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March 1, 2018

Via U.S. Mail and/or Email

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

RE: Application for Approval of the Supplemental and
Amended Implementation Plan for Program Years
("PY") 7 through 9 of the Energy Smart Plan
Docket No. UD-08-02

Dear Ms. Johnson:

Pursuant to Resolution R-17-623, please find enclosed the Advisors' Recommendations for Council Consideration in connection with Entergy New Orleans, Inc.'s September 29, 2017, Application for Approval of the Supplemental and Amended Implementation Plan for Program Years 7 through 9 of the Energy Smart Plan in the referenced docket. It is requested that you file the enclosed document in accordance with your normal procedure, and that you provide us a time-stamped copy of this letter to certify receipt.

With best regards, I remain

Sincerely,

WILKERSON & ASSOCIATES, PLC



Walter J. Wilkerson



WJW/krb

Enclosure

cc: Official Service List

ADVISORS' RECOMMENDATIONS FOR COUNCIL CONSIDERATION

PURSUANT TO RESOLUTION R-17-623

RE: UNRESOLVED ISSUES FOR ENERGY SMART PROGRAM YEARS 7-9

DOCKET NO. UD-08-02

In response to Entergy New Orleans, Inc.'s ("ENO") September 29, 2017 Application for Approval of the Supplemental and Amended Implementation Plan for Program Years ("PY") 7 through 9 of the Energy Smart Plan in Docket No. UD-08-02 ("Supplemental Application"), the Council issued Resolution R-17-623 on December 14, 2017 with the following directives:

1. ENO was directed to file within 30 days all supporting models and work that demonstrate the reallocation of kWh savings forecasted for PY 7 to PY 8 while still achieving the combined pro-rated energy savings for PY's 7 and 8. Said filing was made on January 22, 2018.
2. Further comments and recommendations from all parties are required before the Council can give further consideration to the following unresolved issues:
 - a. The continued implementation levels of the three Pilot programs based on a completed evaluation of results;
 - b. Any PY 8 and 9 budget revisions that may be required based on the Pilot programs results;
 - c. A revised Utility Performance Incentive ("UPI") structure and amount; and
 - d. Approval of the New Orleans Technical Reference Manual ("NO TRM").Such comments and recommendations were to be provided by the Intervenors no later than January 31, 2018.
3. The Advisors were directed to provide recommendations and the current status of potential additional funding sources by February 28, 2018.

In the absence of any additional supplemental funding ordered by the Council prior to June 2018, ENO was directed to implement a transparent, stand-alone Energy Efficiency Cost Recovery ("EECR") rider on customers' bills on ENO Legacy customer bills commencing with the first billing cycle in July 2018.

I. Advisors' Recommendations

Based on a review of ENO's Supplemental Application and the Energy Smart Quarterly Reports submitted for Program Year 7, we offer the following recommendations to the Council:

1. Our initial analysis shows that there is no longer a need to combine PY 7 and PY 8 for evaluating the performance related to budgets and kWh savings. Therefore, we recommend that ENO provide a separate Annual Report and evaluation of each Program Year.

2. Results have yet to be provided by ENO to the Council Advisors for the Direct Load Control Pilot (“DLC”), the Behavioral Pilot, or the Algiers Smart Thermostat Pilot; as such, no direct recommendations regarding the continued implementation of the Pilot Programs can be provided at this time. However, we recommend that ENO submit its proposal to the Council for the Behavioral Pilot to transition to an opt-out enrollment format, including any proposed revisions to the budget and program implementation timetable.
3. We recommend that the program kWh savings and corresponding budgets approved by the Council for PY 8 and PY 9 be maintained until ENO provides analyses and results of the three Pilot programs for review by stakeholders with supporting documentation for any proposed changes to the kWh savings targets and budgets through PY 9.
4. The Advisors recommend that the current incentive amounts for achieving 100% of the kWh savings goal should be increased to \$750,000 with an additional \$200,000 at 120% of the goal. We also recommend no change to the existing penalty mechanism.
5. We have determined the NO TRM Version 1 to be satisfactory and recommend its use in Energy Smart planning and evaluation and the 2018 Integrated Resource Plan (“IRP”), with the understanding that the NO TRM will be considered a “living document” and require updates through biannual meetings. The attached Appendix A: *Legend Review of ENO New Orleans Technical Reference Manual Version 1* is the Technical Advisors’ complete review of the NO TRM Version 1
6. We have concluded that funding for Energy Smart will be depleted by mid-year 2018, and no additional sources of funding have yet materialized. If no additional funding is approved by April 30, 2018, ENO should prepare implementation of the EECR Rider on July 2018 customer bills pursuant to Resolution R-17-623.

