Attachment 1:
Proposed Revisions to the Technical Resource Manual and Deemed Savings Table

- This Attachment describes proposed revisions to the Technical Resource Manual (TRM) and Deemed Savings Table. These documents were submitted as part of the Ameren Missouri 2019-2021 MEEIA Cycle, as Appendix F (Deemed Savings Table) and Appendix G, H, I (TRM Volumes 1-3), on October 25, 2018 in EO-2018-0211 and approved on December 5, 2018. Ameren Missouri previously requested:

    o A TRM revision on 12/31/2018 approved by the Commission on 2/27/2019.

    o A TRM revision on 11/15/2019 approved by the Commission on 12/11/2019.

    o A TRM revision on 06/19/2020 approved by the Commission on 07/08/2020.

The primary purpose of this update is to incorporate Evaluation Measurement & Verification (EM&V) results from the 2019 program year. In addition, this revision also includes updates to multiple measures, based on feedback from the evaluation contractor, Opinion Dynamics Consulting (ODC), and the program implementation teams.   Formatting and editing updates are also included for consistency. A description of these changes is provided below. The measure changes have been analyzed for cost effectiveness and the goals of the portfolio will not be adjusted.

To aid in stakeholder review, all updates are included in the TRM and Deemed Savings table in track changes with redlines. Within the Microsoft Excel workbook that serves as the basis for the Deemed Savings tables, this includes:

- New changes included in red text;
- Modifications to existing text in red and strikethrough (change);
- A revision change log included in columns "V" through "YY" denoted input values by applicable revision date;

Revisions based on PY2019 Results:

- Updated to reflect plan year 2019 evaluations results, as provided by Opinion Dynamics. Applicable input values have been updated within the MEEIA 2019-21 Deemed Savings Table (appendix F) and corresponding TRM (Appendix G, H, & I). Examples include updates to items such as the following:

  - Inputs to algorithms: Base and efficient wattages, leakage rates, In Service Rates (ISR), heating and cooling capacities, SEER ratings, HSPF, %Cooling, Gallons per minute, etc.

  - Add "In Service Rate" to multiple measure algorithms

  - Update Business lighting Effective useful life (EUL) values based on PY2019 Evaluation (ongoing research by ODC for PY2020 Evaluation).

Deemed savings table revisions to align variations of existing measures to the programs:

- Add Lumen ranges to standard bulb measure names to better categorize bulbs.

- Add direct install and other variations of existing measure options.

- Add Income Eligible and Appliance Recycling kit measure options.

- Add an 11w BR30 & 6w bulb categories based on program offerings.

- Added Storm Window measures that were already included in Appendix I but not prescribed within the deemed savings tables (Appendix F).

- Add three lighting network control measures that use existing inputs from Appendix H.

Clean-up items

- Updates to references regarding the Energy Independence Security Act (EISA) lighting standards. These changes are necessary to reflect the current status of Federal Regulations, as of this filing date.

- Update Measure Reference ID's within the MEEIA 2019-21 Deemed Savings Table.

- Algorithm corrections to 3 measures with minimal impact on savings values (measure 351250, 250351 & 25045).

- Update inconsistent use of terminology across Appendix F, G, & H.

- Formatting and terminology was corrected in a manner that does not impact associated measure savings/cost values.

Incremental Cost items:

- Update Incremental cost for Residential Learning Thermostats from $175 to $125 which aligns with both PY2019 program data & other Technical Resource Manuals.

- Ductless Heat Pumps & Air Conditioners incremental cost inputs and calculations have been updated to reflect publicly available data and consistent with other residential HVAC measures.

- Update direct install cost of Pipe Insulation based on program data.