

Energy Efficiency Collaborative Report

Executive Summary

The Company's MEEIA Cycle 2 Stipulation and Agreement ("MEEIA 2 Stipulation")¹ included a commitment to form a Collaborative and explore additional savings opportunities that could be implemented in the 2017 and 2018 program years. With only a three month window for the Collaborative effort, the Company developed a structured process that allowed submitted proposals to be evaluated consistently, comprehensively, and transparently. Through a series of workshops and meetings, the Company analyzed 21 unique proposals submitted by the Collaborative members and assessed each proposal across 30 different criteria. Table 1 below represents a high-level summary of the Collaborative efforts. Even though this limited Collaborative effort was not designed to make decisions about next steps, the Company will submit a follow-up to the Commission by the end of 2016 which will either include proposals for Commission approval, an explanation about why no proposals will be submitted for approval, or a status update.

Table 1 – Overall Collaboration Research Results Summary

	Incremental for 2017/2018			Cost Effective?
	Energy (MWh)	Demand (MW)	Budget (MM\$)	
Significant Overlap with Approved Programs				
C&I Concierge	18,692	2.2	\$8.0	✗
Advanced Lighting Controls	0	0	\$0.0	✓
Education Program for Teachers	0	0	\$0.0	✓
Multifamily One-Stop-Shop	8,380	1.9	\$7.0	✗
Marketing/Delivery Opportunities for Approved Programs				
Up-Stream Residential Products	25,382	8.5	\$10.9	✗
C&I Mid-Stream Lighting	9,870	1.9	\$4.3	✓
C&I Benchmarking – EPA Tool	6,272	0.7	\$1.9	✓
Res. Large Employer Marketing	1,448	0.8	\$1.3	✓
New Programs/Budget Requiring Commission Approval				
Residential Bundling	292	0.1	\$0.9	✗
Low Income S.F. – Sweep	6,035	1.4	\$4.6	✓
Low Income S.F. – Weatherization	5,289	3.1	\$3.7	✓
Low Income S.F. – New Constr.	6,319	3	\$3.0	✓
Bulb Buyback – Incandescent	4,463	0.3	\$1.1	✓
Bulb Buyback – Halogen	2,948	0.2	\$1.1	✓
Bulb Buyback – CFL	447	0.03	\$1.1	✗
LED Street Lighting	34,442	0	\$14.0	✓
Water Heater Direct Load Control	0	4	\$4.5	✗
Circuit Rider	2,197	0.85	\$0.2	✗ / ✓
Financing	1,721	1.1	\$1.2	✓
Exterior Lighting	43,969	0.1	\$6.5	✓
Competitions (Gamification)	0.2	0.1	\$0.1	✗
Total	178,166	30.3	\$75.4	

¹ File No. EO-215-0055 paragraph 9

Purpose and Structure

The original impetus for the Collaborative was the Company's MEEIA 2 Stipulation. The MEEIA 2 Stipulation contains the specifics about the formation and goals of a Collaborative; specifically, "to address new, unserved, or underserved customer markets and identify additional cost-effective energy and demand savings strategies (a possible additional 300 to 400 gigawatt-hours ("GWh") of savings) that could be considered for implementation for Program years 2017 and 2018 if all customers within the customer class realize a benefit." The Collaborative was also provided a three month duration to complete the activities.

The Company and KCP&L jointly presented a new approach to evaluate the various proposals submitted. The important aspects of such an approach are that all proposals could be evaluated on a transparent, consistent, and comprehensive basis. To support such a purpose, a list of criteria needed for each proposal was developed. The list of criteria was developed such that all of the relevant information could be assembled to support cost effectiveness analysis as well as other qualitative assessments. The list of criteria was split into two parts; 1) the portion containing descriptive information about the proposal; and 2) the portion containing the analytical results and qualitative assessments. Each submitting party was asked to fill out the first portion to their best ability while the utilities would fill out the second portion applying the analytical tools required to do so. Each proposal was then put into a spreadsheet to document all of the information relevant to the listed criteria. Both Ameren Missouri and KCP&L used the same list of criteria but following the initial Collaborative meeting the Companies worked independently to analyze the proposals. The Company apportioned two weeks to review the submitted proposals and ask any relevant questions. Afterward, the Company spent a month to research and validate each proposal. Upon completion of the initial research, the findings were shared with the Collaborative and additional feedback was gathered for refinements as necessary. Finally, revised results were shared with the Collaborative, and this report was written to formalize the entire process for the Commission. The kick-off meeting presentation which outlines the overall process is attached as Schedule 1.

