

HOME ENERGY MANAGEMENT

REQUEST FOR INFORMATION

1. Introduction

Customers have come to expect greater choice and more personalized experiences with the products and services they purchase. Energy purchases are not immune from those expectations. Electric utilities are tasked with giving customers the information and control they desire while simultaneously operating and optimizing the system to provide safe, affordable, reliable electricity to all customers. An energy management platform is the foundation that simultaneously addresses the desires of customers and needs of the utility for more information, control and flexibility. As indicated below, AEP is looking for a strategic partner with a shared vision to help meet customers' demands, including more holistic energy solutions. American Electric Power (AEP) is one of the largest investor owned utilities in the United States serving nearly 5.4 million customers in 11 states. Maintaining the nation's largest electricity transmission system and more than 219,000 miles of distribution lines, we deliver power to customers in Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia.

1.1 Summary of Solicitation

Initially, AEP is interested in identifying vendors who can provide an integrated Home Energy Management (HEM) platform to our customers across our service territory. The HEM suite of tools includes, but is not limited to, Home Energy Reports (HERs), electronic Home Energy Reports (eHERs), device control, an omni-channel customer engagement solution, online audit and alerts such as high bill alerts. More than just a collection of tools, AEP is interested in how the platform integrates these tools into a seamless customer engagement platform, as well as the vendor's vision of where the state of the HEM market is heading. Such a vision may include how the HEM platform can interact with or establish the framework for an energy marketplace.

1.2 Contact Information, Due Date, and Submission of Responses

Responses are due no later than **March 22, 2019**.

Questions regarding this RFI and responses can be submitted to:

John Jost
Contract Analyst
Utilities Procurement
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2. Background

Several of the AEP operating companies currently have aspects of the HEM suite offered by multiple vendors. AEP would like to standardize the HEM product offerings and consolidate the HEM suite of products under one strategic partner. By consolidating under one vendor, we hope to achieve economies of scale, a consistent customer experience across our service territory, reduction in the development and maintenance of data integrations, and a consistent data backhaul to feed multiple digital channels (web, app, voice) as well as CRM and Voice of the Customer systems.

3. Home Energy Management Suite of Products

Below are descriptions of the Home Energy Management Products currently being offered by AEP operating companies. Please describe your similar product offerings and any additional products that you recommend for AEP. Identify AMI and non-AMI features offered for each product offering and explain the differences.

3.1 Home Energy Reports

Paper as well as electronic Home Energy Reports (HERs). The HERs should offer at a minimum:

- Similar home comparison
- Annual, monthly, and interval usage view
- Disaggregated usage analytics and estimated costs
- Personalized recommendations with estimated savings

Vendor will provide 3 years validated, third party EM&V data for EE savings claims for both paper and digital HERs.

3.2 Online Energy Audit or Online Energy Checkup

Energy efficiency and savings recommendations tailored to the home based on the customers billing data and inputs they enter into the interactive online web tool or mobile app.

AEP has programs that invite customers to participate in an online/mobile audit and model their residence's equipment and typical household operations. AEP also provides direct information to customers on what they may do to manage their energy use and save on their bill. An energy report is generated that provides guidance to participants on potential energy efficiency activities or measures that might be useful in helping them achieve greater efficiency within their home. Customer data and personalized recommendations will be integrated into HERs and AEP's digital channels.

3.3 Device Control

Utilizes WiFi-enabled thermostats or other end use devices to support demand response (DR) programs and/or manage A/C load to maximize energy savings. Thermostats under this type of program are customer-owned and self-installed. Must utilize two-way communication protocols to initiate demand response events and gather information and data such as resource availability (device online percentage), customer opt outs and HVAC run time during events and similar days. AEP prefers its customers to have choice when selecting these types of devices, thus AEP's expectation is that an HEM platform will be device agnostic with regards to thermostat manufacturers. Further, AEP prefers that any customer device that is currently supported in its service territory will continue to be supported by the HEM platform.

Incentives may be offered but are subject to state commissions and different tariffs throughout our service territory. Please describe your proposed incentive mechanism for this product offering.

Please describe the thermostats and the manufacturer of those thermostats that would be applicable as part of your solution, including any contractual relationship status with each manufacturer. Please also describe how your solution communicates with each thermostat.

Please describe any additional devices that your solution offers, including Electric Vehicles, water heaters, solar inverters, pool pumps, and smart switches/plugs.

Please describe the utility-facing DR management platform that AEP would use to initiate events and retrieve customer data. Include any experience integrating this platform with a Distributed Energy Resource Management System (DERMS) and/or how this platform can act as a DERMS, including the ability to push notifications of upcoming DR events, allow for customer opt-in/opt-out, and a portal to see availability and results. Describe the ability to create various groups, including control groups, and initiate events for distinct groups or combinations of groups.

3.4 Channel Engagement Solution

Vendors must describe their customer engagement solution that provides up-to-date usage (including interval data) and information to customers, as well as, other information based on the online energy audit/ checkup, HERs, and device control. Customer engagement should be multi-channel with web, app, and voice capabilities. Include representative displays of customer views as displayed online, via app, and through email/text alerts.

It is AEP's strategy to own our customer channels. Please describe how your solution integrates into existing digital channels. Please also describe tools available to AEP's call centers to allow customer service reps to see any/all information displayed to the customer.

AEP is interested in a two-way data flow, leveraging customer data and analytics into existing and planned back office systems to enhance our 360 view of the customer. Describe what Customer Relationship Management (CRM), Voice of the Customer (VOC), or other customer experience platforms the vendor has integrated with before, and what types of data are shared.

3.5 Alerts

Vendors must describe the types of alerts and notifications available to AEP customers, including mid-cycle high bill alerts.

4. Flexibility/Modular Design

Due to regulatory and jurisdictional diversity, not all aspects of the HEM platform will be offered in each Operating Company. Describe how the platform is designed to allow flexibility to offer different components in different jurisdictions, including vendor's vision on what would be a base offering across all Operating Companies. Describe how the product offerings work together as an HEM system and the benefits gained or lost by adding or eliminating components. Include the utility value proposition for each component, how the value can be measured/quantified, and recommendations for internal evaluation protocols that may reduce third party EM&V costs.

5. Customer Recommendations

AEP is interested in helping our customers manage their energy use and costs. This includes traditional EE programs, tariff rate comparisons, and beneficial electrification (including EV adoption). Describe how your recommendation algorithm incorporates these objectives and how AEP can leverage the recommendation to support existing programs and strategic initiatives.

6. General Administration and Management Experience

Vendor will describe their project management processes and provide examples of relevant reports. Please include information related to the timeline from contract execution to the solutions being fully operational.

7. Capital Project Requirements

AEP intends to capitalize the investment in an HEM platform. AEP Accounting Policy requires certain contract provisions for capitalization, including the right to host the solution internally. Please describe vendor's experience contracting with utilities in this area in which all or a significant portion of the project received capital treatment.

8. Consolidation of Home Energy Management with Commercial Energy Management

AEP may desire in the future to further consolidate the HEM solution with a Commercial and Industrial energy management solution. Please describe the vendor's current C&I capabilities, vision and roadmap.

9. Qualifications and Experience of Key Personnel

Vendor will identify key personnel and provide their bios.

10. *Client References*

Please provide references for current and former utility customers for whom you have implemented the products described above. Please include the type of product offering, the size and scope of the project, dates the products were offered, contact name, phone number and email address.

11. *Conflict of Interest Disclosure*

Vendor will describe any potential conflicts of interest.