II. Background

Per the Council directives in Resolution R-17-31, ENO filed its Implementation and Cost Recovery Plan for continuation of the Energy Smart Program for Program Years 7 through 9 on February 13, 2017 (“Initial Filing”). In response to ENO’s Initial Filing, the Council issued Resolution R-17-176 (“Resolution”), which found that Scenario 2 presented in ENO’s Implementation and Cost Recovery Plan was consistent with the incremental kWh savings goal of 0.2% per year of annual sales described in Resolution R-15-599 and approved the individual programs as proposed.¹ However, the Resolution revised the proposed PY 7 budget pending submittal to the Council of a Supplemental and Amended Implementation Plan for PY 8 and 9, filed by October 1, 2017, that would also include a revised budget for PY 7.² The Resolution also directed ENO to host, at a minimum, three Technical Conferences to determine if ENO, the stakeholders, and the Advisors could reach consensus on a number of unresolved matters as

¹ Resolution R-17-176 Directive 1.

² Resolution R-17-176 Directive 9.

outlined in the stakeholders' and Advisors' Comments related to the Initial Filing.³ To confirm the Energy Smart issues to be addressed in reaching a consensus, the intervenors provided a description of their respective positions on the outstanding issues to be discussed during the technical conferences.

Subsequent to five Technical Conferences and ENO's Supplemental Application, the Council adopted Resolution R-17-623 which identified the unresolved issues and directives addressed herein. The directives included a demonstration of the reallocation of kWh savings forecasted for PY 7 to PY 8 while still achieving the combined pro-rated energy savings for PYs 7 & 8.⁴

In Resolution R-15-140, the Council modified the incentive mechanism to a performance-based incentive that begins when the Company achieves 95% of the kWh goal set by the Council, with a cap at achieving 120% of the goal. The ENO Legacy incentive for achieving 100% of the goal is \$530,000. The current incentive mechanism provides for an additional \$5,000 per 1.0% increment above 100% with a cap at 120%, providing a maximum possible incentive of \$630,000. Resolution R-17-623 denied ENO's request for a modification of the UPI at 100% of the kWh savings goal.

Resolution R-17-623 directed ENO to include 6.5% of the Energy Smart program budget for EM&V costs, including work on the NO TRM, until such time that the Council can consider further specific comments and recommendations from all parties toward a consensus regarding the metrics and methodology used in estimating kWh/kW reductions for Energy Smart consistent with estimating the DSM potential for integrated resource planning. Resolution R-17-623 also directed ENO to, "proceed with its proposed semi-annual reviews of the NO TRM and to provide to the Advisors and stakeholders a mapping of the NO TRM to the Demand Side Management Portfolio defined in the 2015 Integrated Resource Plan prior to the first such review to be held no later than March 31, 2018."

III. Reallocation of kWh Savings from PY 7 to PY 8

On January 22, 2018, ENO submitted their *Filing to Demonstrate the Reallocation of kWh Savings forecasted for Program Year 7 to Program Year 8* pursuant to Resolution R-17-623. In this filing ENO stated that, at the time of filing, they anticipated that the pre-evaluation kWh savings results would be very close to the Council's approved Energy Smart savings target for Program Year 7 and, as such, a reallocation of program savings would be unnecessary. A review of the final Energy Smart Quarterly Report for PY 7 shows that ENO has achieved 99% of their targeted 19,949 MWh in savings for PY 7, resulting in no requirement to shift savings from PY 7 to PY 8. As has been seen in previous program years, ENO was able to complete a large amount

³ Resolution R-17-176 Directive 5.

⁴ Based on concerns expressed in the Technical Conferences regarding PY 7's late start, the program year reduction to 9 months, and PY 7 performance to date, the parties recommended that the evaluation and budgets for PY 7 & 8 be combined.

of savings within the last quarter of PY 7 due to a large increase in participation, which then allowed them to almost entirely meet their savings goal.

