New Jersey Board of Public Utilities ("Board", "BPU"), providing information and advice pertaining to how New Jersey can achieve the Energy Master Plan's ("EMP") goal of reducing building sector energy use by twenty percent by 2020. At its April 16, 2009 agenda meeting, the Board accepted NEEP's March 2009 ("NEEP Report", "the Report") report for comment.

The New Jersey Department of the Public Advocate, Division of Rate Counsel ("Rate Counsel") submitted its initial comments on the NEEP Report on June 1, 2009. At that time, more detailed information about NEEP's cost benefit analysis was not available and Rate Counsel reserved its right to provide further comments on that section of the NEEP Report at a later time. Since then, NEEP has provided additional information about its cost benefit analysis. These supplemental comments address the results of the cost-benefit analysis which were included in the NEEP Report. The cost-

benefit analysis is described in the NEEP Report section entitled "Savings, Costs & Benefits", pp. 157-176, and the results of NEEP analysis are cited briefly in the Executive Summary of the Report.

NEEP's Cost Benefit Analysis

In the "Savings, Costs, & Benefits" section of the NEEP Report, NEEP describes an analysis of the costs and benefits of procuring additional savings from energy efficiency ("EE"). The quantity of additional EE analyzed was that amount approximately sufficient to achieve the State's Energy Master Plan ("EMP") goals of a twenty percent reduction in energy consumption in buildings and industry by 2020. On June 2, 2009, Rate Counsel's consultants had the opportunity engage in a limited review of the methods and data employed by NEEP's consultants, Optimal Energy and Vermont Energy Investment Corp. (collectively, "the analysts", "NEEP's consultants"), to prepare the cost-benefit analysis of EE described in The NEEP Report. The following comments are based on that review.

While it is certainly correct to characterize the cost-benefit analysis as a "high level analysis", as NEEP does on page 165 of its report, Rate Counsel would suggest that the analysis also be considered only as "indicative." For many of the input assumptions the analysts were unable to develop new data or New Jersey-specific data, but rather relied on data from previous work the analysts had done or were familiar with. This does not mean the cost benefit analysis is of no value, but rather means its results should be considered as only indicative of the likelihood that (1) EE to meet EMP goals can be procured, and (2) it can be procured at a total resource cost significantly less than the

total resource benefits it would yield. In sum, the resulting analysis cannot be considered a definitive assessment of EE costs and benefits to New Jersey.

However, the NEEP cost benefit analysis may be considered as affirming the overall result of the Rutgers Center for Energy, Economic, and Environmental Policy ("CEEEP") analysis conducted in support of the EMP, namely, that EE measures sufficient to achieve EMP goals are available at a lower total cost than the associated benefits. The NEEP cost benefit analysis also encompassed distributed generation, basically combined heat and power.

The NEEP analysis is more detailed than the corresponding CEEEP analysis for the EMP, especially on the demand side where NEEP quantified and analyzed thousands of EE measures. The approach used by the analysts engaged by NEEP explicitly modeled the penetration of EE measures with and without programs and policies to support them. In this way, an attempt was made to incorporate and properly account for "naturally occurring" EE savings that would be expected without further EE programs.

However, Rate Counsel notes that in order to model sufficient EE measures to approximate the EMP goals, the NEEP analysts had to assume that two novel policy measures are adopted: first, mandatory disclosure of the intensity of energy use by a seller at the time of a building's sale, and subsequently, a policy of mandatory upgrades of the energy efficiency of buildings as a condition of sale. These new policies had to be assumed particularly for the residential sector savings to provide an adequate contribution to the EE savings required overall. Here, Rate Counsel notes that it is reasonable to suppose that any attempt to implement such new policies could be more controversial than the types of EE programs developed and fielded in the State have been to date.

Furthermore, implementing such measures in today's real estate market downturn might not be might be feasible or advisable.

While the analysis conducted by NEEP's consultants conforms to the methodological description contained in the NEEP report, the Report's description does not explicitly point out that much of the residential EE analysis was derived from simply scaling a previous analysis for Long Island, NY to the level of activity in New Jersey, based on the relative levels of energy demand between the two. Such a scaling is not implausible, but it must be recognized as an approximation.

NEEP estimated the avoided cost benefits of EE in its analysis based on projections of avoided electricity and natural gas costs that it obtained from CEEEP in late 2008. To the extent that certain of those CEEEP projections are not reasonable, the corresponding NEEP estimates of avoided cost benefits of EE are problematic. Two examples are as follows:

- Two of the CEEEP projections that NEEP used to estimate avoided electricity cost benefits of EE are not reasonable: (1) avoided capacity costs and (2) avoided Local Transmission and Distribution ("T&D") system costs. The CEEEP projection of avoided capacity costs is higher than the values established in the PJM capacity market. Without any supporting rationale this estimate is unreasonably high. On the other hand, the CEEEP projection of avoided local transmission and distribution costs, at zero, is unreasonably low in the absence of any supporting rationale. It is not reasonable to assume avoided local T&D costs are zero unless that assumption is supported by an analysis prepared specifically for New Jersey. All else equal, most energy efficiency programs produce avoided T&D savings, not only reductions in losses on the T&D systems, but also avoided T&D capital costs.

- NEEP used CEEEP projections of retail gas prices to estimate avoided natural gas cost benefits of EE. Using retail price projections over-estimates the gas costs avoided by EE and is not reasonable. Calculation of avoided gas costs should be composed of avoided gas production costs, forecast wholesale transportation costs from major gas producing areas to the city-gate receipt points of NJ gas distribution utilities, and avoided local distribution costs, i.e., from the city-gate receipt points to the meters of retail customers.

It is difficult to calculate what effects, in total, better assumptions for the above avoided cost elements would have had upon the NEEP results.

In quantifying the costs of all the EE modeled in its analysis, NEEP included the estimated incremental costs of EE measures, and added the estimated administrative and marketing costs of utilities or other program administrators. It is important to note that NEEP did not assume that any portion of the costs of EE would be amortized over time and earn a rate of return for utilities. Any such utility earnings would be in addition to the EE costs that are approximated in NEEP's indicative analysis.

While the cost benefit analysis in NEEP's Report can be considered only high-level and indicative, the kind of detailed modeling employed by NEEP's consultants could be used to perform an updated analysis of the economic potential for EE in the State. The basis for such a study would have to be extensive and detailed data collection that is both current and specific to New Jersey. A well-grounded study of the detailed potential for cost-effective EE could be very useful to guide EE program development as EE functions are transitioned to the utilities. In particular, such a study could provide a road map to where efficiency gains can be achieved that maximize savings to ratepayers while incurring the lowest feasible costs for those savings.

Rate Counsel reserves its right to submit further comments on cost benefit analysis and other reports as new information is provided by NEEP.