December 31, 2015

Via Hand Delivery

Ms. Lora W. Johnson, CMC
Clerk of Council
Room 1E09, City Hall
1300 Perdido Street
New Orleans, LA 70112

Re: ENO Initial Report and Comments on Net-Metering

Dear Ms. Johnson:

Enclosed please find an original and two copies of the Alliance for Affordable Energy's comments on ENO's report and comments on net metering. Please file the attached Comments and this letter in the record of the proceeding in accordance with normal procedure.

Thank you for your time and attention.

Sincerely,

Casey DeMoss
Alliance for Affordable Energy

Cc: Official Service List

BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: EXAMINATION OF	**)**	
OPPORTUNITIES FOR AND EFFECTS OF	**)**	
CONSUMER-BASED RENEWABLE	**)**	**DOCKET NO UD-13-02**
TECHNOLOGIES IN THE CITY OF	**)**	
NEW ORLEANS	**)**	

COMMENTS OF THE ALLIANCE FOR AFFORDABLE ENERGY

The Alliance for Affordable Energy (hereinafter "the Alliance") is thankful for the opportunity to comment on renewable energy in New Orleans. Solar PV energy has seen tremendous growth in Louisiana, particularly New Orleans over the past several years. It is remarkable that New Orleans finds itself as a distinguished Solar City leader. Currently New Orleans ranks 6th in the nation for per capita solar PV. New Orleans also has an impressive diversity of families with solar, especially following hurricane Katrina. Unlike many cities with solar customers in only a handful of affluent neighborhoods, solar can be seen across all socio-economic levels, offering clean affordable energy to a variety of families. Not only this, solar installation has become a locally grown industry offering good jobs and revenue for the city.

We are pleased that ENO recognizes the importance of distributed generation and a customer's right to self-generate. ENO also recognizes that DG brings significant benefits including avoided energy costs (fuel and purchased power), avoided generation capacity costs (new power plants), avoided pollution costs (MATS, SOX, NOX, CSAPR), and avoided climate change pollution (carbon dioxide, methane, and nitrous oxide)[1].

The issue of "cross subsidization" is an argument championed by utility companies across the United States. ENO is no different. The claim is that solar PV costs are greater than its benefits but cites no evidence to support this claim. It is clear to the Alliance that the chief concern of utilities is Lost Contribution to Fixed Costs. Under energy efficiency rules the utility is allowed to earn back some of the savings achieved by the energy reductions; this is an incentive for the utility, which is reasonable since all ratepayers pay for the energy efficiency measures. However, for solar PV, the utility does not pay for the cost associated with the energy reductions and thus, is not entitled to any of the savings achieved.

ENO and other utilities compare residential customers to Qualifying Facilities (QF) and argue that residential solar PV customers should be treated as industrial merchant generators. The Alliance rejects this idea outright. The difference in scale between a solar customer and a QF is ludicrous. The estimated avoided cost for a QF is based on 100 to 1000 MW blocks of purchases. An average solar net-metered customer in New Orleans is about 6 kW; that's .00006 to .000006 of a percent of a QF block[2].

[1] ENO cited in its March filing that there are no laws about regulating carbon emissions but that is no longer correct. The Clean Power Plan adopted by the EPA is now in force under 111(d) of the Clean Air Act. Further, the US made global commitments at COP21 to reduce carbon emissions.

[2] Average solar system size is 6 kW. ENO cited 8.3 kW in its illustrations.

Net-metered customers do not fit the definition of a Qualifying Facility. A QF is defined as either:

1. a small power production QF produces 80MW or less of renewable power with a **minimum 500kW** output and sells that power to the utility
2. a cogeneration QF produces electricity and another form of useful thermal energy in a way that is more efficient than the separate production of both

A net-metered customer does not fit into either group. A typical residential system is between 3.5 and 7kW. Far below the 500kW minimum. Further, small solar systems fail the "Fundamental use test" in PURPA rule 18 CFR 292.206(d)3.

Utilities argue that it is expensive and operationally complicated to provide backup power to large industrial plants but it is NOT expensive or operationally complicated to provide back-up power to residential and commercial customers. Hence, it is unreasonable to assess cost assumptions of huge systems onto small systems.

Though ENO makes assertions that variable charges have dropped, they have not been interested in opening a rate case to adjust their rates to account for the loss. This failure implies that the company has not suffered losses due to solar.

Incentives for PV adoption have changed significantly since ENO's March filing. First, Entergy Corporate's lobbyists successfully persuaded the Louisiana Legislature to dramatically cut the solar tax credit. In addition, Commissioner Skrmetta and Commissioner Holloway According to experts in the local solar industry, the majority of the state tax credit allowances for 2015, 2016 and 2017 have already been spent. We will know more once residents file their 2015 tax forms. That said, the number of systems expected to join the grid is considerably less now that the state tax credit is likely expended.

In Response to ENO's list of Potential Options:

1. Cap - The Alliance would entertain a cap on NEM of 10%. This seems to be the general threshold where a cost shift from non-NEM to NEM customers is real.

2. Avoided Cost of Excess –Avoided cost is the incremental cost to an electric utility of energy or capacity which, but for the purchase from the QF, such utility would generate itself or purchase from another source. PURPA rule 18 CFR 292.101(b)(6). Ergo, what is the avoided cost for the Utilities to purchase or generate 500kWh if they did not receive that power from the solar customer? Again, the scale is too small to make sense.

   Hence, the Alliance rejects the idea of avoided cost. We would, however, discuss options around Locational Marginal Pricing (LPM). Note, the Alliance rejects the utility perspective that self-generated energy that is used behind the meter is somehow retail rate. The energy a customer generates that does NOT hit the grid is not in play. The utility has NO legal right to that energy and therefore cannot offer the customer the enjoyment of a full retail credit. This is disingenuous. We agree that if there were a shift to LPM, then solar system size limits should be discarded.

