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September 20, 2012

Via Overnight Delivery and Electronic Mail

Honorable Kristi Izzo, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, New Jersey 08625-0350

**Re: "New Jersey Energy Efficiency Market Potential Assessment"
(EnerNOC report, dated August 31 2012)**

Dear Secretary Izzo:

Enclosed please find an original and ten copies of comments submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in connection with the above-captioned matter. Copies of the comments are being provided to all parties on the e-service list by electronic mail and hard copies will be provided upon request to our office. Rate Counsel notes that at the time of the Office of Clean Energy's request for comments, dated September 11, 2012, only the body of the EnerNOC Study was available (Volume 2). However, the Study's Appendices (Volume 3) were only made available on September 19, 2012. Therefore, Rate Counsel respectfully reserves its right to submit supplemental comments upon further analysis of the EnerNOC Study with reference to the material that was only provided yesterday.

We are enclosing one additional copy of the comments. Please stamp and date the extra copy as "filed" and return it in our self-addressed stamped envelope.

Honorable Kristi Izzo, Secretary
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Thank you for your consideration and assistance.

Respectfully submitted,

STEFANIE A. BRAND
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**“New Jersey Energy Efficiency Market Potential Assessment”
(EnerNOC, August 31 2012)**

**Comments of the New Jersey
Division of Rate Counsel**

September 20, 2012

The Division of Rate Counsel (“Rate Counsel”) would like to thank the New Jersey Board of Public Utilities (“BPU”), Office of Clean Energy (“OCE”), the Rutgers Center for Energy, Economic and Environmental Policy (“CEEPP”), and EnerNOC for the opportunity to comment on EnerNOC’s energy efficiency (“EE”) market assessment study for New Jersey, entitled “New Jersey Energy Efficiency Market Potential Assessment” dated August 31, 2012 (“EnerNOC Study”, or “the Study”). On September 10, 2012, EnerNOC presented the EnerNOC Study to the Clean Energy Program (“CEP”) Energy Efficiency Committee.

In general, Rate Counsel is pleased with the transparency and level of detail of the EnerNOC Study. However, Rate Counsel has a number of concerns and reservations on the EnerNOC Study. Rate Counsel’s questions and comments are on the following topics:

- Study Results
- Avoided Costs
- Incentive Scenario
- Baseline Assumptions

These topics are addressed in the comments below.

Moreover, Rate Counsel would like to note that stakeholders received the final measure data assumptions (Volume 3 of the EnerNOC Study) on September 19, the day before comments were due. The receipt of this data on September 19 did not leave Rate Counsel with adequate time to review and comment on the assumptions contained in Volume 3. Rate Counsel respectfully reserves the right to provide additional comments upon review of Volume 3 of the

EnerNOC Study, with appendices. Therefore, these comments are limited to the EnerNOC Study, Volume 2.

I. Study Results

Rate Counsel has significant concerns about the presentation of the analysis and the results of the Study.

First, an estimate of summer peak load reductions from electric energy efficiency programs is not provided anywhere in the Study. Peak load reduction data are a critical piece of information for determining regional generation capacity needs; the omission of these data from the Study constitutes a major oversight. EnerNOC should provide this data as an addendum to the Study, or modify the Study.

Second, all energy efficiency savings results in the EnerNOC Study include the impact of fuel switching between electricity and natural gas.¹ While Rate Counsel believes that EnerNOC's fuel switching analysis is useful, such an analysis should have been conducted as part of a multi-scenario approach outside of the Study's main results for the following reasons: (1) existing energy efficiency programs in New Jersey are not designed to encourage fuel switching between electricity and natural gas; (2) the current cost-benefit screening models utilized by the CEEEP and New Jersey utilities are not designed to conduct appropriate fuel switching economic screening analyses; and (3) fuel switching itself is a controversial issue which calls for a separate comprehensive and transparent analysis. Notwithstanding these concerns, stakeholders in the EnerNOC Study review process have not been given an opportunity to discuss the fuel-switching issue, nor have they reviewed and agreed upon appropriate underlying assumptions (such as the

¹ See pages 6-1 and 7-1 of the EnerNOC Study, as well as the data tables showing the impact of fuel switching, such as Tables 7-1 through 7-8.

true costs of switching to gas or electric heat pumps which would include the cost of upgrading an electric panel or upgrading gas service meters and gas supply pipes within a building.) Electricity and natural gas savings estimates should have been presented without fuel switching impacts for the “achievable low”, “achievable high”, “economic”, and “technical” potential. It would have been more appropriate to consider fuel switching as part of a multi-scenario analysis and confine the results of the fuel switching analysis to Chapter 9 of the Study. EnerNOC should provide this data as an addendum to the Study or modify the Study.

