

## MEMORANDUM

To: Alliance for Affordable Energy  
cc: Distribution List for DOCKET NO. UD-17-03  
From: Cliff McDonald and Jeff Loiter  
Date: 24 April 2018  
Subject: Responses to the comments submitted by the Alliance for Affordable Energy on the proposed measure list and other aspects of the DSM Potential Study

### GENERAL CONCERNS

***The Alliance requests a separate scenario specifically designed to achieve the Council's 2 percent annual savings target***

Our goal is for the study to provide an independent and unbiased assessment of the available potential in New Orleans, and do not believe that creating a scenario where we presuppose 2 percent annual savings to be either consistent with that goal or particularly informative. Although the RFP referenced the 2 percent goal in its introduction, it never called for a specific scenario based on this goal, and neither our proposal nor our detailed work plan includes budget for such a scenario. Assuming the cost-effective efficiency in New Orleans exceeds 2 percent per year, developing a scenario to equal the 2 percent exactly (or nearly so) would require an exercise in "goal-seeking" through adjustments to incentive amounts and program delivery models to achieve this. This is beyond the scope of our effort, nor is it feasible to ask of our Delphi panels who will be developing measures penetrations as a function of incentive coverage.

That said, we expect the results of the study to significantly inform Entergy, the Council, and other Stakeholders on whether the 2 percent target is achievable, how easily, and at what cost.

***The Alliance wants to ensure that the results of the study can inform a capacity savings target to compliment the 2 percent energy savings target***

All three aspects of our study – efficiency, demand response, and rate structures – will result in reported peak capacity savings in addition to energy savings. These reported values may be used to inform capacity savings targets.

***The Alliance requests that all Entergy customers are included in the potential estimate***

All customers will be included in the efficiency estimate. There will be no “carve-outs” for commercial and industrial customers who might “opt-out” of efficiency programs if given the option in the future.

***The Alliance recommends that a societal discount rate is used for the potential study***

As stated in our work plan, a lower societal discount rate will be used for the primary discount rate for the study, with a discount rate equal to the weighted average cost of capital (WACC) to be evaluated in a sensitivity analysis.

***The Alliance requests special examination of the savings available from certain large commercial and industrial Entergy customers***

It is not in the scope of the study to evaluate efficiency opportunities at specific facilities or classes of facilities. That said, the measure list includes efficiency opportunities applicable to the vast majority of the energy consumption represented by the customers mentioned in the Alliance comments. For example, the Alliance calls out laundromats as a customer type to examine separately. The hot water load from the laundromats will appear in our top down load forecast disaggregation by end use. Commercial laundry measures are applicable to this segment of energy usage. In this way, we will ensure that the opportunities in laundromats are reflected in this study. A similar approach will be used to ensure that the study will reflect savings opportunities at all the other mentioned customers.

For the Sewerage and Water Board, it was our understanding that this customer produces the majority of its own energy usage and furthermore that this energy usage is not included in the load to which ENO’s Integrated Resource Plan is applicable. To accurately account for potential efficiency opportunities for this customer, we will evaluate the energy use of the Sewerage and Water Board that is reflected in the IRP forecast and thus eligible for efficiency measures and inclusion in this potential study. If this represents a significant savings opportunity, we will develop one or more measures that apply to this customer’s unique energy usage patterns.

***The Alliance requests that battery storage technologies to be included in the demand response section of the study.***

It is our understanding that the IRP rules call for distributed generation and energy storage to be included in the load forecast. These technologies will therefore be included in the baseline forecast used in the study and are out-of-scope for further evaluation. This includes both battery storage and thermal storage technologies.

***The Alliance recommends the inclusion of efficiency measures applicable to electric vehicles and related infrastructure***

We will evaluate to what extent sales related to electric vehicles is included in the IRP load forecast. If it is a significant amount, we will include one or more efficiency measures related to elective vehicle charging infrastructure.

***The Alliance requests clarification on the avoided costs to be used in the study, which includes values for reliability externalities, fuel costs, and the price effect of demand reduction.***

To the extent electric measures also cause a reduction in gas or oil usage, we will include these benefits in the study. However, reliability externalities and the price effect of demand reduction are hard-to-value impacts that, in order to be useful, require separate studies and/or a thorough vetting process to gain widespread agreement and acceptance among a variety of stakeholders. This study or consensus process is not in our scope or budget, and adding highly uncertain estimates would detract from the reliability of the study with little likely impact on the final potential estimates. Therefore, they will not be included, but the report will note these and other benefits that are not included and indicate, qualitatively, the effect of this on study outputs.