3. T&D charges – The Alliance does not support this option. The utilities in Arizona revealed a flaw in the policy. Basically, they were allowed to raise the charge at any time, without much justification, and little oversight.

4. VOST – This is an interesting concept and the Alliance would support discussing this idea further. VOST has offered a policy solution in other jurisdictions, taking into account line loss savings, energy savings, capacity savings, hedging on fuel volatility, and environmental benefits, and we certainly support considering these benefits alongside costs.

The Alliance takes issue with the NREL report cited by ENO on page 4 because the Alliance has serious concerns about the validity of this report. These concerns are included in Appendix A.

The Alliance agrees that a good policy that works for all stakeholders can be found and implemented. Policy that allows solar customers their right to self-generate, allows utilities to plan and cover their costs, protects non-solar customers, and supports local solar job growth. New Orleans has an opportunity to continue to lead in the region on clean distributed generation, while diversifying the city's energy mix and improving resiliency.

Respectfully submitted,

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Casey DeMoss
C.E.O.

Appendix A: Feedback on Entergy New Orleans' Solar PV Pilot Study

The Data

Data collection was obviously a serious problem. The study's protocol for data collection did not address the requirements of the equipment. The Quality Control around collection was very poor. The report claims "the data . . . is sufficient to support the findings of this report." We strongly disagree. The following points are by no means comprehensive but do outline the biggest flaws, which call the report's findings into question.

1. The report claims that there were 29 valid sites but only 18 sites had the proper 12 months of data (section 3.2 pg. 18 "18 residences with a complete year of energy consumption").
2. Lack of data storage was listed as a problem in section 2.5.3 because the brand of equipment only held 1 month of data. Yet, in section 2.5.1, it states that data was manually collected every 2 months. We do not believe that data storage was actually the problem, rather the inconceivably poor study protocol to collect data every 2 months on equipment that only held 1 month worth of information.
3. Poorly operating equipment was listed as a problem. For a study that depended on good information, it is assumed that functional equipment would have been a high priority. It is noted that a router was "periodically malfunctioning" but the reader is not told how this was handled or which data point this corresponded to.
4. The report admits significant problems but then states, "missing or inaccurate data is not uncommon. The best way to ensure quality data is to monitor for missing data on a regular basis." It is clear from the report that the monitoring of missing data did not happen. Examples:
    a. The report states that data collection equipment was recording over uncollected data.
    b. One set of data had no known location and no PV production information. Since data was collected every two months, we must assume that no quality control or monitoring of data was happening since it took 12 months to figure out that 1 site had recorded nothing.
    c. Only 1 of the 3 commercial sites recorded data.
5. Maintenance costs are well beyond actual costs; for the typical NOLA home, this adds up to +$120/year. There is no reference to the $20/kW per month maintenance cost figure.
6. Fuel adjustment fees were not included in the kWh cost.
7. For figures 10-16, line graphs were used for discrete data points. This does not make sense. Histograms with error bars should have been used.
8. The report claims that, "Many service calls occurred during the pilot." The service call info was not included on Table 1.

The Analysis

The main thrust of the analysis studied issues that did not add to our understanding of the costs and benefits of solar in New Orleans. Typically, statisticians work to limit error but in this analysis the authors actually introduce error. The only significance we found in the analysis was the errors in judgment.

1. There was no randomization of the PV sites. This means that a normal distribution cannot be assumed calling into question the confidence interval and CV.
2. The authors interpolated data, adding error (noise). The proper protocol is to not include the months with missing data.
3. The authors removed outliers with no justification. Proper analysis requires some kind of justification such as a scatterplot showing the outlier.
4. The analysis focuses on issues that are either obvious or nonsensical.

a. Percent of energy consumption met by solar is a major focus of the analysis. But what is this really telling us? More energy efficient homes have a higher percent of their energy consumption met by solar. This is provable by simple math and does not require collecting any data. To illustrate:

	Solar output	**Average kWh usage of home**	**% of solar meeting usage**
Energy efficient solar home	500 kWh	750	67%
Typical solar home	500 kWh	1200	42%

b. There was much attention in the analysis to differences between city districts. The distance between districts is insignificant in terms of weather events. This provided no new information about solar's cost or benefits in New Orleans.

5. Sample size inputs are not referenced making it impossible for the reader to verify the accuracy of the calculation.
   a. CV: where did the 10% number come from? Report cites "similar data output" but gives no supporting documentation. Did the CV come from a calculation of the PV fleet maximum output variability? Were the systems assumed to be uncorrelated? From the Alliance's research, uncorrelated pv systems of close proximity have higher than a 10% CV. An increase in CV would have a direct effect on sample size: CV of 15%, 20%, and 25% require a minimum sample size of 31, 61, and 93 respectively.
6. The standard deviation (confidence) was set to 2. Was the s.d. chosen based on required reserve capacity? There was no documentation for the data inputs.

Entergy's PV report forces the reader to work very hard to ascertain important information; the reader must wade through irrelevant and repetitive information. Findings that are presented in the executive summary and conclusion are not explained in the body of the report. There are blatant errors in the summary and conclusion. Hence, the findings cannot be justified by the data or analysis.

CERTIFICATE OF SERVICE

I hereby certify that I have this 31st day of December, 2015, served the required number of Copies of the foregoing pleading upon all other known parties, of this proceeding, as listed below, by electronic mail.

Respectfully submitted,

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New Orleans, LA 70125

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