Based on the summary of results provided in the Quarterly Reports of PY 7, there is no longer a need to combine PY 7 and PY 8 for evaluating the performance related to budgets and kWh savings. Therefore, we recommend that ENO provide a separate Annual Report and evaluation of Program Year 7 and Program Year 8.

IV. Continued Implementation of Pilot Programs Based on Evaluation of Results

No results have been provided by ENO to the Council Advisors for the Direct Load Control Pilot ("DLC"), the Behavioral Pilot, or the Algiers Smart Thermostat Pilot. The three Pilot Programs were approved and implemented in 2016. Notwithstanding the absence of analyses and results of the three Pilot Programs, several observations regarding continued implementation are summarized below based on updated information and the Technical Conferences.

1. DLC Pilot:

- a. Resolution R-16-185 directed that "the time period for the DLC Pilot shall be June 1, 2016 - May 31, 2017."
- b. The Third Party Administrators' ("TPA") PY 7-9 planning tool shows a Total Resource Cost ("TRC") value for DLC program that is much lower than the TRC used in ENO's Demand Side Management ("DSM") Potential Studies conducted for the IRP. That inconsistency has not yet been reconciled.
- c. During the technical conferences, the TPA concluded that the AAE recommendation to expand DLC to hot water heaters and pool pumps was not cost effective, but that there was potential to offer demand response ("DR") programs to large commercial and industrial customers.
- d. AAE recommended that DR programs should be increased and that cost benefit analysis should be conducted and results presented by the end of 2017 to serve as a basis for future budgeting and discussion of possible capacity targets and performance incentives.
- e. We recommend that the TPA should develop DR program offerings to large commercial and industrial customers during PY 8, and ENO should propose to the Council by November 1, 2018, such additional cost-effective DR programs to be added to PY 9 with a revised implementation plan and budget for PY 9.
- f. We recommend that a DR cost benefit analysis should be conducted and that the results should serve as a basis for future discussion of possible capacity targets. The Advisors further recommend that such a cost benefit analysis could be provided by the DSM Potential Study being conducted for the 2018 IRP.

2. Behavioral Pilot

- a. During the Technical Conferences, the AAE recommended that the Behavioral Energy Efficiency ("BEE" or "BEE Scorecard") Pilot Program should run from January through December 2017, and that a full report on BEE results should be made ready for review in January 2018.
- b. During the fourth Technical Conference ENO clarified that they intended to continue the Behavioral Program as opt-in and that any change to an opt-out program structure would be fully considered by the Council and Advisors before change is made. Tom Stratton, from the Council's Utility Regulatory Office ("CURO"), further clarified that the Behavioral Program is to be conducted as an opt-in program and if such a change to an opt-out program is warranted there needs to be the appropriate filing with the Council. Derek Mills of ENO agreed, stating the Company was keeping their options open if enrollment does not escalate to provide sufficient participants.
- c. As of December 31, 2017 the BEE Scorecard program had 1,866 enrolled participants. Our July 2017 report stated that 40,000 customers were anticipated to be enrolled by PY 9.⁵ Based on January 11, 2018 submittals provided by ENO and Accelerated Innovations ("AI")⁶, the implementer of the Behavioral Program, and based upon information included in the January 30, 2018 Energy Smart Quarterly Report, ENO and AI intend to transition the Behavioral Program from a participant opt-in enrollment format, to an opt-out enrollment format in an effort to boost participation and achieve the targeted overall kWh savings of 11% - 15% of the kWh savings in PY 8 and 9. The January 11, 2018 submittals were provided as a revised Scope of Work for the Behavioral Pilot Program to transition to an opt-out program. AI maintains that they can achieve their initial estimates of participants for Program Years 8 & 9 from the Supplemental Application after the transition to an opt-out enrollment format.
- d. We concur that the transition to an opt-out enrollment format will help to achieve the targeted kWh savings, and note that the increased participation will coincide with ENO's full implementation of AMI and the behavioral-related customer education program underway with AMI implementation.
- e. We recommend that ENO submit its proposal to the Council for the BEE program to transition to an opt-out enrollment format, including any proposed revisions to the budget and program implementation timetable.
- f. We recommend that the information provided by the Third Party Evaluator, ADM, during the Technical Conferences related to the evaluation of the Behavioral Pilot

⁵ Advisors Evaluation of Energy Smart Program Year 7-9 Proposed Program Budget, July 6, 2017

⁶ Energy Smart Scorecard – Program Years 8 & 9 Transition to Opt-Out Approach, January 10, 2018, submitted by Accelerated Innovations, and Technical Approach for Opt-Out Behavioral Evaluation Prepared for Entergy New Orleans, January 11, 2018, by ADM Associates.

