|                                      |                                      |   | Prog   | ram                             | Desc                                | riptic                    | n                                   |   |                            |  |  |
|--------------------------------------|--------------------------------------|---|--|---------------------------------|-------------------------------------|---------------------------|-------------------------------------|---|----------------------------|--|--|
| Program N                            | ame                                  | Demand Based Ventilation Controls for HVAC and Kitchen Exhaust Fans   |  |                                 |                                     |                           |                                     |   |                            |  |  |
| Program<br>Description               | 1                                    | 12 h<br>than<br>prog  | This program targets small restaurant facilities with long operating hours (longer than 12 hours a day) who are AIC electric customers and whose monthly demand is less than 150 kW. The program savings are 100% from non-lighting measures. Through this program, Matrix will installdemand based ventilation fan controls on HVAC fans and VFD controls on kitchen exhaust fans in qualifying facilities. |                                 |                                     |                           |                                     |   |                            |  |  |
|                                      |                                      |   | We have been installing our in-house developed HVAC DBVFC measure in ComEd's Illinois servive for the DBVFC Program for small restaurants and fitness centers.   |                                 |                                     |                           |                                     |   |                            |  |  |
| Program Duration Ju                  |                                      |   | June 1, 2017 though may 31, 2020 (3-year program)  |                                 |                                     |                           |                                     |   |                            |  |  |
| Budget                               |                                      | The total budget for this three-year program is \$2,999,938; the annual budget breakdown is as follows: 1st Year budget: \$749,984; 2nd Year budget: \$1,193rd Year budget: \$1,049,975.  |  |                                 |                                     |                           |                                     |   |                            |  |  |
| Estimated Participation              | on                                   |   | We anticipate serving a total of 1,100 small restaurants. We expect to install 2,000 DBVFC units and 996 DBV controls for kitchen exhaust fans.  |                                 |                                     |                           |                                     |   |                            |  |  |
| Savings Targets sa                   |                                      |   | Our total savings goal is 10,682,295 net kWh for the entire program. The annual savings goals areas follows. 1st Year goal is 2,670,574 net kWh; 2nd Year goal is 4,272,918 net kWh; and 3rd Year goal is 3,738,803 net kWh.   |                                 |                                     |                           |                                     |   |                            |  |  |
| Delivery Strategy                    |                                      | Matrix will market the program, schedule audit with the customer, perform facility, prepare audit report showing proposed measures, savings, cost and the payback period. Once the customer enrolls in the program, Matrix will purchase materials, schedule installations, QC the installations, resolve any customer issues, and report to Ameren on a monthly, quartrely and annual basis. |  |                                 |                                     |                           |                                     |   |                            |  |  |
|                                      |                                      | Small Restaurants with less than 150 kW monthly peak and with hours of operation of 12, 18 or 24 hours.   |  |                                 |                                     |                           |                                     |   |                            |  |  |
| Marketing<br>Strategy                |                                      | Matrix will market the program using its Three-Channel Initial Customer Outreach model (call center, fliers/mass-mailings, and website) which will lead to the face-to-face encounter with the business operator/owner. Also refer to the Marketing Strategy Section of the submitted proposal.   |  |                                 |                                     |                           |                                     |   |                            |  |  |
|                                      | Measu<br>Descript                    |   | UOM  | 1st<br>Year<br>Savings<br>(kWh) | Measure<br>Life<br>Savings<br>(kWh) | Unit<br>Incentive<br>(\$) | 1st Year<br>Cost<br>Savings<br>(\$) | Measure<br>Life Cost<br>Savings<br>(\$) | Measure<br>Life<br>(Years) |  |  |
| Eligible<br>Measures<br>&<br>Measure | Fan Cycl<br>24-hour<br>Business      |   | Ton  | 663.22                          | 6632.2                              | \$117.57                  | \$39.79                             | \$397.93                                | 10                         |  |  |
| Saving<br>Costs                      | Fan Cycling -<br>18-hour<br>Business |   | Ton  | 589.87                          | 5898.7                              | \$117.57                  | \$35.39                             | \$353.92                                | 10                         |  |  |
|                                      | Fan Cycling -<br>12-hour<br>Business |   | Ton  | 603.64                          | 6036.4                              | \$117.57                  | \$36.22                             | \$362.18                                | 10                         |  |  |

|           | Kitchen |       |              |                                 |       |            |          |            |    |
|-----------|---------|-------|--------------|---------------------------------|-------|------------|----------|------------|----|
|           | Demand  |       |              |                                 |       |            |          |            |    |
|           | Exhaust | Horse | power        | 4486                            | 67290 | \$1,613.54 | \$269.16 | \$4,037.40 | 15 |
| Appendice | Appen   |       | e proposal t | e proposal fo<br>for Material S |       |            |          |            |    |