Initial Proposals

Before the kick-off meeting the list of criteria needed to evaluate each proposal was shared with the Collaborative members and the Collaborative members were asked to attend the kick-off meeting with as much as possible of the criteria completed for each proposal submitted. That list of criteria can be seen in Schedule 2 to this report. The Company gathered the proposals and each proposal was input into a spreadsheet as submitted, which is attached as Schedule 3. At this stage some proposals only included partially complete information and the second portion of the list of criteria still needed to be completed for all proposals. Table 2 below summarizes the fifteen proposals as initially submitted. The proposals without incremental energy savings or budgets were those that either did not have the information provided or more work was needed to determine initial estimates.

Table 2 – Initial List of Proposals

	Stakeholder	Short Description	Sector	Incr. Budget	Incr. MWh
1	NRDC	C&I Concierge	Business	\$22.9M	102,703
2	NRDC	Expanded Upstream	Business	\$14.6M	95,233
3a	NRDC	RES Bundling/Tiers	Residential	\$22.6M	24,921
3b	Div. of Energy	RES Bundling/Tiers	Residential		
4	NRDC	Low Income Single	Residential	\$30.1M	17,716

	Stakeholder	Short Description	Sector	Incr. Budget	Incr. MWh
		Family			
5	Div. of Energy	Bulb Buy-back	Res. New Homes	\$71k-120k	44
6	NRDC/Division of Energy	LED Street Lighting	Street Lighting	\$7.54	27,902
7	Div. of Energy	Water Heater Demand Response	Residential		
8	Div. of Energy	Mid-Stream Lighting	Business		
9	Div. of Energy	Advanced Lighting Control	Business		
10	Div. of Energy	Education Program for Teachers	Education		
11	Div. of Energy	Circuit Rider	Res. New Homes	\$181k	4,394
12	Div. of Energy/United For Missouri	Financing	Residential		
13	Renew Missouri	Exterior Lighting	Business		
14	Div. of Energy	Multi-family One Stop Shop	Residential		
15	Div. of Energy/OPC	Gamification	Competitions		

Initial Research Results

Once the initial proposals were submitted, the Company worked with Collaborative members to better understand proposals as necessary. Afterwards the Company began to research each proposal using E-Source (fee-based subscription service to a large library of energy efficiency-related information) and web searches for detailed reports or evaluations of similar programs. Each proposal was then analyzed to evaluate the cost effectiveness using inputs (e.g. avoided costs, measure characteristics) from the Company's approved MEEIA Cycle 2 plan. An output of the research and analysis is the completion of the list of criteria previously developed to support a complete and consistent assessment of each proposal. All of the research results and completed characterization of the proposals was compiled into a spreadsheet that was shared with the Collaborative and is attached to this report as Schedule 4. Although the complete spreadsheet about each proposal is comprehensive, the information can be overwhelming in such a format. To aide in the understanding of the results, the Company developed a presentation for the Collaborative which was delivered on September 7th, 2016 and is attached as Schedule 5 to this report.

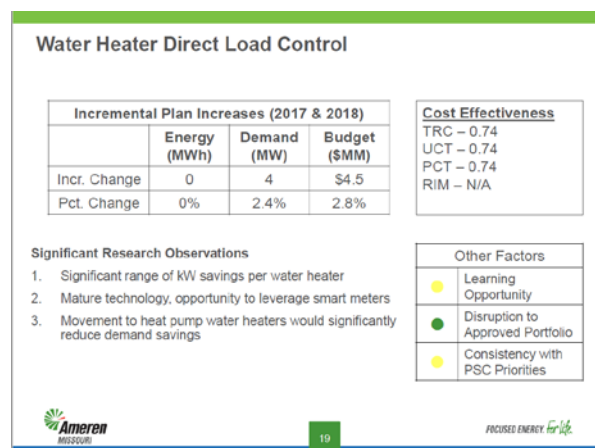
The presentation serves as a useful tool to break down the results of the Company's research and analysis and how the proposals relate to the Company's existing programs. First, the proposals were categorized into three main buckets: 1) Significant Overlap with Approved Programs; 2) Marketing/Delivery Opportunities for Approved Programs; and 3) New Programs/Budget Requiring Commission Approval. The proposals in the Significant Overlap with Approved Programs category are those in which the Company determined were very similar to programs the Company is currently offering. The proposals in the Marketing/Delivery Opportunities for Approved Programs are those in which the Company identified as delivering the same measures but through a different delivery channel or marketing strategy. The proposals in the New Programs/Budget Requiring Commission Approval are those which the Company determined are completely new programs and/or would require additional budgets beyond those currently approved. Table 3 below summarizes the initial research.