Program and double counting of kWh savings (related estimating savings from participating in the Behavioral Pilot Program simultaneously with other Energy Smart programs) be included in the updates to the NO TRM prior to its first semi-annual review.

3. Smart Thermostat Pilot in Algiers (Nest Smart Thermostats)

- a. Resolution R-16-331 directed ENO to proceed with the Nest Smart Thermostat Pilot from September 1, 2016 through August 31, 2017. The installation of all the devices for the Nest Program was completed in September 2016.
- b. In their Supplemental Application, ENO stated that data through October 2017 would be analyzed in determining the success of the program and that these results would be presented by the first quarter of 2018. The Nest Pilot was not included in the PY 7 – 9 Implementation Plan, and ENO is considering recommending similar programs for future implementation.
- c. In the Home Performance with Energy Star program, Smart Thermostats are being offered to a limited number of participants as a direct install measure, offering participants a \$250 reimbursement toward the \$350 installed cost.
- d. Notwithstanding the results of the Nest Pilot, we recommend that ENO continue to offer Smart Thermostats as Energy Smart direct install measures providing that the screening results continue to show cost-effectiveness based on the incentives provided.

V. Budget Revisions for PYs 8 & 9

Since results have not yet been provided by ENO to the Council Advisors for the DLC Pilot, the Behavioral Pilot, or the Nest Pilot, no determination could be made regarding any required budget revisions to PYs 8 & 9 based on the Pilot Programs.

We recommend that the kWh savings and corresponding budgets approved by the Council be maintained until ENO provided analyses and results of the three Pilot programs with supporting documentation for any proposed changes to the kWh savings targets and budgets through PY 9.

VI. Utility Performance Incentive (“UPI”) Structure and Amount

The Advisors recommend that the current incentive amounts for achieving 100% of the kWh savings goal should be increased an appropriate amount proportional to kWh savings goals. Specifically, we recommend that the incentive amount per each 1% increment between 95% and 100% be increased by \$150,000,⁷ which results in a \$750,000 incentive for achieving 100% of

⁷ Based on the information provided in Energy Smart filings, the year-over-year percentage increase in savings is 34% from PY6 to PY7, 74% from PY7 to PY8, and 17% from PY8 to PY9. The arithmetic average of these year-over-year increases is 41.667%. Increasing the incremental incentive of \$106,000 by 41.667% results in an incremental incentive of approximately \$150,000 for each 1% of savings between 95% and 100%, with 100% at approximately \$750,000.

the goal. The proposed \$750,000 ENO incentive relates to a 15 to 20 basis point increase in ENO's ROE.

We also believe that incentivizing ENO to attain savings beyond 100% of the savings goal will maximize DSM potential. If the goal of the Council's policy is to encourage the maximum achievable cost-effective DSM, then the incentive should be related to maximizing DSM through the incentive provided beyond 100% of the goal. With the current UPI structure, there is only an additional \$100,000 incentive to achieve the additional savings at 120% of goal. We also recommend an increase in the per increment incentive over 100% to result in an additional incentive of \$200,000 at 120% of goal. The recommended total additional incentive of \$200,000 at 120% of savings goal (for a total ENO incentive of \$950,000 at 120 % of goal) makes the increase in savings above 100% of goal more appealing.⁸

As such, we recommend no change to the existing penalty mechanism.

Per the Application, ENO has asked the Council to grant ENO the opportunity to revise elements of the Supplemental and Amended Implementation Plan should material changes to circumstances and expectations arise. While this is not without precedent, we recommend that any further revisions to the approved Implementation Plan that result in significant increases to the Energy Smart budget beyond budget increases which are approved also have a proportionately negative impact on ENO's performance incentive. Specifically, we recommend that each 1% increase above the approved budget due to significant unanticipated budget revisions that have not been approved by the Council should result in a corresponding 1% decrease in ENO's UPI at 100% of goal. Our recommendation would relate to poor performance in execution of the Implementation Plan and not to budget and savings goal revisions due to Pilot Programs evaluation, adding demand response programs, or other such revisions approved by the Council.