Lastly, the difference between the EnerNOC Study’s results and the results of the other studies shown on page 11-2, especially the results for natural gas potential, calls for a more thorough explanation. On pages 11-1 to 11-2, the EnerNOC Study compares its findings on natural gas savings potential in New Jersey with an estimate from a recent study conducted for Delaware by the University of Delaware.² Rate Counsel does not agree with the statement in the Study that “in general, the results that we produced are on a reasonable par with these studies.” (Page 11-1) Given that the Delaware study found nearly twice as much natural gas savings per year, EnerNOC should have explained why the University of Delaware’s estimates are so much higher than EnerNOC’s estimates.

II. Avoided Costs

The EnerNOC Study does not provide sufficient information on the avoided cost estimates that EnerNOC used for its economic screening. First, the Study does not cite a specific document as the source of the avoided cost assumptions. Second, the Study is not clear concerning what types of avoided costs were used. Table 2-12 provides no description beyond

² Center for Energy and Environmental Policy, University of Delaware, “Delaware’s Energy Efficiency Potential and Program Scenarios to Meet Its Energy Efficiency Resource Standard.”

“Forecast of average energy and capacity avoided costs and retail prices.” Finally, EnerNOC should clarify whether avoided transmission and distribution capacity and other cost factors such as the avoided cost of emissions were also included.

The Study also provides misinformation on the source of the avoided cost estimates. Rate Counsel is cited as a key source for electricity and natural gas prices on pages 2-15, 2-19, and 2-23, yet Rate Counsel did not provide any estimates on avoided costs for publication. Rate Counsel provided informal data upon a request by the CEEEP, EnerNOC, and the OCE for additional analysis. Therefore, Rate Counsel objects to the inclusion in the EnerNOC Study of the avoided cost estimates being attributable to Rate Counsel.

Lastly, the presentation of avoided cost data is confusing in places. In Table 2-12, entitled “Data Needs for the Baseline Forecast and Potentials Estimation in Load MAP,” “electricity and natural gas prices” would be more accurately called “retail electricity and natural gas prices and avoided costs of electricity and natural gas.” On page 2-15, forecasts of avoided costs are described as a part of economic projections for New Jersey. Rate Counsel views avoided costs separate from economic projections.

III. Incentive Scenario

The “Achievable High adoption rates” discussed on page 2-24 are estimated based on a scenario in which high incentives are provided to customers. However, the proposed funding levels for New Jersey’s 2014 to 2017 Comprehensive Resource Analysis (“CRA”) assume that a significant portion of energy savings will come from financing instead of rebates.³The Study

³ On August 22, 2012, the OCE circulated a straw proposal for the CRA 2014-2017 funding levels (BPU Docket No. EO11050324V). The CRA matter is pending, with public comments due no later than October 22, 2012.

should have described whether and how using financing instead of rebates would affect the assumptions used to estimate adoption rates.

IV. Baseline Assumptions

The Study does not clearly explain how naturally occurring energy efficiency was estimated and excluded from the baseline energy forecasts. In addition, assumptions regarding savings from existing utility and CEP EE programs and whether current levels of annual savings from these programs were incorporated into the baseline (i.e., with the savings from these programs are expected to continue at current levels into the future) are not described adequately in the Study.

The EnerNOC Study states that no new EE programs are included in the baseline. This is ambiguous. For the EnerNOC Study baseline, it appears that the State is assumed to not have any EE programs beginning in 2013, as though the existing CEP and utility-administered EE programs cease to operate. It is not clear how or whether effects of the historical CEP and utility-administered EE programs (i.e., those in operation through 2012) are excluded from the baseline energy demand forecast for 2013 through 2016 for efficiency measures where the market has not yet undergone a permanent transformation.

On page 2-19, the EnerNOC Study states that baseline purchase shares were developed for each efficiency level (based on manufacturer shipment data for recent years) and these values were held constant through the study period, but it is not clear whether the purchase shares are adjusted to account for the impacts that are occurring now because of the currently existing programs but which would not occur in the absence of these programs. If the baseline forecast does not assume that currently existing energy efficiency programs continue, then purchase shares of different kinds of equipment/technology should have been adjusted to reflect the

removal of incentives currently in place that promote the purchase of more efficient equipment. From the discussion found in the EnerNOC Study, it is not clear whether or how EnerNOC handled these effects when forecasting the baseline.

Finally, Rate Counsel notes that EnerNOC relies on EIA AEO 2011 for various key assumptions related to baseline forecasts such as market size, annual intensity, customer growth, equipment purchase share, building areas, industrial employees. EnerNOC should have used the final EIA AEO 2012, released in June 2012, for these critical assumptions.