***The Alliance wants more opportunities for feedback earlier in the process, and would ideally want more review time.***

We recognize the value of stakeholder feedback throughout the potential study process. However, the potential study has only a short time to produce results for inclusion in Entergy's IRP process. We therefore need to strike a balance between stakeholder review and maintaining the schedule. We acknowledge the Alliance's point that the original schedule did not allow for sufficient feedback in the process. To that end, as discussed in the kick-off meeting, we will conduct an in-person meeting to present the draft achievable potential results to all stakeholders. We will accept comments on the results within a reasonable period of time after the meeting, to which we will provide responses and, if appropriate, revise the study. Because our scope is limited to three in-person meetings, this new meeting will replace the presentation of final results. Thus, instead of the kick-off meeting, a meeting to present the draft report, and a meeting to present the final results (which would provide only two opportunities for feedback), we will have the kick-off meeting, a meeting to present the draft results, and a meeting to present the draft report (resulting in three opportunities for feedback). After each meeting we will carefully examine the schedule and, if possible without delaying the project, allow for more than a week for review and feedback.

*The Alliance requests that the study include a measure that encompasses future savings from technologies that are currently unknown but that will become available during the study horizon.*

The costs, savings, and penetration of such measures would by definition be largely arbitrary, and we do not believe that including such savings would improve the value or credibility of the study. We will, as the measure list indicates, include all currently known cost-effective technologies.

## **MEASURE LIST COMMENTS**

### **General Measure List Comments**

*The Alliance asks what efficiency specification will be used for measures that do not have ENERGY STAR ratings. Further, they point out that even measures with ENERGY STAR ratings may demonstrate effective baselines exceeding the ENERGY STAR minimum.*

In absence of ENERGY STAR specification, we will evaluate the efficient case on a measure by measure basis, drawing on factors such as the New Orleans Technical Resource Manual, existence of other non-Energy Star ratings, market availabilities of different efficiencies, standard market practices, and others, depending on the available data. For measures with Energy Star specifications, if there is evidence of substantial penetration of above-specification efficiencies, we will use realistic average efficiencies rather than relying solely on the minimum specification for ENERGY STAR qualification.

*The Alliance asks how we will address the increasing efficiency of LEDS over time, as well as the impact of the 2020 EISA standard on the residential lighting market.*

We are aware of the coming 2020 EISA standard and its potentially significant impact on the residential lighting market. The study will include the likely effects of EISA over time as reflected by the latest market research on EISA's impact combined with assumptions developed in other jurisdictions.

*The Alliance urges the consideration of future improvements of price in LEDs when considering adoption rates.*

Adoption rates are to be developed by the Delphi Panels. Part of the instructions to Delphi Panel participants will be to consider potential future changes to the price of technology when considering adoption rates.

*The Alliance asks how lighting baselines will be established, for example, in the case where there is significant persistence of T12 lamps despite legislation designed to eliminate the lamps.*

For retrofit measures we will use a baseline based on the best available data for current equipment in the New Orleans service territory. If the Alliance has any applicable data, we

would be happy to review it and consider it for inclusion. For new construction and market driven measures, baseline will consist of current federal or local code, as is standard practice for efficiency studies, and as required by the NOLA TRM.

*The Alliance asks how we plan to handle custom measures that may only apply to a handful of customers.*

We believe that the current measure list sufficiently handles custom measures, even custom measures that are highly specific to certain customers. For example, retro-commissioning, industrial process improvements, and data center cooling design are all fairly broad measures that can encompass a high degree of individual variability.

### **Specific Measure List Comments**

*The Alliance makes several suggestions for adding and/or disaggregating measures in the residential sector.*

The Alliance suggests several additional efficiency measures for inclusion in the study. Many of these suggestions in effect are requests for more granularity within measure categories. For example, specific refrigeration measures such as ECM evaporator fans and anti-sweat door heater controls would already be included in the existing 'HE Refrigeration' measure on the measure list. Using the top-down methodology in this study, it is more accurate to group together measures that, for example, all apply to commercial walk- or reach-in refrigerators, rather than specify individual measures that often overlap, interact, or preclude one another. To assess potential for these measures would require accurate estimates on the portion of commercial refrigeration energy use to which each individual measure is applicable. This may be different for, again as an example, evaporator fans and door heaters. In general, we will determine the appropriate level of the granularity of the measures in the measure list based on available data. We will ensure that, to the extent measures are grouped together, these grouped measures will include a comprehensive cross section of available technologies.

Other specific comments made by the Alliance, and our responses, are as follows.

- **Add linear lighting for residential** – We will research this to determine whether there is significant linear residential lighting in New Orleans residences
- **Energy Star ceiling fan and whole house fan** – We will investigate the opportunity for these measures
- **Solar hot water** – we will look into adding this measure to the list
- **Energy Star laptop and desktop computers** – Our understanding is that Energy Star already has a very high market share with these products and that there are few savings remaining from this measure, but we will review available data to confirm this
- **Comprehensive envelope improvements** will be added to the residential measure list

- We will look into **adding C&I measures for ERVs, rooftop unit controls, low flow showerheads, and commercial pools**