VII. New Orleans Technical Reference Manual

The Advisors have completed multiple reviews of not only the NO TRM Version 1, but also of multiple draft versions of the NO TRM previously supplied by ENO. The attached *Appendix A: Legend Review of ENO New Orleans Technical Reference Manual Version 1* is the Technical Advisors' complete review of the NO TRM Version 1, to update the previous Advisors' critique supplied to ENO on August 22, 2017. After several reviews of draft documents, we have determined the NO TRM Version 1 to be satisfactory for use in conjunction with the Supplemental and Amending PY 7-9 Implementation Plan, with the understanding that the NO TRM will be considered a "living document".

It is important to note that the NO TRM is a comprehensive reference manual, but limited to data and some methodologies to estimate savings. The NO TRM is not a policy or planning document; the Council establishes policy with the evaluations and planning of Energy Smart and

⁸ The same Boolean logic related to incentivizing increased kWh savings could also be applied to discouraging any increases in program costs. That is, any revisions in the approved program plan and budget that cause costs to increase would result in a reduction of ENO's incentive. This is addressed in a subsequent paragraph.

the IRP Rules. During the fourth Technical Conference, we expressed concern that forward looking analyses should not be conducted as EM&V under Energy Smart funds. Rather, forward looking analyses should be included in the development of the IRP DSM Potential Study and other aspects of the IRP process. We also recommend that the Resource Value Test ("RVT") should be included among the screening tests in the NO TRM. The RVT is advocated by the National Efficiency Screening Project's National Standard Practice Manual,⁹ and we have previously included the RVT in the scope of work for the Council's DSM Potential Study in the 2018 IRP.

VIII. Current Status of Potential Energy Smart Funding Sources

In its January 30th, 2018 Quarterly Report for the Period of October 1st, 2017 to December 31st, 2017 ENO noted that as of January 30th, 2018 ENO-Legacy has a balance of approximately \$8 million remaining in Energy Smart funding for ENO Legacy.¹⁰ The report also stated that ENO – Algiers had approximately \$350,000 remaining in Energy Smart Algiers funding sources. However, the Company has yet to provide an updated, detailed tracking of such funding through the end of 2017, as directed in Resolution R-15-599.¹¹ Lacking such information we relied upon the information provided to us in the Supplemental Application. Based on the Council-approved Implementation Plan, we estimate that these funds will be depleted by mid-year 2018.

Resolution R-17-623 noted that the potential exists for two additional sources of funding for Energy Smart that were not mentioned in ENO's Supplemental Application: (i) the reallocation of ENO Restructuring credits in Docket No. UD-16-03¹² and (2) Entergy Arkansas ("EAI") Penalty Payments to ENO in FERC Docket No. EL09-61.¹³ However, these additional sources have not materialized. If no additional funding sources are allocated to Energy Smart by mid-year 2018, Resolution R-17-623 has directed that a transparent, stand-alone EECR Rider will appear on customers' July 2018 bills in ENO's Legacy jurisdiction. ENO has previously stated that they will need approximately a 2-3 month notice to prepare implementation of an EECR

⁹ National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources, The National Efficiency Screening Project, May 18, 2017

¹⁰ These funding sources include Rough Production Cost Equalization ("RPCE") funds, related to the Entergy System Agreement, that the Council allocated for ENO – Legacy Energy Smart program costs.

¹¹ "ENO is hereby directed to include documentation showing funding and expenditures, fund carryover, and the balance of the Energy Smart funding account in all subsequent Quarterly Reports." Resolution R-15-199, December 10, 2015.

¹² On July 22nd, 2016, ENO filed an Application for Approval of a Proposed Internal Restructuring and for Related Relief, which proposed to guarantee customer credits of \$10 million in 2017, \$5 million in 2018, \$5 million in 2019, and \$5 million in 2020. ENO received the appropriate timely approval and completed its restructuring on November 30th, 2017, and as such \$5 million in ratepayer credits are payable in 2018.

¹³ In FERC Docket No. EL09-61, The Louisiana Public Service Commission ("LSPC") filed a complaint alleging that Entergy violated the terms of the Entergy System Agreement by making sales of low-cost System energy on behalf of Entergy Arkansas. It was determined that EAI would be required to pay back damages, of which ENO Legacy is expected to receive \$4.7 million and Algiers would receive approximately \$0.24 million.