|   | Program Description  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Program Name  | Up to 175K Electric Only Household Expansion (Opower Home Energy Reports)  |  |  |  |  |  |
|   | 125K AIC customers will be enrolled in the program in year 1, and will receive 5-4-4 reports over the 3-year program. 25K high usage customers will be added to the program in year 2 and will receive 6-4 reports over the remaining 2 years of the cycle. Finally, an additional 25K high usage customers will be added in PY3 and these customers will receive 6 reports in that year.  |  |  |  |  |  |
|   | The Residential Behavior Modification Program relies on providing customers with a comparison of their energy usage to that of similar homes within proximity of the report recipient. A similar home does not necessarily refer to a next-door neighbor, but rather a household with similar characteristics in terms of square footage, geographical location, and heating fuel.   |  |  |  |  |  |
|   | The energy and program participation data for this implementation will be provided on an ongoing basis by AIC and will be combined with third party data to build comprehensive profiles of each participating customer. In addition to the Home Energy Reports, a customer service interface with give customer service representatives online access to the full history of Home Energy Reports delivered to customers. A customerfacing website will provide customers online access to their Home Energy Report, online benchmarking, audit-like functionality, and access to additional energy efficiency information beyond that presented on the direct-mailed report. E-mail reports will be sent monthly to qualifying households to increase overall savings from the program. |  |  |  |  |  |
| Background  | We have attached a complete list of independent evaluations as Appendix B. We would be happy to provide copies of any of the 63 listed reports upon request.cribe where this program has been successful in other jurisdictions, including the jurisdiction, eligible customers, participation achieved, savings achieved, and any other background information that will help participants understand this program. Provide sources, including links to reports addressing this program, as applicable.   |  |  |  |  |  |
| Program Duration  | June 2017- May 2020  |  |  |  |  |  |
|   | PY1 (June 2017-May 2018): \$950,000  |  |  |  |  |  |
| _   | PY2 (June 2018-May 2019): \$1,025,000  |  |  |  |  |  |
|   |  |  |  |  |  |  |
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| -   |  |  |  |  |  |  |
| -   |  |  |  |  |  |  |
| Program Duration  Budget  Estimated Participation  Savings Targets* | including links to reports addressing this program, as applicable.  June 2017- May 2020  PY1 (June 2017-May 2018): \$950,000   |  |  |  |  |  |

|                       | Program Description   |  |
|-----------------------|---|--|
| Delivery Strategy     | AIC will use a third-party contractor to implement the program. Key implementation steps and processes include but are not limited to:  • Home Energy Reports will be mailed to targeted residential customers on a recurring basis for the duration of the program.  • The energy and program participation data for this implementation will be provided on an ongoing basis by AIC and will be combined with third-party data to build comprehensive profiles for each participating customer.  • In addition to the Home Energy Reports, customers will receive access to a website and e-mail Home Energy Reports. AIC customer service representatives will get access to a customer service interface which provides full online history of Home Energy Reports delivered to customers and analytics on customers' energy consumption.   |  |
| Target Market         | 125K customers in PY1, 150K customers in PY2 (PY1+25K), and 175K customers in PY3 (PY2+25K)   |  |
| Marketing Strategy    | Not applicable- the Home Energy Report program provides customers with normative comparisons, usage history, and energy savings tips to encourage customers to reduce their consumption.  Opower will use energy, housing, demographic, and available past program participation data to design a multi-dimensional segmentation plan of potential customers based on:  • Energy consumption patterns (e.g., normalized high seasonal peak, high base load, etc.)  • Housing data (e.g., age of house, size of house, value of home, type of construction, presence of a pool, presence of a garage)  • Past program participation and rebate redemption (e.g., ENERGY STAR and other rebates, rate programs, etc.) if available  • Demographic data (e.g., renter vs. homeowner, presence of children in the household, indicators of interest in environmental issues, age of customer, duration of residence, socioeconomic/income levels, as available)  Opower will identify high-potential prospects for program marketing by profiling historical participants and available historical marketing campaign results |  |
| Eligible Measures     | The program focuses on energy consumption behavior changes that result in reduced electricity and some natural gas consumption. As such, the overall metric is reduced monthly/annual energy consumption. There are no specific energy efficiency measures associated with the program or corresponding incentives. We refer to it as the Home Energy Report program.   |  |
|                       | PY1 (June 2017-May 2018) Cost per Claimable kWh: \$0.109  |  |
| Cost per Energy Saved | PY2 (June 2018-May 2019) Cost per Claimable kWh: \$0.103  |  |
| Appendices            | PY3 (June 2019-May 2020) Cost per Claimable kWh: \$0.113  Provide additional information, as needed.  |  |