Table 2 – Summary Table from Presentation

	Incremental for 2017/2018			Cost Effective?
	Energy (MWh)	Demand (MW)	Budget (MM\$)	
Significant Overlap with Approved Programs				
C&I Concierge	18,692	2.2	\$8.0	✗
Advanced Lighting Controls	0	0	\$0.0	✓
Education Program for Teachers	0	0	\$0.0	✓
Multifamily One-Stop-Shop	8,380	1.9	\$7.0	✗
Marketing/Delivery Opportunities for Approved Programs				
Up-Stream Residential Products	25,382	8.5	\$10.9	✗
C&I Mid-Stream Lighting	9,870	1.9	\$4.3	✓
New Programs/Budget Requiring Commission Approval				
Residential Bundling	292	0.1	\$0.9	✗
Low Income Single Family	6,035	1.4	\$4.7	✓
Bulb Buyback	4,463	0.3	\$0.5	✓
LED Street Lighting	34,442	0	\$14.0	✓
Water Heater Direct Load Control	0	4	\$4.5	✗
Circuit Rider	4,394	1.7	\$0.3	✗
Financing	1,721	1.1	\$1.2	✓
Exterior Lighting	43,969	0.1	\$6.5	✓
Competitions (Gamification)	0.2	0.1	\$0.1	✗
Total	157,640	23.3	\$62.9	

In the presentation, attached as Schedule 5, there is a summary slide for each proposal and each slide is organized as a dashboard to display key information. That key information includes: 1) the incremental energy savings, demand savings, and budget; 2) key research observations; 3) the quantitative analysis results around cost effectiveness from multiple perspectives; and 4) three main qualitative factors. The three main qualitative factors included a red/yellow/green style indicator where red represents “negative” and green represents “positive.” This color-coded approach makes it easy to understand how these qualitative factors were judged. The qualitative factors included in the dashboard were the Learning Opportunity, Disruption to Existing Portfolio, and Consistency with PSC Priorities. Learning Opportunity and Disruption to Existing Portfolio were subjectively assessed by the Company while the Consistency with PSC Priorities factor was clearly defined. For the Consistency with PSC Priorities factor, a green rating was assessed when a proposal passed the Total Resource Cost (“TRC”) test and also achieved demand savings, a yellow rating was assessed when a proposal either had significant demand savings or passed the TRC, and a red rating was assessed when a proposal scored poorly on the TRC. An example dashboard slide from the presentation is below in Figure 1.

Figure 1 – Example Dashboard Presentation Slide



Research Updates

During the initial results review on September 7, 2016, there was robust discussion about the Company's research results. That discussion informed the need for additional research and remodeling on some proposals. The Company was able to perform additional research as well as hold supplementary discussions with some of the Collaborative members. As a result, the Company ran five additional proposals which were refinements on previously discussed proposals. The Company created new dashboard slides, attached as Schedule 6, for the updates as well as updating the summary table which is below in Table 3 and presented the research and analysis results to the Collaborative on September 30, 2016. Schedule 7 to this report includes the full details of each proposal for all 30 of the criteria analyzed.

Table 3 – Overall Collaboration Research Results Summary

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Next Steps

With the Collaborative proposals submitted, researched, analyzed, and the completion and filing of this report, the Company has fulfilled the terms of the MEEIA 2 Stipulation. However, there is still the unanswered question about which, if any, of the submitted proposals warrant implementation during the Company's 2017/2018 program years. There is also the unanswered question about how such implementation would or would not impact the Company's approved budgets and/or Demand-Side Investment Mechanism. Such answers were not within the scope of the Collaborative process. To a limited degree, the Collaborative discussed which proposals looked favorable but it was clear that more work was necessary before any decisions could be made. The Company committed to reflect on the results of the Collaborative and present "next steps" as part of its scheduled Quarterly Energy Efficiency Stakeholder meeting on November 4th, 2016. The Company is aware that any decisions about additions to its energy efficiency portfolio must be made quickly if such additions are to be successfully implemented during the 2017/2018 program years. To that end, the Company will submit a follow-up to the Commission by the end of 2016 which will either include proposals for Commission approval, an explanation about why no proposals will be submitted for approval, or a status update.