Rider on customers' bills, so any additional funding sources would have to be approved by the end of April 2018.

APPENDIX A:

LEGEND REVIEW OF ENO NEW ORLEANS TECHNICAL REFERENCE MANUAL VERSION 1; FILED SEPTEMBER 19, 2017

The following paragraphs include brief comments by the Technical Advisors' noting the extent to which the New Orleans Technical Reference Manual ("NO TRM") filed by ENO on September 19, 2017 incorporated any provisions related to the critique of the draft version of the NO TRM provided by the Technical Advisors on August 22, 2017 ("Advisors' critique"). Each individual paragraph of the Advisors' critique is followed by comments based on the most recent review of the NO TRM Version 1.

I. Comments from Advisors' Critique

1. The NO TRM should provide a detailed description of EM&V activities performed each year to update the NO TRM, specifying the measures impacted by each activity and listing the recent updates under each measure. The draft NO TRM does not include this detail. In a February 28, 2017 response to the Advisors' review of portions of the NO TRM draft, ADM did provide a table that outlined the EM&V data collected by sector, parameter, measure affected, description, and # of data points. The draft NO TRM should include such an EM&V table updated periodically to make it possible to identify measures for which there should be specific values provided in the NO TRM.
 - **The Introduction of the filed NO TRM includes *Table 1: "Parameters Validated with Primary Data Collection in New Orleans"*. Although not stated in the Introduction, it is assumed that updates will be made to Table 1 with each Annual Filing of the NO TRM.**
2. In Council Resolution R-15-140, paragraph 5, bullet (iii) states that the Reference Manual for New Orleans shall lay out the resulting savings per measure estimates in the form of savings values, algorithms, and/or calculation tools. The NO TRM does not provide savings values for all measures. The required savings values can be calculated from empirical data collected through EM&V or from applicable sources.
 - **All measures in the filed NO TRM include algorithms, calculations and baseline/average deemed savings values. These values include both energy and demand savings for each measure. This will greatly increase the ability to validate savings and costs for (i) the DSM Potential Study cost-effective measures evaluated in the IRP process, and (ii) future Energy Smart Implementation Plans.**

3. There are a number of measures in the NO TRM with algorithms or calculations which can be used to determine kWh and kW savings values, but the algorithms are not shown with a savings value. Even though the measure inputs to the algorithms may vary based on individual equipment, a suggested/reasonable value for each input should be provided (applicable to New Orleans' measures) for calculating savings estimates. The NO TRM measures should provide both the algorithm and the savings estimates based on the suggested inputs. For example, ADM has collected 267 data points with respect to Residential Central AC Tune-up based on a billing analysis of all PY5 participants in the measure. The algorithm or formula provided in the NO TRM for that measure requires the following inputs: a) Cooling capacity; b) efficiency of the equipment prior to tune-up; c) nameplate efficiency of the existing equipment; d) equivalent full-load cooling hours; e) equivalent full-load heating hours; and f) peak coincidence factor. All of these data inputs are available from data collected from previously conducted tune-ups in prior program years; however, the NO TRM does not provide a calculated value using the data collected from PY 5 participants. Even though the measure inputs will vary based on individual equipment, a reasonable value should be calculated with the algorithm for program planning and budget estimates.
 - **The NO TRM provides calculated energy and demand savings values with the algorithms using the data inputs collected from Energy Smart participants.**
4. In addition to providing savings estimates and other measure metrics, the NO TRM should provide relevant evaluation procedures and update such procedures specific to the unique circumstances of New Orleans. The draft NO TRM does not include evaluation procedures or guidance in determining the complete cost of implementing measures. The NO TRM must comply with Resolution R-15-140, Directive 5, which states: "ENO is directed to create an EM&V Reference Manual for New Orleans which
 - i. organizes the methods and sources used to develop average and default values by DSM measure category and sector,
 - ii. summarizes the results of recent EM&V research as well as planned EM&V, and
 - iii. lays out the resulting savings per measure estimates in the form of savings values, algorithms, and/or calculation tools for New Orleans energy efficiency measures. The EM&V RM should also provide guidance on the frequency that key inputs and/or equations (an algorithm with stipulated or variable parameters) should be updated, based on the vintage of the input parameters, as well as an assessment of the level of variability in energy efficiency reductions estimates across the range of likely applications in New Orleans." Additionally, the Scope of Work for the NO TRM (Exhibit A, paragraph A. 1. i) for the TPA/TPE) requires that the TRM must "organize the methods and sources used to develop average and default values by DSM category and sector." (emphasis added)
 - **All details, mentioned above, as required in the Resolution R-15-140 are included in the NO TRM Version 1.**
 - **Each section follows a consistent format for each measure, including the methods and sources used to develop the average saving values.**
 - **Section A.2 *New Orleans EM&V Studies* includes a summary of previous EM&V research, identifying the specific measures related to the EM&V studies.**

5. The NO TRM does not provide guidance related to the customer incentive costs of each measure, including (i) what customer incentive payments have been assumed in previous IRP's and program years for comparable measures, and (ii) an outline or suggested methodology for determining measure-level incentive costs, on a measure basis or as part of a group of measures bundled into a program. The NO TRM should provide an appropriate range of % customer incentive per measure incremental cost. This guidance will facilitate any evaluation of Energy Smart as well as any DSM Potential Study specific to New Orleans.
 - **While it is not appropriate for the NO TRM to cite a specific value for customer incentive costs for each measure, section A.4 *Measure Incentive Levels* outlines and suggests a methodology for determining measure-level incentive costs. This guidance includes suggested percentages for programs within Energy Smart.**

6. Not all measures described in the NO TRM are provided with an incremental cost, or alternatively the NO TRM simply states that the incremental cost for that measure is the full replacement cost but no value is provided. All NO TRM measures should have an incremental cost provided, and the quality of the estimate should be noted.
 - **Section A.3, *Incremental Costs*, states that incremental cost values are provided for most measures, defining two scenarios ((i) normal replacement/new construction/replace-on-burnout or (ii) early replacement) which result in different incremental costs. Some default incremental costs are provided.**
 - **However, specific incremental costs are not included for some measures such as Residential faucet aerators and low flow shower heads.**
 - **For measures where no the incremental cost is provided, there is no mention of an incremental cost or guidance to estimate an incremental cost or incentive costs.**

7. Some measures in the PY 7-9 Implementation Plan are not listed in the NO TRM. For example, for the residential measures being implemented: 1) Smart/Programmable Thermostat; 2) Direct Load Control of central air conditioners ("CAC"); 3) Window A/C. These measures may not be considered as high impact measures ("HIM") at the time of the initial NO TRM draft; however, they are included in the PY 7-9 Implementation Plan and should be added to the NO TRM. Prospective Energy Smart program years will likely include measures that have not previously been high impact measures, but must be added to the NO TRM to ensure that there is comparability between any Energy Smart program implementation plan, the IRP DSM Potential Study and the NO TRM.

- **The NO TRM Version 1 does not include some measures in the Energy Smart Implementation Plan for PY 7 – 9. Also, demand response (such as direct load control) and custom energy efficiency measures (such as HVAC variable frequency drives (“VFDs”)) have been excluded from this TRM, with the reason given that they are more appropriate for custom analysis. Section A.9, *Treatment of Measures Not Included in the TRM*, states that custom measures (with many in the C&I sector) and demand response measures were omitted in the NO TRM because they are validated individually using industry standard (“IPMVP”) protocols or annual performance validations. Deemed savings may be inappropriate for custom measures, but since the NO TRM serves as a reference for kWh/kW savings and costs it should not be exclusively limited to deemed savings. Custom and demand response measures comprise a significant and growing portion of the Energy Smart savings. A separate section of the NO TRM (refer to additional comments below) could address the EM&V and results of custom measure and demand response measure validations, summarizing the relevant parameters of each measure.**
 - **Each Program Year Annual Report should include descriptions of custom and demand response measures, and the methodology employed, but individual Annual Reports cannot provide the value of a consistent longer term record of data and information developed in the NO TRM.**
 - **The NO TRM will be updated via a two-stage process each year, and a detailed section regarding the annual updates will include measures that were not previously high impact, or that have been added to Energy Smart.**
8. It is not possible to evaluate lighting measures in the current program year implementation plan by cross referencing to specific NO TRM lighting data. The draft NO TRM section on residential lighting is extensive and general in nature, and lighting measures in the current program year implementation plan are not clearly identified. Lighting measures in the program year implementation plan must reference specific Fixture Codes and Lamp Codes in the NO TRM Standard Wattage Table.
- **More concise information was provided in the Residential and Commercial lighting sections, including standard wattages, demand, and energy savings.**
 - **Moving forward there will be better coordination between the TPE and TPA to provide proper mapping between measures in the NO TRM and the Energy Smart Implementation Plans.**
9. Many of the measures were included in program bundles in the PY 7-9 Implementation Plan without sufficient detail to confirm the cost and savings on a measure basis as provided in the NO TRM. Since measures are often bundled in program year implementation plans, all cost and savings data in the current implementation plan should be provided on a measures basis so that the metrics can be confirmed with the NO TRM.

- **Many program measures were still included in a bundle in ENO's October 1, 2017 Energy Smart Supplemental Filing. A primary objective is to correlate/validate the kWh/kW savings and costs of all measures included as program bundles in the Energy Smart Implementation Plan, Annual Report, and IRP DSM Potential Study with the data and information in the NO TRM, this is not entirely possible with the way that the Implementation Plan was provided to the Advisors.**

10. Some commercial measure being implemented in PY 7-9, notably: (i) Custom – Compressed Air Projects, (ii) Custom – VFD (Commercial and Industrial), and (iii) Strip Curtains for Walk-In Freezers were not included in the draft NO TRM. Until such commercial measures are included in the NO TRM, the TPA show how the kWh and kW savings and other measure metrics were determined for these measures in the current program year implementation plan.

- **Since these measures were not included in the Version 1 of the NO TRM, further clarification from the TPA is needed regarding how the measure and year-end savings were calculated.**
- **This clarification should be provided in the October 1, 2017 Implementation Filing, or in the Program Year Annual Report supporting work papers.**

11. We concur with focusing the EM&V budget on measures for which there is significant local investment and to minimize the overall uncertainty in savings estimates for the Energy Smart portfolio. Specifically, we concur with the general guideline that EM&V is not conducted for measures that comprise less than 1% of Energy Smart portfolio. However, to keep the NO TRM information current, it should be updated for all measures, regardless of size, when new information becomes available regarding any measure metrics or procedures.

- **Section A.9 describes the annual process to update the NO TRM: (i) In a first quarter technical forum, stakeholders suggest measure additions or updates; (ii) the EM&V contractor develops updates by July for comment; (iii) a second technical conference is held in August; (iv) the updates are finalized in September for completion by year end.**
- **In addition to updates to specific measures that the stakeholders bring forward, it is assumed that all new/current information regarding measures will be included in the NO TRM annual update process.**

II. Additional Comments

In addition to the comments associated with the Advisors' critique, we have compiled additional comments regarding the NO TRM, Version 1.

There is no mention in the NO TRM of a primary objective – that it serves as a principal reference source or link to support the kWh/kW savings and cost estimates of measures bundled into programs for (i) the Implementation Plan for Energy Smart Program Years and (ii) the DSM Potential Study to screen cost-effective energy efficiency/demand response resources for each subsequent IRP cycle. Since the DSM Potential Study would consider a broad range of measures beyond those in the current Energy Smart plan, it is logical that most, if not all, of the measures in the NO TRM would be included among the cost effective measures screened by the DSM Potential Study.

As a recognized point of reference in considering what could be incorporated in the NO TRM, It is worthwhile to note the how the structure of the Arkansas TRM Version 6 (“AR TRM”) has evolved since its inception in 2007. The AR TRM consists of three volumes:

- Volume 1 provides guidance and insight regarding some of the important Evaluation, Measurement & Verification (“EM&V”) methods and recommends best approaches to use specifically with the DSM Program Portfolio. Section I of Volume 1 provides an overview of EM&V terms, methods, and approaches, while Section II provides EM&V Protocols for a common framework (data types, frequency, metrics and reference points) for conducting cost-effective DSM Program evaluations.
- Volume 2 is the Deemed Savings, Installation, and Efficiency Standards section, providing an extensive measure compilation of deemed savings values for electric (and gas) energy annual usage, as well as coincident peak electric (and gas) demand savings, and Estimated Useful Lives (“EULs”) to facilitate economic evaluations.
- Volume 3 provides Supporting Appendices, including building characteristics, lighting fixtures and effects, and estimation of peak demand savings and multipliers.